

Списък на цитиранията на научните трудове (без автоцитирания) на  
Мирослав Абрашев

Общ брой – 4409      h-индекс = 33

(с 33 и повече цитирания са 33 работи: [20], [22], [26], [27], [28], [31], [36], [37], [39], [42], [43], [45], [46], [52], [54], [55], [56], [58], [59], [62], [65], [68], [71], [72], [75], [86], [89], [90], [91], [93], [100], [101], [103])

1. *"Raman Study of Hydrogenated  $YBa_2Cu_3O_{7-x}$  ( $R = Y, Gd$ )"*

V. G. Hadjiev, M. V. Abrashev, M. N. Iliev, and L. N. Bozukov

Physica C 171 (1990) 257 - 264.

11. Hydrogen in a Nonstoichiometric  $YBa_2Cu_3O_{6.96}$  Compound: Study by Raman Spectroscopy

Bobylev, I. B.; Ponosov, Yu. S.; Zyuzeva, N. A.; et al.

PHYSICS OF METALS AND METALLOGRAPHY Volume: 119 Issue: 7 Pages: 643-649 Published: JUL 2018

10. Sumadiyasa, M., Adnyana, I.G.A.P., Widagda, I.G.A., Suharta, W.G.

Study synthesis of  $(La_{1-x}Gd_x)Ba_2Cu_3O_{7-\delta}$  superconductors at low temperature

Journal of Physics: Conference Series 725(1), 12001 (2016)

9. Bobylev, I.B., Ponosov, Y.S., Zyuzeva, N.A.

Raman study of the effect of water vapor during low-temperature annealing on the structure and electrophysical properties of  $YBa_2Cu_3O_y$

Materials Chemistry and Physics 167, 1-8 (2015)

8. Bobylev, I. B.; Ponosov, Yu. S.; Zyuzeva, N. A.

Interaction of  $YBa_2Cu_3O_{6.8}$  with atmospheric moisture during low-temperature annealing

PHYSICS OF THE SOLID STATE 56 (8) pp. 1536-1541 AUG 2014

7. Ponosov, Yu S.; Bobylev, I. B.; Zyuzeva, N. A.

Antiferromagnetic fluctuations in water-intercalated  $YBa_2Cu_3O_{6.8}$

JETP LETTERS 99 (6), pp. 340-345 MAY 2014

6. Tsaneva, V.N., Vickers, M.E., Blamire, M.G., Barber, Z.H., Evetts, J.E., Popov, T.K., Donchev, T.I., Ariosa, D.

Diagnostics of sputtering plasma variations affecting Y-Ba-Cu-O thin film growth and properties

Superconductor Science and Technology 17 (9), pp. S465-S472 (2004)

5. Hirata T

Hydrogen in high-T-c superconductors

PHYS STATUS SOLIDI A 156: (2) 227-250 AUG 16 1996

4. Harrington, I., Korn, C., Goren, S.D., Shaked, H., Kimmel, G.

X-ray diffraction study of the influence of hydrogen on the crystallographic structure of  $H_xYBa_2Cu_3O_{7-\delta}$

Physica C: Superconductivity and its applications 226, 255-261 (1994).

3. Goren, S.D., Korn, C., Volterra, V., Riesemeier, H., Rössler, E., Vieth, H.M., Lüders, K.

NMR OF H-1 AND 2D IN HYDROGEN-DOPED AND DEUTERIUM-DOPED  $YBa_2Cu_3O_7$

PHYS REV B 46: (21) 14142-14149 DEC 1 1992

2. Kamei, M., Yoshida, I., Takahashi, H., Itti, R., Morishita, T.

RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL  $Y_1Ba_2Cu_3O_{7-x}$  FILMS

J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

1. Richter, A., Irmer, G., Keßler, G., Panzner, M., Herzog, K.

RAMAN AND IR SPECTROSCOPY OF HYDROGEN-CHARGED  $YBa_2Cu_3O_{7-\Delta}$  FILMS

J ALLOY COMPD 187: (1) 59-66 AUG 27 1992

2. *"Destruction of Non-Superconducting  $YBa_2Cu_3O_{6.3}$  and  $PrBa_2Cu_3O_{6.8}$  due to the Hydrogenation: Raman Scattering and X-Ray Diffraction Study"*

Physica C 178 (1991) 317 - 323.

M. V. Abrashev, L. N. Bozukov and M. N. Iliev

3. CELANI F, BOUTET M, DIGIOACCHINO D, et al.

1ST RESULTS ABOUT HYDROGEN LOADING BY MEANS OF PULSED ELECTROLYSIS OF  $Y_1Ba_2Cu_3O_7$  PELLETS

PHYS LETT A 189: (5) 395-402 JUN 27 1994

2. KAMEI M, YOSHIDA I, TAKAHASHI H, et al.

RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL  $Y_1Ba_2Cu_3O_{7-x}$  FILMS

J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

1. CELANI F, SPALLONE A, LIBERATORI L, et al.

3. *"Polarized Raman Spectra of Y<sub>2</sub>BaCuO<sub>5</sub>: Normal Mode Assignment from Substitution for Y and Ba"*

M. V. Abrashev and M. N. Iliev

Phys. Rev. B 45 (1992) 8046 - 8051.

11. Das, Dhruva; Muralidhar, M.; Rao, M. S. Ramachandra; et al.

Top-seeded infiltration growth of (Y,Gd)Ba(2)Cu(3)O<sub>y</sub> bulk superconductors with high critical current densities  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY 30 (10), 105015 OCT 2017

10. Shi, Y., Hasan, T., Babu, N.H., Torrisi, F., Milana, S., Ferrari, A.C., Cardwell, D.A.

Synthesis of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> and Y<sub>2</sub>BaCuO<sub>5</sub> nanocrystalline powders for YBCO superconductors using carbon nanotube templates  
ACS Nano 6 (6), pp. 5395-5403, 2012.

9. Gupta, H.C., Sharma, V.

Interatomic forces in Pnma, Immm, P4/mbm and I4/mcm phase of R<sub>2</sub>BaMO<sub>5</sub>(R= yttrium or lanthanides; M= Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

8. Gouadec, G., Colomban, P.

Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007).

7. Gupta HC, Sharma V

Lattice dynamic investigation of the Raman and infrared wavenumbers of orthorhombic R<sub>2</sub>BaCuO<sub>5</sub> (R = Y, Ho, Gd) oxides  
JOURNAL OF RAMAN SPECTROSCOPY 36 (1): 83-88 JAN 2005

6. Capsoni D, Bini M, Massarotti V, et al.

Micro-Raman and X-ray diffraction study of Y<sub>2</sub>BaNi<sub>1-x</sub>MxO<sub>5</sub> (M = Mg, Zn) polymorphs  
SOLID STATE COMMUN 122 (7-8): 367-372 2002

5. Provoost R, Rosseel K, Dierickx D, et al.

Stress analysis in melt processed R<sub>2</sub>BaCu<sub>3</sub>O<sub>7</sub> (R = Y, Nd) by micro-Raman spectroscopy  
APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998

4. Dietrich M, Thurian P, Loa I, et al.

Crystal-field transitions of Nd<sup>3+</sup> and Er<sup>3+</sup> in perovskite-type crystals  
MATER SCI FORUM 258-2: 1589-1594 Part 1-3 1997

3. Provoost R, Rosseel K, Dierickx D, et al.

Observation of local variations of stress in fast melt processed YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> superconductors at Y<sub>2</sub>BaCuO<sub>5</sub> inclusions  
INST PHYS CONF SER (158) 1595-1598 1997

2. Provoost R, Rosseel K, Moshchalkov VV, et al.

Stress release at Y<sub>2</sub>BaCuO<sub>5</sub> inclusions in fast melt processed YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> observed by micro-Raman spectroscopy  
APPL PHYS LETT 70: (21) 2897-2899 MAY 26 1997

1. DE ANDRES A, TABOADA S, MARTINEZ JL, et al.

OPTICAL PHONONS IN R<sub>2</sub>BAMO<sub>5</sub> OXIDES WITH M = CO, NI, CU, AND R = A RARE-EARTH  
PHYS REV B 47: (22) 14898-14904 JUN 1 1993

4. *"Raman Spectroscopy of (Pb(1+x)/2 Cu(1-x)/2)Sr<sub>2</sub>(Y<sub>1-x</sub>Cax)Cu<sub>2</sub>O<sub>7+y</sub> (x = 0; 0.35)"*

M. V. Abrashev, M. N. Iliev and L. N. Bozukov

Physica C 200 (1992) 189 - 194.

1. Ren, Y.T., Chang, H., Xiong, Q., Wang, Y.Q., Sun, Y.Y., Meng, R.L., Xue, Y.Y., Chu, C.W..

Micro-Raman scattering on superconducting HgBa<sub>2</sub>Can-1CunO<sub>2n+2+δ</sub> (n = 1, 2, 3) ceramics  
Physica C: Superconductivity and its applications 217, 273-279 (1993)

5. *"Raman-active phonons in R<sub>2</sub>BaCuO<sub>5</sub> (R = La, Nd)"*

M. V. Abrashev, G. A. Zlateva and E. Dinolova

Phys. Rev. B 47 (1993) 8320 - 8323.

6. Antony, C.J., Aatiq, A., Panicker, C.Y., Bushiri, M.J., Varghese, H.T., Manojkumar, T.K.

FT-IR and FT-Raman study of Nasicon type phosphates, A<sub>2</sub>SnFe(PO<sub>4</sub>)<sub>3</sub> [A = Na(2), Ca, Cd]  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 78 (1) Pages: 415-419, JAN 2011.

5. Gupta, H.C., Sharma, V.

Interatomic forces in Pnma, Immm, P4/mbm and I4/mcm phase of R<sub>2</sub>BaMO<sub>5</sub>(R= yttrium or lanthanides; M= Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

4. Gupta, H.C., Sharma, V.  
Lattice dynamics of tetragonal  $R_2BaCuO_5$  ( $R = La, Nd$ ) oxides in the  $P4/mbm$  structure  
Journal of Raman Spectroscopy 38 (7), pp. 885-889 (2007).
3. Provoost R, Rosseel K, Dierickx D, et al.  
Stress analysis in melt processed  $RBa_2Cu_3O_7$  ( $R = Y, Nd$ ) by micro-Raman spectroscopy  
APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998
2. Dareys B, Thurian P, Taboada S, et al.  
Luminescence properties of  $Nd_2BaZnO_5$   
J LUMIN 72-4: 174-176 JUN 1997
1. TABOADA S, DEANDRES A, MARTINEZ JL, et al.  
EFFECT OF THE RARE-EARTH SUBSTITUTION ON THE OPTICAL PHONONS OF  $LaBaCuO_5$  ( $R=Nd$  AND  $Eu$ ) OXIDES  
J ALLOY COMPD 225: (1-2) 216-219 JUL 15 1995

6. *"Micro-Raman, SEM and X-ray characterization of  $(Pb_{0.5}Cu_{0.5})LaSrCa_{n-1}Cu_nO_x$  ( $n = 1, 2$ ) ceramics"*

M. V. Abrashev, V. N. Hadjimitov, E. Dinolova, and L. N. Bozakov  
Physica C 215 (1993) 421 - 428.

7. Wang, J., Lin, Y., Zou, H., Pu, S., Shi, J.  
Structural transition, electrical and magnetic properties of the B-site Co doped  $Sr_{14}Cu_{24}O_{41}$  compounds  
Journal of Physics Condensed Matter 21 (7), art. no. 075601 (2009).
6. Hu Ni, Xiong Rui, Wei Wei, et al.  
Raman scattering study of the spin ladder compound  $Sr_{14}(Cu_{1-y}Fe_y)_{24}O_{41}$   
ACTA PHYSICA SINICA 57 (8) 5267-5271 AUG 2008
5. Carvalho CL, Guedes I  
Spectroscopic characterization of BPSCCO thin films grown by dip-coating technique  
PHYSICA C 390 (3): 239-242 JUL 1 2003
4. Ogita N, Fujita Y, Sakaguchi Y, et al.  
Raman scattering study of  $Sr_{14-x}Ca_xCu_{24}O_{41}$   
J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000
3. Osada M, Kakihana M, Nagai I, et al.  
Raman-active phonons and their doping dependence in spin-ladder  $Sr_{14}Cu_{24}O_{41}$   
PHYSICA C 338: (1-2) 161-165 AUG 1 2000
2. Nagai, I., Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
Raman scattering study of  $Sr_{14-x}Ca_xCu_{24}O_{41}$   
Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)
1. Leonyuk L, Babonas GJ, Maltsev V  
Regularities of cation sublattice structure in crystals of layered cuprates  
INT J APPL ELECTROM 8: (3) 229-242 SEP 1997

7. *"Preparation of a Calcium-substituted Copper-rich Yttrium Barium Copper Oxide Superconductor from a spray-dried nitrate precursor"*

G. Gyurov, I. Khristova, P. Peshev and M. V. Abrashev  
Mat. Res. Bull. 28 (1993) 1067 - 1074.

7. Nenartaviciene G, Jasaitis D, Kareiva A  
Sol-gel synthesis and characterization of  $YBa_2(Cu_{1-x}Cr_x)_4O_{8-x}$  superconductor  
ACTA CHIMICA SLOVENICA 51 (4): 661-674 (2004).
6. Baranauskas, A., Jasaitis, D., Kareiva, A.  
Characterization of sol-gel process in the Y-Ba-Cu-O acetate-tartrate system using IR spectroscopy  
Vibrational Spectroscopy 28 (2), pp. 263-275 (2002)
5. Mathur S, Shen H, Lecerf N, et al.  
Sol-gel synthesis route for the preparation of  $Y(Ba_{1-x}Sr_x)_2Cu_4O_8$  superconducting oxides  
J SOL-GEL SCI TECHN 24 (1): 57-68 MAY 2002
4. Baranauskas A, Jasaitis D, Kareiva A, et al.  
Sol-gel preparation and characterization of manganese-substituted superconducting  $YBa_2(Cu_{1-x}Mn_x)_4O_{8-x}$  compounds  
J EUR CERAM SOC 21 (3): 399-408 MAR 2001
3. Van Bael MK, Kareiva A, Vanhoyland G, et al.

Influence of calcium substitution on the formation and thermal stability of the YBa<sub>2</sub>Cr<sub>4</sub>O<sub>8</sub> superconductor  
THERMOCHIM ACTA 341: 407-416 Sp. Iss. SI DEC 14 1999

2. Van Bael MK, Kareiva A, Vanhoyland G, et al.  
Enhancement of T<sub>c</sub> by substituting strontium for barium in the YBa<sub>2</sub>Cu<sub>4</sub>O<sub>8</sub> superconductor prepared by a sol-gel method  
PHYSICA C 307 (3-4): 209-220 OCT 20 1998

1. Kareiva A, Bryntse I, Karppinen M, et al.  
Influence of complexing agents on properties of YBa<sub>2</sub>Cu<sub>4</sub>O<sub>8</sub> superconductors prepared by the sol-gel method  
J SOLID STATE CHEM 121 (2): 356-361 FEB 1 1996

8. *"Morphological and compositional changes of the target surface during RF magnetron sputtering of the Y-Ba-Cu-O system"*

R. Chakalov and M. V. Abrashev  
Physica C 223 (1994) 173 - 178.

9. *"Optical Phonons in Nd<sub>2</sub> BaMO<sub>5</sub> (M = Zn, Cu)"*

M. V. Abrashev, G. A. Zlateva, M. N. Iliev, and M. Gyulmezov  
Phys. Rev. B 49 (1994) 11783 - 11788.

9. Ten Kate, Otmar M.; van der Kolk, Erik  
Quantum tripling in Tm<sup>3+</sup> doped La<sub>2</sub>BaZnO<sub>5</sub> phosphors for efficiency enhancement of small band gap solar cells  
JOURNAL OF LUMINESCENCE Volume: 156 Pages: 262-265 Published: DEC 2014

8. Cao, Renping; Cao, Chunyan; Yu, Xiaoguang; et al.  
Visible to near-infrared luminescence properties of Nd<sup>3+</sup>-doped La<sub>2</sub>BaZnO<sub>5</sub> phosphor  
JOURNAL OF SOLID STATE CHEMISTRY 215, pp. 22-25 JUL 2014

7. Rosli, A.N., Kassim, H.A., Shrivastava, K.N.  
DFT calculation of vibrations in the clusters of zinc and oxygen atoms  
Sains Malaysiana 42 (5), pp. 649-654, 2013

6. Gupta, H.C., Sharma, V.  
Interatomic forces in Pnma, Immm, P4/mbm and I4/mcm phase of R<sub>2</sub>BaMO<sub>5</sub> (R= yttrium or lanthanides; M= Ni, Cu or Zn)  
Journal of Physics: Conference Series 92 (1), art. no. 012163 (2007).

5. Gupta, H.C., Sharma, V.  
Lattice dynamics of tetragonal Nd<sub>2</sub>BaZnO<sub>5</sub>  
Journal of Raman Spectroscopy 38 (12), pp. 1554-1560 (2007).

4. Gupta, H.C., Sharma, V.  
Lattice dynamics of tetragonal R<sub>2</sub>BaCuO<sub>5</sub> (R = La, Nd) oxides in the P4/mbm structure  
Journal of Raman Spectroscopy 38 (7), pp. 885-889 (2007)

3. Dietrich M, Thurian P, Loa I, et al.  
Crystal-field transitions of Nd<sup>3+</sup> and Er<sup>3+</sup> in perovskite-type crystals  
MATER SCI FORUM 258-2: 1589-1594 Part 1-3 1997

2. Dareys B, Thurian P, Taboada S, et al.  
Luminescence properties of Nd<sub>2</sub>BaZnO<sub>5</sub>  
J LUMIN 72-4: 174-176 JUN 1997

1. de Andres A, Taboada S, Martinez JL, et al.  
Nd<sup>3+</sup> crystal-field transitions studied by raman and FIR spectroscopies in Nd<sub>2</sub>BaZnO<sub>5</sub>  
PHYS REV B 55: (6) 3568-3573 FEB 1 1997

10. *"Raman-active Phonons in R<sub>2</sub> BaMO<sub>5</sub> (R - rare earth, M = Cu, Zn)"*

M. V. Abrashev, G. A. Zlateva, and M. N. Iliev  
Proc. Suppl. of Balkan Physics Letters 2 (1994) 538 - 542.

11. *"Raman Study of R<sub>0.5</sub> Pr<sub>0.5</sub> Ba<sub>2</sub> Cu<sub>3</sub> O<sub>7</sub> (R = Y, Rare Earth)"*

G. G. Bogachev, M. V. Abrashev, M. N. Iliev, N. Poulakis, E. Liarokapis, C. Mitros, A. Koufoudakis, and V. Psycharis  
Phys. Rev. B 49 (1994) 12151 - 12158.

10. Zhang, A.-M., Zhang, Q.-M.  
Electron-phonon coupling in cuprate and iron-based superconductors revealed by Raman scattering  
Chinese Physics B 22 (8), art. no. 087103, 2013

9. Barba D, Jandl S, Nekvasil V, et al.

- Infrared transmission study of crystal-field excitations in Al- and Sr-doped  $\text{Pr}_{1+x}\text{Ba}_{2-x}\text{Cu}_3\text{O}_6$   
 PHYS REV B 69 (2): Art. No. 024528 JAN 2004
8. Gantis A, Calamiotou M, Palles D, et al.  
 Phase formation and lattice strain in superconducting compound  $\text{Y}_{1-x}\text{La}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  ( $0 \leq x \leq 1$ )  
 PHYS REV B 68 (6): Art. No. 064502 AUG 1 2003
7. Calamiotou M, Gantis A, Palles D, et al.  
 Phase separation and internal strains in the mixed  $\text{La}_{0.5}\text{R}_{0.5}\text{Ba}_2\text{Cu}_3\text{O}_y$  compounds (R = rare-earth element)  
 PHYS REV B 58: (22) 15238-15246 DEC 1 1998
6. Jin H, Ruan KQ, Wang CY, et al.  
 Ion size effect on the charge transfer and Raman spectrum of the  $(\text{Pb}_{0.65}\text{Sr}_{0.35})\text{Sr}_2(\text{R}_{0.5}\text{Ca}_{0.5})\text{Cu}_2\text{O}_y$  compound  
 PHYSICA C 292: (3-4) 211-217 DEC 20 1997
5. Faulques E, Ivanov VG  
 Raman line shapes from sputtered thin films of  $\text{Y}(\text{Pr})\text{Ba}_2\text{Cu}_3\text{O}_6+\delta$ : Fine structures and oxygen ordering  
 PHYS REV B 55: (6) 3974-3986 FEB 1 1997
4. Mayer M, Knoll P, HolzingerSchweiger E  
 Phononic and spin excitations in  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{6.9}$  crystals  
 J SUPERCOND 9: (4) 463-465 AUG 1996
3. Kall M, Litvinchuk AP, Berastegui P, et al.  
 Phonon Raman scattering in  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_4\text{O}_8$  ( $x=0-1$ ) and  $(\text{Y}_{1-x}\text{Pr}_x)_2\text{Ba}_4\text{Cu}_7\text{O}_{15-\delta}$  ( $x=0-0.6$ )  
 PHYS REV B 53: (6) 3590-3597 FEB 1 1996
2. LIKODIMOS V, GUSKOS N, PALIOS G, et al.  
 EPR STUDY OF LOCALIZED  $\text{Cu}^{2+}$  PARAMAGNETIC-IONS AND  $\text{Cu}^{2+}$  PAIRS IN THE OXYGEN-DEFICIENT  
 $\text{PrBa}_2\text{Cu}_3\text{O}_{6+x}$  AND  $\text{Pr}(\text{R})\text{Ba}_2\text{Cu}_3\text{O}_{6+x}$  (R=Y,ER) COMPOUNDS  
 PHYS REV B 52: (10) 7682-7688 SEP 1 1995
1. SHIN HS, YANG IS, LEE WC  
 RAMAN-STUDY OF  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_7-\delta$  AND  $\text{YBa}_2\text{Cu}_3-\text{XZn}_x\text{O}_7-\delta$  SINGLE-CRYSTALS  
 PHYSICA C 250: (3-4) 275-281 AUG 15 1995
12. *"Mossbauer, Crystal Structure, Magnetic and Raman Study of  $(\text{Y,Ce})_2\text{Sr}_2\text{CuFeO}_8$  Isomorphous with  $T^*$  Structure Superconductors"*  
 M. Pissas, C. Mitros, D. Niarchos, A. Kostikas, A. Simopoulos, M. Abrashev, V. Hadjimitov, and M. N. Iliev  
 Phys. Rev. B 50 (1994) 10157.
13. *"Raman Study of the 1222 Compound  $(\text{Bi,Cu})\text{Sr}_2(\text{R,Ce})_2\text{Cu}_2\text{O}_{9-x}$  (R = Y, Ho)"*  
 M. V. Abrashev, V. N. Hadjimitov, L. N. Bozukov, and M. N. Iliev  
 Solid State Commun. 93 (1995) 563.
5. Sathe, V.G., Awana, V.P.S., Deshpande, A., Kishan, H., Narlikar, A.V.  
 Raman spectroscopy of  $\text{RuSr}_2(\text{Eu}_{1.5}\text{Ce}_{0.5})\text{Cu}_2\text{O}_{10}$  magneto-superconductor  
 Solid State Communications 141 (12), pp. 658-662 (2007)
4. Xu GJ, Pu QR, Ding ZJ, et al.  
 Microstructure and phonon vibration of the Fe-doped  $\text{Bi}2201$  system  
 PHYSICA C 340: (2-3) 178-184 DEC 1 2000
3. Chen XH, Ruan KQ, Qian GG, et al.  
 Effects of doping on phonon Raman scattering in the Bi-based 2212 system  
 PHYS REV B 58: (9) 5868-5872 SEP 1 1998
2. Choy JH, Hwang SJ, Kim DK  
 Raman spectroscopic evidence on molecular mercuric bromide in the two-dimensional lattice of  $(\text{HgBr}_2)_{0.5}\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_y$   
 PHYS REV B 55: (9) 5674-5677 MAR 1 1997
1. Pissas, M., Kallias, G., Poulakis, N., Niarchos, D., Simopoulos, A., Liarokapis, E.  
 Structural, Mössbauer, and Raman studies of the  $(\text{Y,Ce})_2\text{Sr}_2\text{Cu}_2\text{FeO}_{8+y}$  compound  
 Physical Review B 52(14), 10610 (1995)
14. *"Raman-active phonons in  $\text{La}_4\text{BaCu}_5\text{O}_{13}$  : polarized Raman spectroscopy and lattice dynamical calculations"*  
 M. V. Abrashev and V. N. Popov  
 J. Phys.: Condens. Matter 7 (1995) 4967.

15. "Preparation of a  $YBa_2Cu_4O_8$  high-temperature superconductor from a spray dried nitrate precursor"

G. Gyurov, I. Khristova, and M. V. Abrashev  
J. Mater. Sci. Lett. 15 (1996) 1559 - 1561.

16. "Raman spectroscopy and lattice dynamical calculations of mixed copper-titanium oxides"

M. V. Abrashev, C. Thomsen, V. N. Popov, and L. N. Bozukov  
Physica C 274 (1997) 141 - 148.

1. Lim, G.H  
Vibration of plates and shells using finite elements (1996-1997)  
Finite Elements in Analysis and Design 31 (3), pp. 223-230 1999

17. "Optical properties of  $Nd^{3+}$  in  $Nd_2BaZnO_5$  "

B. Dareys, P. Thurian, M. Dietrich, M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, A. de Andres, and S. Taboada  
Phys. Rev. B 55 (1997) 6871 - 6879.

7. Nawrocki, P.R., Sørensen, T.J.  
Optical spectroscopy as a tool for studying the solution chemistry of neodymium(iii)  
Physical Chemistry Chemical Physics 25(29), pp. 19300-19336 (2023).

6. Feng, L., Li, L., Zhang, M., Yang, Y., Sun, X.  
Novel and environment-friendly high NIR reflectance color pigments based on Fe, Pr, Ho, Nd, Er and Ce doped lithium aluminum molybdate: Synthesis and properties  
Ceramics International 48(20), pp. 30630-30639 (2022).

5. Gupta, H.C., Sharma, V.  
Lattice dynamics of tetragonal  $Nd_2BaZnO_5$   
Journal of Raman Spectroscopy 38 (12), pp. 1554-1560 (2007).

4. Klimin SA, Popova MN, Mill BV  
Infrared spectroscopy of the  $Nd^{3+}$  ion in  $Nd_2BaCuO_5$  and  $Nd_2BaZnO_5$   
PHYS SOLID STATE+ 44 (8): 1564-1569 2002

3. Klimin SA, Popova MN, Antic-Fidancev E, et al.  
Optical and crystal-field analysis of  $Nd^{3+}$  ion in  $Nd_2BaCuO_5$  and  $Nd_2BaZnO_5$   
J SOLID STATE CHEM 162 (1): 42-51 NOV 15 2001

2. Cruz GK, Carvalho RA, Basso HC  
Energy assignments for the  $I-4(15/2)$  and  $S-4(3/2)$  multiplets of the  $Er^{3+}$  ion in  $(Er_{0.05}Y_{0.95})_2BaZnO_5$   
J APPL PHYS 89: (4) 2194-2201 FEB 15 2001

1. Cruz GK, Basso HC, Terrile MC, et al.  
Spectroscopic properties of  $Y_2BaZnO_5 : Er^{3+}$   
J LUMIN 86: (2) 155-160 MAR 2000

18. "Optical phonons in the orthorhombic double-chain  $Sr_{1-x}Ca_xCuO_2$  ( $x = 0, 0.5$ )"

M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, and V. N. Popov  
Phys. Rev. B 55 (1997) 9136 - 9141.

13. Finite size effect on the magnetic excitations spectra, phonons and heat conduction of the quasi- one-dimensional spin chains system  $SrCuO_2$   
Bounoua, D., Saint-Martin, R., Petit, S., Bourdarot, F., Pinsard-Gaudart, L.  
Physica B: Condensed Matter Volume 536 Page 323-326 Published MAY 1 2018

12. Khan, Afzal; Jimenez, Carmen; Chaix-Pluchery, Odette; et al.  
Effect of thermal annealing on electrical and optical properties of Ba-doped  $SrCu_2O_2$  thin films on glass substrates  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE 210 (12), pp. 2569-2574 DEC 2013

11. Montagnese, M., Otter, M., Zotos, X., Fishman, D.A., Hlubek, N., Mityashkin, O., Hess, C., (...), Van Loosdrecht, P.H.M.  
Phonon-magnon interaction in low dimensional quantum magnets observed by dynamic heat transport measurements  
Physical Review Letters 110 (14), art. no. 147206, 2013

10. Cheng Li; Xiong Rui; Shi Jing  
Raman scattering study of the spin ladder compound  $Sr(14)Cu(24)O(41+\delta)$   
ACTA PHYSICA SINICA 59 (7) Pages: 5078-5084, JUL 2010.

9. Nunner TS, Brune P, Kopp T, et al.  
Phonon-assisted magnetic absorption of (La,Ca)<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>: Contribution of different phonon modes  
ACTA PHYS POL B 34 (2): 1545-1548 Sp. Iss. SI FEB 2003
8. Popovic ZV, Ivanov VA, Konstantinovic MJ, et al.  
Optical studies of gap, hopping energies, and the Anderson-Hubbard parameter in the zigzag-chain compound SrCuO<sub>2</sub>  
PHYS REV B 63 (16): art. no. 165105 APR 15 2001
7. Popovic ZV, Konstantinovic MJ, Gajic R, et al.  
Polarized far-infrared and Raman spectra of SrCuO<sub>2</sub> single crystals  
PHYSICA C 351 (4): 386-394 APR 15 2001
6. Lee YS, Noh TW, Choi HS, et al.  
Polarization-dependent infrared phonon spectra of quasi-one-dimensional Sr<sub>2</sub>CuO<sub>3</sub> and SrCuO<sub>2</sub>  
PHYS REV B 62: (9) 5285-5288 SEP 1 2000
5. Popovic ZV, Konstantinovic MJ, Ivanov VA, et al.  
Optical properties of the spin-ladder compound Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYS REV B 62: (8) 4963-4972 AUG 15 2000
4. Nagai, I., Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
Raman scattering study of Sr<sub>14-x</sub>Ca<sub>x</sub>Cu<sub>24</sub>O<sub>41</sub>  
Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)
3. Ruzicka B, Degiorgi L, Meijer GI, et al.  
Optical properties of Sr<sub>14-x</sub>Ca<sub>x</sub>Cu<sub>24</sub>O<sub>41</sub> and Sr<sub>0.73</sub>CuO<sub>2</sub>  
PHYSICA C 318: 282-285 MAY 1999
2. Milicic SN, Popovic ZV, Konstantinovic MJ, et al.  
Phonons in SrCuO<sub>2</sub> single crystals  
SOLID STATE PHENOM 61-2: 305-308 (1998).
1. Popovic ZS, Vukajlovic FR  
Coulomb correlated band structure of one-dimensional SrCuO<sub>2</sub>  
SOLID STATE COMMUN 106: (7) 415-420 MAY 1998

19. *"Frohlich-interaction induced multi-phonon Raman scattering in SrCuO<sub>2</sub> and Sr<sub>0.5</sub>Ca<sub>0.5</sub>CuO<sub>2</sub>"*  
M. V. Abrashev, A. P. Litvinchuk, and C. Thomsen  
Phys. Rev. B 55 (1997) R8638 - R8641

21. Ascencio, F., Rangel-Gamboa, L., Maqueda-Cabrera, B., (...), Herrera, R., Mendoza-Cruz, R.  
Structural and vibrational study of porous CeO<sub>2</sub> nanoparticles  
Materials Chemistry and Physics 311,128492 (2024).
20. Zuñiga-Puelles, E., Levyskiy, V., Özden, A., (...), Kortus, J., Gumeniuk, R.  
Thermoelectric properties and scattering mechanisms in natural PbS  
Physical Review B 107(19),195203 (2023).
19. Finite size effect on the magnetic excitations spectra, phonons and heat conduction of the quasi- one-dimensional spin chains system SrCuO<sub>2</sub>  
Bounoua, D., Saint-Martin, R., Petit, S., Bourdarot, F., Pinsard-Gaudart, L.  
Physica B: Condensed Matter Volume 536 Page 323-326 Published MAY 1 2018
18. Cristian Vasquez, G.; Maestre, David; Cremades, Ana; et al.  
Assessment of the Cr doping and size effects on the Raman-active modes of rutile TiO<sub>2</sub> by UV/Visible polarized Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY 48 (6), 847-854 JUN 2017
17. Baibarac, M.; Smaranda, I.; Scocioreanu, M.; et al.  
Exciton-phonon interaction in Pbl<sub>2</sub> revealed by Raman and photoluminescence studies using excitation light overlapping the fundamental absorption edge  
MATERIALS RESEARCH BULLETIN Volume: 70 Pages: 762-772 Published: OCT 2015
16. de la Flor, G.; Wehber, M.; Rohrbeck, A.; et al.  
Resonance Raman scattering of perovskite-type relaxor ferroelectrics under nonambient conditions  
PHYSICAL REVIEW B 90 (6), Art. No: 064107 AUG 12 2014
15. Bielecki, J., Svedlindh, P., Tibebe, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012
14. Andreasson, J., Holmlund, J., Singer, S.G., Knee, C.S., Rauer, R., Schulz, B., Käll, M., (...), Lichtenstein, A.  
Electron-lattice interactions in the perovskite LaFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub> characterized by optical spectroscopy and LDA+U calculations  
Physical Review B - Condensed Matter and Materials Physics 80 (7), art. no. 075103 (2009).

13. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).

12. Hu Ni; Xiong Rui; Wei Wei; et al.

Raman scattering study of the spin ladder compound Sr-14(Cu<sub>1-y</sub>Fey)(24)O-41

ACTA PHYSICA SINICA Volume: 57 Issue: 8 Pages: 5267-5271 Published: AUG 2008

11. Holmlund, J., Andreasson, J., Knee, C.S., Bäckström, J., Käll, M., Osada, M., Noji, T., (...), Börjesson, L.

Resonant two-phonon Raman scattering as a probe of hole crystal formation in Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>

Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134502 (2006)

10. Choi, K.-Y., Gnezdilov, V.P., Lemmens, P., Capogna, L., Johnson, M.R., Sofin, M., Maljuk, A., Keimer, B.

Magnetic excitations and phonons in the spin-chain compound Na Cu<sub>2</sub> O<sub>2</sub>

Physical Review B - Condensed Matter and Materials Physics 73 (9), art. no. 094409, pp. 1-8 (2006)

9. Livneh T, Sterer E

Effect of pressure on the resonant multiphonon Raman scattering in UO<sub>2</sub>

PHYSICAL REVIEW B 73 (8): Art. No. 085118 FEB 2006

8. Popovic ZV, Ivanov VA, Konstantinovic MJ, et al.

Optical studies of gap, hopping energies, and the Anderson-Hubbard parameter in the zigzag-chain compound SrCuO<sub>2</sub>

PHYS REV B 63 (16): art. no. 165105 APR 15 2001

7. Popovic ZV, Konstantinovic MJ, Gajic R, et al.

Polarized far-infrared and Raman spectra of SrCuO<sub>2</sub> single crystals

PHYSICA C 351 (4): 386-394 APR 15 2001

6. Lee YS, Noh TW, Choi HS, et al.

Polarization-dependent infrared phonon spectra of quasi-one-dimensional Sr<sub>2</sub>CuO<sub>3</sub> and SrCuO<sub>2</sub>

PHYS REV B 62: (9) 5285-5288 SEP 1 2000

5. Popovic ZS, Vukajlovic FR

Coulomb-correlated band structure of one-dimensional spin-Peierls alpha'-NaV<sub>2</sub>O<sub>5</sub>

PHYS REV B 59: (8) 5333-5340 FEB 15 1999

4. Konstantinovic MJ

Raman scattering in copper-oxide based antiferromagnets

SOLID STATE PHENOM 61-2: 59-66 1998

3. Milicic SN, Popovic ZV, Konstantinovic MJ, et al.

Phonons in SrCuO<sub>2</sub> single crystals

SOLID STATE PHENOM 61-2: 305-308 (1998).

2. Lin Y, Eldridge JE

Fluctuation effects on the Raman scattering from the charge-density-wave system TTF-TCNQ

PHYS REV B 58: (7) 3477-3481 AUG 15 1998

1. Popovic ZS, Vukajlovic FR

Coulomb correlated band structure of one-dimensional SrCuO<sub>2</sub>

SOLID STATE COMMUN 106: (7) 415-420 MAY 1998

## 20. "Raman and infrared-active phonons in hexagonal YMnO<sub>3</sub>: Experiment and lattice dynamical calculations"

M. N. Iliev, H. G. Lee, V. N. Popov, M. V. Abrashev, A. Hamed, R. L. Meng, and C. W. Chu  
Phys. Rev. B 56 (1997) 2488 - 2494.

193. Wu, R., Schmitt, S., Maudet, F., (...), Deshpande, V., Dubourdieu, C.

Electrochemical Metallization Memristive Devices with Al Active Electrode Using Engineered Mixed Hexagonal/Orthorhombic Polycrystalline YMnO<sub>3</sub>

Small Structures DOI: 10.1002/sstr.202300494 (2024)

192. Gao, Z., Zhang, Y., Li, X., (...), Cheong, S.-W., Wang, X.

Mechanical manipulation for ordered topological defects

Science Advances 10(1), eadi5894 (2024)

191. Lu, X.-Z., Zhang, H.-M., Zhou, Y., (...), Kageyama, H., Rondinelli, J.M.

Out-of-plane ferroelectricity and robust magnetoelectricity in quasi-two-dimensional materials

Science Advances 9(47), eadi0138 (2023)

190. Munisha, B., Mishra, B., Nanda, J., (...), Sankaran, K.J., Suman, S.

Enhanced photocatalytic degradation of 4-nitrophenol using polyacrylamide assisted Ce-doped YMnO<sub>3</sub> nanoparticles

Journal of Rare Earths 41(10), pp. 1541-1550 (2023)



189. Saha, P., Nithya, R., Sathyanarayana, A.T., (...), Deshpande, U., Venkatesh, R. Experimental Evidences for Quantum Spin Liquid Ground State in Layered Hexagonal Y<sub>2</sub>CuTiO<sub>6</sub> Journal of Superconductivity and Novel Magnetism 36(7-9), pp. 1683-1691 (2023)
188. Correa, A., Barbosa, D.A.B., De Menezes, A.S., (...), Sharma, S.K., Santos, C.C. Strain-mediated magnetolectricity probed by Raman spectroscopy in h-ErMnO<sub>3</sub> Physical Review B 108(1),014101 (2023)
187. Watanabe, K., Nishikawa, M., Sakaguchi, H., Veis, M., Ishibashi, T. Preparation and characterization of YMnO<sub>3</sub> thin films by metal-organic decomposition Japanese Journal of Applied Physics 62(SB),SB1005 (2023)
186. Schweidler, S., Tang, Y., Lin, L., (...), Tarancón, A., Botros, M. Synthesis of perovskite-type high-entropy oxides as potential candidates for oxygen evolution Frontiers in Energy Research 10,983979 (2022)
185. Roy, A., Bhatt, H., Srihari, V., Poswal, H.K., Vishwakarma, S.R. Probing bipyramid microstructure of pure and Dy-doped HoMnO<sub>3</sub> using high pressure and low temperature studies Bulletin of Materials Science 45(4),224 (2022)
184. Safdar, M., González-Castaño, M., Penkova, A., (...), Odriozola, J.A., Arellano-García, H. CO<sub>2</sub> methanation on Ni/YMn<sub>1-x</sub>Al<sub>x</sub>O<sub>3</sub> perovskite catalysts Applied Materials Today 29,101577 (2022)
183. Wan, F., Li, L., Bai, X., (...), Li, J., Cao, C. Structure and dielectric relaxation behaviors of Co-doped YMnO<sub>3</sub> multiferroic ceramics Journal of Materials Science: Materials in Electronics 33(21), pp. 17361-17371 (2022)
182. Zhang, A.M., Cao, H.F., Pan, X.X., Zhu, J.J., Wu, X.S. Strain-modulated structure distortion and magnetic properties of orthorhombic LuMnO<sub>3</sub> thin films Thin Solid Films 750,139186 (2022)
181. Amrillah, T., Duong, M.N., Chen, Y.-X., (...), Wu, K.-H., Juang, J.-Y. Effects of Surface Polarity on the Structure and Magnetic Properties of Epitaxial h-YMnO<sub>3</sub> Thin Films Grown on MgO Substrates ACS Applied Electronic Materials 4(4), pp. 1603-1610 (2022)
180. Chanu, L.P., Phanjoubam, S. Study on the structural and electrical properties of YMnO<sub>3</sub> co-substituted with transition metal ions at Mn-site and their conduction mechanism Journal of Materials Science: Materials in Electronics 33(9), pp. 6107-6120 (2022)
179. Paris Chanu, L., Phanjoubam, S. Study on the structural and electrical transport properties of YMn<sub>0.9</sub>Cr<sub>0.1</sub>O<sub>3</sub> Materials Today: Proceedings 65, pp. 2645-2650 (2022)
178. Karoblis, D., Zarkov, A., Garskaite, E., (...), Beganskiene, A., Kareiva, A. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub> Scientific Reports 11(1),2875 (2021)
177. Sanson, A. EXAFS spectroscopy: a powerful tool for the study of local vibrational dynamics Microstructures 1(1),2021004 (2021)
176. Ye, M., Xu, X., Wang, X., (...), Cheong, S.-W., Blumberg, G. Crystal-field excitations and vibronic modes in the triangular-lattice spin-liquid candidate TbInO<sub>3</sub> Physical Review B 104(8),085102 (2021)
175. González-Castaño, M., de Miguel, J.C.N., Penkova, A., (...), Odriozola, J.A., Arellano-García, H. Ni/YMnO<sub>3</sub> perovskite catalyst for CO<sub>2</sub> methanation Applied Materials Today 23,101055 (2021)
174. Počuča-Nešić, M., Stanojević, Z.M., Radović, M., (...), Branković, G., Branković, Z. Processing and Properties of Ceramic Yttrium Manganite Sintered by Different Methods Science of Sintering 53(4), pp. 485-496 (2021)
173. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub> Karoblis, D (Karoblis, Dovydas) Zarkov, A (Zarkov, Aleksej) Garskaite, E (Garskaite, Edita) Mazeika, K (Mazeika, Kestutis) Baltrunas, D (Baltrunas, Dalis) Niaura, G (Niaura, Gediminas) Beganskiene, A (Beganskiene, Aldona) Kareiva, A (Kareiva, Aivaras) SCIENTIFIC REPORTS Volume11 Issue1 Article Number2875 PublishedFEB 3 2021
172. Unusual magnetic ordering transitions in nanoscale biphasic LuFeO<sub>3</sub>: the role of the ortho-hexa phase ratio and the local structure Chaturvedi, S (Chaturvedi, Smita) Shyam, P (Shyam, Priyank) Shirolkar, MM (Shirolkar, Mandar M.) Krishna, SS (Krishna, Swathi S.) Sinha, B (Sinha, Bhavesh) Caliebe, W (Caliebe, Wolfgang) Kalinko, A (Kalinko, Aleksandr) Srinivasan, G (Srinivasan, Gopalan) Ogale, S (Ogale, Satishchandra) JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue47 Page17000-17008 PublishedDEC 21 2020

171. Effect of oxygen vacancy gradient on ion-irradiated Ca-doped YMnO<sub>3</sub> thin films  
Rathod, KN (Rathod, Kunalsinh N.) Gadani, K (Gadani, Keval) Dhruv, D (Dhruv, Davit) Shrimali, VG (Shrimali, Vipul G.) Solanki, S (Solanki, Sapana) Joshi, AD (Joshi, Ashvini D.) Singh, JP (Singh, Jitendra P.) Chae, KH (Chae, Keun H.) Asokan, K (Asokan, Kandasami) Solanki, PS (Solanki, Piyush S.)  
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B Volume38 Issue6 Article Number062208 PublishedNOV 2020
170. h-ErMnO<sub>3</sub> absorbance, reflectivity, and emissivity in the terahertz to mid-infrared from 2 to 1700 K: Carrier screening, Frohlich resonance, small polarons, and bipolarons  
Massa, NE (Massa, Nestor E.) del Campo, L (del Campo, Leire) Holldack, K (Holldack, Karsten) Canizares, A (Canizares, Aurelien) Phuoc, VT (Phuoc, Vinh Ta) Kayser, P (Kayser, Paula) Alonso, JA (Antonio Alonso, Jose)  
PHYSICAL REVIEW B Volume102 Issue13 Article Number134305 PublishedOCT 12 2020
169. Magnetoelastic excitations in multiferroic hexagonal YMnO<sub>3</sub> studied by inelastic x-ray scattering  
Park, K (Park, Kisoo) Oh, J (Oh, Joosung) Lee, KH (Lee, Ki Hoon) Leiner, JC (Leiner, Jonathan C.) Sim, H (Sim, Hasung) Nahm, HH (Nahm, Ho-Hyun) Kim, T (Kim, Taehun) Jeong, J (Jeong, Jaehong) Ishikawa, D (Ishikawa, Daisuke) Baron, AQR (Baron, Alfred Q. R.)  
PHYSICAL REVIEW B Volume102 Issue8 Article Number085110 PublishedAUG 5 2020
168. Valence fluctuation and magnetic frustration in Ga substituted YMnO<sub>3</sub>  
Paul, P (Paul, Pralay) Rajarajan, AK (Rajarajan, A. K.) Debnath, AK (Debnath, A. K.) Rao, R (Rao, Rekha) Rao, TVC (Rao, T. V. Chandrasekhar)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume503 Article Number166617 PublishedJUN 1 2020
167. Domain structure and multiferroic properties of epitaxial hexagonal ErMnO<sub>3</sub> films  
Chen, Y (Chen, Yi) Li, Y (Li, Ye) Zheng, DF (Zheng, Dongfeng) Li, LY (Li, Leiyu) Zeng, M (Zeng, Min) Qin, MH (Qin, Minghui) Hou, ZP (Hou, Zhipeng) Fan, Z (Fan, Zhen) Gao, XS (Gao, Xingsen) Lu, XB (Lu, Xubing)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume821 Article Number153529 PublishedAPR 25 2020
166. Parametric Excitation of an Optically Silent Goldstone-Like Phonon Mode  
Juraschek, DM (Juraschek, Dominik M.) Meier, QN (Meier, Quintin N.) Narang, P (Narang, Prineha)  
PHYSICAL REVIEW LETTERS Volume124 Issue11 Article Number117401 PublishedMAR 16 2020
165. The particle size effect of Yb<sub>0.8</sub>Ru<sub>0.2</sub>MnO<sub>3</sub> (R is Sm, Nd, and Eu) on some physical properties  
Abdel-Latif, IA (Abdel-Latif, I. A.)  
JOURNAL OF NANOPARTICLE RESEARCH Volume22 Issue2 Article Number45 PublishedFEB 6 2020
164. Structure distortion and magnetic properties of Ru-doped H-LuMnO<sub>3</sub>  
Cao, HF (Cao, H. F.) Zhang, AM (Zhang, A. M.) Cui, JY (Cui, J. Y.) Yang, LP (Yang, L. P.) Wu, XS (Wu, X. S.)  
SOLID STATE COMMUNICATIONS Volume 306 Article Number 113753 Published FEB 2020
163. Synthesized and Photocatalytic Mechanism of the NiO Supported YMnO<sub>3</sub> Nanoparticles for Photocatalytic Degradation of the Methyl Orange Dye  
Wang, YJ (Wang, Yujuan) Song, JJ (Song, Jingjing)  
ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS Volume234 Issue 1 Page 153-170 Published JAN 2020
162. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
SCIENTIFIC REPORTS Volume 9 Article Number 19204 Published DEC 16 2019
161. Competition of magnetic ordering and spin-phonon coupling in multiferroic hexagonal YMn<sub>1-x</sub>CrxO<sub>3</sub>  
Cui, JY (Cui, J. Y.) Zhang, AM (Zhang, A. M.) Shi, JY (Shi, J. Y.) Cao, HF (Cao, H. F.) Wu, XS (Wu, X. S.) Zhang, YM (Zhang, Y. M.)  
JOURNAL OF APPLIED PHYSICS Volume 126 Issue 11 Article Number 114103 Published SEP 21 2019
160. Investigations on the Electronic Excitations through Spectroscopic Measures for Resistive Switching Character of Manganite Thin Films  
Rathod, KN (Rathod, Kunalsinh N.) Gadani, K (Gadani, Keval) Dhruv, D (Dhruv, Davit) Boricha, H (Boricha, Hetal) Zankat, A (Zankat, Alpa) Joshi, AD (Joshi, Ashvini D.) Singh, JP (Singh, Jitendra P.) Chae, KH (Chae, Keun H.) Asokan, K (Asokan, Kandasami) Solanki, PS (Solanki, Piyush S.)  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume 256 Issue 12 Article Number 1900264 Published DEC 2019
159. Hybridization and Decay of Magnetic Excitations in Two-Dimensional Triangular Lattice Antiferromagnets  
Kim, T (Kim, Taehun) Park, K (Park, Kisoo) Leiner, JC (Leiner, Jonathan C.) Park, JG (Park, Je-Geun)  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume 88 Issue 8 Article Number 081003 Published AUG 15 2019
158. Crystal structure and vibrational spectra of hexagonal manganites YMnO<sub>3</sub> and LuMnO<sub>3</sub> under high pressure  
Jabarov, SH (Jabarov, S. H.) Dang, NT (Dang, N. T.) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Dubrovinsky, LS (Dubrovinsky, L. S.) Park, JG (Park, Je-Geun) Lee, S (Lee, Seongsu) Mammadov, AI (Mammadov, A., I) Mehdiyeva, RZ (Mehdiyeva, R. Z.) Savenko, BN (Savenko, B. N.)  
MATERIALS RESEARCH EXPRESS Volume 6 Issue 8 Article Number 086110 Published AUG 2019
157. Lattice and spin dynamics in multiferroic BiFeO<sub>3</sub> and RMnO<sub>3</sub>  
Song, Y (Song, Yan) Xu, B (Xu, Ben) Nan, CW (Nan, Ce-Wen)  
NATIONAL SCIENCE REVIEW Volume 6 Issue 4 Page 642-652 Published JUL 2019
156. Effects of a strong gravitational field on Mn-trimers and magnetic properties of hexagonal YMnO<sub>3</sub> single crystal

- Tokuda, M (Tokuda, Makoto) Mashimo, T (Mashimo, Tsutomu) Ma, WJ (Ma, Weijian) Hayami, S (Hayami, Shinya) Ando, S (Ando, Shinji) Nishiyama, T (Nishiyama, Tadao) Yoshiasa, A (Yoshiasa, Akira)  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume 129 Page 172-179 Published JUN 2019
155. Structural, ferroelectric and dielectric properties of multiferroic YMnO<sub>3</sub> synthesized via microwave assisted radiant hybrid sintering  
Kumar, M (Kumar, Manish) Phase, DM (Phase, D. M.) Choudhary, RJ (Choudhary, R. J.)  
HELIYON Volume 5 Issue 5 Article Number 01691 Published MAY 2019
154. Characteristics of Coherent Optical Phonons in a Hexagonal YMnO<sub>3</sub> Thin Film  
Hasegawa, T (Hasegawa, Takayuki)  
APPLIED SCIENCES-BASEL Volume 9 Issue 4 Article Number 704 Published FEB 2 2019
153. High pressure structural investigations on hexagonal YInO<sub>3</sub>  
Dwivedi, A (Dwivedi, Abhilash) Poswal, HK (Poswal, H. K.) Shukla, R (Shukla, R.) Velaga, S (Velaga, Srihari) Sahoo, BD (Sahoo, B. D.) Grover, V (Grover, V.) Deo, MN (Deo, M. N.)  
HIGH PRESSURE RESEARCH Volume 39 Issue 1 Page 17-35 Published JAN 2 2019
152. New insight into the structure of PuGaO<sub>3</sub> from ab initio particle-swarm optimization methodology  
Li, SC (Li, Shichang) Ye, XQ (Ye, Xiaoqi) Liu, T (Liu, Tao) Gao, T (Gao, Tao) Ma, SG (Ma, Shenggui) Ao, BY (Ao, Bingyun)  
JOURNAL OF MATERIALS CHEMISTRY A Volume 6 Issue 45 Page 22798-22808 Published DEC 7 2018
151. Thermal stable blue pigment with tunable color of DyIn<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.1)  
Zhang, YM (Zhang, Yimeng) Qi, H (Qi, Hui) Liu, HH (Liu, Huanhuan) Wang, S (Wang, Shan) Yuan, L (Yuan, Long) Hou, CM (Hou, Changmin)  
DYES AND PIGMENTS Volume 156 Page 192-198 Published SEP 2018
150. Synthesis, Structure and Spectral Properties of Fe-doped DyInO<sub>3</sub> Yellow Pigments  
Zhang, YM (Zhang Yimeng) Yuan, L (Yuan Long) Liu, HH (Liu Huanhuan) Hou, CM (Hou Changmin)  
CHEMICAL JOURNAL OF CHINESE UNIVERSITIES-CHINESE Volume 39 Issue 7 Page 1400-1405 Published JUL 10 2018
149. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure  
Shukla, R (Shukla, Rakesh) Grover, V (Grover, Vinita) Srinivasu, K (Srinivasu, Kancharlapalli) Paul, B (Paul, Barnita) Roy, A (Roy, Anushree) Gupta, R (Gupta, Ruma) Tyagi, AK (Tyagi, Avesh Kumar)  
DALTON TRANSACTIONS Volume 47 Issue 19 Page 6787-6799 Published MAY 21 2018
148. Magnetic ground state of the multiferroic hexagonal LuFeO<sub>3</sub>  
Suresh, P (Suresh, Pittala) Laxmi, KV (Laxmi, K. Vijaya) Bera, AK (Bera, A. K.) Yusuf, SM (Yusuf, S. M.) Chittari, BL (Chittari, Bheema Lingam) Jung, J (Jung, Jeil) Kumar, PSA (Kumar, P. S. Anil)  
PHYSICAL REVIEW B Volume 97 Issue 18 Article Number 184419 Published MAY 15 2018
147. Hole doping effect on structure, transport and magnetic properties of Dy<sub>1-x</sub>Ba<sub>x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 1)  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume 744 Page 82-89 Published MAY 5 2018
146. The magnetic transition temperature tuned by strain in YMn<sub>0.9</sub>Ru<sub>0.1</sub>O<sub>3</sub> thin films  
Yang LP, Zhang AM, Wang K, Wu XS, Zhai ZY,  
AIP ADVANCES Volume 8 Issue 5 Article Number 055805 Published MAY 2018
145. Momentum-resolved observations of the phonon instability driving geometric improper ferroelectricity in yttrium manganite  
Bansal D., Niedziela JL, Sinclair R, Garlea VO, Abernathy DL, Chi SX, Ren Y, Zhou HD, Delaire O,  
NATURE COMMUNICATIONS Volume 9 Article Number 15 Published JAN 2 2018
144. Demirel, S.; Oz, E.; Altin, S.; et al.  
Structural, magnetic, electrical and electrochemical properties of SrCo<sub>0.25</sub>, Sr<sub>9</sub>Co<sub>2</sub>Mn<sub>5</sub>O<sub>21</sub> and SrMnO<sub>3</sub> compounds  
CERAMICS INTERNATIONAL Volume: 43 Issue: 17 Pages: 14818-14826 Published: DEC 1 2017
143. Zhang, Xiong; Song, Hongjia; Tan, Congbing; et al.  
Epitaxial growth and magnetic properties of h-LuFeO<sub>3</sub> thin films  
JOURNAL OF MATERIALS SCIENCE Volume: 52 Issue: 24 Pages: 13879-13885 Published: DEC 2017
142. Hasegawa, Takayuki; Fujimura, Norifumi; Nakayama, Masaaki  
Ultrafast dynamics of coherent optical phonon correlated with the antiferromagnetic transition in a hexagonal YMnO<sub>3</sub> epitaxial film  
APPLIED PHYSICS LETTERS Volume: 111 Issue: 19 Article Number: 192901 Published: NOV 6 2017
141. Rawat, Ritu; Phase, D. M.; Choudhary, R. J.  
Spin-phonon coupling in hexagonal Sr<sub>0.6</sub>Ba<sub>0.4</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 441 Pages: 398-403 Published: NOV 1 2017
140. Muneeswaran, M.; Jang, Jae Won; Choi, Byung Chun; et al.  
Structural, optical and multiferroic properties of pure and Dy modified YMnO<sub>3</sub>  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 22 Pages: 16788-16796 Published: NOV 2017
139. Qiang, Gang; Fang, Yifei; Zhang, Jincang  
Two-dimensional antiferromagnetic perturbation and enhanced ferroelectricity in h-Yb<sub>1-x</sub>HoxMnO<sub>3</sub>  
SOLID STATE COMMUNICATIONS Volume: 266 Pages: 46-49 Published: OCT 2017

138. Zhang, Zhenya; Wang, Saisai  
High-temperature phase transition, coordination mechanism and magnetism in multiferroic YMnO<sub>3</sub> nanopowders  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 15 Pages: 10940-10950 Published: AUG 2017
137. Yang, L. P.; Zhang, A. M.; Dai, Y.; et al.  
The effect of Dy-Fe co-doping on the structural and magnetic properties of h-YMnO<sub>3</sub>  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 12 Pages: 8872-8877 Published: JUN 2017
136. Chakraborty, Keka R.; Paul, Barnita; Shukla, R.; et al.  
Revealing magnetic ordering and spin-phonon coupling in Y-1-xTbxMnO<sub>3</sub> (0.1 ≤ x ≤ 0.3) compounds  
JOURNAL OF PHYSICS-CONDENSED MATTER 29 (15), 155804 APR 2017
135. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.  
Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in LuMn<sub>0.5</sub>Fe<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 121 (8), 084102 FEB 2017
134. Nguyen, TMH, Nguyen, TH, Chen, XB, Park, Y, Jung, YM, Lee, D, Noh, TW, Cheong, SW, Yang, IS  
Correlation between magnon and magnetic symmetries of hexagonal RMnO<sub>3</sub> (R = Er, Ho, Lu)  
JOURNAL OF MOLECULAR STRUCTURE Volume: 1124 Special Issue: SI Pages: 103-109 DOI: 10.1016/j.molstruc.2016.03.043  
Published: NOV 15 2016
133. Mustafa, G., Islam, M.U., Zhang, W., Arshad, M.I., Jamil, Y., Anwar, H., Murtaza, G., Hussain, M., Ahmad, M.  
Investigation of the Role of Ce<sup>3+</sup> Substituted Ions on Dielectric Properties of Co-Cr Ferrites Prepared by Co-precipitation Method  
JOURNAL OF ELECTRONIC MATERIALS Volume: 45 Issue: 11 Pages: 5830-5838 DOI: 10.1007/s11664-016-4783-z Published: NOV 2016
132. Biswas, T., Jain, M.  
Quasiparticle band structure and optical properties of hexagonal-YMnO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 15 Article Number: 155102 DOI: 10.1063/1.4964690 Published: OCT 21 2016
131. Bekheet, M.F., Svoboda, I., Liu, N., Bayarjargal, L., Irran, E., Dietz, C., Stark, R.W., Riedel, R., Gurlo, A.  
Ferroelectric InMnO<sub>3</sub>: Growth of single crystals, structure and high-temperature phase transitions  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 241 Pages: 54-63 DOI: 10.1016/j.jssc.2016.05.031 Published: SEP 2016
130. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
Published: JUL 2016
129. Cheng, S., Li, M., Deng, S., Bao, S., Tang, P., Duan, W., Ma, J., Nan, C., Zhu, J.  
Manipulation of Magnetic Properties by Oxygen Vacancies in Multiferroic YMnO<sub>3</sub>  
ADVANCED FUNCTIONAL MATERIALS Volume: 26 Issue: 21 Pages: 3589-3598 DOI: 10.1002/adfm.201505031 Published: JUN 7 2016
128. Nguyen, D.T., Nguyen, M.T.T., Kim, H.-J.  
Optimization of the growth of epitaxial hexagonal YMnO<sub>3</sub> on different substrates via pulsed laser deposition  
New Physics: Sae Mulli 66(4), 398-401 DOI: 10.3938/NPSM.66.398 (2016)
127. Sim, H., Oh, J., Jeong, J., Le, M.D., Park, J.-G.  
Hexagonal RMnO<sub>3</sub>: a model system for two-dimensional triangular lattice antiferromagnets  
ACTA CRYSTALLOGRAPHICA SECTION B-STRUCTURAL SCIENCE CRYSTAL ENGINEERING AND MATERIALS Volume: 72 Pages: 3-19 DOI: 10.1107/S2052520615022106 Part: 1 Published: FEB 2016
126. Chai, J.-S., Tian, H., Mao, A.-J., Deng, L.-J., Kuang, X.-Y.  
Pressure effect on the properties of magnetic moments and phase transitions in YMnO<sub>3</sub> from first principles  
RSC ADVANCES Volume: 6 Issue: 59 Pages: 54041-54048 DOI: 10.1039/c6ra08539c Published: 2016
125. Romaguera-Barcelay, Y, Moreira, JA, Almeida, A, Tavares, PB, Fernandes, L, de la Cruz, JP  
Persistence of the orthorhombic phase in YMnO<sub>3</sub> hexagonal thin films  
FERROELECTRICS Volume: 498 Issue: 1 Special Issue: SI Pages: 80-84 DOI: 10.1080/00150193.2016.1168211 Part: 2 Published: 2016
124. Balamurugan, C., Lee, D.-W.  
Perovskite hexagonal YMnO<sub>3</sub> nanopowder as p-type semiconductor gas sensor for H<sub>2</sub>S detection  
Sensors and Actuators B: Chemical Volume 221, Pages 857–866, 31 December 2015
123. Li, S.-C., Zheng, Y.-L., Ma, S.-G., Gao, T., Ao, B.-Y.  
First-principles calculation of the electronic structure, chemical bonding, and thermodynamic properties of beta-US<sub>2</sub>  
CHINESE PHYSICS B Volume: 24 Issue: 12 Article Number: 127101 DOI: 10.1088/1674-1056/24/12/127101 Published: DEC 2015
122. Zhou, G., Gu, X., Xie, W., Gao, T., Peng, J., Wu, X.S.  
Polarized Raman Scattering Studies of Hexagonal YMnO<sub>3</sub> Single Crystal  
IEEE TRANSACTIONS ON MAGNETICS Volume: 51 Issue: 11 Article Number: 2501904 DOI: 10.1109/TMAG.2015.2438154  
Published: NOV 2015

121. Kozlenko, D.P., Dang, N.T., Kichanov, S.E., Lukin, E.V., Pashayev, A.M., Mammadov, A.I., Jabarov, S.H., Dubrovinsky, L.S., Liermann, H.-P., Morgenroth, W., Mehdiyeva, R.Z., Smotrakov, V.G., Savenko, B.N.  
Competing magnetic and structural states in multiferroic YMn<sub>2</sub>O<sub>5</sub> at high pressure  
PHYSICAL REVIEW B Volume: 92 Issue: 13 Article Number: 134409 DOI: 10.1103/PhysRevB.92.134409 Published: OCT 12 2015
120. Paul, Arpita; Sharma, Priya; Waghmare, Umesh V.  
Spin-orbit interaction, spin-phonon coupling, and anisotropy in the giant magnetoelastic effect in YMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 92 Issue: 5 Article Number: 054106 Published: AUG 11 2015
119. Bouyanfif, H.; Salah, A. M.; Zaghrioui, M.; et al.  
High-temperature lattice-dynamics evolution of YMnO<sub>3</sub> and YbMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 91 Issue: 22 Article Number: 224104 Published: JUN 12 2015
118. Zhou, G., Gu, X., Peng, J., Wu, X.  
Behavior of atomic displacements and Mn-Mn coupling in YMnO<sub>3</sub> single crystal  
2015 IEEE MAGNETICS CONFERENCE (INTERMAG) Meeting Abstract: FT-06, art. No. 7157355 Published: 2015
117. Gupta, M.K., Mittal, R., Zbiri, M., Sharma, N., Rols, S., Schober, H., Chaplot, S.L.  
Spin-phonon coupling and high-temperature phase transition in multiferroic material YMnO<sub>3</sub>  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 44 Pages: 11717-11728 DOI: 10.1039/c5tc02096d Published: 2015
116. Shukla, R.; Gupta, Santosh K.; Grover, V.; et al.  
The role of reaction conditions in the polymorphic control of Eu<sup>3+</sup> doped YInO<sub>3</sub>: structure and size sensitive luminescence  
DALTON TRANSACTIONS Volume: 44 Issue: 23 Pages: 10628-10635 Published: 2015
115. Kumar, Manish; Choudhary, R. J.; Phase, D. M.  
Structural and Multiferroic Properties of Self Doped Yttrium Manganites YMn<sub>1-x</sub>O<sub>3</sub>  
AIP Conference Proceedings Volume: 1661 Article Number: 070005 Published: 2015
114. Satoh, Takuya; Iida, Ryugo; Higuchi, Takuya; et al.  
Writing and reading of an arbitrary optical polarization state in an antiferromagnet  
NATURE PHOTONICS Volume: 9 Issue: 1 Pages: 25-29 Published: JAN 2015
113. Shukla, Rakesh; Sayed, Farheen N.; Grover, Vinita; et al.  
Quest for Lead Free Relaxors in YIn<sub>1-x</sub>FexO<sub>3</sub> (0.0 ≤ x ≤ 1.0) System: Role of Synthesis and Structure  
INORGANIC CHEMISTRY Volume: 53 Issue: 19 Pages: 10101-10111 Published: OCT 6 2014
112. Patete, Jonathan M.; Han, Jinkyu; Tiano, Amanda L.; et al.  
Observation of Ferroelectricity and Structure-Dependent Magnetic Behavior in Novel One-Dimensional Motifs of Pure, Crystalline Yttrium Manganese Oxides  
JOURNAL OF PHYSICAL CHEMISTRY C 118 (37), pp. 21695-21705 SEP 18 2014
111. Basistyy, R.; Stanislavchuk, T. N.; Sirenko, A. A.; et al.  
Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO<sub>3</sub> (R = Ho, Er, Tm, Yb, and Lu)  
PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014
110. Massa, Nestor E.; del Campo, Leire; Meneses, Domingos De Sousa; et al.  
Phonons and hybrid modes in the high and low temperature far infrared dynamics of hexagonal TmMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (27), Art. No. 275901 JUL 9 2014
109. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014
108. Cano, A.  
Hidden order in hexagonal RMnO<sub>3</sub> multiferroics (R = Dy-Lu, In, Y, and Sc)  
PHYSICAL REVIEW B 89 (21), Art. No. 214107 JUN 17 2014
107. Chernyshev, V. A.; Petrov, V. P.; Nikiforov, A. E.  
Phonon Spectra of YTiO<sub>3</sub> and Y<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>: Ab Initio Calculations  
OPTICS AND SPECTROSCOPY 116 (6), 864-867 JUN 2014
106. Chaix, L.; de Brion, S.; Petit, S.; et al.  
Magneto- to Electroactive Transmutation of Spin Waves in ErMnO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 112 (13), Art. No. 137201 APR 2 2014
105. Toulouse, C.; Liu, J.; Gallais, Y.; et al.  
Lattice and spin excitations in multiferroic h-YMnO<sub>3</sub>  
PHYSICAL REVIEW B 89 (9), Art. No. 094415 MAR 19 2014
104. Wang ShiFa; Zhang ChuanFei; Sun GuangAi; et al.  
Chelating agents role on phase formation and surface morphology of single orthorhombic YMn<sub>2</sub>O<sub>5</sub> nanorods via modified polyacrylamide gel route  
SCIENCE CHINA-CHEMISTRY 57 (3), pp. 402-408 MAR 2014

103. Nakayama, Masaaki; Furukawa, Yoshiaki; Maeda, Kazuhiro; et al.  
Correlation between the intra-atomic Mn<sup>3+</sup> photoluminescence and antiferromagnetic transition in an YMnO<sub>3</sub> epitaxial film  
APPLIED PHYSICS EXPRESS 7 (2), Art. No. 023002 FEB 2014
102. Xie, Miao; Winkler, Bjoern; Mao, Zhu; et al.  
Raman scattering from superhard rhenium diboride under high pressure  
APPLIED PHYSICS LETTERS 104 (1), Art. No. 011904 JAN 6 2014
101. Jandl, S.; Mansouri, S.; Vermette, J.; et al.  
Study of crystal-field excitations and infrared active phonons in the multiferroic hexagonal DyMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (47), Art. No. 475403 NOV 27 2013
100. Shukla, Rakesh; Grover, Vinita; Deshpande, S. K.; et al.  
Synthesis and Structural and Electrical Investigations of a Hexagonal Y<sub>1-x</sub>Gd<sub>x</sub>InO<sub>3</sub> (0.0 ≤ x ≤ 1.0) System Obtained via Metastable C-Type Intermediates  
INORGANIC CHEMISTRY Volume: 52 Issue: 22 Pages: 13179-13187 Published: NOV 18 2013
99. Du, Yi; Wang, Xiaolin; Chen, Dapeng; et al.  
Manipulation of domain wall mobility by oxygen vacancy ordering in multiferroic YMnO<sub>3</sub>  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 15 (46), pp. 20010-20015 2013
98. Lin, C., Liu, J., Li, Y., Li, X., Li, R.  
Pressure-induced structural and vibrational evolution in ferroelectric RInO<sub>3</sub> (R=Eu, Gd, Dy)  
Solid State Communications 173, pp. 51-55, 2013
97. Raneesh, B., Saha, A., Kalarikkal, N.  
Effect of gamma radiation on the structural, dielectric and magnetoelectric properties of nanostructured hexagonal YMnO<sub>3</sub>  
Radiation Physics and Chemistry 89, pp. 28-32, 2013
96. Kumar, M., Choudhary, R.J., Phase, D.M.  
Valence band structure of YMnO<sub>3</sub> and the spin orbit coupling  
Applied Physics Letters 102 (18), art. no. 182902, 2013
95. Namdeo, S., Sinha, A.K., Singh, M.N., Awasthi, A.M.  
Investigation of charge states and multiferroicity in Fe-doped h-YMnO<sub>3</sub>  
Journal of Applied Physics 113 (10), art. no. 104101, 2013
94. Chen, X.-B., Minh, H.N.T., Yang, I.-S., Lee, D., Noh, T.-W.  
A raman study of the origin of oxygen defects in hexagonal manganite thin films  
Chinese Physics Letters 29 (12), 126103, 2012
93. Liu, J., Toulouse, C., Rovillain, P., Cazayous, M., Gallais, Y., Measson, M.-A., Lee, N., (...), Sacuto, A.  
Lattice and spin excitations in multiferroic h-YbMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184410, 2012
92. El Amrani, M., Ta Phuoc, V., Ammar, M.R., Zaghrioui, M., Gervais, F.  
Structural modifications of disordered YMn<sub>1-x</sub>In<sub>x</sub>O<sub>3</sub> solid solutions evidenced by infrared and Raman spectroscopies  
Solid State Sciences 14 (9), pp. 1315-1320, 2012
91. Rushchanskii, K.Z., Leai, M.  
Ab initio phonon structure of h-YMnO<sub>3</sub> in low-symmetry ferroelectric phase  
Ferroelectrics 426 (1), pp. 90-96, 2012.
90. Standard, E.C., Stanislavchuk, T., Sirenko, A.A., Lee, N., Cheong, S.-W.  
Magnons and crystal-field transitions in hexagonal RMnO<sub>3</sub> (R = Er, Tm, Yb, Lu) single crystals  
Physical Review B - Condensed Matter and Materials Physics 85 (14), art. no. 144422, 2012.
89. Vermette, J., Jandl, S., Orlita, M., Gospodinov, M.M.  
Role of the apical oxygen in the low-temperature magnetoelectric effect in RMnO<sub>3</sub> (R=Ho and Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (13), art. no. 134445, 2012.
88. Jiang, N., Zhang, X.  
Atomistic simulation of Mn-site substitution in multiferroic h-YMnO<sub>3</sub>  
Journal of Physics Condensed Matter 24 (23), art. no. 235402, 2012.
87. Vieira, L.G., Ribeiro, J.L., Santo, O., Tavares, P.B.  
Infrared anisotropy averaging in polycrystalline samples and resonant scattering: The example of YMnO<sub>3</sub>  
Journal of Optics 14 (4), art. no. 045707, 2012.
86. Ji, Y., Cao, J., Zhu, Z., Li, J., Wang, Y., Tu, C.  
Synthesis and white light emission of Dy<sup>3+</sup> ions doped hexagonal structure YAIO<sub>3</sub> nanocrystalline  
Journal of Luminescence 132 (3), pp. 702-706, 2012.
85. Prikockyte, A., Bilc, D., Hermet, P., Dubourdieu, C., Ghosez, P.  
First-principles calculations of the structural and dynamical properties of ferroelectric YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 84 (21), art. no. 214301 (2011).

84. Zaghrioui, M., Ta Phuoc, V.  
Phonon dynamics of hexagonal  $\text{YMn}_{1-x}\text{Fe}_x\text{O}_3$   
Solid State Communications 151 (22), 1704-1707 (2011).
83. Hien, N.T.M., Oh, S.-Y., Chen, X.-B., Lee, D., Jang, S.-Y., Noh, T.W., Yang, I.-S.  
Raman scattering studies of hexagonal rare-earth  $\text{RMnO}_3$  (R = Tb, Dy, Ho, Er) thin films  
Journal of Raman Spectroscopy 42 (9), pp. 1774-1779, 2011.
82. Zhou Shuang; Mao Shao-Yu; Xie Zhao-Xiong; et al.  
Preparation and gas sensing properties of Fe-doped yttrium manganate nanoparticles  
SENSORS AND ACTUATORS B-CHEMICAL 156 (1) Pages: 23-27, AUG 10 2011.
81. Cheng, Z.X., Zhao, H.Y., Du, Y., Kimura, H., Ozawa, K., Wang, X.L.  
Exchange bias in multiferroic  $\text{BiFeO}_3$  and  $\text{YMnO}_3$  multilayers: One more parameter for magnetoelectric manipulation  
SCRIPTA MATERIALIA 65 (3) Pages: 249-252, AUG 2011.
80. Gao, P., Chen, Z., Tyson, T.A., Wu, T., Ahn, K.H., Liu, Z., Tappero, R., (...), Cheong, S.-W.  
High-pressure structural stability of multiferroic hexagonal  $\text{RMnO}_3$  (R = Y, Ho, Lu)  
PHYSICAL REVIEW B 83 (22) Article Number: 224113, JUN 27 2011.
79. Zhang ChengGuo; Zhang XiaoZhong; Sun YongHao; et al.  
Atomistic simulation of dynamical and defect properties of multiferroic hexagonal  $\text{YMnO}_3$   
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY 54 (5) Pages: 836-840, MAY 2011.
78. Rusakov, D.A., Belik, A.A., Kamba, S., Savinov, M., Nuzhnyy, D., Kolodiazhnyi, T., Yamaura, K., (...), Kroupa, J.  
Structural Evolution and Properties of Solid Solutions of Hexagonal  $\text{InMnO}_3$  and  $\text{InGaO}_3$   
INORGANIC CHEMISTRY 50 (8) Pages: 3559-3566, APR 18 2011.
77. Zhang Chengguo; Zhang X.; Sun Yonghao; et al.  
Atomistic simulation of Y-site substitution in multiferroic h- $\text{YMnO}_3$   
PHYSICAL REVIEW B 83 (5) Article Number: 054104, FEB 15 2011.
76. Vermette, J., Jandl, S., Mukhin, A.A., Ivanov, V.Y., Balbashov, A., Gospodinov, M.M., Pinsard-Gaudart, L.  
Raman study of the antiferromagnetic phase transitions in hexagonal  $\text{YMnO}_3$  and  $\text{LuMnO}_3$   
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (35) Article Number: 356002, SEP 8 2010.
75. Nguyen Thi Minh Hien; Chen Xiang-Bai; Luc Huy Hoang; et al.  
Raman scattering studies of the magnetic ordering in hexagonal  $\text{HoMnO}_3$  thin films  
JOURNAL OF RAMAN SPECTROSCOPY 41 (9) Pages: 983-988, SEP 2010.
74. Das Raja; Jaiswal Adhish; Adyanthaya Suguna; et al.  
Origin of Magnetic Anomalies below the Neel Temperature in Nanocrystalline  $\text{LuMnO}_3$   
JOURNAL OF PHYSICAL CHEMISTRY C 114 (28) Pages: 12104-12109, JUL 22 2010.
73. Jang, K.-J., Lee, H.-G., Lee, S., Ahn, J., Ahn, J.S., Hur, N., Cheong, S.-W.  
Strong spin-lattice coupling in multiferroic hexagonal manganite  $\text{YMnO}_3$  probed by ultrafast optical spectroscopy  
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031914, JUL 19 2010.
72. Goian, V., Kamba, S., Kadlec, C., Nuzhnyy, D., Kužel, P., Agostinho Moreira, J., Almeida, A., Tavares, P.B.  
THz and infrared studies of multiferroic hexagonal  $\text{Y}_{1-x}\text{Eu}_x\text{MnO}_3$  ( $x=0-0.2$ ) ceramics  
PHASE TRANSITIONS 83 (10-11) Pages: 931-941, 2010.
71. Kovachev, S., Wesselinowa, J.M.  
Impact of the spin-phonon interaction on the phonon properties of multiferroic hexagonal  $\text{RMnO}_3$  thin films  
Journal of Physics Condensed Matter 22 (25), art. no. 255901 (2010).
70. Liu, Y.-F., Wang, B., Zheng, H.-W., Liu, X.-Y., Gu, Y.-Z., Zhang, W.-F.  
Temperature-dependent raman spectrum of hexagonal  $\text{YMnO}_3$  films synthesized by chemical solution method  
Chinese Physics Letters 27 (5), art. no. 056801 (2010).
69. Dixit, A., Smith, A.E., Subramanian, M.A., Lawes, G.  
Suppression of multiferroic order in hexagonal  $\text{YMn}_{1-x}\text{In}_x\text{O}_3$  ceramics  
Solid State Communications 150 (15-16), pp. 746-750 (2010).
68. Jang, K.-J., Lim, J., Ahn, J., Kim, J.-H., Yee, K.-J., Ahn, J.S., Cheong, S.-W.  
Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic  $\text{LuMnO}_3$   
New Journal of Physics 12, art. no. 023017 (2010).
67. Wang, W.-R., Song, G.-X., Zhao, Y., Han, X.-Y.  
Raman active phonons in  $\text{RMnO}_3$  (R=La, Pr, Nd, Sm) manganites  
Proceedings of SPIE - The International Society for Optical Engineering 7282, art. no. 72822R (2009).
66. Choithrani, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of manganites  $\text{RMnO}_3$  (R = Sm, Eu or Gd): Instabilities and coexistence of orthorhombic and hexagonal phases  
New Journal of Physics 11, art. no. 073041 (2009).

65. Delaney, K.T., Mostovoy, M., Spaldin, N.A.  
Superexchange-Driven Magnetoelectricity in Magnetic Vortices  
PHYSICAL REVIEW LETTERS Volume: 102 Issue: 15 Article Number: 157203 DOI: 10.1103/PhysRevLett.102.157203 Published: APR 17 2009
64. Wang, K.F., Liu, J.-M., Ren, Z.F.  
Multiferroicity: The coupling between magnetic and polarization orders  
Advances in Physics 58 (4), pp. 321-448 (2009).
63. Zhong, C., Jiang, Q., Zhang, H., Jiang, X.  
Effect of spin frustration and spin-orbit coupling on the ferroelectric polarization in multiferroic YMnO<sub>3</sub>  
Applied Physics Letters 94 (22), art. no. 224107 (2009).
62. Lou, S.-T., Zimmermann, F.M., Bartynski, R.A., Hur, N., Cheong, S.-W.  
Femtosecond laser excitation of coherent optical phonons in ferroelectric LuMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 79 (21), art. no. 214301 (2009).
61. Loshkareva, N.N., Moskvina, A.S., Balbashov, A.M.  
Optical 4f-4f transitions in multiferroic HoMnO<sub>3</sub>  
Physics of the Solid State 51 (5), pp. 930-932 (2009).
60. Zhong, C., Jiang, X., Yu, H., Jiang, Q., Fang, J., Li, Z.  
First-principles studies of the magnetic structure and exchange interactions in the frustrated multiferroic YMnO<sub>3</sub>  
Journal of Magnetism and Magnetic Materials 321 (9), pp. 1260-1265 (2009).
59. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Yoshimura, T., Fujimura, N.  
Spin-phonon coupling in multiferroic YbMnO<sub>3</sub> studied by Raman scattering  
Journal of Physics Condensed Matter 21 (6), art. no. 064218 (2009).
58. Talbayev, D., Laforge, A.D., Trugman, S.A., Hur, N., Taylor, A.J., Averitt, R.D., Basov, D.N.  
Magnetic Exchange Interaction between Rare-Earth and Mn Ions in Multiferroic Hexagonal Manganites  
PHYSICAL REVIEW LETTERS Volume: 101 Issue: 24 Article Number: 247601 DOI: 10.1103/PhysRevLett.101.247601 Published: DEC 12 2008
57. Zaghrioui, M., Ta Phuoc, V., Souza, R.A., Gervais, M.  
Polarized reflectivity and lattice dynamics calculation of multiferroic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 78 (18), art. no. 184305 (2008).
56. Vermette, J., Jandl, S., Gospodinov, M.M.  
Raman study of spin-phonon coupling in ErMnO<sub>3</sub>  
Journal of Physics Condensed Matter 20 (42), art. no. 425219 (2008).
55. Petit, S., Pailhès, S., Fabrèges, X., Hennion, M., Moussa, F., Pinsard, L., Regnault, L.-P., Ivanov, A.  
Spin lattice coupling in multiferroic hexagonal YMnO<sub>3</sub>  
PRAMANA-JOURNAL OF PHYSICS Volume: 71 Issue: 4 Special Issue: SI Pages: 869-876 Published: OCT 2008
54. Lü, W., Ma, X., Zhou, H., Chen, G., Li, J., Zhu, Z., You, Z., Tu, C.  
White up-conversion luminescence in rare-earth-ion-doped YAIO<sub>3</sub> nanocrystals  
Journal of Physical Chemistry C 112 (38), pp. 15071-15074 (2008).
53. Möller, A., Löw, U., Taetz, T., Kriener, M., André, G., Damay, F., Heyer, O., (...), Mydosh, J.A.  
Structural domain and finite-size effects of the antiferromagnetic S=1/2 honeycomb lattice in InCu<sub>2/3</sub>V<sub>1/3</sub>O<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 78 (2), art. no. 024420 (2008).
52. Feng, S.M., Wang, L.J., Zhu, J.L., Li, F.Y., Yu, R.C., Jin, C.Q., Wang, X.H., Li, L.T.  
Pressure-induced phase transition in Ho<sub>0.8</sub>Dy<sub>0.2</sub>MnO<sub>3</sub> multiferroic compound  
Journal of Applied Physics 103 (2), art. no. 026102 (2008).
51. Petit, S., Moussa, F., Hennion, M., Pailhès, S., Pinsard-Gaudart, L., Ivanov, A.  
Spin phonon coupling in hexagonal multiferroic YMnO<sub>3</sub>  
PHYSICAL REVIEW LETTERS Volume: 99 Issue: 26 Article Number: 266604 DOI: 10.1103/PhysRevLett.99.266604 Published: DEC 31 2007
50. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
Spin-coupled phonons in multiferroic YbMnO<sub>3</sub> epitaxial films by Raman scattering  
Journal of Physics: Conference Series 92 (1), art. no. 012126 (2007).
49. Nénert, G., Pollet, M., Mariné, S., Blake, G.R., Meetsma, A., Palstra, T.T.M.  
Experimental evidence for an intermediate phase in the multiferroic YMnO<sub>3</sub>  
Journal of Physics Condensed Matter 19 (46), art. no. 466212 (2007)
48. Poirier, M., Laliberté, F., Pinsard-Gaudart, L., Revcolevschi, A.  
Magnetoelastic coupling in hexagonal multiferroic YMnO<sub>3</sub> using ultrasound measurements  
Physical Review B - Condensed Matter and Materials Physics 76 (17), art. no. 174426 (2007)



47. Ribeiro, J.L.  
Symmetry and magnetically driven ferroelectricity in rare-earth manganites  $\text{RMnO}_3$  ( $\text{R}=\text{Gd}, \text{Tb}, \text{Dy}$ )  
*Physical Review B - Condensed Matter and Materials Physics* 76 (14), art. no. 144417 (2007)
46. Wesselinowa, J.M., Kovachev, St.  
Theoretical study of the phonon spectra of hexagonal multiferroics  $\text{RMnO}_3$   
*Journal of Physics Condensed Matter* 19 (38), art. no. 386218 (2007)
45. Fukumura, H., Matsui, S., Harima, H., Kisoda, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
Raman scattering studies on multiferroic  $\text{YMnO}_3$   
*Journal of Physics Condensed Matter* 19 (36), art. no. 365239 (2007)
44. Fukumura, H., Matsui, S., Harima, H., Takahashi, T., Itoh, T., Kisoda, K., Tamada, M., (...), Miyayama, M.  
Observation of phonons in multiferroic  $\text{BiFeO}_3$  single crystals by Raman scattering  
*Journal of Physics Condensed Matter* 19 (36), art. no. 365224 (2007)
43. Rini, E.G., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Phonon dynamics of lanthanum manganite  $\text{LaMnO}_3$  using an interatomic shell model potential  
*Physical Review B - Condensed Matter and Materials Physics* 75 (21), art. no. 214301 (2007)
42. Cho, D.-Y., Kim, J.-Y., Park, B.-G., Rho, K.-J., Park, J.-H., Noh, H.-J., Kim, B.J., Oh, S.-J., Park, H.-M., Ahn, J.-S., Ishibashi, H., Cheong, S.-W., Lee, J.H., Murugavel, P., Noh, T.W., Tanaka, A., Jo, T.  
Ferroelectricity driven by Y d(0)-ness with rehybridization in  $\text{YMnO}_3$   
PHYSICAL REVIEW LETTERS Volume: 98 Issue: 21 Article Number: 217601 DOI: 10.1103/PhysRevLett.98.217601 Published: MAY 25 2007
41. Lee, C.H., Kim, S.H., Choi, J.Y., Kim, J.  
Interface Mn nanoclusters in  $\text{YMnO}_3/\text{Si}$  ferroelectric gate structures revealed by electron magnetic resonance  
*Current Applied Physics* 7 (1), pp. 10-12 (2007)
40. Lee, C.H., Kim, S.H., Choi, J.Y., Kim, J.  
Interface Mn nanoclusters in  $\text{YMnO}_3/\text{Si}$  ferroelectric gate structures revealed by electron magnetic resonance  
*Current Applied Physics* 7 (1), pp. 10-12 (2006)
39. Zhou, J.-S., Goodenough, J.B., Gallardo-Amores, J.M., Morán, E., Alario-Franco, M.A., Caudillo, R.  
Hexagonal versus perovskite phase of manganite  $\text{RMnO}_3$  ( $\text{R}=\text{Y}, \text{Ho}, \text{Er}, \text{Tm}, \text{Yb}, \text{Lu}$ )  
*Physical Review B - Condensed Matter and Materials Physics* 74 (1), art. no. 014422 (2006)
38. Wang WR, Xu DP, Su WH  
Raman shift of  $\text{RMnO}_3$  ( $\text{R} = \text{La}, \text{Pr}, \text{Nd}, \text{Sm}$ ) manganites  
CHINESE PHYSICS LETTERS 22 (3): 705-707 MAR 2005
37. Fiebig M, Pavlov VV, Pisarev RV  
Second-harmonic generation as a tool for studying electronic and magnetic structures of crystals: review  
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 22 (1): 96-118 JAN 2005
36. Zhang, T., Branford, W.R., Trodahl, H.J., Sharma, A., Rager, J., MacManus-Driscoll, J.L., Cohen, L.F.  
Raman spectroscopy of highly aligned thin films of  $\text{Sr}_2\text{FeMoO}_6$   
*Journal of Raman Spectroscopy* 35 (12), pp. 1081-1085 (2004)
35. Lee CH, Han A, Kim J  
Electron magnetic resonance study of a  $\text{YMnO}_3/\text{Si}$  ferroelectric gate structure  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 45 (4): 1123-1126 OCT 2004
34. Sharma PA, Ahn JS, Hur N, et al.  
Thermal conductivity of geometrically frustrated, ferroelectric  $\text{YMnO}_3$ : Extraordinary spin-phonon interactions  
PHYSICAL REVIEW LETTERS 93 (17): Art. No. 177202 OCT 22 2004
33. Zhang MF, Liu JM, Liu ZG  
Microstructural characterization of nanosized  $\text{YMnO}_3$  powders: the size effect  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 79 (7): 1753-1756 NOV 2004
32. Tian HW, Zang JF, Ding T, et al.  
The evidence of phase separation in perovskite manganites above  $T_c$   
JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION 19 (2): 62-63 JUN 2004
31. Van Aken BB, Palstra TTM, Filippetti A, et al.  
The origin of ferroelectricity in magnetoelectric  $\text{YMnO}_3$   
NATURE MATER 3 (3): 164-170 MAR 2004
30. Staneva A, Gattf E, Dimitriev Y, et al.  
Magnetic materials containing  $\text{LaSr}$  manganite phase  
SOLID STATE SCI 6 (1): 47-51 JAN 2004
29. Wu CT, Lin BN, Ku HC, et al.  
Variation of triangular antiferromagnetic order in ferroelectromagnetic  $\text{Sc}_{1-x}\text{Lu}_x\text{MnO}_3$  manganites

CHINESE J PHYS 41 (6): 652-661 DEC 2003

28. Souchkov AB, Simpson JR, Quijada M, et al.  
Exchange interaction effects on the optical properties of LuMnO<sub>3</sub>  
PHYS REV LETT 91 (2): Art. No. 027203 JUL 11 2003
27. Yoo, D.C., Lee, J.Y., Kim, I.S., Kim, Y.T.  
Crystallization behavior and ferroelectric properties of YMnO<sub>3</sub> thin films on Si (100) substrates  
Materials Research Society Symposium - Proceedings 688, pp. 73-77 (2002)
26. Park J, Kong U, Pirogov A, et al.  
Neutron-diffraction studies of YMnO<sub>3</sub>  
APPL PHYS A-MATER 74: S796-S798 Part 1 Suppl. S DEC 2002
25. Jiang Q, Zhong CG  
The magnetoelectric properties study for system with the coexistence of the ferroelectric and antiferromagnetic orders  
PHYS LETT A 306 (2-3): 166-174 DEC 30 2002
24. Takahashi J, Kohn K, Hanamura E  
Luminescence spectrum from hexagonal YMnO<sub>3</sub>  
J LUMIN 100 (1-4): 141-145 DEC 2002
23. Kimel AV, Pisarev RV, Bentivegna F, et al.  
Ultrafast optical spectroscopy of hexagonal manganites RMnO<sub>3</sub> (R = Y, Er, Sc)  
FERROELECTRICS 279: 135-146 2002
22. Takahashi J, Hagita K, Kohn K, et al.  
Anomalously broad Raman scattering spectrum due to two-magnon excitation in hexagonal YMnO<sub>3</sub>  
PHYS REV LETT 89 (7): Art. No. 076404 AUG 12 2002
21. Zhong CG, Jiang Q  
Theoretical study on perpendicular magnetoelectric coupling in ferroelectromagnet system  
SOLID STATE COMMUN 122 (11): 601-605 (2002).
20. Filippetti A, Hill NA  
Coexistence of magnetism and ferroelectricity in perovskites  
PHYS REV B 65 (19): Art. No. 195120 MAY 15 2002
19. Yoshii K, Abe H  
Magnetic properties of LnMnO<sub>3</sub> (Ln=Ho, Er, Tm, Yb, and Lu)  
J SOLID STATE CHEM 165 (1): 131-135 APR 2002
18. Yoo DC, Lee JY, Kim IS, et al.  
Crystallization behavior of ferroelectric YMnO<sub>3</sub> thin films on Si(100) substrates  
J CRYST GROWTH 234 (2-3): 454-458 JAN 2002
17. Iizuka-Sakano, T., Hanamura, E., Tanabe, Y.  
Second-harmonic-generation spectra of the hexagonal manganites RMnO<sub>3</sub>  
Journal of Physics Condensed Matter 13 (13), pp. 3031-3055 (2001)
16. Kimel AV, Pisarev RV, Bentivegna F, et al.  
Time-resolved nonlinear optical spectroscopy of Mn<sup>3+</sup> ions in rare-earth hexagonal manganites RMnO<sub>3</sub> (R = Sc, Y, Er)  
PHYS REV B 64 (20): art. no. 201103 NOV 15 2001
15. Yoo DC, Lee JY, Kim IS, et al.  
Effects of post-annealing on the microstructure and ferroelectric properties of YMnO<sub>3</sub> thin films on Si  
J CRYST GROWTH 233 (1-2): 243-247 NOV 2001
14. Degenhardt C, Fiebig M, Frohlich D, et al.  
Nonlinear optical spectroscopy of electronic transitions in hexagonal manganites  
APPL PHYS B-LASERS O 73 (2): 139-144 AUG 2001
13. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
12. Tomuta DG, Ramakrishnan S, Nieuwenhuys GJ, et al.  
The magnetic susceptibility, specific heat and dielectric constant of hexagonal YMnO<sub>3</sub>, LuMnO<sub>3</sub> and ScMnO<sub>3</sub>  
J PHYS-CONDENS MAT 13 (20): 4543-4552 MAY 21 2001
11. Qian MC, Dong JM, Xing DY  
Optical properties of the ferroelectromagnet YMuO<sub>3</sub> studied from first principles  
PHYS REV B 63 (15): art. no. 155101 MAR 22 2001
10. Munoz A, Alonso JA, Martinez-Lope MJ, et al.  
Magnetic structure of hexagonal RMnO<sub>3</sub> (R = Y, Sc): Thermal evolution from neutron powder diffraction data

PHYS REV B 62: (14) 9498-9510 OCT 1 2000

9. Yi WC, Kwun SI, Yoon JG  
Study on the electronic structure of hexagonal and orthorhombic YMnO<sub>3</sub>  
J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000

8. Qian MC, Dong JM, Zheng QQ  
Electronic structure of the ferroelectromagnet YMnO<sub>3</sub>  
PHYS LETT A 270: (1-2) 96-101 MAY 22 2000

7. Sa D, Valenti R, Gros C  
A generalized Ginzburg-Landau approach to second harmonic generation  
EUR PHYS J B 14: (2) 301-305 MAR 2000

6. Kim SH, Lee SH, Kim TH, et al.  
Growth, ferroelectric properties, and phonon modes of YMnO<sub>3</sub> single crystal  
CRYST RES TECHNOL 35: (1) 19-27 2000

5. Lee HN, Kim IS, Kim YT, et al.  
Ferroelectric switching properties of highly c-axis oriented YMnO<sub>3</sub> gate capacitors  
J KOREAN PHYS SOC 35: S1260-S1263 Suppl. S DEC 1999

4. Pavlov, VV, Pisarev, RV, Frohlich, D, Leute, S  
Second-harmonic spectroscopy of the ferroelectric antiferromagnet YMnO<sub>3</sub>  
LASER SPECTROSCOPY AND OPTICAL DIAGNOSTICS: NOVEL TRENDS AND APPLICATIONS IN LASER CHEMISTRY,  
BIOPHYSICS, AND BIOMEDICINE - ICONO'98 Book Series: PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL  
INSTRUMENTATION ENGINEERS (SPIE) Volume: 3732 Pages: 72-80 DOI: 10.1117/12.339995 Published: 1999

3. Roy C, Budhani RC  
Raman, infrared and x-ray diffraction study of phase stability in La<sub>1-x</sub>BaxMnO<sub>3</sub> doped manganites  
J APPL PHYS 85: (6) 3124-3131 MAR 15 1999

2. Pavlov VV, Pisarev RV, Frohlich D, et al.  
Nonlinear optical spectroscopy of electronic transitions and domains in ferroelectric antiferromagnet YMnO<sub>3</sub>  
FERROELECTRICS 218: (1-4) 375-380 1998

1. Frohlich D, Leute S, Pavlov VV, et al.  
Nonlinear optical spectroscopy of the two-order-parameter compound YMnO<sub>3</sub>  
PHYS REV LETT 81: (15) 3239-3242 OCT 12 1998

## 21. *"Doping Effects in the Sr<sub>14</sub>Cu<sub>24</sub>O<sub>4</sub> - type structure: A Raman scattering study"*

M. V. Abrashev, C. Thomsen and M. Surtchev  
Physica C 280 (1997) 297 - 303.

27. Tseng, Y., Paris, E., Schmidt, K.P., (...), Rønnow, H.M., Schmitt, T.  
Momentum-resolved spin-conserving two-triplon bound state and continuum in a cuprate ladder  
Communications Physics 6(1),138 (2023)

26. Khan, A., Jiménez, C., Chaix-Pluchery, O., Roussel, H., Deschanvres, J.L.  
In-situ Raman spectroscopy and X-ray diffraction studies of the structural transformations leading to the SrCu<sub>2</sub>O<sub>2</sub> phase from strontium-copper oxide thin films deposited by metalorganic chemical vapor deposition  
Thin Solid Films 541, pp. 136-141, 2013

25. Naruse, K., Kawamata, T., Ohno, M., Matsuoka, Y., Kumagai, K., Koike, Y.  
Thermal conductivity due to magnons in high-quality single crystals of the two-leg spin-ladder system (Ca,Sr,La)<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
Solid State Communications 154 (1), pp. 60-63, 2013

24. Cheng Li; Xiong Rui; Shi Jing  
Raman scattering study of the spin ladder compound Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41+δ</sub>  
ACTA PHYSICA SINICA 59 (7) Pages: 5078-5084, JUL 2010.

23. Wang, J., Lin, Y., Zou, H., Pu, S., Shi, J.  
Structural transition, electrical and magnetic properties of the B-site Co doped Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> compounds  
Journal of Physics Condensed Matter 21 (7), art. no. 075601 (2009).

22. Hu, N, Xiong, R, Wei, W, Wang, ZY, Wang, LL, Yu, ZX, Tang, WF, Shi, J  
Raman scattering study of the spin ladder compound Sr<sub>14</sub>(Cu<sub>1-y</sub>Fe<sub>y</sub>)<sub>24</sub>O<sub>41</sub>  
ACTA PHYSICA SINICA Volume: 57 Issue: 8 Pages: 5267-5271 Published: AUG 2008

21. Zeng, Y., Pan, F.-S., Yu, Z.-X., Shi, J.  
Phase evolution of (14-x)SrCO<sub>3</sub>-xCaCO<sub>3</sub>-24CuO system under ambient pressure below 1000°C  
Cailiao Kexue yu Gongyi/Material Science and Technology 15 (3), pp. 417-420 (2007)

20. Devereaux, T.P., Hackl, R.

- Inelastic light scattering from correlated electrons  
Reviews of Modern Physics 79 (1), pp. 175-233 (2007)
19. Holmlund, J., Andreasson, J., Knee, C.S., Bäckström, J., Käll, M., Osada, M., Noji, T., (...), Börjesson, L.  
Resonant two-phonon Raman scattering as a probe of hole crystal formation in Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134502 (2006)
18. Zeng Y, Pan FS, Yu ZX, et al.  
(14-x)SrCO<sub>3</sub>-xCaCO<sub>3</sub>-24CuO system to synthesize spin-ladder compounds Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub> using DTA and XRD techniques  
CHINESE JOURNAL OF CHEMICAL PHYSICS 18 (4): 614-618 AUG 2005
17. Gossling A, Kuhlmann U, Thomsen C, et al.  
Magnetic excitations in SrCu<sub>2</sub>O<sub>3</sub>: A Raman scattering study  
PHYSICAL REVIEW B 67 (5): Art. No. 052403 FEB 1 2003
16. Zeng Y, Shi J, Yu ZX, et al.  
Thermal behavior during the synthesis of spin-ladder compound Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
MATERIALS LETTERS 59 (6): 662-666 MAR 2005
15. Lemmens P, Guntherodt G, Gros C  
Magnetic light scattering in low-dimensional quantum spin systems  
PHYS REP 375 (1): 1-103 FEB 2003
14. Natsume Y, Tada S, Suzuki T  
The origin of the asymmetric shape for the exchange-scattering peak of 2Δ(g) in the ladder antiferromagnet CaV<sub>2</sub>O<sub>5</sub> with the singlet ground state  
J PHYS CHEM SOLIDS 63 (6-8): 1361-1364 JUN-AUG 2002
13. Schmidt KP, Knetter C, Uhrig GS  
Raman response in antiferromagnetic two-leg S=1/2 Heisenberg ladders  
EUROPHYS LETT 56 (6): 877-883 DEC 2001
12. Tada S, Natsume Y, Suzuki T  
Numerical study of magnetic Raman scattering spectra in ladder antiferromagnets - Exchange scatterings from the singlet ground state  
J PHYS SOC JPN 70 (8): 2443-2447 AUG 2001
11. Cabra DC, Dobry A, Rossini GL  
Nonperturbative effective-field theory for two-leg antiferromagnetic spin ladders  
PHYS REV B 63 (14): art. no. 144408 APR 1 2001
10. Nucker N, Merz M, Kuntscher CA, et al.  
Hole distribution in (Sr,Ca,Y,La)<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> ladder compounds studied by x-ray absorption spectroscopy  
PHYS REV B 62: (21) 14384-14392 DEC 1 2000
9. Strzeszewski J, Szymczak H, Leonyuk L, et al.  
Raman scattering study of (Sr,Ca)<sub>10</sub>Cu<sub>17</sub>O<sub>29</sub> single crystals  
ACTA PHYS POL A 98: (4) 429-439 OCT 2000
8. Orignac E, Citro R  
Raman scattering cross section of spin ladders  
PHYS REV B 62: (13) 8622-8625 OCT 1 2000
7. Ogita N, Fujita Y, Sakaguchi Y, et al.  
Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000
6. Popovic ZV, Konstantinovic MJ, Ivanov VA, et al.  
Optical properties of the spin-ladder compound Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYS REV B 62: (8) 4963-4972 AUG 15 2000
5. Osada, M, Kakihana, M, Nagai, I, Noji, T.; Adachi, T, Koike, Y, Backstrom, J, Kall, M, Borjesson, L  
Charge and spin dynamics in spin-ladder Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> investigated by Raman scattering  
ADVANCES IN SUPERCONDUCTIVITY XII Pages: 188-190 Published: 2000
4. Osada M, Kakihana M, Nagai I, et al.  
Raman-active phonons and their doping dependence in spin-ladder Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>  
PHYSICA C 338: (1-2) 161-165 AUG 1 2000
3. Nagai, I, Osada, M., Kakihana, M., Noji, T., Adachi, T., Koike, Y.  
Raman scattering study of Sr<sub>14-x</sub>CaxCu<sub>24</sub>O<sub>41</sub>  
Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy 46 (9), pp. 1004-1008 (1999)
2. Sugai S, Suzuki M  
Magnetic raman scattering in two-leg spin ladder Sr<sub>14-x-y</sub>CaxYyCu<sub>24</sub>O<sub>41</sub>  
PHYS STATUS SOLIDI B 215: (1) 653-659 SEP 1999

1. Natsume Y, Watabe Y, Suzuki T  
Numerical study of magnetic Raman spectra by the exchange-scattering in the antiferromagnetic ladder with two-legs  
J PHYS SOC JPN 67: (9) 3314-3315 SEP 1998

## 22. "Raman Spectroscopy of Orthorhombic Perovskite-Like $YMnO_3$ and $LaMnO_3$ "

M. N. Iliev, M. V. Abrashev, H. G. Lee, V. N. Popov, Y. Y. Sun, C. Thomsen, R. L. Meng, and C. W. Chu

Phys. Rev. B 57 (1998) 2872 - 2877.

596. Wang, X., Zhou, T., Wang, W., (...), Liang, C., Zhou, D.  
Effect of B-site complex substitutions on orthorhombic distortion and microwave dielectric properties of  $Ca(Zr_{0.95}Ti_{0.05})O_3$  perovskites  
Journal of Materials Chemistry C 12(9), pp. 3124-3131 (2024)

595. Aparnadevi, N., Kumar, Y.N., Venkateswaran, C.  
The impact of 50% combined Fe and Mn ions at the B-sites on the structural, optical, magnetic and dielectric properties of double perovskite  $Nd_2FeMnO_6$   
Journal of Materials Science: Materials in Electronics 35(6),452 (2024)

594. Duong, M.N., Chen, Y.-X., Tzeng, W.-Y., (...), Kuo, C.-Y., Juang, J.-Y.  
Orbital ordering and ultrafast carrier dynamics anisotropies in orientation-engineered orthorhombic  $YMnO_3$  films  
APL Materials 12(2),021117 (2024)

593. Schüler, L., Ross, U., Moshnyaga, V.  
Strain-induced phase transition at the surface of epitaxial  $La_{0.65}Sr_{0.35}MnO_3$  films  
Surfaces and Interfaces 45,103906 (2024)

592. Kanwar, K., Pradhan, S., Satapathy, S., Bitla, Y., Panwar, N.  
Structural, optical and dielectric investigations on  $RECr_{0.85}Mn_{0.15}O_3$  (RE = Ho, Gd and Pr) nanoparticles  
Journal of Rare Earths 42(2), pp. 399-408 (2024)

591. Pant, M., Mahapatro, A.K.  
Perfectly dense ceramics of highly pure calcium manganese oxide  
Ceramics International (in press) DOI: 10.1016/j.ceramint.2024.03.158 (2024)

590. Wu, R., Schmitt, S., Maudet, F., (...), Deshpande, V., Dubourdieu, C.  
Electrochemical Metallization Memristive Devices with Al Active Electrode Using Engineered Mixed Hexagonal/Orthorhombic Polycrystalline  $YMnO_3$   
Small Structures (in press) DOI: 10.1002/ssr.202300494 (2024)

589. Mohan, M., Nayak, S., Pal, A., Murugavel, P.  
Bipolar magnetic switching and large exchange-bias in Fe-substituted  $SmCrO_3$   
Journal of Physics Condensed Matter 35(47),475801 (2023)

588. Su, W., Hu, Q., Yue, B., (...), Hai, W., Liu, J.  
Structure and magnetic properties of electrospun rare earth orthochromites nanofibers  
Solid State Sciences 145,107314 (2023)

587. Zhang, H., Li, Z., Zhang, T., (...), Chen, N., Chen, J.  
Improvement of metal-insulator transition and mechanical strength of  $RENiO_3$  by co-sintering  
Journal of Applied Physics 134(13),135104 (2023)

586. Massa, N.E., Del Campo, L., Ta Phuoc, V., Kayser, P., Alonso, J.A.  
Low-temperature terahertz spectroscopy of  $LaFeO_3$ ,  $PrFeO_3$ ,  $ErFeO_3$ , and  $LuFeO_3$ : Quasimagnon resonances and ground-state multiplet transitions  
Physical Review B 108(11),115116 (2023)

585. Mohan, M., Murugavel, P.  
Tuning the spin-reorientation towards room temperature and the evidence for spin-phonon coupling in modified  $SmFeO_3$   
Journal of Alloys and Compounds 955,170140 (2023)

584. He, J., Baldassarri, B., Wolverton, C.  
Assessment of exchange-correlation functionals on oxygen vacancy formation energies of metal oxides  
Physical Review B 108(10),104103 (2023)

583. Lakshmana Rao, T., Sahoo, A.K., Singh, S., Dash, S.  
Impact of coexisting ions on the structure and functional properties in  $LaFeO_3$  nanoparticle  
Journal of Materials Science: Materials in Electronics 34(25),1758 (2023)

582. Saha, P., Nithya, R., Sathyanarayana, A.T., (...), Deshpande, U., Venkatesh, R.  
Experimental Evidences for Quantum Spin Liquid Ground State in Layered Hexagonal  $Y_2CuTiO_6$   
Journal of Superconductivity and Novel Magnetism 36(7-9), pp. 1683-1691 (2023)

581. Saha, P., Nithya, R., Sarguna, R.M., Sathyanarayana, A.T.  
Magnetic and robust dielectric properties in distorted double perovskite  $Gd_2CuTiO_6$

- Applied Physics A: Materials Science and Processing 129(9),624 (2023)
580. Ma, C.  
(1-x)Mn<sub>1.56</sub>Co<sub>0.96</sub>Ni<sub>0.48</sub>O<sub>4</sub>/xLaMnO<sub>3</sub> (0.1 ≤ x ≤ 0.9): A composite NTC thin film with low resistance, high sensitivity and strong light absorption  
Ceramics International 49(17), pp. 28442-28448 (2023)
579. Sharma, P.K., Pramanik, M., Limaye, M.V., Singh, S.B.  
Magnetic Field-Enhanced Oxygen Evolution in YMn<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (x = 0, 0.05, and 0.1) Perovskite Oxides  
Journal of Physical Chemistry C 127(33), pp. 16259-16266 (2023)
578. Kovaleva, N.N.  
Lattice-dynamics study of Raman-active modes in LaTiO<sub>3</sub>  
Physics Letters, Section A: General, Atomic and Solid State Physics 479,128942 (2023)
577. Gluchowski, P., Nikonkov, R., Kujawa, D., (...), Zhaludkevich, A., Karpinsky, D.  
Controlling the Magnetic Properties of La<sub>0.9</sub>A<sub>0.1</sub>Mn<sub>0.9</sub>Cr<sub>0.1</sub>O<sub>3</sub> (A: Li, K, Na) Powders and Ceramics by Alkali Ions Doping  
Magnetochemistry 9(6),140 (2023)
576. Maneesha, P., Chandra Baral, S., Rini, E.G., Sen, S.  
An overview of the recent developments in the structural correlation of magnetic and electrical properties of Pr<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
Progress in Solid State Chemistry 70,100402 (2023)
575. Gouitaa, N., Ahjyaje, F.Z., Lamcharfi, T.-D., Abdi, F., Haddad, M.  
Colossal dielectric constant (CDC) response in 0.5CaTiO<sub>3</sub>-0.5FeTiO<sub>3</sub> composites  
Journal of Materials Research 38(9), pp. 2486-2494 (2023)
574. Kim, H.-I., Cho, H.G., Lee, S., (...), Hong, J.K., Jin, Y.K.  
Spatial distribution of manganese oxide minerals in the natural ferromanganese nodule of the Arctic Sea: A view from Raman spectroscopy  
Chemical Geology 623,121398 (2023)
573. Kozlenko, D.P., Lukin, E.V., Kichanov, S.E., (...), Golosova, N.O., Savenko, B.N.  
High-pressure evolution of the magnetic order in LaMnO<sub>3</sub>  
Physical Review B 107(14),144426 (2023)
572. Amdouni, W., Otoničar, M., Gemeiner, P., (...), Maghraoui-Meherzi, H., Dkhil, B.  
A General Synthetic Route to High-Quality Perovskite Oxide Nanoparticles and Their Enhanced Solar Photocatalytic Activity  
Angewandte Chemie - International Edition 62(7),e202215700 (2023)
571. Anyanwu, V.O., Friedrich, H.B., Mahomed, A.S., Singh, S., Moyo, T.  
Phase Transition of High-Surface-Area Glycol-Thermal Synthesized Lanthanum Manganite  
Materials 16(3),1274 (2023)
570. Manchón-Gordón, A.F., Sánchez-Jiménez, P.E., Blázquez, J.S., Perejón, A., Pérez-Maqueda, L.A.  
Structural, Vibrational, and Magnetic Characterization of Orthoferrite LaFeO<sub>3</sub> Ceramic Prepared by Reaction Flash Sintering  
Materials 16(3),1019 (2023)
569. Bhowmik, T.K., Halder, S., Sinha, T.P.  
Tailoring the magnetic landscape in Al-doped LaMnO<sub>3</sub>: an experimental and computational perspective  
Physica Scripta 98(2),025806 (2023)
568. Wan, Y., Jiao, J., Lin, G., (...), Yao, X., Ma, J.  
The orbital effect on the anomalous magnetism and evolution in La<sub>x</sub>Y<sub>1-x</sub>VO<sub>3</sub> (0 ≤ x ≤ 0.2) single crystals  
Journal of Alloys and Compounds 932,167526 (2023)
567. Kumar Parmar, L., Saxena, P., Yadav, A.  
Effect of Sr and Fe co-doping on the structural and optical properties of Y<sub>0.5</sub>Sr<sub>0.5</sub>Cr<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> (x = 0, 0.25) solids  
Materials Today: Proceedings 89, pp. 19-23 (2023)
566. Liu, J., Gao, X., Xiao, W., (...), Chen, K., Liao, Z.  
Controlled properties of perovskite oxide films by engineering oxygen octahedral rotation  
Journal of University of Science and Technology of China 53(1) (2023)
565. Aswathy, P.K., Rajendran, D.N.  
Effect of Fe ion substitution at B site of samarium cobaltite perovskites  
Physica B: Condensed Matter 647,414361 (2022)
564. Mohan, M., Al-Omari, I.A., Al-Harathi, S.H., (...), Dhanyaprabha, K.C., Thomas, H.  
Alivalent Calcium Substitution: An Effective Way to Enhance the Magnetolectric Coupling Properties of Multiferroic BiFeO<sub>3</sub>  
Physica Status Solidi (A) Applications and Materials Science 219(24),2200445 (2022)
563. Liu, D., Chen, X., Zhang, Q., (...), Chen, J., Zhai, X.  
Effects of Mg-doping on distorted structure and enhanced electrochemical performance of V<sub>1-x</sub>Mg<sub>x</sub>O<sub>2</sub> nanorods  
Materials Today Communications 33,104948 (2022)

562. Zhang, A., Zhu, J., Pan, X., Wu, X.  
Microstructural Distortion and Magnetic Phase Competition of  $\text{HoFe}_{1-x}\text{Cr}_x\text{O}_3$  Near Half-Doping  
*Journal of Superconductivity and Novel Magnetism* 35(12), pp. 3761-3771 (2022)
561. Selmi, R., Cherif, W., Ferreira, N.M.  
Mg Deficiency Impacts on Magnetocaloric Behavior of  $\text{La}_{0.77}\text{Mg}_{0.23-x}\text{MnO}_3$  ( $0 \leq x \leq 0.2$ ) Manganites  
*Journal of Superconductivity and Novel Magnetism* 35(12), pp. 3585-3601 (2022)
560. Lu, Q., Cheng, Y., Wu, L., (...), Zhu, Y., Zhai, X.  
Photoinduced evolution of lattice orthorhombicity and conceivably enhanced ferromagnetism in  $\text{LaMnO}_3$  membranes  
*npj Quantum Materials* 7(1),47 (2022)
559. Kumar, R., Bhowmik, R.N., Sinha, A.K.  
Role of A site doped rare earth ( $\text{Gd}^{3+}$  and  $\text{Ho}^{3+}$ ) ions in the lattice structure and magnetic properties of biphasic  $\text{La}_{2-x}\text{RE}_x\text{NiMnO}_6$  (RE = Gd, Ho,  $x = 0.1$ ) double perovskites  
*Journal of Alloys and Compounds* 920,165917 (2022)
558. Gouitaa Najwa, Zahra, A.F., Taj-Dine, L., Farid, A., Mustapha, H.  
High Dielectric Permittivity and Low Transition Temperature of  $(1-x)\text{CaTiO}_3-x\text{FeTiO}_3$  Inorganic Composites ( $x = 0.0$  to  $1.0$ )  
*Russian Journal of Inorganic Chemistry* 67(11), pp. 1868-1879 (2022)
557. Grecco Manfré, M., do Prado Labaki, H., dos Santos de Souza, V., Gonçalves, R.R.  
Red and near-infrared emitting phosphors based on  $\text{Eu}^{3+}$ - or  $\text{Nd}^{3+}$ -doped lanthanum niobates prepared by the sol-gel route  
*Dalton Transactions* 51(46), pp. 17869-17882 (2022)
556. Mohanty, S., Sharma, R., Rout, S.K., Mukherjee, S.  
Evidence of structural and two magnetic phase transitions in Cu doped  $\text{La}_2\text{FeMnO}_6$  double perovskites  
*Journal of Alloys and Compounds* 918,165694 (2022)
555. Padmasree, G., Reddy, P.Y., Reddy, C.G.  
Study of structural, electrical and hyperfine properties of Dy doped  $\text{YFeO}_3$   
*Ceramics International* 48(19), pp. 28980-28985 (2022)
554. Anand, K., Pal, A., Joshi, A.G., (...), Mohan, A., Chatterjee, S.  
Giant exchange bias in antiferromagnetic  $\text{Pr}_2\text{CoFe}_{0.5}\text{Mn}_{0.5}\text{O}_6$ : a structural and magnetic properties study  
*Journal of Physics D: Applied Physics* 55(36),365004 (2022)
553. Das, S., Dokala, R.K., Weise, B., (...), Mishra, P.K., Thota, S.  
Effect of Ce substitution on the local magnetic ordering and phonon instabilities in antiferromagnetic  $\text{DyCrO}_3$  perovskites  
*Journal of Physics Condensed Matter* 34(34),345803 (2022)
552. Laajimi, K., Kchaw, M., Fourati, I., (...), Gazzah, M.H., Dhahri, J.  
Large magnetocaloric effect in  $0.25(\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3 + \text{La}_{0.67}\text{Ca}_{0.13}\text{Sr}_{0.2}\text{Mn}_{0.98}\text{Ni}_{0.02}\text{O}_3) / 0.5\text{La}_{0.67}\text{Ca}_{0.23}\text{Sr}_{0.1}\text{Mn}_{0.98}\text{Ni}_{0.02}\text{O}_3$  composite close to room temperature  
*European Physical Journal Plus* 137(8),943 (2022)
551. Chen, H., Zheng, D., Wang, Y., (...), Li, Z., Bai, H.  
Secondary insulator-to-metal transition and magnetic properties in epitaxial  $\text{La}_{0.92}\text{Sr}_{0.08}\text{MnO}_3$  films  
*Physical Review B* 106(6),064103 (2022)
550. Graham, P.J., Rovillain, P., Bartkowiak, M., (...), Kenzelmann, M., Ulrich, C.  
Spin-phonon and magnetoelectric coupling in oxygen-isotope substituted  $\text{TbMnO}_3$  investigated by Raman scattering  
*Physical Review B* 105(17),174438 (2022)
549. Kumar, R., Singh, K.D., Kumar, R.  
Effect of Sr substitution on structural properties of  $\text{LaCrO}_3$  perovskite  
*Journal of Materials Science: Materials in Electronics* 33(15), pp. 12039-12052 (2022)
548. Aguilar, C.J., Diosa, J.E., Mosquera, E., (...), Rodríguez-Páez, J.E., Bolaños, G.  
Mixed oxides of the  $\text{Pr}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $0.1 \leq x \leq 0.5$ ) system synthesized by a chemical route: Structural, electric and magnetic characterization  
*Journal of Alloys and Compounds* 899,163291 (2022)
547. Xiong, Z., Zhang, X., Fang, Z., (...), Tang, B., Zhang, S.  
Characterization of structural and electrical properties of  $\text{Ca}_{0.61}\text{Nd}_{0.26}\text{TiO}_3$  ceramic tailored by complex ions ( $\text{Al}_{0.5}\text{Nb}_{0.5}$ )<sup>4+</sup>  
*Journal of Alloys and Compounds* 899,163234 (2022)
546. Dhillip, M., Punitha, J.S., Rameshkumar, R., (...), Anbarasu, V., Elangovan, K.  
A novel double perovskite oxide  $\text{Sm}_2\text{CoFeO}_6$  phosphor for orange LEDs: structural, magnetic and luminescence properties  
*Applied Physics A: Materials Science and Processing* 128(4),324 (2022)
545. Jagadish Kumar, G., Senthil Kumar, E., Navaneethan, M., Kamala Bharathi, K.  
Exchange bias, magnetic, and dielectric properties of  $\text{La}_2\text{FeMnO}_6$  nanoparticles  
*Journal of Materials Science: Materials in Electronics* 33(11), pp. 8467-8472 (2022)
544. Das, S., Tanguturi, R.G., Ghosh, S., (...), Rawat, R.S., Thota, S.

- Substrate orientation dependent characteristics of half-metallic and metallic superlattices [La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>/LaNiO<sub>3</sub>]<sub>10</sub>  
Journal of Applied Physics 131(12),125305 (2022)
543. Chen, X., Wang, B., Ge, T., Wei, H., Cao, B.  
Modifying Jahn-Teller distortion by epitaxial stress in LaMnO<sub>3</sub>films for tuning electron localization  
Journal of Physics Condensed Matter 34(10),105401 (2022)
542. Lakshmi, R.V., Bera, P., Hiremath, M., (...), Kundu, A.K., Barshilia, H.C.  
Structural, magnetic, and dielectric properties of solution combustion synthesized LaFeO<sub>3</sub>, LaFe<sub>0.9</sub>Mn<sub>0.1</sub>O<sub>3</sub>, and LaMnO<sub>3</sub>perovskites  
Physical Chemistry Chemical Physics 24(9), pp. 5462-5478 (2022)
541. Triyono, D., Hannisa, A., Laysandra, H.  
Structural, magnetic, and dielectric studies of cubically ordered Sr<sub>2</sub>FeMnO<sub>6</sub>  
Applied Physics A: Materials Science and Processing 128(3),232 (2022)
540. Guo, J., Su, Y., Shi, C., (...), Hu, H., Wang, Y.  
Temperature Dependence of the Microstructure and Magnetic Properties of Polycrystalline GdCrO<sub>3</sub>  
Journal of Superconductivity and Novel Magnetism 35(3), pp. 711-718 (2022)
539. Chanu, L.P., Phanjobam, S.  
Study on the structural and electrical properties of YMnO<sub>3</sub> co-substituted with transition metal ions at Mn-site and their conduction mechanism  
Journal of Materials Science: Materials in Electronics 33(9), pp. 6107-6120 (2022)
538. Shen, Q., Zhou, J., Ma, C., (...), Cao, L., Yang, J.  
Development of LnMnO<sub>3+σ</sub> perovskite on low temperature Hg<sup>0</sup> removal  
Journal of Environmental Sciences (China) 113, pp. 141-151 (2022)
537. Mohanty, S., Mukherjee, S.  
Effect of Jahn-Teller distortion on microstructural and dielectric properties of La based double perovskites  
Journal of Alloys and Compounds 892,162204 (2022)
536. Padilla, O., Munera, J., Gallego, J., Santamaria, A.  
Approach to the Characterization of Monolithic Catalysts Based on La Perovskite-like Oxides and Their Application for VOC Oxidation under Simulated Indoor Environment Conditions  
Catalysts 12(2),168 (2022)
535. Tozri, A., Alhalafi, S., Alrowaili, Z.A., (...), Costa, B.F.O., Ildiz, G.O.  
Investigation of the magnetocaloric effect and the critical behavior of the interacting superparamagnetic nanoparticles of La<sub>0.8</sub>Sr<sub>0.15</sub>Na<sub>0.05</sub>MnO<sub>3</sub>  
Journal of Alloys and Compounds 890,161739 (2022)
534. Ravichandran, H., Irusan, B., Balaraman, S., (...), Krishnamoorthy, S., Elayaperumal, M.  
Microwave assisted synthesis and characterization of Fe<sub>3+</sub>-O-Fe<sub>3+</sub> sublattice magnetic moment influencing ferromagnetism exhibited erbium orthoferrite sublattice (ErFeO<sub>3</sub>) perovskite nanopowders  
Journal of Alloys and Compounds 890,161825 (2022)
533. Safarina, G.A., Kim, Y.-J., Park, H.-S., Yang, C.-H.  
Raman spectroscopy of the Jahn-Teller phonons in a magnetic LaMnO<sub>3</sub>thin film grown on KTaO<sub>3</sub>  
Journal of Applied Physics 131(2),025302 (2022)
532. Sultan, K.  
Practical Guide to Materials Characterization: Techniques and Applications ( Book)  
Practical Guide to Materials Characterization: Techniques and Applications pp. 1-206 (2022)
531. Wang, Y., Li, Z., Ma, Z., (...), Zhang, F., Zhu, L.  
Phase Structure and Electrical Properties of Sm-Doped BiFe<sub>0.98</sub>Mn<sub>0.02</sub>O<sub>3</sub> Thin Films  
Nanomaterials 12(1),108 (2022)
530. Zhang, H., Qian, H., Xie, L., (...), Liu, Y., He, X.  
The spin reorientation and improvement of magnetocaloric effect in HoCr<sub>1-x</sub>Ga<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.5)  
Journal of Alloys and Compounds 885,160863 (2021)
529. Yao, H., Jin, K., Yang, Z., (...), Zhang, D., Yang, G.  
Ferromagnetic Enhancement in LaMnO<sub>3</sub> Films with Release and Flexure  
Advanced Materials Interfaces 8(24),2101499 (2021)
528. Wang, M., Dai, H., Li, T., (...), Ping, T., He, J.  
The evolution of structure and properties in GdMn<sub>(1-x)</sub>Ti<sub>x</sub>O<sub>3</sub> ceramics  
Journal of Materials Science: Materials in Electronics 32(23), pp. 27348-27361 (2021)
527. Nandi, S., Wu, J.X., Simon, P., (...), Mamede, A.-S., Berrier, E.  
Mn- or Cu- substituted LaFeO<sub>3</sub>-based three-way catalysts: Highlighting different catalytically operating modes of La<sub>0.67</sub>Fe<sub>0.8</sub>Mn<sub>0.2</sub>O<sub>3</sub> (M=Cu, Mn)  
Applied Catalysis B: Environmental 296,120330 (2021)



526. Raji, R.K., Ramachandran, T., Muralidharan, M., (...), Ramasamy, P., Mourad, A.-H.I.  
Twisting the inherent properties: the impact of transition metal Mn-doped on LaFeO<sub>3</sub>-based perovskite materials  
Journal of Materials Science: Materials in Electronics 32(20), pp. 25528-25544 (2021)
525. Anand, K., Pal, A., Alam, M., (...), Sathe, V.G., Chatterjee, S.  
Emergence of metamagnetic transition, re-entrant cluster glass and spin phonon coupling in Tb<sub>2</sub>CoMnO<sub>6</sub>  
Journal of Physics Condensed Matter 33(27),275802 (2021)
524. Wang, Y., Zhang, L., Ma, S., (...), Tan, D., Chen, B.  
Octahedral tilting dominated phase transition in compressed double perovskite Ba<sub>2</sub>SmBiO<sub>6</sub>  
Applied Physics Letters 118(23),231903 (2021)
523. Qahtan, A.A.A., Husain, S., Zarrin, N., (...), Fatema, M., Khan, W.  
Raman scattering, electronic transport and dielectric features of Co-doped DyCrO<sub>3</sub>  
Journal of Materials Science: Materials in Electronics 32(11), pp. 15108-15133, 2021
522. Ksoll, P., Mandal, R., Meyer, C., (...), Roddatis, V., Moshnyaga, V.  
Emergent double perovskite phase at LaMnO<sub>3</sub>/LaNiO<sub>3</sub> interfaces: Coupled charge transfer and structural reconstruction  
Physical Review B 103(19),195120 (2021)
521. Zhang, H., Peng, H., Xie, L., (...), He, X., Li, Y.  
The Lattice Structure, Raman Spectra, Electronic Structure, and Magnetic Properties of RCrO<sub>3</sub> (R = Ho and Sm) Films: the Effect of Thickness  
Journal of Superconductivity and Novel Magnetism 34(5), pp. 1415-1424 (2021)
520. Počuča-Nešić, M., Stanojević, Z.M., Radović, M., (...), Branković, G., Branković, Z.  
Processing and Properties of Ceramic Yttrium Manganite Sintered by Different Methods  
Science of Sintering 53(4), pp. 485-496 (2021)
519. Electrochemical and magnetic properties of perovskite type RMnO<sub>3</sub> (R = La, Nd, Sm, Eu) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.  
Journal of Alloys and Compounds 872,159727 (2021)
518. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X.,  
Materials Characterization 176,111108 (2021)
517. Influence of Ba<sup>2+</sup> Doping on Structural and Electrical Transport Properties of YMnO<sub>3</sub> Ceramics  
Shukla, J., Mishra, A.  
Journal of Superconductivity and Novel Magnetism 34(2), pp. 451-459 (2021)
516. Tuning Jahn-Teller distortion and electron localization of LaMnO<sub>3</sub> epitaxial films via substrate temperature  
Chen, X (Chen, Xin) Wang, BH (Wang, Baohua) Chen, Y (Chen, Yang) Wei, HM (Wei, Haoming) Cao, BQ (Cao, Bingqiang)  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume54 Issue23 Article Number235302 PublishedJUN 10 2021
515. Raman spectroscopy of SrZrO<sub>3</sub> based proton conducting electrolyte: Effect of Y-doping and Sr-nonstoichiometry  
Shkerin, SN (Shkerin, S. N.) Rudakova, AV (Rudakova, A. V.) Bulanin, KM (Bulanin, K. M.) Khaliullina, AS (Khaliullina, A. Sh) Meshcherskikh, AN (Meshcherskikh, A. N.) Vovkotrub, EG (Vovkotrub, E. G.) Dunyushkina, LA (Dunyushkina, L. A.)  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume46 Issue32 Page17007-17018 PublishedMAY 10 2021
514. Spin induced exchange bias and lattice modulation in Nd<sub>1-x</sub>EuxCrO<sub>3</sub>  
Gupta, P (Gupta, Pragya) Pal, D (Pal, D.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume33 Issue13 Article Number135806 PublishedMAR 31 2021
513. A comparative study of the structural, optical, magnetic and magnetocaloric properties of HoCrO<sub>3</sub> and HoCr<sub>0.85</sub>Mn<sub>0.15</sub>O<sub>3</sub> orthochromites  
Kanwar, K (Kanwar, Komal) Coondoo, I (Coondoo, Indrani) Anas, M (Anas, M.) Malik, VK (Malik, Vivek K.) Kumar, P (Kumar, Pradip) Kumar, S (Kumar, Sandeep) Kulriya, PK (Kulriya, Pawan K.) Kaushik, SD (Kaushik, S. D.) Panwar, N (Panwar, Neeraj)  
CERAMICS INTERNATIONAL Volume47 Issue6 Page7386-7397 PublishedMAR 15 2021
512. The Lattice Structure, Raman Spectra, Electronic Structure, and Magnetic Properties of RCrO<sub>3</sub> (R = Ho and Sm) Films: the Effect of Thickness  
Zhang, HG (Zhang, Hongguang) Peng, HP (Peng, Haiping) Xie, L (Xie, Liang) Wang, Z (Wang, Zheng) Liu, LQ (Liu, Liqing) He, XM (He, Xuemin) Li, YT (Li, Yongtao)  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM DOI10.1007/s10948-020-05778-7 Early AccessMAR 2021
511. Spray-Flame Synthesis of LaMnO<sub>3</sub>+delta Nanoparticles for Selective CO Oxidation (SELOX)  
Angel, S (Angel, Steven) Tapia, JD (Tapia, Juan David) Gallego, J (Gallego, Jaime) Hagemann, U (Hagemann, Ulrich) Wiggers, H (Wiggers, Hartmut)  
ENERGY & FUELS Volume35 Issue5 Page4367-4376 PublishedMAR 4 2021
510. Bi<sub>2</sub>S<sub>3</sub> Nanowires: First-Principles Phonon Dynamics and Their Photocatalytic Environmental Remediation  
Do, TAT (Do, T. Anh Thu) Vu, TTH (Vu, T. Thai Ha) Ho, GT (Giang Truong Ho) Pham, QN (Quang Ngan Pham) Giang, HT (Hong Thai Giang) Le, AT (Anh Thi Le) Man, MT (Minh Tan Man) Tran, DL (Dai Lam Tran)  
JOURNAL OF PHYSICAL CHEMISTRY C Volume125 Issue7 Page4086-4091 PublishedFEB 25 2021

509. Breaking of inversion symmetry in NdGaO<sub>3</sub>  
De Krishna, B (De Krishna, Binoy) Dwij, V (Dwij, Vivek) Gupta, MK (Gupta, Mayanak K.) Mittal, R (Mittal, Ranjan) Bhatt, H (Bhatt, Himad) Reddy, VR (Reddy, V. R.) Sathe, VG (Sathe, V. G.)  
PHYSICAL REVIEW B Volume103 Issue5 Article Number054106PublishedFEB 8 2021
508. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
Karoblis, D (Karoblis, Dovydas) Zarkov, A (Zarkov, Aleksej) Garskaite, E (Garskaite, Edita) Mazeika, K (Mazeika, Kestutis) Baltrunas, D (Baltrunas, Dalis) Niaura, G (Niaura, Gediminas) Beganskiene, A (Beganskiene, Aldona) Kareiva, A (Kareiva, Aivaras)  
SCIENTIFIC REPORTS Volume11 Issue1 Article Number2875 PublishedFEB 3 2021
507. Magnetic and Magnetocaloric Properties of Multiferroic Oxides Gd<sub>0.5</sub>Y<sub>0.5</sub>MnO<sub>3</sub> and Eu<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>  
Behera, PS (Behera, P. Suchismita) Nirmala, R (Nirmala, R.)  
IEEE TRANSACTIONS ON MAGNETICS Volume57 Issue2 Article Number2200705 PublishedFEB 2021
506. Intrinsic structural distortion assisted optical and magnetic properties of orthorhombic rare-earth perovskite La<sub>1-x</sub>EuxCrO<sub>3</sub>: Effect of t-e hybridization  
Siddique, MN (Siddique, M. Naseem) Faizan, M (Faizan, Mohd) Riyajuddin, S (Riyajuddin, Sk) Tripathi, P (Tripathi, P.) Ahmad, S (Ahmad, Shabbir) Ghosh, K (Ghosh, Kaushik)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume850 Article Number156748 PublishedJAN 5 2021
505. Strong Impact of Cr Doping on Structural and Magnetic Properties of Bi<sub>0.5</sub>La<sub>0.5</sub>Fe<sub>1-x</sub>CrxO<sub>3-delta</sub>  
Dang, NT (Dang, N. T.) Rutkauskas, AV (Rutkauskas, A., V) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Nguyen, HH (Nguyen, H. H.) Tran, N (Tran, N.) Lee, MY (Lee, M. Y.) Lee, BW (Lee, B. W.) Phan, TL (Phan, T. L.) Khiem, LH (Khiem, L. H.)  
JOURNAL OF ELECTRONIC MATERIALS Volume50 Issue3 Page1340-1348 Special IssueSI PublishedMAR 2021
504. Subsolidus phase relationship in the Y<sub>2</sub>O<sub>3</sub>-Mn<sub>3</sub>O<sub>4</sub>-CoO<sub>x</sub> system in air  
Song, YJ (Song, Y. J.) He, LM (He, L. M.) Yan, JL (Yan, J. L.)  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume41 Issue1 Page472-479 PublishedJAN 2021
503. Effect of magnesium on the XPS and Raman spectra of (Ba<sub>0.5</sub>Sr<sub>0.5</sub>)(Al<sub>10-2x</sub>MgxFe<sub>0.8</sub>)O<sub>3-xi</sub> (x <= 0.2)  
Jaiswal, SK (Jaiswal, Shivendra Kumar) Kashyap, VK (Kashyap, Vijay Kumar) Kumar, J (Kumar, Jitendra)  
JOURNAL OF ASIAN CERAMIC SOCIETIES Volume9 Issue1 Page140-149 PublishedJAN 2 2021
502. Portable handheld Raman spectrometer for the identification of new psychoactive substances  
Li, B., Wang, S., Zhang, M., Jia, Q., Wang, Q.  
Hongwai yu Jiguang Gongcheng/Infrared and Laser Engineering 49,20200101 (2020)
501. Influence of Fe doping on microstructure and magnetic properties of YCrO<sub>3</sub>  
Su, Y., Guo, J., Shi, C., (...), Wang, Y., Li, Z.  
Gongneng Cailiao/Journal of Functional Materials 51(3), pp. 03075-03081 (2020)
500. The influence of calcination temperature on the structural properties of La<sub>2</sub>FeMnO<sub>6</sub> double perovskite materials  
Yunida, Triyono, D.  
IOP Conference Series: Materials Science and Engineering 902(1),012027 (2020)
499. Raman spectroscopy of SrZrO<sub>3</sub> based proton conducting electrolyte: Effect of Y-doping and Sr-nonstoichiometry  
Shkerin, S.N., Rudakova, A. V., Bulanin, K.M., (...), Vovkotrub, E.G., Dunyushkina, L.A.  
International Journal of Hydrogen Energy (Article in Press) 2020
498. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films  
Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)  
JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020
497. Local ferroelectric polarization in antiferroelectric chalcogenide perovskite BaZrS<sub>3</sub> thin films  
Pandey, J (Pandey, Juhi) Ghoshal, D (Ghoshal, Debjit) Dey, D (Dey, Dibyendu) Gupta, T (Gupta, Tushar) Taraphder, A (Taraphder, A.) Koratkar, N (Koratkar, Nikhil) Soni, A (Soni, Ajay)  
PHYSICAL REVIEW B Volume102 Issue20 Article Number205308 PublishedNOV 30 2020
496. Morphologically tuned LaMnO<sub>3</sub> as an efficient nanocatalyst for the removal of organic dye from aqueous solution under sunlight  
Priyatharshni, S (Priyatharshni, S.) Kumar, SR (Kumar, S. Rajesh) Viswanathan, C (Viswanathan, C.) Ponpandian, N (Ponpandian, N.)  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume8 Issue5 Article Number104146 PublishedOCT 2020
495. Co-substitution tailored dielectric relaxation and electrical conduction in lanthanum orthoferrite  
Rai, A (Rai, Atma) Thakur, AK (Thakur, Awalendra K.)  
CERAMICS INTERNATIONAL Volume46 Issue14 Page22752-22765 PublishedOCT 1 2020
494. Influence of Ba(2+) Doping on Structural and Electrical Transport Properties of YMnO(3) Ceramics  
Shukla, J (Shukla, Jyoti) Mishra, A (Mishra, Ashutosh)  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume34 Issue2 Page451-459 PublishedFEB 2021
493. Magnetocaloric effect and spin-phonon correlations in RFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub> (R = Er and Yb) compounds  
Yadav, K (Yadav, Kavita) Kaur, G (Kaur, Gurpreet) Sharma, MK (Sharma, Mohit K.) Mukherjee, K (Mukherjee, K.)  
PHYSICS LETTERS A Volume384 Issue26 Article Number126638 PublishedSEP 18 2020
492. Evidence of weak antilocalization in quantum interference effects of (001) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices

- Helen, RS (Helen, Roshna Sobhanan) Prellier, W (Prellier, Wilfrid) Padhan, P (Padhan, Prahallad)  
 JOURNAL OF APPLIED PHYSICS Volume128 Issue3 Article Number033906 PublishedJUL 21 2020
491. Impact of texturing on the phase transitions in sol-gel-processed Bi(Sm)FeO<sub>3</sub> thin films on LaNiO<sub>3</sub>-buffered silicon  
 Liu, LS (Liu, Lisha) Qiu, XF (Qiu, Xiaofu) Zhang, SW (Zhang, Suwei) Zhou, Z (Zhou, Zhen) Huang, Y (Huang, Yu) Shu, L (Shu, Liang) Cheng, YYS (Cheng, Yue-Yu-Shan) Wang, XP (Wang, Xuping) Li, JF (Li, Jing-Feng)  
 JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume103 Issue11 Page6554-6564 PublishedNOV 2020
490. Re-entrant spin reorientation transition and Griffiths-like phase in antiferromagnetic TbFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub>  
 Mali, B (Mali, Bhawana) Nair, HS (Nair, Harikrishnan S.) Heitmann, TW (Heitmann, T. W.) Nhalil, H (Nhalil, Hariharan) Antonio, D (Antonio, Daniel) Gofryk, K (Gofryk, Krzysztof) Bhandari, SR (Bhandari, Shalika Ram) Ghimire, MP (Ghimire, Madhav Prasad) Elizabeth, S (Elizabeth, Sujia)  
 PHYSICAL REVIEW B Volume102 Issue1 Article Number014418 PublishedJUL 13 2020
489. Surface Conditions That Constrain Alkane Oxidation on Perovskites  
 Koch, G (Koch, Gregor) Havecker, M (Havecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)  
 ACS CATALYSIS Volume10 Issue13 Page7007-7020 PublishedJUL 2 2020
488. Dielectric relaxation, magneto-dielectric coupling, and pyrocurrent anomaly in point defect controlled HoCrO<sub>3</sub>  
 Anusree, VK (Anusree, V. K.) Lekshmi, PN (Lekshmi, P. Neenu) Bhat, SG (Bhat, Shwetha G.) Wagh, AA (Wagh, Aditya A.) Das, G (Das, Gangadhar) Santhosh, PN (Santhosh, P. N.)  
 JOURNAL OF APPLIED PHYSICS Volume127 Issue19 Article Number194105 PublishedMAY 21 2020
487. A Fast, Low-Temperature Synthesis Method for Hexagonal YMnO<sub>3</sub>: Kinetics, Purity, Size and Shape as Studied by In Situ X-ray Diffraction  
 Marshall, KP (Marshall, Kenneth P.) Blichfeld, AB (Blichfeld, Anders B.) Skjaervo, SL (Skjaervo, Susanne L.) Grendal, OG (Grendal, Ola G.) van Beek, W (van Beek, Wouter) Selbach, SM (Selbach, Sverre M.) Grande, T (Grande, Tor) Einarsrud, MA (Einarsrud, Mari-Ann)  
 CHEMISTRY-A EUROPEAN JOURNAL Volume26 Issue42 Page9330-9337 Special IssueSI PublishedJUL 27 2020
486. Room-temperature magnetization reversal and magnetocaloric switching in Fe substituted GdMnO<sub>3</sub>  
 Pal, A (Pal, Arnab) Mohan, M (Mohan, Manu) Venimadhav, A (Venimadhav, Adyam) Murugavel, P (Murugavel, Pattukkannu)  
 PHYSICAL REVIEW MATERIALS Volume4 Issue4 Article Number044407 PublishedAPR 24 2020
485. Enhanced ferromagnetism and conductivity in epitaxial LaMnO<sub>3</sub> thin films by oxygen-atmosphere annealing  
 Sun, QC (Sun, Qincao) Luo, X (Luo, Xin) Xia, QT (Xia, Qingtao) Guo, YF (Guo, Yunfeng) Su, J (Su, Jie) Li, Q (Li, Qiang) Miao, GX (Miao, Guoxing)  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume499 Article Number166317 PublishedAPR 1 2020
484. Preparation of Multiferroic YFeO<sub>3</sub> Nanofibers and the Photocatalytic Activity under Visible Irradiation  
 Zhang, RL (Zhang, Runlan) Wang, XQ (Wang, Xiaoqin) Yu, CX (Yu, Chunxia) Liu, J (Liu, Jian) Yao, JJ (Yao, Junjie) Kang, XY (Kang, Xiaoying) Xing, XX (Xing, Xingxing) Xiong, SX (Xiong, Shanxin)  
 INTEGRATED FERROELECTRICS Volume206 Issue1 Page105-111 Special IssueSI PublishedMAR 23 2020
483. Atomic layer deposition of YMnO<sub>3</sub> thin films  
 Choi, JH (Choi, Ju H.) Pham, C (Pham, Calvin) Dorman, J (Dorman, James) Kim, T (Kim, Taeseung) Chang, JP (Chang, Jane P.)  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume498 Article Number166146 PublishedMAR 15 2020
482. Electronic configuration and magnetic properties of La<sub>0.7</sub>Ca<sub>0.3</sub>Mn<sub>1-x</sub>FexO<sub>3</sub> perovskite NPs: The effect of a lower Fe<sup>3+</sup> concentration  
 Martinez-Rodriguez, HA (Martinez-Rodriguez, H. A.) Onyekachi, K (Onyekachi, Kalu) Concha-Balderrama, A (Concha-Balderrama, A.) Herrera-Perez, G (Herrera-Perez, G.) Matutes-Aquino, JA (Matutes-Aquino, J. A.) Jurado, JF (Jurado, J. F.) Bocanegra-Bernal, MH (Bocanegra-Bernal, M. H.) Ramos-Sanchez, VH (Ramos-Sanchez, V. -H.) Duarte-Moller, JA (Duarte-Moller, J. A.) Reyes-Rojas, A (Reyes-Rojas, A.)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume816 Article Number152668 PublishedMAR 5 2020
481. Strain modulated magnetocaloric effect in (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices  
 Roshna, SH (Roshna, S. H.) Prellier, WP (Prellier, W.) Padhan, PP (Padhan, P.)  
 NANOSCALE Volume12 Issue8 Page5151-5158 PublishedFEB 28 2020
480. Spin phonon coupling in Mn doped HoFeO<sub>3</sub> compounds exhibiting spin reorientation behaviour  
 Prakash, P (Prakash, Pulkit) Sathe, V (Sathe, Vasant) Prajapat, CL (Prajapat, C. L.) Nigam, AK (Nigam, A. K.) Krishna, PSR (Krishna, P. S. R.) Das, A (Das, A.)  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume32 Issue9 Article Number095801 PublishedFEB 27 2020
479. Magnetocaloric effect in mixed rare earth manganite Gd<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>  
 Behera, PS (Behera, P. Suchismita) Nirmala, R (Nirmala, R.) Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)  
 3RD INTERNATIONAL CONFERENCE ON CONDENSED MATTER & APPLIED PHYSICS (ICC-2019) Book SeriesAIP Conference Proceedings Volume2220 Article Number110019 Published2020
478. Low temperature dielectric study of La<sub>2</sub>CuMnO<sub>6</sub> ceramics  
 Singh, DN (Singh, D. N.) Mahato, DK (Mahato, Dev K.)  
 MATERIALS TODAY-PROCEEDINGS Volume29 Page768-771 Special IssueSI Part3 Published2020

477. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline YCrO<sub>3</sub> ceramics across the T-C similar to 460 K  
Mall, AK (Mall, Ashish Kumar) Paul, B (Paul, Barnita) Garg, A (Garg, Ashish) Gupta, R (Gupta, Rajeev)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue3 Page537-545 PublishedMAR 2020
476. Orbital Floquet engineering of exchange interactions in magnetic materials  
Chaudhary, S., Hsieh, D., Refael, G.  
Physical Review B 100(22),220403 (2019)
475. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Hoang, N.N., Pham, D.H.Y., Nguyen, T.N.  
Scientific Reports 9(1), 19204 (2019)
474. Strain tuning effects in perovskites (Book Chapter)  
Cheng, Z., Hong, F., Jia, T., (...), Ozawa, K., Kimura, H.  
Nanoscale Ferroelectric-Multiferroic Materials for Energy Harvesting Applications pp. 23-39 (2019)
473. Low temperature dielectric study of La<sub>2</sub>CuMnO<sub>6</sub> ceramics  
Singh, D.N., Mahato, D.K.  
Materials Today: Proceedings 29, pp. 768-771 (2019)
472. X-ray diffraction and Raman spectroscopy for lead halide perovskites ( Book Chapter)  
Rahman, M.Z., Edvinsson, T.  
Characterization Techniques for Perovskite Solar Cell Materials pp. 23-47 (2019)
471. Study of structural and dielectric properties of La<sub>0.9</sub>Na<sub>0.1</sub>CrO<sub>3</sub>- and Ni<sub>0.5</sub>Cu<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>-based composites  
Saleem, M (Saleem, M.) Chouhan, S (Chouhan, Shivani) Mishra, A (Mishra, A.)  
JOURNAL OF ADVANCED DIELECTRICS Volume9 Issue6 Article Number1950044 PublishedDEC 2019
470. Potential of Raman spectroscopy towards understanding structures of carbon-based materials and perovskites  
Selvarajan, P (Selvarajan, Premkumar) Chandra, G (Chandra, Goutam) Bhattacharya, S (Bhattacharya, Susmita) Sil, S (Sil, Sanchita)  
Vinu, A (Vinu, Ajayan) Umapathy, S (Umapathy, Siva)  
EMERGENT MATERIALS Volume2 Issue4 Page417-439 PublishedDEC 2019
469. Yttrium Manganese Oxide Phase Stability and Selectivity Using Lithium Carbonate Assisted Metathesis Reactions  
Todd, PK (Todd, Paul K.) Smith, AMM (Smith, Antoinette M. M.) Neilson, JR (Neilson, James R.)  
INORGANIC CHEMISTRY Volume58 Issue22 Page15166-15174 PublishedNOV 18 2019
468. First-principles study of structural, electronic, ferroelectric, and vibrational properties of BiInO<sub>3</sub> under high pressure  
Kaczowski, J (Kaczowski, J.)  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume134 Page225-237 PublishedNOV 2019
467. In Situ Observation of Thermally Induced Structural Transitions in Vacancy-Doped Cuprous Telluride (Cu<sub>2-x</sub>Te) Nanowires Using Raman Spectroscopy  
Chen, CJ (Chen, Caiju) Liao, ML (Liao, Mengling) Shan, BB (Shan, Beibei) Li, M (Li, Ming)  
JOURNAL OF PHYSICAL CHEMISTRY C Volume123 Issue40 Page24763-24771 PublishedOCT 10 2019
466. Structure and physical properties of SeCo<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub>  
Ridley, CJ (Ridley, Christopher J.) Knight, KS (Knight, Kevin S.) Wilson, CW (Wilson, Craig W.) Smith, RI (Smith, Ronald, I) Bull, CL (Bull, Craig L.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue39 Article Number395402 PublishedOCT 2 2019
465. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
464. Vapor-Phase Incommensurate Heteroepitaxy of Oriented Single-Crystal CsPbBr<sub>3</sub> on GaN: Toward Integrated Optoelectronic Applications  
Zhao, LY (Zhao, Liyun) Gao, Y (Gao, Yan) Su, M (Su, Man) Shang, QY (Shang, Qiuyu) Liu, Z (Liu, Zhen) Li, Q (Li, Qi) Wei, Q (Wei, Qi) Li, ML (Li, Meili) Fu, L (Fu, Lei) Zhong, YG (Zhong, Yangguang)  
ACS NANO Volume13 Issue9 Page10085-10094 PublishedSEP 2019
463. Conventional synthesis and characterization of cubically ordered La<sub>2</sub>FeMnO<sub>6</sub> double perovskite compound  
Dhilip, M (Dhilip, M.) Devi, NA (Devi, N. Aparna) Punitha, JS (Punitha, J. Stella) Anbarasu, V (Anbarasu, V) Kumar, KS (Kumar, K. Saravana)  
VACUUM Volume167 Page16-20 PublishedSEP 2019
462. Significance of isostructural distortion and strong magnetoelastic coupling in the weak ferromagnet YFe<sub>0.9</sub>Cr<sub>0.1</sub>O<sub>3</sub>  
Raut, S (Raut, Subhaji) Kar, B (Kar, Biman) Velaga, S (Velaga, Srihari) Poswal, HK (Poswal, Himanshu K.) Panigrahi, S (Panigrahi, S.)  
JOURNAL OF APPLIED PHYSICS Volume126 Issue7 Article Number074103 PublishedAUG 21 2019
461. Self-doped La<sub>1-x</sub>MnO<sub>3+δ</sub> perovskites: Electron state hybridization and Raman modes  
Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)  
SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019

460. Crystal structure and vibrational spectra of hexagonal manganites  $\text{YMnO}_3$  and  $\text{LuMnO}_3$  under high pressure  
 Jabarov, SH (Jabarov, S. H.) Dang, NT (Dang, N. T.) Kichanov, SE (Kichanov, S. E.) Kozlenko, DP (Kozlenko, D. P.) Dubrovinsky, LS (Dubrovinsky, L. S.) Park, JG (Park, Je-Geun) Lee, S (Lee, Seongsu) Mammadov, AI (Mammadov, A., I) Mehdiyeva, RZ (Mehdiyeva, R. Z.) Savenko, BN (Savenko, B. N.)  
 MATERIALS RESEARCH EXPRESS Volume6 Issue8 Article Number086110 PublishedAUG 2019
459. Photo-Fenton Activity of Magnesium Substituted Cerium Ferrite Perovskites for Degradation of Methylene Blue via Sol-Gel Method  
 Anantharaman, A (Anantharaman, Ashwini) Josephine, BA (Josephine, B. Avila) Teresita, VM (Teresita, V. Mary) Ajeesha, TL (Ajeesha, T. L.) George, M (George, Mary)  
 JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume19 Issue8 Page5116-5129 PublishedAUG 2019
458. Griffiths phase-like behavior and origin of spin-phonon interaction in  $\text{Eu}_{0.75}\text{Y}_{0.25}\text{MnO}_3$   
 Gupta, S (Gupta, Surbhi) Sharma, G (Sharma, Gaurav) Reddy, VR (Reddy, V. R.) Sathe, VG (Sathe, V. G.) Siruguri, V (Siruguri, V)  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume482 Page38-43 PublishedJUL 15 2019
457. Investigation of multi-mode spin-phonon coupling and local B-site disorder in  $\text{Pr}_2\text{CoFeO}_6$  by Raman spectroscopy and correlation with its electronic structure by XPS and XAS studies  
 Pal, A (Pal, Arkadeb) Ghosh, S (Ghosh, Surajit) Joshi, AG (Joshi, Amish G.) Kumar, S (Kumar, Shiv) Patil, S (Patil, Swapnil) Gupta, PK (Gupta, Prince K.) Singh, P (Singh, Prajyoti) Gangwar, VK (Gangwar, V. K.) Prakash, P (Prakash, P.) Singh, RK (Singh, Ranjan K.)  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue27 Article Number275802 PublishedJUL 10 2019
456. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds:  $\text{Dy}_{0.55}\text{Sr}_{0.45}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$   
 Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019
455. Structural, electrical, optical and magnetic properties of  $\text{SmCrO}_3$  chromites: Influence of Gd and Mn co-doping  
 Panwar, N (Panwar, Neeraj) Coondoo, I (Coondoo, Indrani) Kumar, S (Kumar, Surendra) Kumar, S (Kumar, Sandeep) Vasundhara, M (Vasundhara, M.) Rao, A (Rao, Ashok)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page1122-1131 PublishedJUL 5 2019
454. Raman spectroscopy study of the La-modified  $(\text{Bi}_{0.5}\text{Na}_{0.5})(0.92)\text{Ba}_{0.08}\text{TiO}_3$  lead-free ceramic system  
 Mendez-Gonzalez, Y (Mendez-Gonzalez, Y.) Pelaiz-Barranco, A (Pelaiz-Barranco, A.) Curcio, AL (Curcio, A. L.) Rodrigues, AD (Rodrigues, A. D.) Guerra, JDS (Guerra, J. D. S.)  
 JOURNAL OF RAMAN SPECTROSCOPY Volume50 Issue7 Page1044-1050 PublishedJUL 2019
453. Correlation between lattice strain and physical (magnetic, dielectric, and magnetodielectric) properties of perovskite-spinel  $(\text{Bi}_{0.85}\text{La}_{0.15}\text{FeO}_3)_{(1-x)}-(\text{NiFe}_2\text{O}_4)_{(x)}$  composites  
 Pandey, R (Pandey, Rabichandra) Pradhan, LK (Pradhan, Lagen Kumar) Kumar, S (Kumar, Sunil) Supriya, S (Supriya, Sweetie) Singh, RK (Singh, Rakesh Kumar) Kar, M (Kar, Manoranjan)  
 JOURNAL OF APPLIED PHYSICS Volume125 Issue24 Article Number244105 PublishedJUN 28 2019
452. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
 Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V.)  
 PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
451. Electric field and temperature induced local polarization switching and piezoresponse in  $\text{Bi}_{0.88}\text{Sm}_{0.12}\text{FeO}_3$  ceramics for nanoscale applications  
 Anthoniappen, J (Anthoniappen, Jesuraj) Chang, WS (Chang, Wei Sea) Ruiz, FM (Ruiz, Flora Mae) Tu, CS (Tu, Chi-Shun) Blaise, CT (Blaise, Carvyn Tutong) Chen, PY (Chen, Pin-Yi) Chen, CS (Chen, Cheng-Sao) Mana-ay, H (Mana-ay, Haidee)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume790 Page587-596 PublishedJUN 25 2019
450. Effects of a strong gravitational field on Mn-trimers and magnetic properties of hexagonal  $\text{YMnO}_3$  single crystal  
 Tokuda, M (Tokuda, Makoto) Mashimo, T (Mashimo, Tsutomu) Ma, WJ (Ma, Weijian) Hayami, S (Hayami, Shinya) Ando, S (Ando, Shinji) Nishiyama, T (Nishiyama, Tadao) Yoshiasa, A (Yoshiasa, Akira)  
 JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume129 Page172-179 PublishedJUN 2019
449. Mechano-synthesis of the Whole  $\text{Y}_{1-x}\text{Bi}_x\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$  Perovskite System: Structural Characterization and Study of Phase Transitions  
 Quintana-Cilleruelo, JA (Angel Quintana-Cilleruelo, Jose)  
 Veerapandiyan, VK (Veerapandiyan, Vignaswaran K.) Deluca, M (Deluca, Marco) Alguero, M (Alguero, Miguel) Castro, A (Castro, Alicia)  
 MATERIALS Volume12 Issue9 Article Number1515 PublishedMAY 1 2019
448. Magnetic phase transition and multiferroic phase separation in  $\text{Ho}_{1-x}\text{Gd}_x\text{MnO}_3$   
 Zhang, N (Zhang, N.) Wang, YP (Wang, Y. P.) Li, X (Li, X.) Liu, MF (Liu, M. F.) Liu, XN (Liu, X. N.) Li, N (Li, N.) Qiu, YJ (Qiu, Y. J.) Dong, RY (Dong, R. Y.) Fu, ZM (Fu, Z. M.) Guo, YY (Guo, Y. Y.)  
 CERAMICS INTERNATIONAL Volume45 Issue7 Page8325-8332 PartA PublishedMAY 2019
447. Phase separation and local lattice distortions analysis of charge-ordered manganese films  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_{3-\delta}$  by Raman spectroscopy  
 Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lyanguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.)  
 SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019
446. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in  $(\text{La}_{0.6}\text{Pr}_{0.4})(0.7)\text{Ca}_{0.3}\text{MnO}_3$ : the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy

- Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, v)  
SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019
445. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties  
Wang, S (Wang, Shan) Wu, XF (Wu, Xiaofeng) Wang, TS (Wang, Tiesheng) Zhang, JQ (Zhang, Jiaqi) Zhang, CY (Zhang, Chenyang) Yuan, L (Yuan, Long) Cui, XQ (Cui, Xiaoqiang) Lu, DY (Lu, Dayong)  
INORGANIC CHEMISTRY Volume58 Issue4 Page2315-2329 PublishedFEB 18 2019
444. Accelerated Ionic Motion in Amorphous Memristor Oxides for Nonvolatile Memories and Neuromorphic Computing  
Schmitt, R (Schmitt, Rafael) Kubicek, M (Kubicek, Markus) Sediva, E (Sediva, Eva) Trassin, M (Trassin, Morgan) Weber, MC (Weber, Mads C.) Rossi, A (Rossi, Antonella) Hutter, H (Hutter, Herbert) Kreisel, J (Kreisel, Jens) Fiebig, M (Fiebig, Manfred) Rupp, JLM (Rupp, Jennifer L. M.)  
ADVANCED FUNCTIONAL MATERIALS Volume29 Issue5 Article Number1804782 PublishedFEB 1 2019
443. Selective Formation of Yttrium Manganese Oxides through Kinetically Competent Assisted Metathesis Reactions  
Todd, PK (Todd, Paul K.) Neilson, JR (Neilson, James R.)  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume141 Issue3 Page1191-1195 PublishedJAN 23 2019
442. Enhancing Capacitance of Nickel Cobalt Chalcogenide via Interface Structural Design  
Lu, F (Lu, Fei) Zhou, M (Zhou, Min) Su, K (Su, Kun) Ye, T (Ye, Tao) Yang, YJ (Yang, Yijun) Lam, TD (Lam, Tran Dai) Bando, Y (Bando, Yoshio) Wang, X (Wang, Xi)  
ACS APPLIED MATERIALS & INTERFACES Volume11 Issue2 Page2082-2092 PublishedJAN 16 2019
441. Effect of Ni doping on the structural, vibrational, optical and magnetic properties of YMn<sub>0.4</sub>Fe<sub>0.6-x</sub>Ni<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.1) nanoparticles  
Chihaoui, S (Chihaoui, S.) Koubaa, M (Koubaa, M.) Cheikhrouhou-Koubaa, W (Cheikhrouhou-Koubaa, W.) Cheikhrouhou, A (Cheikhrouhou, A.) Guermazi, H (Guermazi, H.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume771 Page327-334 PublishedJAN 15 2019
440. High pressure structural investigations on hexagonal YInO<sub>3</sub>  
Dwivedi, A (Dwivedi, Abhilash) Poswal, HK (Poswal, H. K.) Shukla, R (Shukla, R.) Velaga, S (Velaga, Srihari) Sahoo, BD (Sahoo, B. D.) Grover, V (Grover, V.) Deo, MN (Deo, M. N.)  
HIGH PRESSURE RESEARCH Volume39 Issue1 Page17-35 PublishedJAN 2 2019
439. Processing and properties of pure antiferromagnetic h-YMnO<sub>3</sub>  
Pocuca-Nesic, M (Pocuca-Nesic, Milica) Stanojevic, ZM (Stanojevic, Zorica Marinkovic) Smole, PC (Smole, Patricia Cotic) Dapcevic, A (Dapcevic, Aleksandra) Tasic, N (Tasic, Nikola) Brankovic, G (Brankovic, Goran) Brankovic, Z (Brankovic, Zorica)  
PROCESSING AND APPLICATION OF CERAMICS Volume13 Issue4 Page427-434 Published2019
438. Thin film nano-photocatalysts with low band gap energy for gas phase degradation of p-xylene: TiO<sub>2</sub> doped Cr, UiO66-NH<sub>2</sub> and LaBO<sub>3</sub> (B = Fe, Mn, and Co)  
Luu, C.L., Van Nguyen, T.T., Nguyen, T., (...), Hoang, T.C., Ha, C.A.  
Advances in Natural Sciences: Nanoscience and Nanotechnology 9(1),015003 2018
437. The effect of dynamic Jahn-Teller interaction on the Raman peaks in manganites  
Sahu, A.K., Rout, G.C., Sahu, D.R.  
African Review of Physics 13,0007, pp. 45-49 2018
436. Structural and electrical characterization of La<sub>2</sub>ZnMnO<sub>6</sub> double perovskite  
Singh, DN (Singh, D. N.) Mahato, DK (Mahato, Dev K.) Sinha, TP (Sinha, T. P.)  
PHYSICA B-CONDENSED MATTER Volume550 Page400-406 PublishedDEC 1 2018
435. Temperature dependent percolation mechanism for conductivity in Y-0.63 Ca<sub>0.37</sub>TiO<sub>3</sub> revealed by a microstructure study  
German, R (German, R.) Zimmer, B (Zimmer, B.) Koethe, TC (Koethe, T. C.) Barinov, A (Barinov, A.) Komarek, AC (Komarek, A. C.) Braden, M (Braden, M.) Parmigiani, F (Parmigiani, F.) van Loosdrecht, PHM (van Loosdrecht, P. H. M.)  
MATERIALS RESEARCH EXPRESS Volume5 Issue12 Article Number126101 PublishedDEC 2018
434. Composition and thermal structural evolution in Pr modified bismuth ferrite near the morphotropic phase boundary  
Tu, CS (Tu, Chi-Shun) Chen, CS (Chen, Cheng-Sao) Chen, PY (Chen, Pin-Yi) Hsieh, YL (Hsieh, Yi Lin) Chien, RR (Chien, R. R.) Schmidt, VH (Schmidt, V. Hugo) Feng, KC (Feng, Kuei-Chih) Chang, HW (Chang, Huang-Wei)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume768 Page903-913 PublishedNOV 5 2018
433. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, KD (Singh, Kapil Dev) Pandit, R (Pandit, Rabia) Kumar, R (Kumar, Ravi)  
SOLID STATE SCIENCES Volume85 Page70-75 PublishedNOV 2018
432. Raman Spectrum of the Organic-Inorganic Halide Perovskite CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> from First Principles and High-Resolution Low-Temperature Raman Measurements  
Perez-Osorio, MA (Perez-Osorio, Miguel A.) Lin, QQ (Lin, Qianqian) Phillips, RT (Phillips, Richard T.) Milot, RL (Milot, Rebecca L.) Herz, LM (Herz, Laura M.) Johnston, MB (Johnston, Michael B.) Giustino, F (Giustino, Feliciano)  
JOURNAL OF PHYSICAL CHEMISTRY C Volume122 Issue38 Page21703-21717 PublishedSEP 27 2018

431. Structural, magnetic and electrical properties of Fe substituted GdCrO<sub>3</sub>  
Dash, BB (Dash, Bibhuti. B.) Ravi, S (Ravi, S.)  
SOLID STATE SCIENCES Volume83 Page192-200 PublishedSEP 2018
430. Magnetization reversal and exchange bias study in bulk Gd<sub>1-x</sub>Y<sub>x</sub>CrO<sub>3</sub> (x=0.0-1.0)  
Dash, BB (Dash, Bibhuti B.) Ravi, S (Ravi, S.)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume461 Page91-99 PublishedSEP 1 2018
429. Pressure induced anomalous magnetic behaviour in nanocrystalline YCrO<sub>3</sub> at room temperature  
Jana, R (Jana, Rajesh) Pareek, V (Pareek, Vivek) Khatua, P (Khatua, Pradip) Saha, P (Saha, Pinku) Chandra, A (Chandra, Amreesh)  
Mukherjee, GD (Mukherjee, Goutam Dev)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume30 Issue33 Article Number335401 PublishedAUG 22 2018
428. Detail investigations of SmFeO<sub>3</sub> under extreme condition  
Tyagi, S (Tyagi, Shekhar) Sathe, VG (Sathe, V. G.) Sharma, G (Sharma, Gaurav) Gupta, MK (Gupta, M. K.) Mittal, R (Mittal, R.) Srihari, V (Srihari, Velaga) Poswal, HK (Poswal, Himanshu Kumar)  
MATERIALS CHEMISTRY AND PHYSICS Volume215 Page393-403 PublishedAUG 15 2018
427. Electric dipoles via Cr<sup>3+</sup>(d<sup>3</sup>) ion off-center displacement in perovskite DyCrO<sub>3</sub>  
Yi, LH (Yi, L. H.) Shi, TF (Shi, T. F.) Zhang, RR (Zhang, R. R.) Park, CB (Park, C. B.) Kim, KH (Kim, Kee Hoon) Yang, J (Yang, J.)  
Tong, P (Tong, P.) Song, WH (Song, W. H.) Dai, JM (Dai, J. M.) Zhu, XB (Zhu, X. B.)  
PHYSICAL REVIEW B Volume98 Issue5 Article Number054301 PublishedAUG 2 2018
426. Colossal magnetoresistance manganites  
Bebenin, NG (Bebenin, N. G.) Zainullina, RI (Zainullina, R. I.) Ustinov, VV (Ustinov, V. V.)  
PHYSICS-USPEKHI Volume61 Issue8 Page719-738 PublishedAUG 2018
425. The Jahn-Teller distortion influenced ferromagnetic order in Pr<sub>1-x</sub>LaxMnO<sub>3</sub>  
He, FF (He, Feifei) Mao, ZQ (Mao, Zhongquan) Tang, LY (Tang, Lingyun) Zhang, J (Zhang, Jiang) Chen, X (Chen, Xi)  
SOLID STATE COMMUNICATIONS Volume274 Page21-26 PublishedJUN 2018
424. Enhancement in magnetocaloric properties of ErCrO<sub>3</sub> via A-site Gd substitution  
Shi, JH (Shi, Jianhang) Yin, SQ (Yin, Shiqi) Seehra, MS (Seehra, Mohindar S.) Jain, M (Jain, Menka)  
JOURNAL OF APPLIED PHYSICS Volume123 Issue19 Article Number193901 PublishedMAY 21 2018
423. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure  
Shukla, R (Shukla, Rakesh) Grover, V (Grover, Vinita) Srinivasu, K (Srinivasu, Kancharlapalli) Paul, B (Paul, Barnita) Roy, A (Roy, Anushree) Gupta, R (Gupta, Ruma) Tyagi, AK (Tyagi, Avesh Kumar)  
DALTON TRANSACTIONS Volume47 Issue19 Page6787-6799 PublishedMAY 21 2018
422. Grain boundary-dominated electrical conduction and anomalous optical-phonon behaviour near the Neel temperature in YFeO<sub>3</sub> ceramics  
Raut, S (Raut, Subhajit) Babu, PD (Babu, P. D.) Sharma, RK (Sharma, R. K.) Pattanayak, R (Pattanayak, Ranjit) Panigrahi, S (Panigrahi, Simanchalo)  
JOURNAL OF APPLIED PHYSICS Volume123 Issue17 Article Number174101 PublishedMAY 7 2018
421. The magnetic transition temperature tuned by strain in YMn<sub>0.9</sub>Ru<sub>0.1</sub>O<sub>3</sub> thin films  
Yang, LP (Yang, L. P.) Zhang, AM (Zhang, A. M.) Wang, K (Wang, K.) Wu, XS (Wu, X. S.) Zhai, ZY (Zhai, Z. Y.)  
AIP ADVANCES Volume8 Issue5 Article Number055805 PublishedMAY 2018
420. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiayi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang)  
Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
NANO ENERGY Volume47 Page474-480 PublishedMAY 2018
419. Spin-phonon coupling in HoCr<sub>1-x</sub>FexO<sub>3</sub> (x=0 and 0.5) compounds  
Kotnana, G (Kotnana, Ganesh) Sathe, VG (Sathe, Vasant. G.) Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
JOURNAL OF RAMAN SPECTROSCOPY Volume49 Issue4 Page764-770 PublishedAPR 2018
418. Effect of Yttrium substitution on the structural and magnetic properties of GdCrO<sub>3</sub>  
Dash, BB (Dash, Bibhuti B.) Ravi, S (Ravi, S.)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume448 Page355-359 PublishedFEB 15 2018
417. Orbital wave in the Raman scattering cross section of LaMnO<sub>3</sub>  
Munkhbaatar, P (Munkhbaatar, Purevdorj) Myung-Whun, K (Myung-Whun, Kim)  
PHYSICAL REVIEW B Volume97 Issue8 Article Number085101 PublishedFEB 1 2018
416. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Zhang, L (Zhang, Lei) deGlee, B (deGlee, Ben) Murphy, R (Murphy, Ryan) Zhao, BT (Zhao, Bote) Zhang, YX (Zhang, Yanxiang) Chen, Y (Chen, Yan)  
ADVANCED FUNCTIONAL MATERIALS Volume28 Issue5 Article Number1704907 PublishedJAN 31 2018
415. Structural dielectric and magnetic properties of (1-x) BiFeO<sub>3</sub>-xBa(0.9)Ca(0.1)Ti(0.9)Sn(0.1)O(3) ceramics  
Mizouri, F (Mizouri, F.) Kallel, I (Kallel, I.) Abdelmoula, N (Abdelmoula, N.) Mezzane, D (Mezzane, D.) Khemakhem, H (Khemakhem, H.)

414. Superconductor sandwiches: cuprate-manganite multilayers with a remarkable new ground state  
Mallett, BPP (Mallett, B. P. P.) Marsik, P (Marsik, P.) Khmaladze, J (Khmaladze, J.) Arul, R (Arul, R.) Minola, M (Minola, M.) Simpson, MC (Simpson, M. C.) Bernhard, C (Bernhard, C.) Edited by Rogers, DJ (Rogers, DJ) Look, DC (Look, DC) Teherani, FH (Teherani, FH)  
OXIDE-BASED MATERIALS AND DEVICES IX Book Series Proceedings of SPIE Volume10533 Article NumberUNSP 105330Y  
Published2018
413. Magnetocaloric effect and magnetic properties in YMnO<sub>3</sub> perovskite  
Jabar, A (Jabar, A.) Masrour, R (Masrour, R.)  
PHASE TRANSITIONS Volume91 Issue3 Page284-292 Published2018
412. The tunable spin reorientation, temperature induced magnetization reversal, and spontaneous exchange bias effect of Sm<sub>0.7</sub>Y<sub>0.3</sub>Cr<sub>1-x</sub>Ga<sub>x</sub>O<sub>3</sub>  
Ma, ZJ (Ma, Zhijie) Liu, GH (Liu, Guanghui) Gao, WJ (Gao, Weijun) Liu, YZ (Liu, Yuzhuang) Xie, L (Xie, Liang) He, XM (He, Xuemin) Liu, LQ (Liu, Liqing) Li, YT (Li, Yongtao) Zhang, HG (Zhang, Hongguang)  
RSC ADVANCES Volume8 Issue58 Page33487-33495 Published2018
411. High pressure studies on nanocrystalline YCrO<sub>3</sub>  
Jana, R (Jana, Rajesh) Chandra, A (Chandra, Amreesh) Mukherjee, GD (Mukherjee, Goutam Dev)  
Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)  
2ND INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC-2017) Book SeriesAIP  
Conference Proceedings Volume1953 Article Number030081 Published2018
410. Effect of Pb<sup>2+</sup> Substitution at A-site on Structural and Magnetic Properties of LaMnO<sub>3</sub>  
Kumar, S (Kumar, Sunil) Pal, J (Pal, Jaswinder) Kaur, S (Kaur, Shubhpreet) Agrawal, P (Agrawal, P.) Singh, M (Singh, Mandeep) Singh, A (Singh, Anupinder)  
Edited by Shekhawat, MS (Shekhawat, MS) Bhardwaj, S (Bhardwaj, S) Suthar, B (Suthar, B)  
2ND INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC-2017) Book SeriesAIP  
Conference Proceedings Volume1953 Article Number120030 Published2018
409. Studies of dielectric and electrical transport characteristics of BaTiO<sub>3</sub>BiFeO<sub>3</sub>-CaSnO<sub>3</sub> ternary system  
Hajra, S (Hajra, Sugato) Sahoo, S (Sahoo, Sushrisangita) Mishra, T (Mishra, Twinkle) Rout, PK (Rout, Pravat Kumar) Choudhary, RNP (Choudhary, Ram Naresh Prasad)  
PROCESSING AND APPLICATION OF CERAMICS Volume12 Issue2 Page165-171 Published2018
408. Structural and spectroscopic studies on HoCr<sub>1-x</sub>FexO<sub>3</sub> (x=0 and 0.5) Compounds  
Kotnana, G (Kotnana, Ganesh) Sathé, VG (Sathé, V. G.) Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
62ND DAE SOLID STATE PHYSICS SYMPOSIUM Book SeriesAIP Conference Proceedings Volume1942 Article Number090040  
Published2018
407. Modification of low temperature magnetic interactions in Dy<sub>1-x</sub>EuxMnO<sub>3</sub>  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
RSC ADVANCES Volume8 Issue24 Page13537-13545 Published2018
406. Intrinsic structural distortion and exchange interactions in SmFexCr<sub>1-x</sub>O<sub>3</sub> compounds  
Xiang, ZC (Xiang, Zhongcheng) Li, WP (Li, Wenping) Cui, YM (Cui, Yimin)  
RSC ADVANCES Volume8 Issue16 Page8842-8848 Published2018
405. Tailoring of magnetic orderings in Fe substituted GdMnO<sub>3</sub> bulk samples towards room temperature  
Pal, A (Pal, A.) Sekhar, CD (Sekhar, C. Dhana) Venimadhav, A (Venimadhav, A.) Murugavel, P (Murugavel, P.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume29 Issue40 Article Number405803 PublishedOCT 11 2017
404. Stojadinovic, Bojan; Dohcevic-Mitrovic, Zorana; Stepanenko, Dimitrije; et al.  
Dielectric and ferroelectric properties of Ho-doped BiFeO<sub>3</sub> nanopowders across the structural phase transition  
CERAMICS INTERNATIONAL Volume: 43 Issue: 18 Pages: 16531-16538 Published: DEC 15 2017
403. Ulyanov, A. N.; Savilov, S. V.; Sidorov, A. V.; et al.  
Electron structure, Raman "vacancy" modes and Griffiths-like phase of self-doped Pr<sub>1-x</sub>MnO<sub>3</sub>+delta manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 722 Pages: 77-82 Published: OCT 25 2017
402. Gross, Nelson; Sun, Yi-Yang; Perera, Samanthe; et al.  
Stability and Band-Gap Tuning of the Chalcogenide Perovskite BaZrS<sub>3</sub> in Raman and Optical Investigations at High Pressures  
PHYSICAL REVIEW APPLIED Volume: 8 Issue: 4 Article Number: 044014 Published: OCT 25 2017
401. Mansouri, Sabeur; Jandl, Serge; Mukhin, Alexander; et al.  
A comparative Raman study between PrMnO<sub>3</sub>, NdMnO<sub>3</sub>, TbMnO<sub>3</sub> and DyMnO<sub>3</sub>  
SCIENTIFIC REPORTS Volume: 7 Article Number: 13796 Published: OCT 23 2017
400. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
Synthesis and Physicochemical Studies of Perovskite Manganite La(0.8)Ca(0.2)Nn(1-x)Co(x)O(3) (0 <= x <= 0.3)  
JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
399. Kumar, Shiv; Dwivedi, G. D.; Joshi, Amish G.; et al.  
Study of structural, dielectric, optical properties and electronic structure of Cr-doped LaInO<sub>3</sub> perovskite nanoparticles  
MATERIALS CHARACTERIZATION Volume: 131 Pages: 108-115 Published: SEP 2017



398. Antunes, Isabel; Amador, Ulises; Alves, Adriana; et al.  
Structure and Electrical -Transport Relations in Ba(Zr,Pr)O<sub>3</sub>-delta Perovskites  
INORGANIC CHEMISTRY Volume: 56 Issue: 15 Pages: 9120-9131 Published: AUG 7 2017
397. Hernandez-Rodriguez, M. A.; Monteseuro, V.; Lozano-Gorrin, A. D.; et al.  
Structural, Vibrational, and Elastic Properties of Yttrium Orthoaluminate Nanoperovskite at High Pressures  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 121 Issue: 28 Pages: 15353-15367 Published: JUL 20 2017
396. Lazarevic, Zorica Z.; Jovalekic, Cedimir; Gilic, Martina; et al.  
Yttrium Orthoferrite Powder Obtained by the Mechanochemical Synthesis  
SCIENCE OF SINTERING Volume: 49 Issue: 3 Pages: 277-284 Published: JUL-SEP 2017
395. Abdel-Latif, I. A.; Ismail, Adel A.; Faisal, M.; et al.  
Impact of the annealing temperature on perovskite strontium doped neodymium manganites nanocomposites and their photocatalytic performances  
JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 75 Pages: 174-182 Published: JUN 2017
394. Thygesen, Peter M. M.; Young, Callum A.; Beake, Edward O. R.; et al.  
Local structure study of the orbital order/disorder transition in LaMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 95 Issue: 17 Article Number: 174107 Published: MAY 30 2017
393. Shimamoto, Kenta; Mukherjee, Saumya; Bingham, Nicholas S.; et al.  
Single-axis-dependent structural and multiferroic properties of orthorhombic RMnO<sub>3</sub> (R = Gd-Lu)  
PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184105 Published: MAY 8 2017
392. Singh, Amit Kumar; Chauhan, Samta; Balasubramanian, Padmanabhan; et al.  
Influence of substrate induced strain on B-site ordering and magnetic properties of Nd<sub>2</sub>NiMnO<sub>6</sub> epitaxial thin films  
THIN SOLID FILMS Volume: 629 Pages: 49-54 Published: MAY 1 2017
391. Koval, Vladimir; Skorvanek, Ivan; Durisin, Juraj; et al.  
Terbium-induced phase transitions and weak ferromagnetism in multiferroic bismuth ferrite ceramics  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 5 Issue: 10 Pages: 2669-2685 Published: MAR 14 2017
390. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.  
Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in LuMn<sub>0.5</sub>Fe<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 084102 Published: FEB 28 2017
389. Narayanan, N.; Graham, P. J.; Reynolds, N.; et al.  
Subpicometer-scale atomic displacements and magnetic properties in the oxygen-isotope substituted multiferroic DyMnO<sub>3</sub>  
PHYSICAL REVIEW B Volume: 95 Issue: 7 Article Number: 075154 Published: FEB 27 2017
388. Thakur, Samita; Singh, K.; Pandey, O. P.  
Sr doped BiMO<sub>3</sub> (M = Mn, Fe, Y) perovskites: Structure correlated thermal and electrical properties  
MATERIALS CHEMISTRY AND PHYSICS Volume: 187 Pages: 96-103 Published: FEB 1 2017
387. Concha-Balderrama, A.; Rojas-George, G.; Alvarado-Flores, J.; et al.  
Nucleation and growth kinetics of La<sub>0.7</sub>Sr<sub>0.3</sub>Cr<sub>0.4</sub>Mn<sub>0.6</sub>O<sub>3</sub>-delta SOFC perovskite: Symmetry alteration evolution induced by Cu<sup>2+</sup> and Ni<sup>2+</sup> impregnation  
PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL Volume: 26 Issue: 6 Pages: 665-670 Published: DEC 2016
386. Sathe, V.G., Tyagi, S., Sharma, G.  
Electron-phonon coupling in perovskites studied by Raman Scattering  
Journal of Physics: Conference Series 755(1), 12008 DOI: 10.1088/1742-6596/755/1/012008 (2016)
385. Abdel-Latif, I.A.  
Study on structure, electrical and dielectric properties of Eu<sub>0.65</sub>Sr<sub>0.35</sub>Fe<sub>0.3</sub>Mn<sub>0.7</sub>O<sub>3</sub>  
IOP Conference Series: Materials Science and Engineering 146(1), 12003 DOI: 10.1088/1757-899X/146/1/012003 (2016)
384. Sarswat, P.K., Free, M.L.  
Long-Term stability of mixed perovskites  
Materials Research Society Symposium Proceedings 1771, 193-198 DOI: 10.1557/opl.2015.612 (2016)
383. Wang, S., Hou, C., Yuan, L., Qu, M., Zou, B., Lu, D.  
Hydrothermal preparation of perovskite structures DyCrO<sub>3</sub> and HoCrO<sub>3</sub>  
Dalton Transactions 45(44), 17593-17597 DOI: 10.1039/c6dt02661c (2016)
382. Gopalarao, T.R., Ravi, S., Pamu, D.  
Effect of Film Thickness in Electrical Resistivity and Magnetic Properties of Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> Thin Films  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 29 Issue: 10 Pages: 2567-2572 DOI: 10.1007/s10948-016-3563-6 Published: OCT 2016
381. Pomar, Alberto; Konstantinovic, Zorica; Bagues, Nuria; et al.  
Formation of Self-Organized Mn<sub>3</sub>O<sub>4</sub> Nano-inclusions in LaMnO<sub>3</sub> Films  
FRONTIERS IN PHYSICS Volume: 4 Article Number: 41 Published: SEP 20 2016

380. Patri, T., Ponnaiah, J., Kutty, P., Ghosh, A.  
Raman and dielectric spectroscopic analysis of magnetic phase transition in Y(Fe<sub>0.5</sub>Cr<sub>0.5</sub>)O-3 multiferroic ceramics  
CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13834-13840 DOI: 10.1016/j.ceramint.2016.05.188 Published: SEP 2016
379. Shukla, R., Patwe, S.J., Deshpande, S.K., Achary, S.N., Krishna, P.S.R., Shinde, A.B., Gopalakrishnan, J., Tyagi, A.K.  
Structural manipulation and tailoring of dielectric properties in SrTi<sub>1-x</sub>FexTaO<sub>3</sub> perovskites: Design of new lead free relaxors  
SCIENTIFIC REPORTS Volume: 6 Article Number: 23400 DOI: 10.1038/srep23400 Published: AUG 12 2016
378. Gopalarao, TR (Gopalarao, T. R.); Ravi, S (Ravi, S.); Pamu, D (Pamu, D.)  
Electrical transport and magnetic properties of epitaxial Nd<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> thin films on (001)-oriented LaAlO<sub>3</sub> substrate  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 409 Pages: 148-154 DOI: 10.1016/j.jmmm.2016.02.069  
Published: JUL 1 2016
377. Vadnala, S., Pal, P., Asthana, S.  
Investigation of near room temperature magnetocaloric, magnetoresistance and bolometric properties of Nd<sub>0.5</sub>La<sub>0.2</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>: Ag<sub>2</sub>O manganites  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 27 Issue: 6 Pages: 6156-6165 DOI: 10.1007/s10854-016-4543-0 Published: JUN 2016
376. Chaturvedi, S., Shyam, P., Apte, A., Kumar, J., Bhattacharyya, A., Awasthi, A.M., Kulkarni, S.  
Dynamics of electron density, spin-phonon coupling, and dielectric properties of SmFeO<sub>3</sub> nanoparticles at the spin-reorientation temperature: Role of exchange striction  
PHYSICAL REVIEW B Volume: 93 Issue: 17 Article Number: 174117 DOI: 10.1103/PhysRevB.93.174117 Published: MAY 26 2016
375. Behera, B.C., Padhan, P., Prellier, W.  
Effect of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> crystal structures on magnetization of (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 19 Article Number: 196004 DOI: 10.1088/0953-8984/28/19/196004 Published: MAY 18 2016
374. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)  
Magnetic Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of La<sub>0.85</sub>Te<sub>0.15</sub>MnO<sub>3</sub> deposited on LaAlO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15 2016
373. Vrejoiu, I., Himcinschi, C., Jin, L., Jia, C.-L., Raab, N., Engelmayer, J., Waser, R., Dittmann, R., Van Loosdrecht, P.H.M.  
Probing orbital ordering in LaVO<sub>3</sub> epitaxial films by Raman scattering  
APL MATERIALS Volume: 4 Issue: 4 Article Number: 046103 DOI: 10.1063/1.4945658 Published: APR 2016
372. Perera, S., Hui, H., Zhao, C., Xue, H., Sun, F., Deng, C., Gross, N., Milleville, C., Xu, X., Watson, D.F., Weinstein, B., Sun, Y.-Y., Zhang, S., Zeng, H.  
Chalcogenide perovskites - an emerging class of ionic semiconductors  
NANO ENERGY Volume: 22 Pages: 129-135 DOI: 10.1016/j.nanoen.2016.02.020 Published: APR 2016
371. Siaï, A., Horchani-Naifer, K., Haro-González, P., Férid, M.  
Effects of the preparation processes on structural, electronic, and optical properties of LaHoO<sub>3</sub>  
MATERIALS RESEARCH BULLETIN Volume: 76 Pages: 179-186 DOI: 10.1016/j.materresbull.2015.12.019 Published: APR 2016
370. Arnache, O., Osorio, J.  
Comparative study of the Raman vibrational modes in pure and Fe-doped La<sub>2/3</sub>Ca<sub>1/3</sub>MnO<sub>3</sub> thin films  
SUPERLATTICES AND MICROSTRUCTURES Volume: 92 Pages: 181-189 DOI: 10.1016/j.spmi.2016.02.020 Published: APR 2016
369. Gupta, S.K., Ghosh, P.S., Yadav, A.K., Pathak, N., Arya, A., Jha, S.N., Bhattacharyya, D., Kadam, R.M.  
Luminescence Properties of SrZrO<sub>3</sub>/Tb<sup>3+</sup> Perovskite: Host-Dopant Energy-Transfer Dynamics and Local Structure of Tb<sup>3+</sup>  
INORGANIC CHEMISTRY Volume: 55 Issue: 4 Pages: 1728-1740 DOI: 10.1021/acs.inorgchem.5b02639 Published: FEB 15 2016
368. Elsässer, S., Geurts, J., Mukhin, A.A., Balbashov, A.M.  
Lattice dynamics and spin-phonon coupling in orthorhombic Eu<sub>1-x</sub>HoxMnO<sub>3</sub> (x <= 0.3) studied by Raman spectroscopy  
PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016
367. Yuan, B., Yang, J., Zuo, X.Z., Kan, X.C., Zhu, X.B., Dai, J.M., Song, W.H., Sun, Y.P.  
Observation of ferroelectricity and magnetoelectric coupling in Mn-doped orthochromite DyCr<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 656 Pages: 830-834 DOI: 10.1016/j.jallcom.2015.10.030 Published: JAN 25 2016
366. Das, P.T., Singh, R., Das, A., Nath, T.K.  
Structural, magnetic, and physical properties of La(1-x)MnO<sub>3</sub> +/-delta nano-manganite  
PHILOSOPHICAL MAGAZINE Volume: 96 Issue: 3 Pages: 286-300 DOI: 10.1080/14786435.2015.1131344 Published: JAN 22 2016
365. Chai, J.-S., Tian, H., Mao, A.-J., Deng, L.-J., Kuang, X.-Y.  
Pressure effect on the properties of magnetic moments and phase transitions in YMnO<sub>3</sub> from first principles  
RSC ADVANCES Volume: 6 Issue: 59 Pages: 54041-54048 DOI: 10.1039/c6ra08539c Published: 2016
364. Bukhari, S.H., Ahmad, J.  
Infrared Active Phonons and Optical Band Gap in Multiferroic GdMnO<sub>3</sub> Studied by Infrared and UV-Visible Spectroscopy  
ACTA PHYSICA POLONICA A Volume: 129 Issue: 1 Pages: 43-48 Published: JAN 2016

363. Kumar, P., Shankwar, N., Srinivasan, A., Kar, M.  
Oxygen octahedra distortion induced structural and magnetic phase transitions in Bi<sub>1-x</sub>Ca<sub>x</sub>Fe<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub> ceramics  
Journal of Applied Physics 117(19), 194103 DOI: 10.1063/1.4921433 (2015)
362. Panwar, N., Kumbhare, P., Singh, A.K., Venkataramani, N., Ganguly, U.  
Effect of morphological change on unipolar and bipolar switching characteristics in Pr<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> based RRAM  
Materials Research Society Symposium Proceedings 1729, 47-52 DOI: 10.1557/opl.2015.192 (2015)
361. Balamurugan, C., Lee, D.-W.  
Perovskite hexagonal YMnO<sub>3</sub> nanopowder as p-type semiconductor gas sensor for H<sub>2</sub>S detection  
SENSORS AND ACTUATORS B-CHEMICAL Volume: 221 Pages: 857-866 DOI: 10.1016/j.snb.2015.07.018 Published: DEC 31 2015
360. Zhu, J., Yang, L., Wang, H.-W., Zhang, J., Yang, W., Hong, X., Jin, C., Zhao, Y.  
Local structural distortion and electrical transport properties of Bi(Ni<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub> perovskite under high pressure  
SCIENTIFIC REPORTS Volume: 5 Article Number: 18229 DOI: 10.1038/srep18229 Published: DEC 16 2015
359. Karchev, N (Karchev, Naoum)  
Leggett's modes in magnetic systems with Jahn-Teller distortion  
ANNALS OF PHYSICS Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015
358. Handayani, I.P., Nugroho, A.A., Riyadi, S., Blake, G.R., Mufti, N., Palstra, T.T.M., Van Loosdrecht, P.H.M.  
Correlation between lattice vibrations with charge, orbital, and spin ordering in the layered manganite Pr<sub>0.5</sub>Ca<sub>1.5</sub>MnO<sub>4</sub>  
PHYSICAL REVIEW B Volume: 92 Issue: 20 Article Number: 205101 DOI: 10.1103/PhysRevB.92.205101 Published: NOV 2 2015
357. Zhang, X., Zhang, A.M., Xie, W.M., Lin, J.G., Wu, X.S.  
Effect of strain-modulated lattice distortion on the magnetic properties of LaMnO<sub>3</sub> films  
PHYSICA B-CONDENSED MATTER Volume: 476 Pages: 114-117 DOI: 10.1016/j.physb.2015.04.038 Published: NOV 1 2015
356. Blessington Selvadurai, A.P., Pazhanivelu, V., Jagadeeshwaran, C., Murugaraj, R., Panneer Muthuselvan, I., Chou, F.C.  
Influence of Cr substitution on structural, magnetic and electrical conductivity spectra of LaFeO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 646 Pages: 924-931 DOI: 10.1016/j.jallcom.2015.05.213 Published: OCT 15 2015
355. Kozlenko, D.P., Dang, N.T., Kichanov, S.E., Lukin, E.V., Pashayev, A.M., Mammadov, A.I., Jabarov, S.H., Dubrovinsky, L.S., Liermann, H.-P., Morgenroth, W., Mehdiyeva, R.Z., Smotrakov, V.G., Savenko, B.N.  
Competing magnetic and structural states in multiferroic YMn<sub>2</sub>O<sub>5</sub> at high pressure  
PHYSICAL REVIEW B Volume: 92 Issue: 13 Article Number: 134409 DOI: 10.1103/PhysRevB.92.134409 Published: OCT 12 2015
354. Ulrich, C., Khaliullin, G., Guennou, M., Roth, H., Lorenz, T., Keimer, B.  
Spin-Orbital Excitation Continuum and Anomalous Electron-Phonon Interaction in the Mott Insulator LaTiO<sub>3</sub>  
PHYSICAL REVIEW LETTERS Volume: 115 Issue: 15 Article Number: 156403 DOI: 10.1103/PhysRevLett.115.156403 Published: OCT 9 2015
353. Sood, K (Sood, Kapil); Singh, K (Singh, K.); Basu, S (Basu, Suddhasatwa); Pandey, OP (Pandey, O. P.)  
Preferential occupancy of Ca<sup>2+</sup> dopant in La<sub>1-x</sub>Ca<sub>x</sub>InO<sub>3-δ</sub> (x=0-0.20) perovskite: structural and electrical properties  
IONICS Volume: 21 Issue: 10 Pages: 2839-2850 DOI: 10.1007/s11581-015-1461-8 Published: OCT 2015
352. Kotnana, G (Kotnana, Ganesh); Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
Band gap tuning and orbital mediated electron-phonon coupling in HoFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 1)  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 12 Article Number: 124101 DOI: 10.1063/1.4931155 Published: SEP 28 2015
351. Gao, Y, Wang, JJ, Wu, L, Bao, SY, Shen, Y, Lin, YH, Nan, CW  
Tunable magnetic and electrical behaviors in perovskite oxides by oxygen octahedral tilting  
Science China-Materials Volume: 58 Issue: 4 Pages: 302-312 DOI: 10.1007/s40843-015-0047-0 Published: APR 2015
350. Lee, N., Lansac, Y., Hwang, H., Jang, Y.H.  
Switching mechanism of Al/La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> resistance random access memory. I. Oxygen vacancy formation in perovskites  
RSC ADVANCES Volume: 5 Issue: 124 Pages: 102772-102779 DOI: 10.1039/c5ra21982e Published: 2015
349. Sayed, F.N., Shukla, R., Tyagi, A.K.  
A chemical method for stabilizing a new series of solid solution Pr<sub>1-x</sub>Ce<sub>x</sub>ScO<sub>3</sub> (0.0 ≤ x ≤ 1.0) systems  
DALTON TRANSACTIONS Volume: 44 Issue: 38 Pages: 16929-16936 DOI: 10.1039/c5dt01459j Published: 2015
348. Behera, B. C.; Padhan, P.; Prellier, W.  
Influence of substrate in all-ferromagnetic superlattices  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 388 Pages: 22-27 Published: AUG 15 2015
347. Singh, Dheeraj Kumar; Lee, Ki Hoon; Takimoto, Tetsuya  
On the Origin of CE-Type Orbital Fluctuations in the Ferromagnetic Metallic Phase of La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> near x=0.4  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 84 Issue: 6 Article Number: 064709 Published: JUN 15 2015
346. McDannald, A.; Kuna, L.; Seehra, M. S.; et al.  
Magnetic exchange interactions of rare-earth-substituted DyCrO<sub>3</sub> bulk powders  
PHYSICAL REVIEW B Volume: 91 Issue: 22 Article Number: 224415 Published: JUN 11 2015
345. Zhang, Jing; Wu, Yu-Jie; Chen, Xiao-Jia

- Structural evolution and enhanced magnetization of  $\text{Bi}_{1-x}\text{Pr}_x\text{O}_3$   
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 382 Pages: 1-6 Published: MAY 15 2015
344. Gopalarao, T. R.; Ravi, S.; Pamu, D.  
 Effect of Post Annealing Process on Electrical and Magnetic Properties of  $\text{Nd}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  Thin Films  
 JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 28 Issue: 5 Pages: 1571-1576 Published: MAY 2015
343. Vitzthum, Daniela; Hering, Stefanie A.; Perfler, Lukas; et al.  
 High-pressure syntheses and crystal structures of orthorhombic  $\text{DyGaO}_3$  and trigonal  $\text{GaBO}_3$   
 ZEITSCHRIFT FÜR NATURFORSCHUNG SECTION B-A JOURNAL OF CHEMICAL SCIENCES Volume: 70 Issue: 4 Pages: 207-214 Published: APR 2015
342. Habib, Zubida; Majid, Kowsar; Ikram, M.; et al.  
 Structural Analysis and Dielectric Properties of  $\text{HoFe}_{1-x}\text{Ni}_x\text{O}_3$  ( $0 \leq x \leq 0.5$ )  
 JOURNAL OF ELECTRONIC MATERIALS Volume: 44 Issue: 4 Pages: 1044-1053 Published: APR 2015
341. Varshney, Dinesh; Choudhary, Dinesh; Khan, Elias  
 Electrical transport in the ferromagnetic state of silver substituted manganites  $\text{La}_{1-x}\text{Ag}_x\text{MnO}_3$  ( $x=0.05$  and  $0.1$ )  
 JOURNAL OF MATERIALS RESEARCH Volume: 30 Issue: 5 Pages: 654-665 Published: MAR 14 2015
340. Munkhbaatar, Purevdorj; Marton, Zsolt; Tsermaa, Baatarchuluun; et al.  
 Room temperature optical anisotropy of a  $\text{LaMnO}_3$  thin-film induced by ultra-short pulse laser  
 APPLIED PHYSICS LETTERS Volume: 106 Issue: 9 Article Number: 092907 Published: MAR 2 2015
339. Qian, Gujie; Li, Yubiao; Gerson, Andrea R.  
 Applications of surface analytical techniques in Earth Sciences  
 SURFACE SCIENCE REPORTS Volume: 70 Issue: 1 Pages: 86-133 Published: MAR 2015
338. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
 Controlling phase separation in  $\text{La}_{5/8-y}\text{Pr}_y\text{Ca}_{3/8}\text{MnO}_3$  ( $y=0.45$ ) epitaxial thin films by strain disorder  
 APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
337. Ding, Jun-Chao; Li, Hua-Yao; Cai, Ze-Xing; et al.  
 $\text{LaCoO}_3$ -based sensors with high sensitivity to carbon monoxide  
 RSC ADVANCES Volume: 5 Issue: 81 Pages: 65668-65673 Published: 2015
336. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.  
 Thickness-dependent phase boundary in Sm-doped  $\text{BiFeO}_3$  piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates  
 PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015
335. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.  
 Phase transition and piezoelectricity of sol-gel-processed Sm-doped  $\text{BiFeO}_3$  thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 2115-2122 Published: 2015
334. Gupta, Preeti; Poddar, Pankaj  
 Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in  $\text{DyCrO}_3$  nanoplatelets  
 RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
333. Nova, T.F., Cartella, A., Cantaluppi, A., Mikhaylovskiy, R., Rzdolski, I., Först, M., Kimel, A.V., Cavalleri, A.  
 Controlling coherent energy flow between collective THz excitations in condensed matter  
 Optics InfoBase Conference Papers, Code 107128 (2014)
332. Sultan, K., Habib, Z., Jan, A., Ahmad Mir, S., Ikram, M., Asokan, K.  
 Temperature dependent Raman spectroscopy of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $x = 0.0$ , and  $0.3$ )  
 Advanced Materials Letters 5(1), 9-13 DOI: 10.5185/amlett.2013.6496 (2014)
331. Bhadram, V.S., Swain, D., Dhanya, R., Polentarutti, M., Sundaresan, A., Narayana, C.  
 Effect of pressure on octahedral distortions in  $\text{RCrO}_3$  ( $R=\text{Lu, Tb, Gd, Eu, Sm}$ ): the role of R-ion size and its implications  
 MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
330. Iliescu, I.; Boudard, M.; Chaix-Pluchery, O.; et al.  
 Phase transformations and selective growth in  $\text{YMnO}_3$  films  
 JOURNAL OF SOLID STATE CHEMISTRY Volume: 220 Pages: 245-253 Published: DEC 2014
329. Ganeshraj, C.; Santhosh, P. N.  
 First-principles study of structural, electronic, vibrational, dielectric and elastic properties of tetragonal  $\text{Ba}_2\text{YT}_2\text{O}_6$   
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 14 Article Number: 144104 Published: OCT 14 2014
328. Matsui, Hiroaki; Hasuike, Noriyuki; Harima, Hiroshi; et al.  
 Engineering of optical polarization based on electronic band structures of A-plane  $\text{ZnO}$  layers under biaxial strains  
 JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 11 Article Number: 113505 Published: SEP 21 2014
327. Lee, Hong-Sub; Choi, Sun Gyu; Yeom, Geun Young; et al.  
 The effect of Gd substitution in perovskite lanthanum strontium manganite films for use in resistive switching devices

326. Nieto, S.; Roque-Malherbe, R.; Polanco, R.; et al.  
High temperature proton transport in BaCe<sub>0.95</sub>Th<sub>0.05</sub>O<sub>3</sub> ( $\delta$ ) perovskite  
CERAMICS INTERNATIONAL 40 (7), pp.11359-11367 Part: B AUG 2014
325. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014
324. Sharma, Yogesh; Sahoo, Satyaprakash; Perez, William; et al.  
Phonons and magnetic excitation correlations in weak ferromagnetic YCrO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 115 (18), Art. No. 183907 MAY 14 2014
323. Zagorac, J.; Zarubica, A.; Radosavljevic-Mihajlovic, A.; et al.  
Structural study of nanosized yttrium-doped CaMnO<sub>3</sub> perovskites  
BULLETIN OF MATERIALS SCIENCE 37 (3), pp. 407-416 MAY 2014
322. Kumar, Pradeep; Ghara, Somnath; Rajeswaran, B.; et al.  
Temperature dependent magnetic, dielectric and Raman studies of partially disordered La<sub>2</sub>NiMnO<sub>6</sub>  
SOLID STATE COMMUNICATIONS 184, 47-51 APR 2014
321. Ahmed, M. A.; Khafagy, Rasha M.; El-sayed, O.  
Laser-induced down-conversion and infrared phosphorescence emissivity of novel ligand-free perovskite nanomaterials  
JOURNAL OF MOLECULAR STRUCTURE 1062, pp. 133-140 MAR 24 2014
320. Varshney, Dinesh; Shaikh, M. W.  
Substitutional effects on structural and magnetotransport properties of La-0.85-xSmxK<sub>0.15</sub>MnO<sub>3</sub> (x=0.05, 0.1 and 0.15)  
JOURNAL OF ALLOYS AND COMPOUNDS 589, pp. 558-567 MAR 15 2014
319. Behera, B. C.; Ravindra, A. V.; Padhan, P.; et al.  
Raman spectra and magnetization of all-ferromagnetic superlattices grown on (110) oriented SrTiO<sub>3</sub>  
APPLIED PHYSICS LETTERS 104 (9), Art. No. 092406 MAR 3 2014
318. Kaminskii, A. A.  
Cascaded and cross-cascaded  $\chi^{(3)}$  nonlinear optical effects in a new SRS-active YAlO<sub>3</sub> crystal  
DOKLADY PHYSICS 59 (3), pp. 115-118 MAR 2014
317. Kozlenko, D. P.; Dang, N. T.; Jabarov, S. H.; et al.  
Structural polymorphism in multiferroic BiMnO<sub>3</sub> at high pressures and temperatures  
JOURNAL OF ALLOYS AND COMPOUNDS 585, pp. 741-747 FEB 5 2014
316. Yin, L. H.; Yang, J.; Zhang, R. R.; et al.  
Multiferroicity and magnetoelectric coupling enhanced large magnetocaloric effect in DyFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub>  
APPLIED PHYSICS LETTERS 104 (3), Art. No. 032904 JAN 20 2014
315. By: Sahu, A. K.; Rout, G. C.  
The Effect of External Magnetic Field on the Raman Peaks in Manganites  
SOLID STATE PHYSICS: PROCEEDINGS OF THE 58TH DAE SOLID STATE PHYSICS SYMPOSIUM 2013, PTS A & B Book Series: AIP Conference Proceedings 1591, pp. 1557-1559 2014
314. Liu, Yun; Chua, Kun Ting Eddie; Sum, Tze Chien; et al.  
First-principles study of the lattice dynamics of Sb<sub>2</sub>S  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 16 (1), pp. 345-350 2014
313. Sultan, Khalid; Ikram, M.; Asokan, K.  
Structural, optical and dielectric study of Mn doped PrFeO<sub>3</sub> ceramics  
VACUUM 99, pp. 251-258 JAN 2014
312. Lee, Jun Hee; Delaney, Kris T.; Bousquet, Eric; et al.  
Strong coupling of Jahn-Teller distortion to oxygen-octahedron rotation and functional properties in epitaxially strained orthorhombic LaMnO<sub>3</sub>  
PHYSICAL REVIEW B 88 (17), Art. No. 174426 NOV 27 2013
311. Silva, R. X.; Reichlova, H.; Marti, X.; et al.  
Spin-phonon coupling in Gd(Co<sub>1/2</sub>Mn<sub>1/2</sub>)O<sub>3</sub> perovskite  
JOURNAL OF APPLIED PHYSICS 114 (19) Art. No. 194102 NOV 21 2013
310. Yu, Chonglong; Ren, Yuhang; Chen, Zhuo; et al.  
First-principles study of structural phase transitions in CsSnI<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 114 (16), Art. No. 163505 OCT 28 2013
309. Wu, Yu-Jie; Chen, Xiao-Kun; Zhang, Jing; et al.  
Pressure effect on structural and vibrational properties of Sm-substituted BiFeO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 114 (15), Art. No. 154110 OCT 21 2013

308. Daniels, Luke M.; Weber, Mads C.; Lees, Martin R.; et al.  
Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution  $\text{La}_x\text{Sm}_{1-x}\text{CrO}_3$   
INORGANIC CHEMISTRY 52 (20), pp. 12161-12169 OCT 21 2013
307. Beltran-Huarac, J., Carpena-Nuñez, J., Barrionuevo, D., Mendoza, F., Katiyar, R.S., Fonseca, L.F., Weiner, B.R., Morell, G.  
Synthesis and transport properties of  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$  conformally-coated on carbon nanotubes  
Carbon 65, pp. 252-260, 2013
306. Lantieri, M, Spina, G, Cianchi, L, Del Giallo, F  
Eu-151 Mossbauer study of multiferroic  $\text{Eu}_{0.75}\text{Y}_{0.25}\text{MnO}_3$   
EUROPEAN PHYSICAL JOURNAL B Volume: 86 Issue: 7 Article Number: 333 DOI: 10.1140/epjb/e2013-40409-4 Published: JUL 2013
305. Chu, Q., Wang, X., Li, B., Liu, F., Liu, X.  
High pressure flux synthesis of  $\text{LaMnO}_3 + \delta$  with charge ordering  
RSC ADVANCES Volume: 3 Issue: 44 Pages: 21311-21314 DOI: 10.1039/c3ra43779e Published: 2013
304. Derras, M., Hamdad, N., Derras, M., Gessoum, A.  
New theoretical model on the electronic structure and magnetic properties of the  $\text{YMnO}_3$  perovskite oxide: Implementation of the U-Hubbard Hamiltonian  
RESULTS IN PHYSICS Volume: 3 Pages: 219-230 DOI: 10.1016/j.rinp.2013.09.011 Published: 2013
303. Chaturvedi, A., Sathe, V.G.  
Raman spectroscopy and X-ray diffraction study of  $\text{PrMnO}_3$  oriented thin films deposited on  $\text{LaAlO}_3$  and  $\text{SrTiO}_3$  substrates  
Journal of Magnetism and Magnetic Materials 344, pp. 230-234, 2013
302. Varshney, D., Choudhary, D., Khan, E.  
Electrical transport in the ferromagnetic and paramagnetic state of potassium-substituted manganites  $\text{La}_{1-x}\text{K}_x\text{MnO}_3$  ( $x = 0.05, 0.1$  and  $0.15$ )  
Journal of Materials Science 48 (17), pp. 5904-5916, 2013
301. Hu, Y., Stender, D., Medarde, M., Lippert, T., Wokaun, A., Schneider, C.W.  
Lattice distortion and strain relaxation in epitaxial thin films of multiferroic  $\text{TbMnO}_3$  probed by X-ray diffractometry and micro-Raman spectroscopy  
Applied Surface Science 278, pp. 92-95, 2013
300. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.  
Structural, magnetic, infrared and Raman studies of  $\text{La}_{0.8}\text{Sr}_x\text{Ca}_{0.2-x}\text{MnO}_3$  ( $0 \leq x \leq 0.2$ )  
Journal of Materials Science: Materials in Electronics 24 (7), pp. 2292-2301, 2013
299. Nikolaev, S.A., Mazurenko, V.G., Rudenko, A.N.  
Influence of magnetic order on phonon spectra of multiferroic orthorhombic  $\text{YMnO}_3$   
Solid State Communications 164, pp. 16-21, 2013
298. Choi, S.G., Lee, H.-S., Yeom, G.Y., Park, H.-H.  
Investigation of the properties of Ba-substituted  $\text{La}_{0.7}\text{Sr}_{0.3-x}\text{Ba}_x\text{MnO}_3$  perovskite manganite films for resistive switching applications  
Journal of Electronic Materials 42 (6), pp. 1196-1201, 2013
297. Noked, O., Melchior, A., Shuker, R., Livneh, T., Steininger, R., Kennedy, B.J., Sterer, E.  
Pressure-induced amorphization of  $\text{La}_{1/3}\text{TaO}_3$   
Journal of Solid State Chemistry 202, pp. 38-42, 2013
296. Sidorov, T.A.  
Identification of complex anions in  $\text{La}_{1-x}\text{A}_x\text{MnO}_3$  manganites ( $\text{A} = \text{Ca}, \text{Sr}$ ) from neutron diffraction data and refinement of their structures on the basis of raman spectroscopy data  
Russian Journal of Inorganic Chemistry 58 (6), pp. 706-710, 2013
295. Zhang, J., Wu, Y.-J., Chen, X.-K., Chen, X.-J.  
Structural evolution and magnetization enhancement of  $\text{Bi}_{1-x}\text{TbxFeO}_3$   
Journal of Physics and Chemistry of Solids 74 (6), pp. 849-853, 2013
294. Wang, Y.T., Luo, C.W., Kobayashi, T.  
Understanding multiferroic hexagonal manganites by static and ultrafast optical spectroscopy  
Advances in Condensed Matter Physics 2013, art. no. 104806, 2013
293. Chen, C., Li, Y., Wang, B.  
Tunable competition and possible coexistence between superconductivity and ferromagnetism in the multilayers of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}/\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$   
Solid State Communications 161, pp. 1-4, 2013
292. Kovaleva, N.N., Kusmartseva, O.E., Kugel, K.I., Maksimov, A.A., Nuzhnyy, D., Balbashov, A.M., Demikhov, E.I., (...), Stoneham, A.M.  
Anomalous multi-order Raman scattering in  $\text{LaMnO}_3$ : A signature of quantum lattice effects in a Jahn-Teller crystal  
Journal of Physics Condensed Matter 25 (15), art. no. 155602, 2013
291. Zheng, Y.-N., Wu, Y.-J., Qin, Z.-X., Chen, X.-J.

- Structural transition and magnetic property of Bi<sub>1-x</sub>Yb<sub>x</sub>FeO<sub>3</sub>  
Chinese Journal of Chemical Physics 26 (2), pp. 157-162, 2013
290. Wang, C., Li, J.-B., Gao, Q., Li, G., Liu, G., Rao, G., Luo, J., (...), Liang, J.  
Subsolidus phase relations of the BaO - Y<sub>2</sub>O<sub>3</sub>- MnO<sub>2</sub> system in air  
Journal of the American Ceramic Society 96 (4), pp. 1332-1336, 2013
289. Prado-Gonjal, J., Schmidt, R., Romero, J.-J., Ávila, D., Amador, U., Morán, E.  
Microwave-assisted synthesis, microstructure, and physical properties of rare-earth chromites  
Inorganic Chemistry 52 (1), pp. 313-320, 2013
288. Srinu Bhadram, V., Rajeswaran, B., Sundaresan, A., Narayana, C.  
Spin-phonon coupling in multiferroic RCrO<sub>3</sub> (R=Y, Lu, Gd, Eu, Sm): A Raman study  
EPL 101 (1), art. no. 17008, 2013
287. Harada, T., Takahashi, R., Lippmaa, M.  
Nonmagnetic Sc substitution in a perovskite ferromagnetic insulator Pr<sub>0.8</sub>Ca<sub>0.2</sub>MnO<sub>3</sub>  
Journal of the Physical Society of Japan 82 (1), art. no. 014801, 2013
286. Jativa, J.; Jurado, J. F.; Vargas-Hernandez, C.  
Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure La<sub>0.5</sub>Ba<sub>0.5</sub>MnO<sub>3</sub>  
REVISTA MEXICANA DE FISICA 58 (2), Suppl. S, 19-23, DEC 2012
285. Wdowik, U.D., Koza, M.M., Chatterji, T.  
Phonons in lanthanum manganite: Inelastic neutron scattering and density functional theory studies  
Physical Review B - Condensed Matter and Materials Physics 86 (17), art. no. 174305, 2012
284. Bielecki, J., Svedlindh, P., Tibebe, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012
283. Mir, F.A., Ikram, M., Kumar, R.  
Amorphization and disorder of PrFeO<sub>3</sub> thin films after heavy ion irradiation  
Applied Radiation and Isotopes 70 (10), pp. 2409-2415, 2012
282. Bai, Y., Xia, Y., Li, H., Han, L., Wang, Z., Wu, X., Lv, S., (...), Meng, J.  
A-site-doping enhanced B-site ordering and correlated magnetic property in La<sub>2-x</sub>Bi<sub>x</sub>CoMnO<sub>6</sub>  
Journal of Physical Chemistry C 116 (32), pp. 16841-16847, 2012
281. Mishra, D.K., Sathe, V.G.  
Evidence of the Fano resonance in a temperature dependent Raman study of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> and SrCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>  
Journal of Physics Condensed Matter 24 (25), art. no. 252202, 2012.
280. Runka, T., Berkowski, M.  
Perovskite La<sub>1-x</sub>Sr<sub>x</sub>Ga<sub>1-y</sub>Mn<sub>y</sub>O<sub>3</sub> solid solution crystals: Raman spectroscopy characterization  
Journal of Materials Science 47 (14), pp. 5393-5401, 2012.
279. Abdel-Latif, I.A., Saleh, S.A.  
Effect of iron doping on the physical properties of europium manganites  
Journal of Alloys and Compounds 530, pp. 116-120, 2012.
278. Rovillain, P., Liu, J., Cazayous, M., Gallais, Y., Measson, M.-A., Sakata, H., Sacuto, A.  
Electromagnon and phonon excitations in multiferroic TbMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 86 (1), art. no. 014437, 2012.
277. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.  
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.
276. Parida, S., Rout, S.K., Subramanian, V., Barhai, P.K., Gupta, N., Gupta, V.R.  
Structural, microwave dielectric properties and dielectric resonator antenna studies of Sr(Zr xTi 1-x)O<sub>3</sub> ceramics  
Journal of Alloys and Compounds 528, pp. 126-134, 2012.
275. Wu, Y.-J., Chen, X.-K., Zhang, J., Chen, X.-J.  
Magnetic enhancement across a ferroelectric-antiferroelectric phase boundary in Bi<sub>1-x</sub>Nd<sub>x</sub>FeO<sub>3</sub>  
Journal of Applied Physics 111 (5), art. no. 053927, 2012.
274. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
273. Lee, Y.-L., Morgan, D.  
Ab initio and empirical defect modeling of LaMnO<sub>3</sub>±δ for solid oxide fuel cell cathodes  
Physical Chemistry Chemical Physics 14 (1), pp. 290-302, 2012.

272. Roberge, B., Jandl, S., Nugroho, A.A., Palstra, T.T.M.  
Micro-Raman study of orbiton-phonon coupling in YbVO<sub>3</sub>  
Journal of Raman Spectroscopy 43 (1), pp. 127-130, 2012.
271. Wu, Y.-J., Zhang, J., Chen, X.-K., Chen, X.-J.  
Phase evolution and magnetic property of Bi<sub>1-x</sub>HoxFeO<sub>3</sub> powders  
Solid State Communications 151 (24), pp. 1936-1940, 2011.
270. Casu, A., Ricci, P.C.  
Raman and structural characterization of LuAlO<sub>3</sub>  
Journal of Solid State Chemistry 184 (11), pp. 3028-3033, 2011.
269. Chopelas, A.  
Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.
268. Dhiman, I., Das, A., Priolkar, K.R., Murthy, P.S.R.  
Infrared absorption study of charge ordered La<sub>0.5</sub>Ca<sub>0.5-x</sub>SrxMnO<sub>3</sub> (0.1 ≤ x ≤ 0.5) manganites  
Physica B: Condensed Matter 406 (4), pp. 1028-1033, 2011.
267. Mandal, P., Bhadram, V.S., Sundarayya, Y., Narayana, C., Sundaresan, A., Rao, C.N.R.  
Spin-Reorientation, Ferroelectricity, and Magnetodielectric Effect in YFe<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub> (0.1 ≤ x ≤ 0.40)  
PHYSICAL REVIEW LETTERS 107 (13) Article Number: 137202, SEP 19 2011.
266. Noked, O., Yakovlev, S., Greenberg, Y., Garbarino, G., Shuker, R., Avdeev, M., Sterer, E.  
Pressure-induced amorphization of La<sub>1/3</sub>NbO<sub>3</sub>  
JOURNAL OF NON-CRYSTALLINE SOLIDS 357 (18) Pages: 3334-3337, SEP 15 2011.
265. Cheng, Z.X., Wang, X.L., Dou, S.X., Osada, M., Kimura, H.  
Strain modulated magnetization and colossal resistivity of epitaxial La<sub>2/3</sub>Ca<sub>1/3</sub>MnO<sub>3</sub> film on BaTiO<sub>3</sub> substrate  
APPLIED PHYSICS LETTERS 99 (9) Article Number: 092103, AUG 29 2011.
264. Dhak, P., Pramanik, P., Bhattacharya, S., Roy, A., Achary, S.N., Tyagi, A.K.  
Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 248 (8) Pages: 1884-1893, AUG 2011.
263. Varshney Dinesh; Dodiya N.  
Interpretation of metallic and semiconducting temperature dependent resistivity of La<sub>0.91</sub>Rb<sub>0.06</sub>Mn<sub>0.94</sub>O<sub>3</sub> manganites  
SOLID STATE SCIENCES 13 (8) Pages: 1623-1632, AUG 2011.
262. Chen, Z., Ma, C.-L., Wu, F.-X., Chen, Y.B., Zhou, J., Yuan, G.-L., Gu, Z.-B., (...), Chen, Y.-F.  
The electrical and magnetic properties of epitaxial orthorhombic YMnO<sub>3</sub> thin films grown under various oxygen pressures  
APPLIED SURFACE SCIENCE 257 (18) Pages: 8033-8037, JUL 1 2011.
261. Shi, L., Wang, Y., Zhou, S.M., Chu, S.N., Guo, Y.Q., Zhao, J.Y.  
A-site ion-size effect on the transport and magnetic properties of Ce doping Pr<sub>0.3</sub>Ce<sub>0.2</sub>Ca<sub>x</sub>Sr<sub>0.5-x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 0.25)  
JOURNAL OF APPLIED PHYSICS 109 (12) Article Number: 123909, JUN 15 2011.
260. Li, S.-L., Li, J., Zhang, Y., Zheng, D.-N., Tsukagoshi, K.  
Unipolar resistive switching in high-resistivity Pr<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> junctions  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 103 (1) Pages: 21-26, APR 2011.
259. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
Strain induced phase separation on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
258. Baldini, M., Struzhkin, V.V., Goncharov, A.F., Postorino, P., Mao, W.L.  
Persistence of Jahn-Teller Distortion up to the Insulator to Metal Transition in LaMnO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 106 (6) Article Number: 066402, FEB 11 2011.
257. Glowacki, M., Runka, T., Domukhovski, V., Diduszko, R., Mirkowska, M., Berkowski, M., Dabrowski, B.  
Growth and characterization of perovskite LaGaO<sub>3</sub> crystals doped with Sr and Mn  
JOURNAL OF ALLOYS AND COMPOUNDS 509 (5) Pages: 1756-1759, FEB 3 2011.
256. Sardar, K., Lees, M.R., Kashtiban, R.J., Sloan, J., Walton, R.I.  
Direct Hydrothermal Synthesis and Physical Properties of Rare-Earth and Yttrium Orthochromite Perovskites  
CHEMISTRY OF MATERIALS 23 (1) Pages: 48-56, JAN 11 2011.
255. Chaix-Pluchery O.; Kreisel J.  
Raman scattering of perovskite SmScO<sub>3</sub> and NdScO<sub>3</sub> single crystals  
PHASE TRANSITIONS Volume: 84 (5-6) Pages: 542-554, 2011.
254. Fontcuberta, J., Fina, I., Fabrega, L., Sánchez, F., Martí, X., Skumryev, V.  
Ferroelectricity and strain effects in orthorhombic YMnO<sub>3</sub> thin films  
PHASE TRANSITIONS Volume: 84 (5-6) Pages: 555-568, 2011.



253. Jugdersuren, B., Kang, S., DiPietro, R.S., Heiman, D., McKeown, D., Pegg, I.L., Philip, J.  
Large low field magnetoresistance in La(0.67)Sr(0.33)MnO(3) nanowire devices  
JOURNAL OF APPLIED PHYSICS 109 (1) Article Number: 016109, JAN 1 2011.
252. Lee Nodo; Lansac Yves; Jang Yun Hee  
Aluminum Oxide Formation at Al/La(1-x)Sr(x)MnO(3) Interface: A Computational Study for Resistance Random Access Memory Applications  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 11 (1) Pages: 339-343, JAN 2011.
251. Kozlenko, D.P., Chan, T.A., Kichanov, S.E., Jirák, Z., Dubrovinsky, L.S., Savenko, B.N.  
Structural and magnetic phase transitions in Pr(0.7)Ca(0.3)MnO(3) at high pressures  
JETP LETTERS 92 (9) Pages: 590-594, JAN 2011.
250. Anisimov, V., Izyumov, Y  
Electronic Structure of Strongly Correlated Materials  
ELECTRONIC STRUCTURE OF STRONGLY CORRELATED MATERIALS Book Series: Springer Series in Solid-State Sciences  
Volume: 163 Pages: 1-288 DOI: 10.1007/978-3-642-04826-5 Published: 2010
249. Liu, Y.-F., Zheng, H.-W., Zhang, W.-F., Gu, Y.-Z., Li, Y.-L., Zhang, H.-R.  
Investigation of preparation, microstructure and magnetic property of hexagonal YMnO<sub>3</sub> nanorods  
Gongneng Cailiao/Journal of Functional Materials 41 (8), pp. 1336-1339, 2010.
248. Marti, X., Skumryev, V., Laukhin, V., Bachelet, R., Ferrater, C., García-Cuenca, M.V., Varela, M., (...), Fontcuberta, J.  
Strain-driven noncollinear magnetic ordering in orthorhombic epitaxial YMnO(3) thin films  
JOURNAL OF APPLIED PHYSICS 108 (12) Article Number: 123917, DEC 15 2010.
247. Issing, S., Pimenov, A., Ivanov, Y.Vu., Mukhin, A.A., Geurts, J.  
Spin-phonon coupling in multiferroic manganites RMnO(3): comparison of pure (R = Eu, Gd, Tb) and substituted (R = Eu(1-x)Y(x)) compounds  
EUROPEAN PHYSICAL JOURNAL B 78 (3) Pages: 367-372, DEC 2010.
246. Yang Y. -F.; Held K.  
Dynamical mean field theory for manganites  
PHYSICAL REVIEW B 82 (19) Article Number: 195109, NOV 9 2010.
245. Zhao L. Z.; Chen Y. W.; Wang G. R.  
Raman spectra study of orthorhombic LiMnO(2)  
SOLID STATE IONICS 181 (31-32) Pages: 1399-1402, OCT 7 2010.
244. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.  
High-pressure investigation of CaTiO(3) up to 60 GPa using x-ray diffraction and Raman spectroscopy  
PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.
243. Rout G. C.; Panda Saswati; Behera S. N.  
Theoretical study of the Raman active CDW gap mode in manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (37) Article Number: 376003, SEP 22 2010.
242. Baldassarre, L., Perucchi, A., Lupi, S., Dore, P.  
Far infrared properties of the rare-earth scandate DyScO(3)  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (35) Article Number: 355402, SEP 8 2010.
241. Chaban, N., Weber, M., Pignard, S., Kreisel, J.  
Phonon Raman scattering of perovskite LaNiO(3) thin films  
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010
240. Varshney D.; Choudhary D.; Shaikh M. W.; et al.  
Electrical resistivity behaviour of sodium substituted manganites: electron-phonon, electron-electron and electron-magnon interactions  
EUROPEAN PHYSICAL JOURNAL B 76 (2) Pages: 327-338, JUL 2010
239. Zagorac, J., Bošković, S., Matović, B., Babić-Stojić, B.  
Structure and Magnetic Investigations of Ca(1+x)Y(x)MnO(3) (x=0, 0.1, 0.2, 0.3) and Mn(4+)/Mn(3+) Relation Aanalysis  
SCIENCE OF SINTERING 42 (2) Pages: 221-232, MAY-AUG 2010
238. Moreira, J.A., Almeida, A., Ferreira, W.S., Araújo, J.E., Pereira, A.M., Chaves, M.R., Kreisel, J., (...), Tavares, P.B.  
Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO(3)  
PHYSICAL REVIEW B 81 (5) Article Number: 054447, FEB 2010
237. Marti, X., Skumryev, V., Ferrater, C., García-Cuenca, M.V., Varela, M., Sánchez, F., Fontcuberta, J.  
Emergence of ferromagnetism in antiferromagnetic TbMnO<sub>3</sub> by epitaxial strain  
Applied Physics Letters 96 (22), art. no. 222505 (2010).
236. Chaix-Pluchery, O., Sauer, D., Kreisel, J.  
Temperature-dependent Raman scattering of DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals  
Journal of Physics Condensed Matter 22 (16), art. no. 165901 (2010).
235. Malavasi, L., Baldini, M., Di Castro, D., Nucara, A., Crichton, W., Mezouar, M., Blasco, J., Postorino, P.

- High pressure behavior of Ga-doped LaMnO<sub>3</sub>: A combined X-ray diffraction and optical spectroscopy study  
Journal of Materials Chemistry 20 (7), pp. 1304-1311 (2010).
234. Salama, H.A., Stewart, G.A., Hutchison, W.D., Nishimura, K., Scott, D.R., O'Neill, H.StC.  
A 169Tm-Mössbauer spectroscopy investigation of orthorhombic phase o - TmMnO<sub>3</sub>  
Solid State Communications 150 (5-6), pp. 289-291 (2010).
233. Issing, S., Fuchs, F., Ziereis, C., Batke, E., Pimenov, A., Ivanov, Y.V., Mukhin, A.A., Geurts, J.  
Lattice dynamics of Eu<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> ( $0 \leq x \leq 0.5$ )  
European Physical Journal B 73 (3), pp. 353-360 (2010).
232. Jehanathan, N., Lebedev, O., Gélard, I., Dubourdieu, C., Van Tendeloo, G.  
Structure and defect characterization of multiferroic ReMnO<sub>3</sub> films and multilayers by TEM  
Nanotechnology 21 (7), art. no. 075705 (2010).
231. Issing, S., Pimenov, A., Ivanov, V.Y., Mukhin, A.A., Geurts, J.  
Composition-dependent spin-phonon coupling in mixed crystals of the multiferroic manganite Eu<sub>1-x</sub>Y<sub>x</sub>MnO ( $0 \leq x \leq 0.5$ ) studied by Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 81 (2) Article Number: 024304 (2010).
230. Chen, C.Z., Cai, C.B., Liu, Z.Y., Peng, L., Gao, B., Fan, F., Lu, Y.M., (...), Dou, S.X.  
Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La<sub>0.67</sub> Sr<sub>0.33</sub> MnO<sub>3</sub> -  $\delta$  films  
Solid State Communications 150 (1-2), pp. 66-69 (2010).
229. Varshney, D., Choudhary, D., Shaikh, M.W.  
Interpretation of metallic and semiconducting temperature-dependent resistivity of La<sub>1-x</sub>NaxMnO<sub>3</sub> ( $x = 0.07, 0.13$ ) manganites  
Computational Materials Science 47 (3), pp. 839-847 (2010).
228. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.  
Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>  
Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).
227. Yusa, H., Belik, A.A., Takayama-Muromachi, E., Hirao, N., Ohishi, Y.  
High-pressure phase transitions in BiMO<sub>3</sub> (M=Al, Ga, and In): In situ x-ray diffraction and Raman scattering experiments  
PHYSICAL REVIEW B Volume: 80 Issue: 21 Article Number: 214103 DOI: 10.1103/PhysRevB.80.214103 Published: DEC 2009
226. Casu, A, Ricci, PC, Anedda, A  
Structural characterization of Lu<sub>0.7</sub>Y<sub>0.3</sub>AlO<sub>3</sub> single crystal by Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 40 Issue: 9 Pages: 1224-1228 DOI: 10.1002/jrs.2266 Published: SEP 2009
225. Siranidi, E, Lampakis, D, Palles, D, Liarokapis, E, Palstra, TTM  
Micro-Raman study of the spin and orbital ordering in SmVO<sub>3</sub>  
Journal of Physics Conference Series Volume: 150 Article Number: 042184 DOI: 10.1088/1742-6596/150/4/042184 Part: 4 Published: 2009
224. Wall, S, Polli, D, Rini, M, Dharmalingam, P, Boothroyd, AT, Tomioka, Y, Tokura, Y, Schoenlein, RW, Cerullo, G, Cavalleri, A  
Coherent Orbital Waves in Manganites  
ULTRAFAST PHENOMENA XVI Book Series: Springer Series in Chemical Physics Volume: 92 Pages: 170-172 Published: 2009
223. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of orthorhombic perovskite yttrium manganite, YMnO<sub>3</sub>  
Journal of Physics Condensed Matter 21 (35), art. no. 355402 (2009).
222. Kuo, C.C., Liu, W.-R., Hsieh, W.F., Hsu, C.-H., Hsu, H.C., Chen, L.C.  
Crystal symmetry breaking of wurtzite to orthorhombic in nonpolar a-ZnO epi-films  
Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS , art. no. 5343083, pp. 349-350 (2009).
221. Yarlagadda, S., Littlewood, P.B., Mitra, M., Monu, R.K.  
Orbital ordering in undoped manganites via a generalized Peierls instability  
Physical Review B - Condensed Matter and Materials Physics 80 (23), art. no. 235123 (2009).
220. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Palstra, T.T.M.  
Micro-Raman study of the spin and orbital ordering in SmVO<sub>3</sub>  
Journal of Physics: Conference Series 150 (4), art. no. 042184 (2009).
219. Hsieh, C.C., Lin, T.H., Shih, H.C., Lin, J.-Y., Hsu, C.-H., Luo, C.W., Wu, K.H., (...), Juang, J.Y.  
Electronic structure and magnetic anisotropies in orthorhombic multiferroic YMnO<sub>3</sub> thin films  
Journal of Physics: Conference Series 150 (4), art. no. 042062 (2009).
218. Liu, X.-Q., Han, G.-J., Huang, C.-K., Lan, W.  
Thickness dependence of microstructure for La<sub>0.9</sub>Sr<sub>0.1</sub>MnO<sub>3</sub>/Si films determined by micro-Raman spectroscopy  
Wuli Xuebao/Acta Physica Sinica 58 (11), pp. 8008-8013 (2009).
217. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P.  
Influence of Ni/Mn cation order on the spin-phonon coupling in multifunctional La<sub>2</sub> NiMnO<sub>6</sub> epitaxial films by polarized Raman spectroscopy

- Physical Review B - Condensed Matter and Materials Physics 80 (13), art. no. 134424 (2009).
216. Wang, W.-R., Song, G.-X., Zhao, Y., Han, X.-Y.  
Raman active phonons in RMnO<sub>3</sub> (R=La, Pr, Nd, Sm) manganites  
Proceedings of SPIE - The International Society for Optical Engineering 7282, art. no. 72822R (2009).
215. Jang, Y.H., Gervais, F., Lansac, Y.  
A-site ordering in colossal magnetoresistance manganite La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>? Molecular dynamics simulations and quantum mechanics calculations  
Journal of Chemical Physics 131 (9), art. no. 094503 (2009).
214. Wall, S., Prabhakaran, D., Boothroyd, A.T., Cavalleri, A.  
Ultrafast coupling between light, Coherent lattice vibrations, and the magnetic structure of semicovalent LaMnO<sub>3</sub>  
Physical Review Letters 103 (9), art. no. 097402 (2009).
213. Baldini, M., Di Castro, D., Cestelli-Guidi, M., Garcia, J., Postorino, P.  
Phase-separated states in high-pressure LaMn<sub>1-x</sub>Ga<sub>x</sub>O<sub>3</sub> manganites  
Physical Review B - Condensed Matter and Materials Physics 80 (4), art. no. 045123 (2009).
212. Chaboy, J.  
Relationship between the structural distortion and the Mn electronic state in La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub>: A Mn K-edge XANES study  
Journal of Synchrotron Radiation 16 (4), pp. 533-544 (2009).
211. Choithrani, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of manganites RMnO<sub>3</sub> (R = Sm, Eu or Gd): Instabilities and coexistence of orthorhombic and hexagonal phases  
New Journal of Physics 11, art. no. 073041 (2009).
210. Kuo, C.C., Liu, W.-R., Hsieh, W.F., Hsu, C.-H., Hsu, H.C., Chen, L.C.  
Crystal symmetry breaking of wurtzite to orthorhombic in nonpolar a-ZnO epilayers  
Applied Physics Letters 95 (1), art. no. 011905 (2009).
209. Chaix-Pluchery, O., Kreisel, J.  
Raman scattering of perovskite DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals  
Journal of Physics Condensed Matter 21 (17), art. no. 175901 (2009).
208. Hao, L., Sheng, L.  
Formation and temperature evolution of correlated polarons in colossal magnetoresistive manganites  
Journal of Physics Condensed Matter 21 (21), art. no. 215605 (2009).
207. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.  
Photo-induced insulator-metal transition probed by Raman spectroscopy  
Journal of Physics Condensed Matter 21 (7), art. no. 075603 (2009).
206. Moskvina, A.S.  
Disproportionation and electronic phase separation in parent manganite LaMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 79 (11), art. no. 115102 (2009).
205. Antonakos, A., Filippi, M., Auban-Senzier, P., Lampakis, D., Pasquier, C.R., Prellier, W., Liarokapis, E.  
Pressure and magnetic field effects on Pr<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> thin films  
Physica Status Solidi (B) Basic Research 246 (3), pp. 622-625 (2009).
204. Antonakos, A., Filippi, M., Aydogdu, G.H., Prellier, W., Habermeier, H.-U., Liarokapis, E.  
Tuning of the charge ordered state in the manganite thin films by internal or external strains  
Physica Status Solidi (B) Basic Research 246 (3), pp. 635-642 (2009).
203. Varshney, D., Mansuri, I., Kaurav, N.  
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons  
Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).
202. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Colin, C., Palstra, T.T.M.  
Raman studies of vanadates at low temperatures and high pressures  
Journal of Superconductivity and Novel Magnetism 22 (2), pp. 185-188 (2009).
201. Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W., Aydogdu, G.H., Habermeier, H.-U.  
Infrared reflectivity spectra of manganite thin films grown on different substrates  
Journal of Superconductivity and Novel Magnetism 22 (2), pp. 109-113 (2009).
200. El-Hagary, M., Shoker, Y.A., Mohammad, S., Moustafa, A.M., El-Aal, A.A., Michor, H., Reissner, M., (...), Ramadan, A.A.  
Structural and magnetic properties of polycrystalline La<sub>0.77</sub>Sr<sub>0.23</sub>Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.5) manganites  
Journal of Alloys and Compounds 468 (1-2), pp. 47-53 (2009).
199. Kovaleva, N.N., Boris, A.V., Capogna, L., Gavartin, J.L., Popovich, P., Yordanov, P., Maljuk, A., (...), Keimer, B.  
Dipole-active optical phonons in YTiO<sub>3</sub>: Ellipsometry study and lattice-dynamics calculations  
Physical Review B - Condensed Matter and Materials Physics 79 (4), art. no. 045114 (2009).

198. Popa, M., Calderón-Moreno, J.M.  
Lanthanum cobaltite thin films on stainless steel  
Thin Solid Films 517 (5), pp. 1530-1533 (2009).
197. Sacchetti, A., Corridoni, T., Arcangeletti, E., Postorino, P.  
High pressure Raman study of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_{3-\delta}$  manganites  
EUROPEAN PHYSICAL JOURNAL B Volume: 66 Issue: 3 Pages: 301-305 DOI: 10.1140/epjb/e2008-00441-1 Published: DEC 2008
196. Dubey, A., Sathe, V.G., Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial  $\text{LaMnO}_{3+\delta}$  thin films  
JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 11 Article Number: 113530 DOI: 10.1063/1.3040718 Published: DEC 1 2008
195. Dilawar, N., Chandra, U., Parthasarathy, G., Bandyopadhyay, A.K.  
Study of high-pressure-induced phase transition in nanocrystalline perovskite  $(\text{LaSr})(\text{MnFe})\text{O}_{3-\delta}$  by Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 39 Issue: 12 Pages: 1765-1771 DOI: 10.1002/jrs.2032 Published: DEC 2008
194. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., Eriksson, S.-G., Rübhausen, M., Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
PHYSICAL REVIEW B Volume: 78 Issue: 23 Article Number: 235103 DOI: 10.1103/PhysRevB.78.235103 Published: DEC 2008
193. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.  
IR-active optical phonons in  $\text{Pnma-1}$ ,  $\text{Pnma-2}$  and  $\text{R(3)over-bar}$  phases of  $\text{LaMnO}_{3+\delta}$   
PHYSICA B-CONDENSED MATTER Volume: 403 Issue: 21-22 Pages: 3896-3902 DOI: 10.1016/j.physb.2008.07.008 Published: NOV 30 2008
192. Vermette, J., Jandl, S., Gospodinov, M.M.  
Raman study of spin-phonon coupling in  $\text{ErMnO}_3$   
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 20 Issue: 42 Article Number: 425219 DOI: 10.1088/0953-8984/20/42/425219 Published: OCT 22 2008
191. Lü, W., Ma, X., Zhou, H., Chen, G., Li, J., Zhu, Z., You, Z., Tu, C.  
White up-conversion luminescence in rare-earth-ion-doped  $\text{YAlO}_3$  nanocrystals  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 112 Issue: 38 Pages: 15071-15074 DOI: 10.1021/jp805205v Published: SEP 25 2008
190. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.  
Evaluation of the strains in charge-ordered  $\text{Pr}(1-x)\text{Ca}(x)\text{MnO}_3$  thin films using Raman spectroscopy  
JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 6 Article Number: 063508 DOI: 10.1063/1.2978207 Published: SEP 15 2008
189. Girardot, C., Kreisel, J., Pignard, S., Caillault, N., Weiss, F.  
Raman scattering investigation across the magnetic and metal-insulator transition in rare earth nickelate  $\text{RNiO}_3$  ( $\text{R}=\text{Sm}, \text{Nd}$ ) thin films  
PHYSICAL REVIEW B Volume: 78 Issue: 10 Article Number: 104101 DOI: 10.1103/PhysRevB.78.104101 Published: SEP 2008
188. Souza, J.A., Terashita, H., Granado, E., Jardim, R.F., Oliveira, N.F., Muccillo, R.  
Polaron liquid-gas crossover at the orthorhombic-rhombohedral transition of manganites  
PHYSICAL REVIEW B Volume: 78 Issue: 5 Article Number: 054411 DOI: 10.1103/PhysRevB.78.054411 Published: AUG 2008
187. Singh, M.K., Jang, H.M., Gupta, H.C., Katiyar, R.S.  
Polarized Raman scattering and lattice eigenmodes of antiferromagnetic  $\text{NdFeO}_3$   
JOURNAL OF RAMAN SPECTROSCOPY Volume: 39 Issue: 7 Pages: 842-848 DOI: 10.1002/jrs.1923 Published: JUL 2008
186. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in  $\text{La}(x)\text{Pr}(y)\text{Ca}(1-x-y)\text{MnO}_3$   
PHYSICAL REVIEW B Volume: 77 Issue: 13 Article Number: 134411 DOI: 10.1103/PhysRevB.77.134411 Published: APR 2008
185. Paula, A.J., Zaghete, M.A., Longo, E., Varela, J.A.  
Microwave-assisted hydrothermal synthesis of structurally and morphologically controlled sodium niobates by using niobic acid as a precursor  
EUROPEAN JOURNAL OF INORGANIC CHEMISTRY Issue: 8 Pages: 1300-1308 DOI: 10.1002/ejic.200701138 Published: MAR 2008
184. Li, N., Lin, F.-T., Ma, X.-M., Shi, W.-Z.  
Effect of post-annealing on the structure and fluorescence properties of  $\text{YMnO}_3$  thin films  
SPECTROSCOPY AND SPECTRAL ANALYSIS Volume: 28 Issue: 3 Pages: 606-608 Published: MAR 2008
183. Feng, S.M., Wang, L.J., Zhu, J.L., Li, F.Y., Yu, R.C., Jin, C.Q., Wang, X.H., Li, L.T.  
Pressure-induced phase transition in  $\text{Ho}(0.8)\text{Dy}(0.2)\text{MnO}_3$  multiferroic compound  
JOURNAL OF APPLIED PHYSICS Volume: 103 Issue: 2 Article Number: 026102 DOI: 10.1063/1.2829778 Published: JAN 15 2008
182. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.  
Pressure induced insulator-metal phase transition on  $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$  thin films  
Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008
181. Hsieh, C.C., Lin, T.H., Shih, H.C., Hsu, C.-H., Luo, C.W., Lin, J.-Y., Wu, K.H., (...), Juang, J.Y.  
Magnetic ordering anisotropy in epitaxial orthorhombic multiferroic  $\text{YMnO}_3$  films

- Journal of Applied Physics 104 (10), art. no. 103912 (2008).
180. Antonakos, A., Lampakis, D., Liarokapis, E., Filippi, M., Prellier, W., Auban-Senzier, P., Pasquier, C.  
Pressure effects on the phase separation of  $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$  thin films  
Journal of Physics Condensed Matter 20 (48), art. no. 485202 (2008).
179. Yun, H.J., Gervais, F., Lansac, Y.  
A-site distribution in  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ : A computational study  
Materials Research Society Symposium Proceedings 1074, pp. 46-51 (2008).
178. Dubey, A., Sathe, V.G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of  $\text{LaMnO}_3$   
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 34 Article Number: 346232 DOI: 10.1088/0953-8984/19/34/346232 Published: AUG 29 2007
177. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.  
Micro-Raman and magnetization studies of  $\text{Nd}_{1-x}\text{Ca}_x\text{MnO}_3$  phase transitions  
Journal of Physics Conference Series Volume: 92 Article Number: 012125 DOI: 10.1088/1742-6596/92/1/012125 Published: 2007
176. Yang, Y.-F., Held, K.  
Localization of strongly correlated electrons as Jahn-Teller polarons in manganites  
Physical Review B - Condensed Matter and Materials Physics 76 (21), art. no. 212401 (2007)
175. Vali, R.  
Vibrational, dielectric and scintillation properties of  $\text{YAlO}_3$   
Journal of Luminescence 127 (2), pp. 727-730 (2007)
174. Gupta, R.K., Whang, C.M.  
Effects of anion and synthesis route on the structure of  $(\text{La}_{0.9}\text{Sr}_{0.1})(\text{Cr}_{0.85}\text{Fe}_{0.05}\text{Co}_{0.05}\text{Ni}_{0.05})\text{O}_3 - \delta$  perovskite and removal of impurity phases  
Solid State Ionics 178 (29-30), pp. 1617-1626 (2007)
173. Choi, Y., Mebane, D.S., Wang, J.-H., Liu, M.  
Continuum and quantum-chemical modeling of oxygen reduction on the cathode in a solid oxide fuel cell  
Topics in Catalysis 46 (3-4), pp. 386-401 (2007)
172. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
Strain effects on  $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  thin films  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 144 (1-3), pp. 83-88 (2007)
171. Ying, Y., Fan, J., Pi, L., Hong, B., Tan, S., Zhang, Y.  
The effect of Ga doping in  $\text{Nd}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  system  
Solid State Communications 144 (7-8), pp. 300-304 (2007)
170. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
Impact of Co Mn cation ordering on phonon anomalies in  $\text{La}_2\text{CoMnO}_6$  double perovskites: Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 76 (13), art. no. 132413 (2007)
169. Fukumura, H., Matsui, S., Harima, H., Takahashi, T., Itoh, T., Kisoda, K., Tamada, M., (...), Miyayama, M.  
Observation of phonons in multiferroic  $\text{BiFeO}_3$  single crystals by Raman scattering  
Journal of Physics Condensed Matter 19 (36), art. no. 365224 (2007)
168. Zinenko, V.I., Pavlovskii, M.S.  
Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the  $\text{LaMnO}_3$  crystal within the polarizable-ion model  
Physics of the Solid State 49 (9), pp. 1749-1758 (2007)
167. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.  
Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of  $\text{La}_{2+x}/3\text{Sr}_{1-x}/3\text{Mn}_{1-x}\text{Cr}_x\text{O}_3$  perovskites  
Journal of Physics and Chemistry of Solids 68 (9), pp. 1749-1755 (2007)
166. Kawasaki, T., Ogimoto, Y., Ogawa, N., Miyano, K., Tamaru, H., Izumi, M.  
Charge- and orbital-ordering patterns in  $\text{Bi}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  thin films studied by Raman scattering  
Journal of Applied Physics 101 (12), art. no. 123714 (2007)
165. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.  
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
Journal of Applied Physics 101 (12), art. no. 123910 (2007)
164. Rini, E.G., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Phonon dynamics of lanthanum manganite  $\text{LaMnO}_3$  using an interatomic shell model potential  
Physical Review B - Condensed Matter and Materials Physics 75 (21), art. no. 214301 (2007)
163. Gupta, R.K., Whang, C.M.  
Structural study of a sol-gel derived novel solid oxide fuel cell perovskite:  $(\text{La}_{1-x}\text{Sr}_x)(\text{Cr}_{0.85}\text{Fe}_{0.05}\text{Co}_{0.05}\text{Ni}_{0.05})\text{O}_{3-\delta}$   
Journal of Physics Condensed Matter 19 (19), art. no. 196209 (2007)

162. Asokan, K., Dong, C.L., Bao, C.W., Tsai, H.M., Chiou, J.W., Chang, C.L., Pong, W.F., (...), Peña, O.  
Electronic structures of hexagonal manganites HoMnO<sub>3</sub> studied by X-ray absorption near-edge structure  
AIP Conference Proceedings 879, pp. 1659-1662 (2007)
161. Božin, E.S., Schmidt, M., Deconinck, A.J., Paglia, G., Mitchell, J.F., Chatterji, T., Radaelli, P.G., (...), Billinge, S.J.L.  
Understanding the insulating phase in colossal magnetoresistance manganites: Shortening of the Jahn-Teller long-bond across the phase diagram of La<sub>1-x</sub>CaxMnO<sub>3</sub>  
Physical Review Letters 98 (13), art. no. 137203 (2007)
160. Andreasson, J., Holmlund, J., Knee, C.S., Käll, M., Börjesson, L., Naler, S., Bäckström, J., (...), Eriksson, S.-G.  
Franck-Condon higher order lattice excitations in the LaFe<sub>1-x</sub>CrxO<sub>3</sub> (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects  
Physical Review B - Condensed Matter and Materials Physics 75 (10), art. no. 104302 (2007)
159. Gouadec, G., Colomban, P.  
Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007)
158. Xu, J., Park, J.H., Jang, H.M.  
Orbital-spin-phonon coupling in Jahn-Teller-distorted LaMnO<sub>3</sub>: Softening of the 490 and 610 cm<sup>-1</sup> Raman-active modes  
Physical Review B - Condensed Matter and Materials Physics 75 (1), art. no. 012409 (2007)
157. Vijayanandhini, K., Kutty, T.R.N.  
Effects of Zn substitution on the magnetic and transport properties of La<sub>0.6</sub>Sr<sub>0.4</sub>Mn<sub>1-y</sub>ZnyO<sub>3-δ</sub> (0 ≤ y ≤ 0.3)  
Solid State Communications 141 (5), pp. 252-257 (2007)
156. Sugai, S., Hirota, K., Kikuchi, A.  
Orbital waves in YVO<sub>3</sub> observed by raman scattering  
AIP Conference Proceedings 850, pp. 1227-1228 (2006)
155. Li, W.J., Zhang, Bo., Lu, W.  
Structural properties and Raman spectroscopy of orthorhombic (Eu<sub>1-x</sub>Pr<sub>x</sub>)<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> (0 ≤ x ≤ 1.0)  
Solid State Communications 140 (11-12), pp. 503-507 (2006)
154. Minh, N.V., Yang, I.-S.  
A Raman scattering study of structural changes in LaMn<sub>1-x</sub>CoxO<sub>3+δ</sub> system  
Vibrational Spectroscopy 42 (2), pp. 353-356 (2006)
153. Zhang, T., Li, G., Qian, T., Qu, J.F., Xiang, X.Q., Li, X.G.  
Effect of particle size on the structure and magnetic properties of La<sub>0.6</sub>Pb<sub>0.4</sub>MnO<sub>3</sub> nanoparticles  
Journal of Applied Physics 100 (9), art. no. 094324 (2006)
152. Laverdière, J., Jandl, S., Mukhin, A.A., Ivanov, V.Yu.  
Raman study of orbital mediated multiphonons in RMnO<sub>3</sub> (R = Pr, Sm, Eu, Tb, Y)  
European Physical Journal B 54 (1), pp. 67-72 (2006)
151. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)
150. Minh, N.V., Hoc, N.Q., Ha Phuong, L.T., Yang, I.-S.  
The effect of Fe substitution on the structural transition of LaMn<sub>1-x</sub>FexO<sub>3</sub> manganites: A raman spectroscopy study  
Journal of Nonlinear Optical Physics and Materials 15 (3), pp. 315-321 (2006)
149. Choi, K.-Y., Pashkevich, Yu.G., Gnezdilov, V.P., Güntherodt, G., Yeremenko, A.V., Nabok, D.A., Kamenev, V.I., (...), Lemmens, P.  
Orbital fluctuating state in ferromagnetic insulating LaMnO<sub>3+δ</sub> (0.085 ≤ δ ≤ 0.125) studied using Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 74 (6), art. no. 064406 (2006)
148. Sartbaeva, A., Wells, S.A., Thorpe, M.F., Božin, E.S., Billinge, S.J.L.  
Geometric simulation of perovskite frameworks with Jahn-Teller distortions: Applications to the cubic manganites  
Physical Review Letters 97 (6), art. no. 065501 (2006)
147. Talati, M., Jha, P.K.  
Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)
146. Mondal, P., Bhattacharya, D., Choudhury, P.  
Dielectric anomaly at the orbital order-disorder transition in LaMnO<sub>3+δ</sub>  
Journal of Physics Condensed Matter 18 (29), art. no. 024, pp. 6869-6881 (2006)
145. Hotta, T.  
Orbital ordering phenomena in d- and f-electron systems  
Reports on Progress in Physics 69 (7), art. no. R02, pp. 2061-2155 (2006)
144. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.

- Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
*Physica B: Condensed Matter* 381 (1-2), pp. 214-218 (2006)
143. Sacchetti, A., Baldini, M., Postorino, P., Martin, C., Maignan, A.  
 Raman spectroscopy on cubic and hexagonal SrMnO<sub>3</sub>  
*Journal of Raman Spectroscopy* 37 (5), pp. 591-596 (2006)
142. Sugai, S., Kikuchi, A., Mori, Y.  
 Raman scattering of orbital waves in YTiO<sub>3</sub>  
*Physical Review B - Condensed Matter and Materials Physics* 73 (16), art. no. 161101, pp. 1-4 (2006)
141. Belik, A.A., Stefanovich, S.Yu., Lazoryak, B.I., Takayama-Muromachi, E.  
 BiInO<sub>3</sub>: A polar oxide with GdFeO<sub>3</sub>-type perovskite structure  
*Chemistry of Materials* 18 (7), pp. 1964-1968
140. Liu, H.L., Lu, K.S., Kuo, M.X., Uba, L., Uba, S., Wang, L.M., Jeng, H.-T.  
 Magneto-optical properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> thin films with perpendicular magnetic anisotropy  
*Journal of Applied Physics* 99 (4) (2006)
139. Kartopu G, Es-Souni M  
 Microstructural properties of solution-deposited La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> and LaMnO<sub>3</sub> thin films  
*JOURNAL OF APPLIED PHYSICS* 99 (3): Art. No. 033501 FEB 1 2006
138. Sugai S, Hirota K  
 Orbital waves in YVO<sub>3</sub> studied by Raman scattering  
*PHYSICAL REVIEW B* 73 (2): Art. No. 020409 JAN 2006
137. Roy, P., Qi, Z., Brubach, J.-B., Favaro, L., Piralli, O., Vervloet, M.  
 Exploiting synchrotron infrared spectra using ab initio calculations  
 WMSCI 2005: 9th World Multi-Conference on Systemics, Cybernetics and Informatics, Vol 6 Pages: 51-55 Published: 2005
136. Guidi, M.C., Sacchetti, E., Arcangeletti, M., Piccinini, P., Postorino, A., Nucara, A., Marcelli, P., Calvani  
 Pressure dependence of the phonon spectrum of La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3-δ</sub> manganites  
*Proceedings of SPIE - The International Society for Optical Engineering* 5932, pp. 1-8 (2005)
135. Liu, H.L., Kuo, M.X., Her, J.L., Lu, K.S., Weng, S.M., Wang, L.M., Cheng, S.L., Lin, J.G.  
 Thickness-dependent optical properties of La<sub>0.7</sub> Sr<sub>0.3</sub> MnO<sub>3</sub> thin films  
*Journal of Applied Physics* 97 (11), pp. 1-4 (2005)
134. Dore P, Postorino P, Sacchetti A, et al.  
 Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
*EUROPEAN PHYSICAL JOURNAL B* 48 (2): 255-258 NOV 2005
133. Zhao BC, Song WH, Ma YQ, et al.  
 Reentrant metal-insulator transition in the Cu-doped manganites La<sub>1-x</sub>Pb<sub>x</sub>MnO<sub>3</sub> (x similar to 0.14) single crystals  
*PHYSICAL REVIEW B* 72 (13): Art. No. 132401 OCT 2005
132. Varshney D, Kaurav N  
 Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction  
*JOURNAL OF LOW TEMPERATURE PHYSICS* 141 (3-4): 165-178 NOV 2005
131. Rozenberg GK, Pasternak MP, Xu WM, et al.  
 Consequences of pressure-instigated spin crossover in RFeO<sub>3</sub> perovskites; a volume collapse with no symmetry modification  
*EUROPHYSICS LETTERS* 71 (2): 228-234 JUL 2005
130. Choi KY, Lemmens P, Guntherodt G, et al.  
 Orbital-mediated multiphonon scattering in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
*PHYSICAL REVIEW B* 72 (2): Art. No. 024301 JUL 2005
129. Jandl S, Mukhin AA, Ivanov VY, et al.  
 Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
*PHYSICAL REVIEW B* 72 (2): Art. No. 024423 JUL 2005
128. Schulz B, Backstrom J, Budelmann D, et al.  
 Fully reflective deep ultraviolet to near infrared spectrometer and entrance optics for resonance Raman spectroscopy  
*REVIEW OF SCIENTIFIC INSTRUMENTS* 76 (7): Art. No. 073107 JUL 2005
127. Ghosh S, Kamaraju N, Seto M, et al.  
 Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
*PHYSICAL REVIEW B* 71 (24): Art. No. 245110 JUN 2005
126. Aliaga H  
 Time-dependent local Green's operator and its applications to manganites  
*PHYSICAL REVIEW B* 71 (18): Art. No. 184404 MAY 2005
125. Her JL, Liu HL, Mukovskii YM, et al.

- Raman scattering studies of single-crystal  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$   
 CHINESE JOURNAL OF PHYSICS 43 (3): 763-766 Suppl. 2 JUN 2005
124. Choi KY, Lemmens P, Sahaoui T, et al.  
 Existence of orbital polarons in ferromagnetic insulating  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $0.11 \leq x \leq 0.14$ ) revealed by giant phonon softening  
 PHYSICAL REVIEW B 71 (17): Art. No. 174402 MAY 2005
123. Lim D, Thorsmølle VK, Averitt RD, et al.  
 Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$   
 PHYSICAL REVIEW B 71 (13): Art. No. 134403 APR 2005
122. Xiong YM, Wang GY, Luo XG, et al.  
 Magnetotransport properties in  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $x=0.33, 0.5$ ) thin films deposited on different substrates  
 JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 083909 APR 15 2005
121. Wang WR, Xu DP, Su WH  
 Raman shift of  $\text{RMnO}_3$  (R = La, Pr, Nd, Sm) manganites  
 CHINESE PHYSICS LETTERS 22 (3): 705-707 MAR 2005
120. Xu SJ, Tong W, Fan JY, et al.  
 Influence of doped Dy on magnetic and electronic properties in  $\text{La}_{0.67-x}\text{Dy}_x\text{Sr}_{0.33}\text{MnO}_3$   
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 288: 92-105 MAR 2005
119. Seikh MM, Sood AK, Narayana C  
 Electronic and vibrational Raman spectroscopy of  $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  through the phase transitions  
 PRAMANA-JOURNAL OF PHYSICS 64 (1): 119-128 JAN 2005
118. Venimadhav A, Yates KA, Blamire MG  
 Scanning Raman spectroscopy for characterizing compositionally spread films  
 JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005
117. Pashkevich, YG, Gnezdilov, VP, Lemmens, P, Choi, KY, Guntherodt, G, Yermenko, AV, Barilo, SN, Shiryayev, SV, Soldatov, AG  
 Giant phonon softening in ferromagnetic  $\text{LaMnO}_3+\delta$   
 SPECTROSCOPY OF EMERGING MATERIALS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 165 Pages: 185-194 Published: 2004
116. Wu L, Yu JC, Zhang LZ, et al.  
 Selective self-propagating combustion synthesis of hexagonal and orthorhombic nanocrystalline yttrium iron oxide  
 JOURNAL OF SOLID STATE CHEMISTRY 177 (10): 3666-3674 OCT 2004
115. Bull, C.L., McMillan, P.F.  
 Raman scattering study and electrical properties characterization of elpasolite perovskites  $\text{Ln}_2(\text{BB}')\text{O}_6$  (Ln=La, Sm...Gd and B, B'=Ni, Co, Mn)  
 Journal of Solid State Chemistry 177 (7), pp. 2323-2328 (2004)
114. Xiong YM, Chen T, Wang GY, et al.  
 Raman spectra in epitaxial thin films of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $x=0.33, 0.5$ ) grown on different substrates  
 PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
113. Varshney D, Kaurav N  
 Electrical resistivity in the ferromagnetic metallic state of  $\text{La-Ca-MnO}_3$ : Role of electron-phonon interaction  
 EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004
112. Yuan QS  
 Comment on "Strain effect and the phase diagram of  $\text{La}_{1-x}\text{Ba}_x\text{MnO}_3$  thin films"  
 PHYSICAL REVIEW B 70 (6): Art. No. 066401 AUG 2004
111. Sacchetti A, Dore P, Postorino P, et al.  
 Pressure and temperature dependence of optical phonons in  $\text{La}_{0.75}\text{Ca}_{0.25}\text{MnO}_3$   
 JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 65 (8-9): 1431-1437 Sp. Iss. SI AUG-SEP 2004
110. Dho J, Leung CW, MacManus-Driscoll JL, et al.  
 Epitaxial and oriented  $\text{YMnO}_3$  film growth by pulsed laser deposition  
 JOURNAL OF CRYSTAL GROWTH 267 (3-4): 548-553 JUL 1 2004
109. Arisi E, Bergenti I, Dediu V, et al.  
 Magnetic field-induced variations in  $\text{Pr}_{0.65}\text{Ca}_{0.35}\text{MnO}_3$ : Raman investigation  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 272-76: 1751-1752 Part 3 Sp. Iss. SI MAY 2004
108. Maczka M, Hanuza J, Fuentes AF, et al.  
 Vibrational studies of  $\text{A}(\text{B}'\text{B}'_2/3(1/3))\text{O}_3$  perovskites (A = Ba, Sr; B' = Y, Sm, Dy, Gd, In; B'' = Mo, W)  
 JOURNAL OF PHYSICS-CONDENSED MATTER 16 (13): 2297-2310 APR 7 2004
107. Tompsett GA, Sammes NM  
 Characterisation of the SOFC material,  $\text{LaCrO}_3$ , using vibrational spectroscopy  
 J POWER SOURCES 130 (1-2): 1-7 MAY 3 2004



106. Mertelj T, Hrovat M, Kuscer D, et al.  
Direct measurement of Polaron binding energy in AMnO(3) as a function of the A site ionic size by photoinduced IR absorption  
J SUPERCOND 17 (2): 187-191 APR 2004
105. Kruger R, Schulz B, Naler S, et al.  
Orbital ordering in LaMnO3 investigated by resonance Raman spectroscopy  
PHYS REV LETT 92 (9): Art. No. 097203 MAR 5 2004
104. Tsurui T, Ogita N, Udagawa M, et al.  
Raman scattering investigation of Y1-xCaxTiO3  
PHYS REV B 69 (2): Art. No. 024102 JAN 2004
103. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study in Pr0.5Ca0.5MnO3 thin films  
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004
102. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al.  
Phonon Raman scattering in LaMn1-xCoxO3 (x = 0, 0.2, 0.3, 0.4, and 1.0)  
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003
101. Gong F, Tong W, Tan S, et al.  
Large effect of small Zn doping on the electric and magnetic properties in LaMn1-xZnxO3  
PHYS REV B 68 (17): Art. No. 174410 NOV 2003
100. Takahashi J, Matsubara E, Arima T, et al.  
Coherent multistep anti-Stokes and stimulated Raman scattering associated with third harmonics in YFeO3 crystals  
PHYS REV B 68 (15): Art. No. 155102 OCT 15 2003
99. Aliaga H, Magnoux D, Moreo A, et al.  
Theoretical study of half-doped models for manganites: Fragility of CE phase with disorder, two types of colossal magnetoresistance, and charge-ordered states for electron-doped materials  
PHYS REV B 68 (10): Art. No. 104405 SEP 1 2003
98. Suzuki K, Fu DS, Nishizawa K, et al.  
Ferroelectric property of alkoxy-derived YMnO3 films crystallized in argon  
JPN J APPL PHYS 1 42 (9A): 5692-5695 SEP 2003
97. Liu Y, Li G, Feng SJ, et al.  
Jahn-Teller distortions cooperating with magnetic interaction in the Raman spectra of La(0.7)5Ca(0.25)MnO(3) thin film  
CHINESE PHYS LETT 20 (9): 1603-1606 SEP 2003
96. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr0.5Ca0.5MnO3 thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
95. Kreisel J, Bouvier P  
High-pressure Raman spectroscopy of nano-structured ABO(3) perovskites: a case study of relaxor ferroelectrics  
J RAMAN SPECTROSC 34 (7-8): 524-531 JUL-AUG 2003
94. Hu LB, Tong W, Zhu H, et al.  
The effects of Jahn-Teller distortion changes on transport properties in LaMn1-xZnxO3  
J PHYS-CONDENS MAT 15 (12): 2033-2043 APR 2 2003
93. Jandl S, Barilo SN, Shiryayev SV, et al.  
Study of Raman active phonons in NdMnO3  
J MAGN MAGN MATER 264 (1): 36-43 AUG 2003
92. Suda J, Kamishima O, Hamaoka K, et al.  
The first-order Raman spectra and lattice dynamics for YAlO3 crystal  
J PHYS SOC JPN 72 (6): 1418-1422 JUN 2003
91. Choi KY, Lemmens P, Guntherodt G, et al.  
Raman scattering study of Nd1-xSrxMnO3 (x = 0.3, 0.5)  
J PHYS-CONDENS MAT 15 (19): 3333-3342 MAY 21 2003
90. Filippetti A, Spaldin NA  
Self-interaction-corrected pseudopotential scheme for magnetic and strongly-correlated systems  
PHYS REV B 67 (12): Art. No. 125109 MAR 15 2003
89. Van Minh N, Kim SJ, Yang IS  
Effect of Ni on structure and Raman scattering of LaMn1-xNixO3+delta  
PHYSICA B 327 (2-4): 208-210 APR 2003
88. Popa M, Van Hong L, Kakihana M  
Nanopowders of LaMeO3 perovskites obtained by a solution-based ceramic processing technique

PHYSICA B 327 (2-4): 233-236 APR 2003

87. Souza AG, Faria JLB, Guedes I, et al.  
Evidence of magnetic polaronic states in  $\text{La}_{0.70}\text{Sr}_{0.30}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$  manganites  
PHYS REV B 67 (5): Art. No. 052405 FEB 1 2003
86. Guttler B, Amelichev VA, Gorbenko OY, et al.  
Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study  
PHASE TRANSIT 76 (1-2): 63-72 Part B JAN-FEB 2003
85. Nikiforov AE, Popov SE  
The lattice dynamics of  $\text{LaMnO}_3$ : the role of the orbital degrees of freedom  
APPL PHYS A-MATER 74: S1743-S1745 Part 2 Suppl. S DEC 2002
84. Popa M, Frantti J, Kakihana M  
Characterization of  $\text{LaMeO}_3$  (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method  
SOLID STATE IONICS 154: 135-141 Part B Sp. Iss. SI DEC 2002
83. Suda J, Mori T, Saito H, et al.  
First-order Raman spectra and lattice dynamics of a  $\text{NdGaO}_3$  crystal  
PHYS REV B 66 (17): Art. No. 174302 NOV 1 2002
82. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002
81. Zhou HD, Li G, Liu F, et al.  
Raman spectrum and ESR of  $\text{Pr}_{0.5}\text{Ca}_{0.4}\text{Sr}_{0.1}\text{MnO}_3$   
SOLID STATE COMMUN 124 (3): 83-87 2002
80. Qin S, Wu X, Seifert F, et al.  
Micro-Raman study of perovskites in the  $\text{CaTiO}_3$ - $\text{SrTiO}_3$  system  
J CHEM SOC DALTON (19): 3751-3755 2002
79. Moskvin AS, Avvakumov IL  
Doped manganites beyond conventional double-exchange model  
PHYSICA B 322 (3-4): 371-389 SEP 2002
78. Hill NA  
Density functional studies of multiferroic magnetoelectrics  
ANNU REV MATER RES 32: 1-37 2002
77. Suzuki, K, Nishizawa, K, Miki, T, Kato, K  
Synthesis of ferroelectric  $\text{YMnO}_3$  thin film by chemical solution deposition  
KEY ENG MAT 228-2: 141-146 2002
76. Suzuki K, Nishizawa K, Miki T, et al.  
Effects of composition on crystallographic properties of alkoxy-derived  $(\text{Y,Yb})\text{MnO}_3$  thin films  
ASIAN CERAMIC SCIENCE FOR ELECTRONICS I Book Series: KEY ENGINEERING MATERIALS Volume: 214-2 Pages: 151-156  
Published: 2002
75. Gontchar, L.E., Nikiforov, A.E.  
Superexchange interaction in insulating manganites  $\text{R}_{1-x}\text{A}_x\text{MnO}_3$  ( $x=0, 0.5$ )  
Physical Review B - Condensed Matter and Materials Physics 66 (1), pp. 144371-144379 (2002)
74. Okamoto S, Ishihara S, Maekawa S  
Theory of Raman scattering from orbital excitations in manganese oxides  
PHYS REV B 66 (1): Art. No. 014435 JUL 1 2002
73. Pattabiraman M, Rangarajan G, Choi KY, et al.  
Polarized Raman scattering in single crystals of  $\text{Nd}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$   
PRAMANA-J PHYS 58 (5-6): 1013-1017 MAY-JUN 2002
72. Postorino P, Congeduti A, Degiorgi E, et al.  
High-pressure behavior of  $\text{La}_x\text{Sr}_{2-x}\text{MnO}_4$  layered manganites investigated by Raman spectroscopy and x-ray diffraction  
PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002
71. Eriksson, S.-G., Valkeapää, M., Ivanov, S., Eriksen, J., Rundlöf, H., Johansson, L.-G., Mathieu, R., Svedlindh, P., Bäckström, J., Börjesson, L.  
Phase transitions and magnetic order in  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3+\delta$  ( $x \leq 0.2$ ;  $2.85 \leq 2-\delta \leq 3.00$ )  
FERROELECTRICS Volume: 269 Pages: 309-314 DOI: 10.1080/00150190211131 Published: 2002
70. Loa I, Adler P, Grzechnik A, et al.  
Suppression of Jahn-Teller distortion and insulator-to-metal transition in  $\text{LaMnO}_3$  at high pressures  
HIGH PRESSURE RES 22 (2): 325-329 Sp. Iss. SI MAY 2002

69. Kuroe H, Habu I, Kuwahara H, et al.  
Low-frequency excitations in the charge-ordered phase of  $(\text{Nd}_{0.5}\text{Sr}_{0.5})\text{MnO}_3$   
PHYSICA B 316: 575-578 MAY 2002
68. Kreisel J, Lucazeau G, Dubourdieu C, et al.  
Raman scattering study of  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrTiO}_3$  multilayers  
J PHYS-CONDENS MAT 14 (20): 5201-5210 MAY 27 2002
67. Gupta R, Pai GV, Sood AK, et al.  
Raman scattering in charge-ordered  $\text{Pr}_{0.63}\text{Ca}_{0.37}\text{MnO}_3$ : Anomalous temperature dependence of linewidth  
EUROPHYS LETT 58 (5): 778-784 JUN 2002
66. Bala J, Oles AM, Sawatzky GA  
Orbital-lattice polarons in ferromagnetic  $\text{LaMnO}_3$   
PHYS REV B 65 (18): Art. No. 184414 MAY 1 2002
65. Filippetti A, Hill NA  
Coexistence of magnetism and ferroelectricity in perovskites  
PHYS REV B 65 (19): Art. No. 195120 MAY 15 2002
64. Saitoh E, Tomioka Y, Kimura T, et al.  
Role of orbital correlation in colossal magnetoresistance  
J MAGN MAGN MATER 239 (1-3): 170-172 Sp. Iss. SI FEB 2002
63. Naler S, Rubhausen M, Yoon S, et al.  
Lattice dynamics and charge ordering in  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $0.45 \leq x \leq 0.76$ )  
PHYS REV B 65 (9): art. no. 092401 MAR 1 2002
62. Suzuki K, Nishizawa K, Miki T, et al.  
Synthesis of ferroelectric  $\text{YMnO}_3$  thin film by chemical solution deposition  
KEY ENG MAT 7: 151-156 2002
61. Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.M., Pantoja, A.E.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
Physical Review B - Condensed Matter and Materials Physics 63(13), 132406 (2001)
60. Suzuki, K., Nishizawa, K., Miki, T., Kato, K.  
Synthesis of  $\text{YMnO}_3$  thin films from alkoxy-derived precursors  
FERROELECTRICS Volume: 263 Issue: 1-4 Pages: 1585-1590 Published: 2001
59. Kreisel J, Lucazeau G, Dubourdieu C, et al.  
A Raman scattering investigation of tensile strain in  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrTiO}_3$  multilayers  
J PHYS IV 11 (PR11): 227-231 DEC 2001
58. Eriksson SG, Ivanov S, Eriksen J, et al.  
A neutron powder diffraction and inelastic light scattering study of  $(\text{La},\text{Sr})\text{MnO}_{3+\delta}$   
MATER SCI FORUM 378-3: 505-510 Part 1&2 2001
57. Zhang PX, Huang SJ, Habermeier HU, et al.  
Raman spectra from isotope substituted  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$   
PHYSICA C 364: 647-651 NOV 2001
56. Zhang PX, Huang SJ, Habermeier HU, et al.  
Isotope effect on Raman spectra of polycrystalline  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$   
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001
55. Filippetti A, Hill NA  
First principles study of structural, electronic and magnetic interplay in ferroelectromagnetic yttrium manganite  
J MAGN MAGN MATER 236 (1-2): 176-189 OCT 2001
54. Loa I, Adler P, Grzechnik A, et al.  
Pressure-induced quenching of the Jahn-Teller distortion and insulator-to-metal transition in  $\text{LaMnO}_3$   
PHYS REV LETT 87 (12): art. no. 125501 SEP 17 2001
53. Perebeinos V, Allen PB  
Multiphonon resonant Raman scattering predicted in  $\text{LaMnO}_3$  from the Franck-Condon process via self-trapped excitons  
PHYS REV B 64 (8): art. no. 085118 AUG 15 2001
52. Martin-Carron L, de Andres A  
Melting of the cooperative Jahn-Teller distortion in  $\text{LaMnO}_3$  single crystal studied by Raman spectroscopy  
EUR PHYS J B 22 (1): 11-16 JUL 2001
51. Yin WG, Lin HQ, Gong CD  
Single hole motion in  $\text{LaMnO}_3$   
PHYS REV LETT 87 (4): art. no. 047204 JUL 23 2001

50. Martin-Carron L, de Andres A  
Raman phonons and the Jahn-Teller transition in RMnO<sub>3</sub> manganites  
J ALLOY COMPD 323: 417-421 JUL 12 2001
49. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
48. Nikiforov AE, Popov SE  
Lattice dynamics of LaMnO<sub>3</sub>: Coupling of the lattice and orbital degrees of freedom  
PHYS SOLID STATE+ 43 (6): 1132-1140 JUN 2001
47. Pantoja AE, Trodahl HJ, Buckley RG, et al.  
Raman spectroscopy of orthorhombic La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub>, x=0.1-0.3  
J PHYS-CONDENS MAT 13 (16): 3741-3752 APR 23 2001
46. Dagotto E, Hotta T, Moreo A  
Colossal magnetoresistant materials: The key role of phase separation  
PHYS REP 344 (1-3): 1-153 APR 2001
45. Pantoja AE, Trodahl HJ, Fainstein A, et al.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
PHYS REV B 63 (13): art. no. 132406 APR 1 2001
44. Amelichev VA, Guttler B, Gorbenko OY, et al.  
Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry  
PHYS REV B 63 (10): art. no. 104430 FEB 21 2001
43. Saitoh E, Okamoto S, Takahashi KT, et al.  
Observation of orbital waves as elementary excitations in a solid  
NATURE 410: (6825) 180-183 MAR 8 2001
42. Congeduti A, Postorino P, Caramagno E, et al.  
Anomalous high pressure dependence of the Jahn-Teller phonon in La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub>  
PHYS REV LETT 86: (7) 1251-1254 FEB 12 2001
41. Li JM, Huan CHA, Du YW, et al.  
Magnetic-field-tunable charge carrier localization in sintered polycrystalline La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub>  
PHYS REV B 63 (2): art. no. 024416 JAN 1 2001
40. Francis, AJ, Bagal, A, Salvador, PA  
Thin film synthesis of metastable perovskites: YMnO<sub>3</sub>  
INNOVATIVE PROCESSING AND SYNTHESIS OF CERAMICS, GLASSES, AND COMPOSITES IV Book Series: CERAMIC  
TRANSACTIONS Volume: 115 Pages: 565-575 Published: 2000
39. Habermeier, HU  
Correlation of microstructure and magnetotransport properties of epitaxially grown La-Ca-Mn-O-3 thin films  
MAGNETIC AND SUPERCONDUCTING MATERIALS, (MSM-99), VOLS A AND B Pages: 905-918 DOI:  
10.1142/9789812793676\_0118 Published: 2000
38. Congeduti A, Postorino P, Dore P, et al.  
High pressure behavior of manganites by infrared and Raman spectroscopy  
INT J MOD PHYS B 14: (29-31) 3418-3423 DEC 20 2000
37. Perebeinos V, Allen PB  
Franck-condon-broadened angle-resolved photoemission spectra predicted in LaMnO<sub>3</sub>  
PHYS REV LETT 85: (24) 5178-5181 DEC 11 2000
36. Guedes I, Mitchell JF, Argyriou D, et al.  
Oxygen stoichiometry in Sr<sub>3</sub>Mn<sub>2</sub>O<sub>7</sub>-delta: A Raman scattering investigation  
PHYS REV B 62: (21) 13809-13811 DEC 1 2000
35. Guedes I, Mitchell JF, Argyriou D, et al.  
Raman phonons in La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> layered manganites  
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000
34. Granado E, Sanjurjo JA, Rettori C, et al.  
Order-disorder in the Jahn-Teller transition of LaMnO<sub>3</sub>: A Raman scattering study  
PHYS REV B 62: (17) 11304-11307 NOV 1 2000
33. Hotta T, Malvezzi AL, Dagotto E  
Charge-orbital ordering and phase separation in the two-orbital model for manganites: Roles of Jahn-Teller phononic and Coulombic interactions  
PHYS REV B 62: (14) 9432-9452 OCT 1 2000
32. Saitoh E, Tomioka Y, Kimura T, et al.

- Directional ordering and collective fluctuation of orbital in a colossal magnetoresistive manganite  
 J PHYS SOC JPN 69: (8) 2403-2406 AUG 2000
31. Yi WC, Kwun SI, Yoon JG  
 Study on the electronic structure of hexagonal and orthorhombic YMnO<sub>3</sub>  
 J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000
30. Granado E, Sanjurjo JA, Rettori C, et al.  
 Effects of cation vacancies in the phonon Raman spectra of LaMnO<sub>3</sub>  
 PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
29. Ishihara S, Maekawa S  
 Theory of orbital excitation and resonant inelastic x-ray scattering in manganites  
 PHYS REV B 62: (4) 2338-2345 JUL 15 2000
28. Hill NA  
 Why are there so few magnetic ferroelectrics?  
 J PHYS CHEM B 104: (29) 6694-6709 JUL 27 2000
27. Argyriou DN, Bordallo HN, Campbell BJ, et al.  
 Charge ordering and phase competition in the layered perovskite LaSr<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub>  
 PHYS REV B 61: (22) 15269-15276 JUN 1 2000
26. Yamamoto K, Kimura T, Ishikawa T, et al.  
 Raman spectroscopy of the charge-orbital ordering in layered manganites  
 PHYS REV B 61: (21) 14706-14715 JUN 1 2000
25. Gonchar' LE, Nikiforov AE  
 Effect of orbital ordering on the magnetic-structure formation in the LaMnO<sub>3</sub> Jahn-Teller magnet  
 PHYS SOLID STATE+ 42: (6) 1070-1074 2000
24. Dediu V, Ferdeghini C, Maticotta FC, et al.  
 Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy  
 PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000
23. Paolone A, Roy P, Pimenov A, et al.  
 Infrared phonon spectrum of pure and doped LaMnO<sub>3</sub>  
 PHYS REV B 61: (17) 11255-11258 MAY 1 2000
22. Pi L, Zheng L, Zhang YH  
 Transport mechanism in polycrystalline La<sub>0.825</sub>Sr<sub>0.175</sub>Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub>  
 PHYS REV B 61: (13) 8917-8921 APR 1 2000
21. Bjornsson P, Rubhausen M, Backstrom J, et al.  
 Lattice and charge excitations in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
 PHYS REV B 61: (2) 1193-1197 JAN 1 2000
20. Granado, E., Moreno, N.O., García, A., Sanjurjo, J.A., Rettori, C., Torriani, I., Oseroff, S.B., Neumeier, J.J., McClellan, K.J., Cheong, S.-W., Tokura, Y.  
 Raman scattering in CMR manganites  
 Materials Science Forum 302-303, 134-138 (1999)
19. Hotta T, Yunoki S, Mayr M, et al.  
 A-type antiferromagnetic and C-type orbital-ordered states in LaMnO<sub>3</sub> using cooperative Jahn-Teller phonons  
 PHYS REV B 60: (22) R15009-R15012 DEC 1 1999
18. E. Liarokapis, Th. Leventouri, D. Lampakis, D. Palles, J. J. Neumeier, and D. H. Goodwin  
 Local lattice distortions and Raman spectra in the La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> system  
 PHYS. REV. B 60: (18) 12758-12763 NOV 1 (1999)
17. Allen PB, Perebeinos V  
 Self-trapped exciton and Franck-Condon spectra predicted in LaMnO<sub>3</sub>  
 PHYS REV LETT 83: (23) 4828-4831 DEC 6 1999
16. Fedorov I, Lorenzana J, Dore P, et al.  
 Infrared-active phonons of LaMnO<sub>3</sub> and CaMnO<sub>3</sub>  
 PHYS REV B 60: (17) 11875-11878 NOV 1 1999
15. Granado E, Garcia A, Sanjurjo JA, et al.  
 Magnetic ordering effects in the Raman spectra of La<sub>1-x</sub>Mn<sub>1-x</sub>O<sub>3</sub>  
 PHYS REV B 60: (17) 11879-11882 NOV 1 1999
14. Habermeier HU, Razavi F, Lebedev O, et al.  
 Correlation of microstructure and magnetotransport properties of epitaxially grown La-Ca-Mn-O-3 thin films  
 PHYS STATUS SOLIDI B 215: (1) 679-683 SEP 1999

13. Gupta HC, Ashdhir P  
Zone center phonons of orthorhombic perovskite  $\text{YAlO}_3$   
J SOLID STATE CHEM 146: (2) 287-290 SEP 1999
12. Yamamoto K, Kimura T, Ishikawa T, et al.  
Probing charge/orbital correlation in  $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  by Raman spectroscopy  
J PHYS SOC JPN 68: (8) 2538-2541 AUG 1999
11. de Andres A, Martinez JL, Alonso JM, et al.  
Raman phonons in orthorhombic manganites  
J MAGN MAGN MATER 197: 453-454 MAY 1999
10. Irwin JC, Chrzanowski J, Franck JP  
Oxygen isotope effect on the vibrational modes of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$   
PHYS REV B 59: (14) 9362-9371 APR 1 1999
9. Smirnova IS  
Normal modes of the  $\text{LaMnO}_3$  Pnma phase: comparison with  $\text{La}_2\text{CuO}_4$  Cmca phase  
PHYSICA B 262: (3-4) 247-261 APR 1 1999
8. Roy C, Budhani RC  
Raman, infrared and x-ray diffraction study of phase stability in  $\text{La}_{1-x}\text{Ba}_x\text{MnO}_3$  doped manganites  
J APPL PHYS 85: (6) 3124-3131 MAR 15 1999
7. Gupta HC, Ashdhir P  
Lattice dynamics of orthorhombic perovskite  $\text{YMnO}_3$   
PHYSICA B 262: (1-2) 1-4 FEB 1999
6. Calvani P, De Marzi G, Dore P, et al.  
Infrared absorption from charge density waves in magnetic manganites  
PHYS REV LETT 81: (20) 4504-4507 NOV 16 1998
5. Granado E, Moreno NO, Garcia A, et al.  
Phonon Raman scattering in  $\text{R}_{1-x}\text{A}_x\text{MnO}_{3+\delta}$  ( $\text{R} = \text{La, Pr}$ ;  $\text{A} = \text{Ca, Sr}$ )  
PHYS REV B 58: (17) 11435-11440 NOV 1 1998
4. Salvador PA, Doan TD, Mercey B, et al.  
Stabilization of  $\text{YMnO}_3$  in a perovskite structure as a thin film  
CHEM MATER 10: (10) 2592-2595 OCT 1998
3. De Teresa JM, Dorr K, Muller KH, et al.  
Strong influence of the  $\text{Mn}^{3+}$  content on the binding energy of the lattice polarons in manganese perovskites  
PHYS REV B 58: (10) R5928-R5931 SEP 1 1998
2. Yoon S, Liu HL, Schollerer G, et al.  
Raman and optical spectroscopic studies of small-to-large polaron crossover in the perovskite manganese oxides  
PHYS REV B 58: (5) 2795-2801 AUG 1 1998
1. Podobedov VB, Weber A, Romero DB, et al.  
Effect of structural and magnetic transitions in  $\text{La}_{1-x}\text{M}_x\text{MnO}_3$  ( $\text{M}=\text{Sr, Ca}$ ) single crystals in Raman scattering  
PHYS REV B 58: (1) 43-46 JUL 1 1998
23. *"Raman-active phonons in the quasi-one dimensional conductor  $\text{La}_{8-x}\text{Sr}_x\text{Cu}_8\text{O}_{20-y}$  ( $x = 1.6, 2.0$ ): polarized Raman spectroscopy and lattice dynamical calculations"*  
M. V. Abrashev, C. Thomsen, and V. N. Popov  
J. Phys.: Condens. Matter 10 (1998) 1643 - 1654.
1. Napoletano M, Amores JMG, Magnone E, et al.  
Skeletal infrared spectra and structural properties of  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  and  $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$  cuprate powders in the  $0 \leq x \leq 0.125$  region  
PHYSICA C 319: (3-4) 229-237 JUN 20 1999
24. *"Raman-active phonons in orthorhombic  $\text{YMnO}_3$  and  $\text{LaMnO}_3$ "*  
M. N. Iliev, M. V. Abrashev, H. G. Lee, V. N. Popov, Y. Y. Sun, C. Thomsen, R. L. Meng, and C. W. Chu  
J. Phys. Chem. Solids 59 no. 10 - 12 (1998) 1982 - 1984.
22. Li, Z., Li, J., Wang, Z., (...), Chen, G., Zhao, J.  
Attempts of B-site doped  $\text{LaFeO}_3$  oxygen carriers in high-moisture content biomass chemical looping gasification  
Chemical Engineering Journal 487,150463 (2024)
21. Weng, Z., Liu, L., Hu, Y., (...), Xi, P., Yan, C.-H.  
Significance of Engineering the  $\text{MnO}_6$  Octahedral Units to Promote the Oxygen Reduction Reaction of Perovskite Oxides  
Advanced Materials 36(13),2311102 (2024)

20. Wu, R., Schmitt, S., Maudet, F., (...), Deshpande, V., Dubourdieu, C.  
Electrochemical Metallization Memristive Devices with Al Active Electrode Using Engineered Mixed Hexagonal/Orthorhombic Polycrystalline YMnO<sub>3</sub> Small Structures (2024) (in press) DOI: 10.1002/sstr.202300494
19. Solanki, P., Vala, M., Dhruv, D., Bhatt, S.V., Kataria, B.  
Resistive switching behaviour of novel GdMnO<sub>3</sub>-based heterostructures  
Surfaces and Interfaces 35,102474 (2022)
18. Dorofeeva, N.V., Kharlamova, T.S., La Parola, V., Liotta, L.F., Vodyankina, O.V.  
Dry Reforming of Methane on Ni-Containing La<sub>2</sub>O<sub>3</sub> and La<sub>2</sub>O<sub>3</sub>-Mn<sub>2</sub>O<sub>3</sub> Catalysts: Effect of the Preparation Method  
Doklady Physical Chemistry 505(1), pp. 95-107 (2022)
17. Mero, R.D., Ogawa, K., Yamada, S., Liu, H.-L.  
Optical Studies on the Phase Transitions in YBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
ACS Omega 6(34), pp. 22137-22150 (2021)
16. Physical study of PrCu<sub>1-x</sub>Zn<sub>x</sub>O<sub>3</sub> perovskite for 0.0 ≤ x ≤ 0.3  
Maayoufi, AE (Maayoufi, A. E.)  
Sdiri, N (Sdiri, N.) Valente, MA (Valente, M. A.) Horchani-Naifer, K (Horchani-Naifer, K.) Ferid, M (Ferid, M.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume849 Article Number156239 PublishedDEC 30 2020
15. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films  
Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)  
JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020
14. Bond analysis of novel MnZrTa<sub>2</sub>O<sub>8</sub> microwave dielectric ceramics with monoclinic structure  
Zhang, Y (Zhang, Yun) Ding, SH (Ding, Shihua) Li, C (Li, Chao) Song, TX (Song, Tianxiu) Zhang, YC (Zhang, Yingchun)  
JOURNAL OF MATERIALS SCIENCE Volume55 Issue20 Page8491-8501 PublishedJUL 2020
13. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeiki) Liu, HL (Liu, Hsiang-Lin)  
SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019
12. Boukhachem, A., Ziouche, A., Amor, M.B., Kamoun, O., Zergoug, M., Maghraoui-Meherzi, H., Yumak, A., Boubaker, K., Amlouk, M.  
Physical investigations on perovskite LaMnO<sub>3-δ</sub> sprayed thin films for spintronic applications  
Materials Research Bulletin 74, 202-211 DOI: 10.1016/j.materresbull.2015.10.003 (2016)
11. Roberge, B., Balli, M., Jandl, S., Fournier, P., Palstra, T.T.M., Nugroho, A.A.  
Raman and infrared study of 4f electron-phonon coupling in HoVO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 43 Article Number: 435401 DOI: 10.1088/0953-8984/28/43/435401 Published: NOV 2 2016
10. Roberge, B., Jandl, S., Nugroho, A.A., Palstra, T.T.M., Tung, L.D., Balakrishnan, G.  
Study of phase coexistence in YVO<sub>3</sub> and LaVO<sub>3</sub>  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 46 Issue: 11 Pages: 1157-1160 DOI: 10.1002/jrs.4735 Published: NOV 2015
9. Balli, M.; Roberge, B.; Jandl, S.; et al.  
Observation of large refrigerant capacity in the HoVO<sub>3</sub> vanadate single crystal  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 7 Article Number: 073903 Published: AUG 21 2015
8. Iliescu, I.; Boudard, M.; Chaix-Pluchery, O.; et al.  
Phase transformations and selective growth in YMnO<sub>3</sub> films  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 220 Pages: 245-253 Published: DEC 2014
7. Otero-Lorenzo, Ruth; Weber, Mads C.; Thomas, Pamela A.; et al.  
Interplay of chemical structure and magnetic order coupling at the interface between Cr<sub>2</sub>O<sub>3</sub> and Fe<sub>3</sub>O<sub>4</sub> in hybrid nanocomposites  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 40 Pages: 22337-22342 Published: OCT 28 2014
6. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMnO<sub>3</sub> phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014
5. Li, M.-R., Walker, D., Retuerto, M., Sarkar, T., Hadermann, J., Stephens, P.W., Croft, M., (...), Greenblatt, M.  
Polar and magnetic Mn<sub>2</sub>FeMO<sub>6</sub> (M=Nb, Ta) with LiNbO<sub>3</sub>-type structure: High-pressure synthesis  
Angewandte Chemie - International Edition 52 (32), pp. 8406-8410, 2013
4. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
3. Chopelas, A.  
Single-crystal Raman spectra of YAIO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites

Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.

2. Weisse A, Fehske H

Interplay of charge, spin, orbital and lattice correlations in colossal magnetoresistance manganites  
EUR PHYS J B 30 (4): 487-494 DEC 2002

1. Irwin JC, Chrzanowski J, Franck JP

Oxygen isotope effect on the vibrational modes of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$   
PHYS REV B 59: (14) 9362-9371 APR 1 1999

## 25. "Raman spectroscopy of $\text{YSr}_2\text{Cu}_3\text{O}_{7+y}$ "

H. G. Lee, A. P. Litvinchuk, M. V. Abrashev, M. N. Iliev, S. H. Xu, and C. W. Chu  
J. Phys. Chem. Solids 59 no. 10 - 12 (1998) 1994 - 1996.

6. Sederholm, L., Conradson, S.D., Geballe, T.H., (...), Karppinen, M., Baldinozzi, G.  
Extremely overdoped superconducting cuprates via high pressure oxygenation methods  
Condensed Matter 6(4),50 (2021)

5. Galstyan, E., Xue, Y., Iliev, M., Sun, Y., Chu, C.-W.

Origin of the superconductivity in the Y-Sr-Ru-O and Y-Sr-Cu-O systems  
Physical Review B - Condensed Matter and Materials Physics 76 (1), art. no. 014501 (2007).

4. Su HB, Welch DO, Wong-Ng W

Strain effects on point defects and chain-oxygen order-disorder transition in 123 cuprate compounds  
PHYSICAL REVIEW B 70 (5): Art. No. 054517 AUG 2004

3. Petrykin VV, Osada M, Kakihana M, et al.

Observation of the epitaxial satellite phase in the superconducting  $\text{RuSr}_2\text{Eu}_{1.5}\text{Ce}_{0.5}\text{Cu}_2\text{O}_{10}$  ceramic samples  
CHEM MATER 15 (23): 4417-4423 NOV 18 2003

2. Ying XN, Li BQ, Liu YH, et al.

T-c reduction in Sr-substituted  $\text{Y}(\text{Ba}_{1-x}\text{Sr}_x)_2\text{Cu}_3\text{O}_{7-\delta}$  investigated by Cu-63, Cu-65 nuclear quadrupole resonance  
PHYS REV B 66 (1): Art. No. 012506 JUL 1 2002

1. Ying XN, Li A, Huang YN, et al.

The effect of strain on the low-temperature internal friction of  $\text{Y}(\text{Ba}_{1-x}\text{Sr}_x)_2\text{Cu}_3\text{O}_{7-\delta}$   
J PHYS-CONDENS MAT 13 (43): 9813-9819 OCT 29 2001

## 26. "Raman spectroscopy of $\text{SrRuO}_3$ near the paramagnetic-to-ferromagnetic phase transition"

M. N. Iliev, A. P. Litvinchuk, H.-G. Lee, C. L. Chen, M. L. Dezaneti, C. W. Chu, V. G. Ivanov, M. V. Abrashev, and V. N. Popov  
Phys. Rev. B 59 (1999) 364 - 368.

67. Simón, Z.J.H., López, J.A.L., Luz, Á.D.H.D.L., (...), Sharma, S., Herrera, O.R.

Unveiling the red electroluminescence in LSMO-SRO thin film heterostructures  
Journal of Alloys and Compounds 976,173045 (2024)

66. Jeong, S.G., Oh, J.Y., Hao, L., Liu, J., Choi, W.S.

Correlated Quantum Phenomena of Spin-Orbit Coupled Perovskite Oxide Heterostructures: Cases of  $\text{SrRuO}_3$  and  $\text{SrIrO}_3$  Based Artificial Superlattices  
Advanced Functional Materials 33(38),2301770 (2023)

65. Pal, A., Huang, C.H., Yen, T.W., (...), Chuang, Y.C., Yang, H.D.

Spin-induced strongly correlated magnetodielectricity, magnetostriction effect, and spin-phonon coupling in helical magnet  $\text{Fe}_3(\text{PO}_4)_3\text{O}_8$   
Physical Review B 106(9),094404 (2022)

64. Tyagi, S., Sathe, V.G., Sharma, G., Rawat, R.

Imaging of strain driven magnetic domains and strong spin-phonon coupling in epitaxial thin films of  $\text{SrRuO}_3$   
Applied Surface Science 589,153024 (2022)

63. Li, Y., Zhou, P., Qi, Y., Zhang, T.

All-inorganic flexible high-temperature strain sensor based on  $\text{SrRuO}_3/\text{muscovite}$  heteroepitaxy  
Journal of the American Ceramic Society 105(3), pp. 2038-2045 (2022)

62. Bhorriya, A., Raghav, D.S., Bura, N., (...), Singh, H.K., Dilawar Sharma, N.

Probing phase separation in  $\text{Nd}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $x \approx 0.4, 0.5$ ) polycrystals through temperature dependent magnetic and Raman spectroscopy studies  
Journal of Alloys and Compounds 894,162424 (2022)

61. Jeong, S.G., Kim, J., Seo, A., (...), Han, J.H., Choi, W.S.

Unconventional interlayer exchange coupling via chiral phonons in synthetic magnetic oxide heterostructures  
Science Advances 8(4),eabm4005 (2022)



60. Yousfi, S., El Marssi, M., Bouyanfif, H.  
Structural behaviour of BiFeO<sub>3</sub>/SrRuO<sub>3</sub> superlattices: An X-ray diffraction and Raman spectroscopy investigation  
Superlattices and Microstructures 156,106983 (2021)
59. Li, T., Li, Y., Wang, Y., Zhang, T.  
Preparation and Catalytic Properties of Graphene-Bismuth Ferrite Nanocrystal Nanocomposite  
Wuji Cailiao Xuebao/Journal of Inorganic Materials 36(7), pp. 725-732 (2021)
58. Fermi surface and kink structures in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub> revealed by synchrotron-based ARPES  
Ngabonziza, P (Ngabonziza, Prosper) Carleschi, E (Carleschi, Emanuela) Zabolotnyy, V (Zabolotnyy, Volodymyr) Taleb-Ibrahimi, A (Taleb-Ibrahimi, Amina) Bertran, F (Bertran, Francois) Fittipaldi, R (Fittipaldi, Rosalba) Granata, V (Granata, Veronica) Cuoco, M (Cuoco, Mario) Vecchione, A (Vecchione, Antonio) Doyle, BP (Doyle, Bryan Patrick)  
SCIENTIFIC REPORTS Volume10 Issue1 Article Number21062 PublishedDEC 3 2020
57. Strain healing of spin-orbit coupling:a cause for enhanced magnetic moment in epitaxial SrRuO<sub>3</sub> thin films  
Tyagi, S (Tyagi, Shekhar) Sathe, VG (Sathe, V. G.) Sharma, G (Sharma, Gaurav) Phase, DM (Phase, D. M.) Reddy, VR (Reddy, V. R.)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume32 Issue30 Article Number305501 PublishedJUL 15 2020
56. Spin-phonon coupling in epitaxial SrRuO<sub>3</sub> heterostructures  
Jeong, SG (Jeong, Seung Gyo) Lim, SY (Lim, Soo Yeon) Kim, J (Kim, Jiwoong) Park, S (Park, Sungkyun) Cheong, H (Cheong, Hyeonsik) Choi, WS (Choi, Woo Seok)  
NANOSCALE Volume12 Issue26 Page13926-13932 PublishedJUL 14 2020
55. Spin-phonon coupling and two-magnons scattering behaviors in hexagonal NiAs-type antiferromagnetic MnTe epitaxial films  
Zhang, JY (Zhang, Jiyue) Lian, Q (Lian, Qin) Pan, ZQ (Pan, Zhiqiang) Bai, W (Bai, Wei) Yang, J (Yang, Jing) Zhang, YY (Zhang, Yuanyuan) Tang, XD (Tang, Xiaodong) Chu, JH (Chu, Junhao)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue8 Page1383-1389 PublishedAUG 2020
54. Strain modulated magnetocaloric effect in (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices  
Roshna, SH (Roshna, S. H.) Prellier, WP (Prellier, W.) Padhan, PP (Padhan, P.)  
NANOSCALE Volume12 Issue8 Page5151-5158 PublishedFEB 28 2020
53. Cerium induced Raman spectra of (Ba<sub>0.5</sub>Sr<sub>0.5</sub>)(Fe<sub>1-x</sub>Cx)O<sub>3-δ</sub> (x=0-1)  
Chauhan, S (Chauhan, Santosh) Kar, M (Kar, M.) Kumar, J (Kumar, Jitendra) Jaiswal, SK (Jaiswal, Shivendra Kumar)  
MATERIALS CHEMISTRY AND PHYSICS Volume241 Article Number122378 PublishedFEB 1 2020
52. Spin reorientation functionality in antiferromagnetic TmFe<sub>1-x</sub>InxO<sub>3</sub> polycrystalline samples  
Sharma, P (Sharma, Poorva) Xu, YD (Xu, Yadong) Fan, HQ (Fan, Huiqing) Kumar, A (Kumar, Ashwini) Li, RB (Li, Rubin) Li, Q (Li, Qi) Ren, W (Ren, Wei) Cao, SX (Cao, Shixun)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume789 Page80-89 PublishedJUN 15 2019
51. Opacic, M.; Lazarevic, N.; Tanaskovic, D.; et al.  
Small influence of magnetic ordering on lattice dynamics in TaFe<sub>1.25</sub>Te<sub>3</sub>  
PHYSICAL REVIEW B Volume: 96 Issue: 17 Article Number: 174303 Published: NOV 16 2017
50. Wei, Tzu-Chiao; Wang, Hsin-Ping; Liu, Heng-Jui; et al.  
Photostriction of strontium ruthenate  
NATURE COMMUNICATIONS Volume: 8 Article Number: 15108 Published: APR 24 2017
49. Sarkar, Tanushree; Manna, Kaustuv; Elizabeth, Suja; et al.  
Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in LuMn<sub>0.5</sub>Fe<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 084102 Published: FEB 28 2017
48. Xia, Weiren; Wu, Heng; Xing, Zhibiao; et al.  
Structural and vibrational properties of (Bi<sub>1-x</sub>Lax)FeO<sub>3</sub> and (Bi<sub>1-y</sub>Bay) (Fe<sub>1-y</sub>Tiy)O<sub>3</sub> multiferroic ceramics investigated by Raman scattering  
CERAMICS INTERNATIONAL Volume: 43 Supplement: 1 Pages: S43-S48 Published: 2017
47. Behera, B.C., Padhan, P., Prellier, W.  
Effect of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> crystal structures on magnetization of (111) oriented La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-SrRuO<sub>3</sub> superlattices  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 19 Article Number: 196004 DOI: 10.1088/0953-8984/28/19/196004 Published: MAY 18 2016
46. Yang, H.F., Liu, Z.T., Fan, C.C., Yao, Q., Xiang, P., Zhang, K.L., Li, M.Y., Li, H., Liu, J.S., Shen, D.W., Jiang, M.H.  
Origin of the kink in the band dispersion of the ferromagnetic perovskite SrRuO<sub>3</sub>: Electron-phonon coupling  
PHYSICAL REVIEW B Volume: 93 Issue: 12 Article Number: 121102 DOI: 10.1103/PhysRevB.93.121102 Published: MAR 4 2016
45. Behera, B. C.; Padhan, P.; Prellier, W.  
Influence of substrate in all-ferromagnetic superlattices  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 388 Pages: 22-27 Published: AUG 15 2015
44. Shen, Xuan; Qiu, Xiangbiao; Su, Dong; et al.  
Thickness-dependent metal-insulator transition in epitaxial SrRuO<sub>3</sub> ultrathin films  
JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 1 Article Number: 015307 Published: JAN 7 2015
43. Lyapin, S. G.; Utyuzh, A. N.; Petrova, A. E.; et al.

42. Tripathy, Satya Narayan; Mishra, Karuna Kara; Sen, Shrabane; et al  
Dielectric and Raman Spectroscopic Studies of Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>-BaSnO<sub>3</sub> Ferroelectric System  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (6), pp. 1846-1854 JUN 2014
41. Tsai, C. Y.; Chen, H. R.; Chang, F. C.; et al.  
Anisotropic strain, magnetic properties, and lattice dynamics in self-assembled multiferroic CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> nanostructures  
JOURNAL OF APPLIED PHYSICS 115 (13), Art. No. 134317 APR 7 2014
40. Behera, B. C.; Ravindra, A. V.; Padhan, P.; et al.  
Raman spectra and magnetization of all-ferromagnetic superlattices grown on (110) oriented SrTiO<sub>3</sub>  
APPLIED PHYSICS LETTERS 104 (9), Art. No. 092406 MAR 3 2014
39. Miao, Naihua; Bristowe, Nicholas C.; Xu, Bin; et al.  
First-principles study of the lattice dynamical properties of strontium ruthenate  
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (3), Art. No. 035401 JAN 22 2014
38. Lu, W., He, K., Song, W., Sun, C.-J., Chow, G.M., Chen, J.-S.  
Effect of oxygen vacancies on the electronic structure and transport properties of SrRuO<sub>3</sub> thin films  
Journal of Applied Physics 113 (17), art. no. 17E125, 2013
37. Pandey, P.K., Choudhary, R.J., Mishra, D.K., Sathe, V.G., Phase, D.M.  
Signature of spin-phonon coupling in Sr<sub>2</sub>CoO<sub>4</sub> thin film: A Raman spectroscopic study  
Applied Physics Letters 102 (14), art. no. 142401, 2013
36. Li, T., Shen, J., Li, N., Ye, M.  
One-pot self-catalyzed synthesis and properties of multiferroic BiFeO<sub>3</sub> single-phase crystallites by sucrose-assisted combustion  
Journal of Alloys and Compounds 548, pp. 89-95, 2013
35. Tai, T., Nishide, M., Matsuoka, M., Kamo, T., Funakubo, H., Katoda, T., Shima, H., (...), Yamamoto, T.  
Investigation of sputtering damage in SrRuO<sub>3</sub> films prepared by sputtering with raman and x-ray photoemission spectroscopies  
Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012
34. Koster, G., Klein, L., Siemons, W., Rijnders, G., Dodge, J.S., Eom, C.-B., Blank, D.H.A., Beasley, M.R.  
Structure, physical properties, and applications of SrRuO<sub>3</sub> thin films  
Reviews of Modern Physics 84 (1), pp. 253-298, 2012.
33. Mishra, K.K., Satya, A.T., Bharathi, A., Sivasubramanian, V., Murthy, V.R.K., Arora, A.K.  
Vibrational, magnetic, and dielectric behavior of La-substituted BiFeO<sub>3</sub>-PbTiO<sub>3</sub>  
Journal of Applied Physics 110 (12), art. no. 123529, 2011.
32. Ramachandran, B., Dixit, A., Naik, R., Lawes, G., Ramachandra Rao, M.S.  
Dielectric relaxation near 25 K in multiferroic BiFeO<sub>3</sub> ceramics  
Journal of Applied Physics 110 (10), art. no. 104105, 2011.
31. Chopelas, A.  
Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.
30. Mishra, K.K., Sivasubramanian, V., Sarguna, R.M., Ravindran, T.R., Arora, A.K.  
Raman scattering from La-substituted BiFeO<sub>3</sub>-PbTiO<sub>3</sub>  
JOURNAL OF SOLID STATE CHEMISTRY 184 (9) Pages: 2381-2386, SEP 2011.
29. Anooz, S.B., Schwarzkopf, J., Dirsyte, R., Wagner, G., Fornari, R.  
Effects of post-growth annealing on physical properties of SrRuO<sub>3</sub> thin film grown by MOCVD  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE 207 (11) Pages: 2492-2498, NOV 2010.
28. Liu, Y.-F., Wang, B., Zheng, H.-W., Liu, X.-Y., Gu, Y.-Z., Zhang, W.-F.  
Temperature-dependent raman spectrum of hexagonal YMnO<sub>3</sub> films synthesized by chemical solution method  
Chinese Physics Letters 27 (5), art. no. 056801 (2010).
27. Jang, K.-J., Lim, J., Ahn, J., Kim, J.-H., Yee, K.-J., Ahn, J.S., Cheong, S.-W.  
Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic LuMnO<sub>3</sub>  
New Journal of Physics 12, art. no. 023017 (2010).
26. Rout, D., Moon, K.-S., Suk-Joong L Kang  
Temperature-dependent Raman scattering studies of polycrystalline BiFeO<sub>3</sub> bulk ceramics  
Journal of Raman Spectroscopy 40 (6), pp. 618-626 (2009).
25. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Yoshimura, T., Fujimura, N.  
Spin-phonon coupling in multiferroic YbMnO<sub>3</sub> studied by Raman scattering  
Journal of Physics Condensed Matter 21 (6), art. no. 064218 (2009).
24. Hsu, H.C., Chou, F.C., Koyama, K., Watanabe, K., Liu, H.L.

- Spin-phonon coupling in antiferromagnetic  $\text{Bi}_2\text{Sr}_2\text{CoO}_{6+\delta}$ : An infrared reflectance study  
Physical Review B - Condensed Matter and Materials Physics 79 (15), art. no. 155109 (2009).
23. Singh, M.K., Dussan, S., Sharma, G.L., Katiyar, R.S.  
Raman scattering measurements of phonon anharmonicity in  $\text{CuAlO}_2$  thin films  
Journal of Applied Physics 104 (11), art. no. 113503 (2008).
22. Crandles, D.A., Eftekhari, F., Faust, R., Rao, G.S., Reedyk, M., Razavi, F.S.  
Kramers-Kronig-constrained variational dielectric fitting and the reflectance of a thin film on a substrate  
Applied Optics 47 (23), pp. 4205-4211 (2008).
21. Crandles, D.A., Eftekhari, F., Faust, R., Rao, G.S., Reedyk, M., Razavi, F.S.  
Infrared active phonons in  $\text{SrRuO}_3$  and  $\text{SrRu}_x\text{Mg}_{1-x}\text{O}_3$  thin films  
Journal of Physics D: Applied Physics 41 (13), art. no. 135007 (2008).
20. Herranz, G., Laukhin, V., Sánchez, F., Levy, P., Ferrater, C., García-Cuenca, M.V., Varela, M., Fontcuberta, J.  
Effect of disorder on the temperature dependence of the resistivity of  $\text{SrRuO}_3$   
Physical Review B - Condensed Matter and Materials Physics 77 (16), art. no. 165114 (2008).
19. Mangalam, R.V.K., Pradhan, G.K., Narayana, C., Sundaresan, A.  
Spin state transition in the ferromagnet  $\text{Sr}_{0.9}\text{Ce}_{0.1}\text{CoO}_{2.85}$   
Solid State Communications 146 (3-4), pp. 110-114 (2008).
18. Fukumura, H., Matsui, S., Harima, H., Kisoda, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
Raman scattering studies on multiferroic  $\text{YMnO}_3$   
Journal of Physics Condensed Matter 19 (36), art. no. 365239 (2007)
17. Popa, M., Crespo, D., Calderon-Moreno, J.M., Preda, S., Fruth, V.  
Synthesis and structural characterization of single-phase  $\text{BiFeO}_3$  powders from a polymeric precursor  
Journal of the American Ceramic Society 90 (9), pp. 2723-2727 (2007)
16. Maiti, K., Singh, R.S., Medicherla, V.R.R.  
Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates  
Europhysics Letters 78 (1), art. no. 17002 (2007)
15. Lee, J.-H., Freeman, A.J.  
Spin-induced variations of phonon frequencies in ferromagnetic metals  
Journal of Magnetism and Magnetic Materials 310 (2 SUPPL. PART 2), pp. 1084-1086 (2007)
14. Haumont, R., Kreisel, J., Bouvier, P.  
Raman scattering of the model multiferroic oxide  $\text{BiFeO}_3$ : Effect of temperature, pressure and stress  
Phase Transitions 79 (12), pp. 1043-1064 (2006)
13. Łazewski, J., Piekarczyk, P., Oleś, A.M., Parlinski, K.  
Influence of local electron interactions on phonon spectrum in iron  
Physical Review B - Condensed Matter and Materials Physics 74 (17), art. no. 174304 (2006)
12. Kamal, S., Kim, D.M., Eom, C.B., Dodge, J.S.  
Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal  $\text{CaRuO}_3$   
Physical Review B - Condensed Matter and Materials Physics 74 (16), art. no. 165115 (2006)
11. Lee, J.-H., Hsue, Y.-C., Freeman, A.J.  
Magnetically induced variations in phonon frequencies  
Physical Review B - Condensed Matter and Materials Physics 73 (17), art. no. 172405 (2006)
10. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.  
Phonon anomalies and the ferroelectric phase transition in multiferroic  $\text{BiFeO}_3$   
Physical Review B - Condensed Matter and Materials Physics 73 (13), art. no. 132101, pp. 1-4 (2006)
9. Singh MK, Jang HM, Ryu S, et al.  
Polarized Raman scattering of multiferroic  $\text{BiFeO}_3$  epitaxial films with rhombohedral  $R\bar{3}c$  symmetry  
APPLIED PHYSICS LETTERS 88 (4): Art. No. 042907 JAN 23 2006
8. Herranz G, Sanchez F, Fontcuberta J, et al.  
Domain structure of epitaxial  $\text{SrRuO}_3$  thin films  
PHYSICAL REVIEW B 71 (17): Art. No. 174411 MAY 2005
7. Rykov AI, Nomura K, Sawada T, et al.  
Phonon density of states in  $\text{Sr}_2\text{FeCoO}_6$ - $\delta$  and  $\text{BaSrFeCoO}_6$ - $\delta$ : Effects induced by magnetic order and transport coherence  
PHYS REV B 68 (22): Art. No. 224401 DEC 2003
6. Yu T, Shen ZX, Sun WX, et al.  
Spin-phonon coupling in rod-shaped half-metallic  $\text{CrO}_2$  ultrafine particles: a magnetic Raman scattering study  
J PHYS-CONDENS MAT 15 (12): L213-L217 APR 2 2003

5. Rykov, AI (Rykov, AI); Nomura, K (Nomura, K); Mitsui, T (Mitsui, T); Seto, M (Seto, M)  
Nuclear resonance inelastic scattering of synchrotron radiation in oxides with colossal magnetoresistance  
MATERIAL RESEARCH IN ATOMIC SCALE BY MOSSBAUER SPECTROSCOPY Book Series: NATO SCIENCE SERIES, SERIES  
II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 94 Pages: 239-250 Published: 2003

4. Lee YS, Yu JJ, Lee JS, et al.  
Non-Fermi liquid behavior and scaling of the low-frequency suppression in the optical conductivity spectra of CaRuO<sub>3</sub>  
PHYS REV B 66 (4): Art. No. 041104 JUL 15 2002

3. Cooper SL  
Optical spectroscopic studies of metal-insulator transitions in perovskite-related oxides  
STRUCT BOND 98: 161-219 2001

2. Fainstein A, Etchegoin P, Trodahl HJ, et al.  
Spin-order-dependent Raman scattering in RuSr<sub>2</sub>GdCu<sub>2</sub>O<sub>8</sub>  
PHYS REV B 61: (22) 15468-15473 JUN 1 2000

1. Granado E, Garcia A, Sanjurjo JA, et al.  
Magnetic ordering effects in the Raman spectra of La<sub>1-x</sub>Mn<sub>1-x</sub>O<sub>3</sub>  
PHYS REV B 60: (17) 11879-11882 NOV 1 1999

27. *"Comparative study of optical phonons in the rhombohedrally distorted perovskites LaAlO<sub>3</sub> and LaMnO<sub>3</sub>"*

M. V. Abrashev, A. P. Litvinchuk, M. N. Iliev, R. L. Meng, V. N. Popov, V. G. Ivanov, R. A. Chakalov, and C. Thomsen  
Phys. Rev. B 59 (1999) 4146 - 4153.

276. Mandal, A.K., Sarkar, S., Chandra, M., (...), Phase, D.M., Choudhary, R.J.  
Navigating the magnetic contribution of the commonly used single-crystal substrates SrTiO<sub>3</sub> (100) and LaAlO<sub>3</sub> (100) in weak magnetic thin films  
Journal of Physics D: Applied Physics 57(23),235003 (2024)

275. Zhao, Y., Yang, L., Liu, H., Sun, S., Wei, X.  
Strain-induced modification in thermal properties of monolayer 1 T-ZrS<sub>2</sub> and ZrS<sub>2</sub>/ZrSe<sub>2</sub> heterojunction  
Journal of Molecular Modeling 30(4),95 (2024)

274. Schüller, L., Ross, U., Moshnyaga, V.  
Strain-induced phase transition at the surface of epitaxial La<sub>0.65</sub>Sr<sub>0.35</sub>MnO<sub>3</sub> films  
Surfaces and Interfaces 45,103906 (2024)

273. Bai, Z., Luo, B., Peng, T., Wang, J.  
High-Entropy Perovskite Oxide Photonic Synapses  
Advanced Optical Materials (Article in Press) DOI: 10.1002/adom.202303248 (2024)

272. Srinivasan, P., Sahadevan, J., Sankaran, E.M., (...), Arangarasan, V., Paramasivam, S.  
Investigating the impact of sodium (Na) dopant on the structural, morphological, optical, and magnetic properties of LaPrSrMnO<sub>3</sub> perovskite nanoflakes  
Zeitschrift für Physikalische Chemie (Article in Press) DOI: 10.1515/zpch-2023-0490 (2024)

271. Rizwan, M., Moin, M., Ullah, H.M.N., (...), Mushtaq, U., Mahmood, T.  
Investigations of electronic, elastic, and optical properties of (Ag, Cd)-doped LaAlO<sub>3</sub>: a computational insight  
Canadian Journal of Physics 101(12), pp. 694-701 (2023)

270. Bao, J., Yang, L., Liu, G., Wang, Y., Liu, T.  
Strain induced modification in thermal properties of monolayer 1T-HfS<sub>2</sub> and HfS<sub>2</sub>/HfSe<sub>2</sub> heterojunction  
Chemical Physics 575,112003 (2023)

269. Ma, C.  
(1-x)Mn<sub>1.56</sub>Co<sub>0.96</sub>Ni<sub>0.48</sub>O<sub>4</sub>/xLaMnO<sub>3</sub> (0.1≤x≤0.9): A composite NTC thin film with low resistance, high sensitivity and strong light absorption  
Ceramics International 49(17), pp. 28442-28448 (2023)

268. Waman, P.T., Bhatt, H., Rao, R., (...), Gonal, M.R., Padma, N.  
Influence of substrate-induced strain on exchange bias effect in YSMO/LSMO heterostructures  
Bulletin of Materials Science 46(3),116 (2023)

267. Gluchowski, P., Nikonov, R., Kujawa, D., (...), Zhaludkevich, A., Karpinsky, D.  
Controlling the Magnetic Properties of La<sub>0.9</sub>A<sub>0.1</sub>Mn<sub>0.9</sub>Cr<sub>0.1</sub>O<sub>3</sub> (A: Li, K, Na) Powders and Ceramics by Alkali Ions Doping  
Magnetochemistry 9(6),140 (2023)

266. Rambadey, O.V., Gupta, M., Kumar, A., Sagdeo, P.R.  
Analysis of structural disorder on Raman spectra of semiconductors  
Journal of Applied Physics 133(13),131101 (2023)

265. Amdouni, W., Otoničar, M., Gemeiner, P., (...), Maghraoui-Meherzi, H., Dkhil, B.  
A General Synthetic Route to High-Quality Perovskite Oxide Nanoparticles and Their Enhanced Solar Photocatalytic Activity  
*Angewandte Chemie - International Edition* 62(7),e202215700 (2023)
264. Wang, Y., Liu, C., Duan, H., (...), Sun, H., Yan, W.  
Polaronic Trions Induced by Strong Interfacial Coupling in Monolayer WSe<sub>2</sub>  
*Advanced Electronic Materials* 9(2),2200852 (2023)
263. Yan, Y., Jin, S., Yu, X., (...), Gu, X., Liu, X.  
Utilization of Ag ions to improve room-temperature TCR of La<sub>0.85-x</sub>Sr<sub>0.15</sub>Ag<sub>x</sub>MnO<sub>3</sub> polycrystalline ceramics  
*Ceramics International* 49(1), pp. 669-676 (2023)
262. Li, S., Zhu, Q., Xiahou, J., Li, J.-G.  
Polyhedron engineering by chemical unit co-substitution in LaAlO<sub>3</sub>:0.02Pb<sup>2+</sup> to generate multimode and condition-sensitive luminescence for dynamic anticounterfeiting  
*Chemical Engineering Journal* 450,138440 (2022)
261. Kim, C.W., Pawar, A.U., Hawari, T., (...), Zhuo, Z., Kang, Y.S.  
Defectronics based photoelectrochemical properties of Cu<sup>2+</sup> ion doped hematite thin film  
*Scientific Reports* 12(1),20972 (2022)
260. Li, S., Zhang, C., Zhu, Q., Li, J.-G.  
Cationic pair substitution in LaAlO<sub>3</sub>:Mn<sup>4+</sup> for octahedral-tilting-dependent zero-phonon line  
*Inorganic Chemistry Frontiers* 10(2), pp. 638-650 (2022)
259. Wang, N., Wang, S., Yang, J., Xiao, P., Zhu, J.  
Promotion Effect of Ce Doping on Catalytic Performance of LaMnO<sub>3</sub> for CO Oxidation  
*Catalysts* 12(11),1409 (2022)
258. Sarkar, A., Dalal, B., De, S.K.  
Spectroscopic and magnetic investigations of the dilute magnetically doped semiconductors BaSn<sub>1-x</sub>Mn<sub>x</sub>O<sub>3</sub> (0.02 ≤ x ≤ 0.1)  
*Journal of Physics and Chemistry of Solids* 170,110942 (2022)
257. Devi, V.S., Athika, M., Elumalai, P.  
Vacancy-induced LaMnO<sub>3</sub> Perovskite as Bifunctional Air-breathing Electrode for Rechargeable Lithium-Air Battery  
*ChemistrySelect* 7(33),e202202554 (2022)
256. Jena, R., Chandrakanta, K., Pal, P., (...), Sharma, R.K., Singh, A.K.  
Role of manganite in enhancing dielectric cum magnetic properties of BTFO-LSMO composites  
*Applied Physics A: Materials Science and Processing* 128(9),753 (2022)
255. Gupta, M., Rambadey, O.V., Sagdeo, P.R.  
Probing the effect of R-cation radii on structural, vibrational, optical, and dielectric properties of rare earth (R=La, Pr, Nd) aluminates  
*Ceramics International* 48(16), pp. 23072-23080 (2022)
254. Parravicini, J., Delre, E., Perego, S., (...), Agranat, A.J., Parravicini, G.  
Key role of polar nanoregions in the cubic-to-tetragonal phase transition of potassium-based perovskites  
*Physical Review B* 106(6),064107 (2022)
253. Gattinoni, C., Spaldin, N.A.  
Prediction of a strong polarizing field in thin film paraelectrics  
*Physical Review Research* 4(3),L032020 (2022)
252. Xie, J., Wang, Y., Chen, G., Chen, D.  
Compositional and Morphology Optimization to Boost the Bifunctionality of Perovskite Oxygen Electrocatalysts  
*ACS Applied Energy Materials* 5(6), pp. 7420-7431 (2022)
251. Gupta, M., Rambadey, O.V., Sagdeo, A., Sagdeo, P.R.  
Investigating the structural, vibrational, optical, and dielectric properties in Mg-substituted LaAlO<sub>3</sub>  
*Journal of Materials Science: Materials in Electronics* 33(16), pp. 13352-13366 (2022)
250. Wang, Q., Zhou, H., Ramanathan, S.  
Electron Doping-Induced Metal-Insulator Transition in LaNiO<sub>3</sub> and Memory Devices  
*ACS Applied Electronic Materials* 4(5), pp. 2463-2472 (2022)
249. Tarasova, N., Galisheva, A., Animitsa, I., Korona, D., Davletbaev, K.  
Novel proton-conducting layered perovskite based on BaLaInO<sub>4</sub> with two different cations in B-sublattice: Synthesis, hydration, ionic (O<sup>2-</sup>, H<sup>+</sup>) conductivity  
*International Journal of Hydrogen Energy* 47(44), pp. 18972-18982 (2022)
248. Murauskas, T., Kubilius, V., Talaikis, M., (...), Niaura, G., Plausinaitiene, V.  
Precise composition control and cation nonstoichiometry in La-doped BaSnO<sub>3</sub> thin films grown by MOCVD  
*Journal of Alloys and Compounds* 898,162843 (2022)
247. Lakshmi, R.V., Bera, P., Hiremath, M., (...), Kundu, A.K., Barshilia, H.C.  
Structural, magnetic, and dielectric properties of solution combustion synthesized LaFeO<sub>3</sub>, LaFe<sub>0.9</sub>Mn<sub>0.1</sub>O<sub>3</sub>, and LaMnO<sub>3</sub> perovskites

- Physical Chemistry Chemical Physics 24(9), pp. 5462-5478 (2022)
246. Shen, Q., Zhou, J., Ma, C., (...), Cao, L., Yang, J.  
Development of  $\text{LnMnO}_3+\sigma$  perovskite on low temperature  $\text{Hg}_0$  removal  
Journal of Environmental Sciences (China) 113, pp. 141-151 (2022)
245. Padilla, O., Munera, J., Gallego, J., Santamaria, A.  
Approach to the Characterization of Monolithic Catalysts Based on La Perovskite-like Oxides and Their Application for VOC Oxidation under Simulated Indoor Environment Conditions  
Catalysts 12(2),168 (2022)
244. Kaaret, J.Z., Khalsa, G., Benedek, N.A.  
A strategy to identify materials exhibiting a large nonlinear phononics response: Tuning the ultrafast structural response of  $\text{LaAlO}_3$  with pressure  
Journal of Physics Condensed Matter 34(3),035402 (2022)
243. Nozdrin, V.S., Komandin, G.A., Spektor, I.E., (...), Vishnevskiy, A.S., Vorotilov, K.A.  
Optical characteristics of  $\text{LaNiO}_3$  thin films in the terahertz-infrared frequency range  
Journal of Applied Physics 131(2),025305 (2022)
242. Koshihara, S., Ishikawa, T., Okimoto, Y., (...), Ishihara, S., Luty, T.  
Challenges for developing photo-induced phase transition (PIPT) systems: From classical (incoherent) to quantum (coherent) control of PIPT dynamics  
Physics Reports 942, pp. 1-61 (2022)
241. Rini, E.G., Gupta, M.K., Mittal, R., (...), Al Saeed, M.H., Sen, S.  
Structural change from  $\text{Pbnm}$  to  $\text{R}\bar{3}c$  phase with varying Fe/Mn content in  $(1-x) \text{LaFeO}_3.x\text{LaMnO}_3$  solid solution leading to modifications in octahedral tilt and valence states  
Journal of Alloys and Compounds 883,160761 (2021)
240. Silveira, I.S., Ferreira, N.S., Souza, D.N.  
Structural, morphological and vibrational properties of  $\text{LaAlO}_3$  nanocrystals produced by four different methods  
Ceramics International 47(19), pp. 27748-27758 (2021)
239. Bhadram, V.S., Sen, A., Sunil, J., (...), Sundaresan, A., Narayana, C.  
Pressure-driven evolution of structural distortions in  $\text{RCrO}_3$  perovskites: The curious case of  $\text{LaCrO}_3$   
Solid State Sciences 119,106708 (2021)
238. Jin, S., Zhang, S., Yu, X., (...), Gu, X., Liu, X.  
Impact of K doping on room-temperature temperature coefficient of resistivity of  $\text{La}_{0.7}(\text{Ag}_{0.3-x}\text{K}_x)\text{MnO}_3$  ( $0.160 \leq x \leq 0.180$ ) polycrystalline ceramics  
Ceramics International 47(17), pp. 24721-24731 (2021)
237. Sunidhi, Sharma, V., Arora, S.K., (...), Singh, F., Sathe, V.  
Influence of swift heavy ion irradiations on temperature dependent phononic behavior of epitaxial  $\text{LaNiO}_3$  thin film  
Journal of Applied Physics 130(1),015301 (2021)
236. Li, S., Zhu, Q., Sun, X., Li, J.-G.  
Magical polyhedral twist: Via chemical unit co-substitution in  $\text{LaAlO}_3:\text{Mn}^{4+}$  to greatly enhance the zero phonon line for high-efficiency plant-growth LEDs  
Journal of Materials Chemistry C 9(22), pp. 7163-7173 (2021)
235. Electrochemical and magnetic properties of perovskite type  $\text{RMnO}_3$  ( $\text{R} = \text{La}, \text{Nd}, \text{Sm}, \text{Eu}$ ) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.  
Journal of Alloys and Compounds 872,159727 (2021)
234. Raman spectroscopy of the Al-doping induced structural phase transition in  $\text{LaCrO}_3$  perovskite  
Silva, R.S., Cunha, F., Barrozo, P.  
Solid State Communications 333,114346 (2021)
233. Tuning Jahn-Teller distortion and electron localization of  $\text{LaMnO}_3$  epitaxial films via substrate temperature  
Chen, X (Chen, Xin) Wang, BH (Wang, Baohua) Chen, Y (Chen, Yang) Wei, HM (Wei, Haoming) Cao, BQ (Cao, Bingqiang)  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume54 Issue23 Article Number235302 PublishedJUN 10 2021
232. Electronic interactions between graphene and cobaltite thin film  $\text{La}_{0.7}\text{Sr}_{0.3}\text{CoO}_3$  and its magnetic consequences  
Othmen, Z (Othmen, Zied) Othmen, R (Othmen, Riadh) Daoudi, K (Daoudi, Kais) Boudard, M (Boudard, Michel) Cavanna, A (Cavanna, Antonella) Madouri, A (Madouri, Ali) Gemeiner, P (Gemeiner, Pascale) Lupascu, DC (Lupascu, Doru C.) Oueslati, M (Oueslati, Meherzi) Dkhil, B (Dkhil, Brahim)  
SURFACES AND INTERFACES Volume23 Article Number100919 PublishedAPR 2021
231. Nonlinear phononics  
Cavalleri, A.  
Proceedings of the International School of Physics "Enrico Fermi" 199, pp. 171-186 (2020)
230. Influence Of Transition Metal Doping On The Structural And Transport Properties Of  $\text{LaCoO}_3$  Cobaltite  
Tiwari, S (Tiwari, Shivendra) Saleem, M (Saleem, M.) Bajpai, N (Bajpai, N.) Soni, M (Soni, M.) Mishra, A (Mishra, A.)

229. A Reliable Method for Determining the Oxidation State of Manganese at the Microscale in Mn Oxides via Raman Spectroscopy  
Bernardini, S (Bernardini, Simone) Bellatreccia, F (Bellatreccia, Fabio) Della Ventura, G (Della Ventura, Giancarlo) Sodo, A (Sodo, Armida)  
GEOSTANDARDS AND GEOANALYTICAL RESEARCH Volume45 Issue1 Page223-244 PublishedMAR 2021
228. Phase transition and multiferroic properties of Zr-doped BiFeO<sub>3</sub> thin films  
Ma, ZB (Ma, Zhibiao) Liu, HY (Liu, Huiying) Wang, LX (Wang, Lingxu) Zhang, FQ (Zhang, Fengqing) Zhu, LY (Zhu, Luyi) Fan, SH (Fan, Suhua)  
JOURNAL OF MATERIALS CHEMISTRY C Volume8 Issue48 Page17307-17317 PublishedDEC 28 2020
227. Ultrafast strain engineering and coherent structural dynamics from resonantly driven optical phonons in LaAlO<sub>3</sub>  
Hortensius, JR (Hortensius, J. R.) Afanasiev, D (Afanasiev, D.) Sasani, A (Sasani, A.) Bousquet, E (Bousquet, E.) Caviglia, AD (Caviglia, A. D.)  
NPJ QUANTUM MATERIALS Volume5 Issue1 Article Number95 PublishedDEC 16 2020
226. Non-linear temperature dependent phononic response of epitaxial lanthanum nickelate thin film  
Sunidhi (Sunidhi) Sharma, V (Sharma, Vishal) Arora, SK (Arora, Sunil K.) Sanchez, F (Sanchez, Florencio) Sathe, V (Sathe, Vasant)  
SOLID STATE COMMUNICATIONS Volume321 Article Number114038 PublishedNOV 2020
225. Stability and amphotericity analysis in rhombohedral ABO<sub>3</sub>(3) perovskites  
Behara, S (Behara, Santosh) Thomas, T (Thomas, Tiju)  
MATERIALIA Volume13 Article Number100819 PublishedSEP 2020
224. Structural and transport properties of La<sub>1-x</sub>Sr<sub>x</sub>Co<sub>1-y</sub>Nb<sub>y</sub>O<sub>3</sub> thin films  
Shukla, R (Shukla, Rishabh) Kumar, A (Kumar, Ajay) Dalal, S (Dalal, Sandeep) Pandey, A (Pandey, Akhilesh) Dhaka, RS (Dhaka, R. S.)  
THIN SOLID FILMS Volume709 Article Number138250 PublishedSEP 1 2020
223. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
Tarasova, N (Tarasova, N.) Animitsa, I (Animitsa, I.) Galisheva, A (Galisheva, A.)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue11 Page2290-2297 PublishedNOV 2020
222. Physical investigations on LaMn(1-x)Ni(x)O(3)perovskite sprayed thin films along with surface magnetic applications  
Gharbi, B (Gharbi, B.) Boukhachem, A (Boukhachem, A.) Amlouk, M (Amlouk, M.) Oueslati, M (Oueslati, M.) Dkhil, B (Dkhil, B.) Meftah, A (Meftah, A.)  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume126 Issue8 Article Number604 PublishedJUL 11 2020
221. Photoinduced Persistent Electron Accumulation and Depletion in LaAlO<sub>3</sub>/SrTiO<sub>3</sub> Quantum Wells  
Chen, Y (Chen, Yu) Lechaux, Y (Lechaux, Yoann) Casals, B (Casals, Blai) Guillet, B (Guillet, Bruno) Minj, A (Minj, Albert) Gazquez, J (Gazquez, Jaume) Mechin, L (Mechin, Laurence) Herranz, G (Herranz, Gervasi)  
PHYSICAL REVIEW LETTERS Volume124 Issue24 Article Number246804 PublishedJUN 19 2020
220. Raman and photoluminescence spectral studies in double perovskite epitaxial Nd<sub>2</sub>CoMnO<sub>6</sub> thin films deposited by pulse laser deposition  
Anshul, A (Anshul, Avneesh) Kumar, M (Kumar, Manish) Raj, A (Raj, Abhishek)  
OPTIK Volume212 Article Number164749 PublishedJUN 2020
219. Vibrational properties of LaNiO<sub>3</sub> films in the ultrathin regime  
Schober, A (Schober, Alexander) Fowle, J (Fowle, Jennifer) Guennou, M (Guennou, Mael) Weber, MC (Weber, Mads C.) Zhao, HJ (Zhao, Hongjian) Iniguez, J (Iniguez, Jorge) Gibert, M (Gibert, Marta) Triscone, JM (Triscone, Jean-Marc) Kreisel, J (Kreisel, Jens)  
APL MATERIALS Volume8 Issue6 Article Number061102 PublishedJUN 1 2020
218. Parameterization of dilute Ising model for iron-containing lanthanum gallate and aluminate solid solutions based on first-principles calculations  
Evarestov, RA (Evarestov, Robert A.) Bandura, AV (Bandura, Andrei, V) Sapova, MD (Sapova, Mariia D.) Korolev, DA (Korolev, Dmitry A.) Chezhina, NV (Chezhina, Natalia, V)  
SOLID STATE IONICS Volume348 Article Number115283 PublishedMAY 2020
217. Particle dispersion and lattice distortion induced magnetic behavior of La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> perovskite nanoparticles grown by salt-assisted solid-state synthesis  
Ortiz-Quinonez, JL (Ortiz-Quinonez, Jose-Luis) Garcia-Gonzalez, L (Garcia-Gonzalez, Lorena) Cancino-Gordillo, FE (Enrique Cancino-Gordillo, Francisco) Pal, U (Pal, Umapada)  
MATERIALS CHEMISTRY AND PHYSICS Volume246 Article Number122834 PublishedMAY 1 2020
216. PI-MOCVD technology of (La, Sr)(Mn, Co)O-3: From epitaxial to nanostructured films  
Vagner, M (Vagner, Milita) Plausinaitiene, V (Plausinaitiene, Valentina) Lukose, R (Lukose, Rasuole) Kersulis, S (Kersulis, Skirmantas) Talaikis, M (Talaikis, Martynas) Knasiene, B (Knasiene, Birute) Stanionyte, S (Stanionyte, Sandra) Kubilius, V (Kubilius, Virgaudas) Motiejutis, K (Motiejutis, Karolis) Saltyte, Z (Saltyte, Zita)  
SURFACE & COATINGS TECHNOLOGY Volume385 Article Number125287 PublishedMAR 15 2020
215. Lattice structure and microwave dielectric properties of La[Al<sub>1-x</sub>(Mg<sub>0.5</sub>Ti<sub>0.5</sub>)<sub>x</sub>]O-3 (x=0-0.2)-based ceramics  
Fan, J (Fan, Jun) Zhao, Q (Zhao, Qing) Du, K (Du, Kang) Wang, F (Wang, Fei) Wang, XH (Wang, Xiao-Hong) Lu, WZ (Lu, Wen-Zhong) Lei, W (Lei, Wen)  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume103 Issue5 Page3231-3237 PublishedMAY 2020

214. Optical and magnetic properties of  $Gd_{1-x}Sr_xCrO_3$  ( $0 \leq x \leq 0.15$ )  
Sarkar, A (Sarkar, Ankita) Dalal, B (Dalal, Biswajit) De, SK (De, Subodh Kumar)  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume31 Issue50 Article Number505801 PublishedDEC 18 2019
213. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019
212. Potential of Raman spectroscopy towards understanding structures of carbon-based materials and perovskites  
Selvarajan, P (Selvarajan, Premkumar) Chandra, G (Chandra, Goutam) Bhattacharya, S (Bhattacharya, Susmita) Sil, S (Sil, Sanchita)  
Vinu, A (Vinu, Ajayan) Umapathy, S (Umapathy, Siva)  
EMERGENT MATERIALS Volume2 Issue4 Page417-439 PublishedDEC 2019
211. Short wavelength emission properties of  $Tm^{3+}$  and  $Tm^{3+} + Yb^{3+}$  doped  $LaAlO_3$  nanocrystals and polymer composites  
Jusza, A (Jusza, Anna) Lipinska, L (Lipinska, Ludwika) Baran, M (Baran, Magdalena) Polis, P (Polis, Pawel) Olszyna, A (Olszyna, Andrzej) Piramidowicz, R (Piramidowicz, Ryszard)  
OPTICAL MATERIALS Volume97 Article Number109365 PublishedNOV 2019
210. Influence of Induced Electrical Polarization on the Magnetoresistance and Magnetoimpedance in the Spin-Disordered  $Tm_xMn_{1-x}S$  Solid Solution  
Aplesnin, SS (Aplesnin, Sergey S.) Sitnikov, MN (Sitnikov, Maksim N.) Kharkov, AM (Kharkov, Anton M.) Masyugin, AN (Masyugin, Albert N.) Kretinin, VV (Kretinin, Vasily V.) Fisenko, OB (Fisenko, Olga B.) Gorev, MV (Gorev, Mikhail V.)  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume256 Issue10 Article Number1900043 PublishedOCT 2019
209. Self-doped  $La_{1-x}MnO_3+\delta$  perovskites: Electron state hybridization and Raman modes  
Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)  
SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019
208. Temperature sensitive properties of  $Eu^{2+}/Eu^{3+}$ -dual-emitting  $LaAlO_3$  phosphors  
Chen, BW (Chen, Bowen) Li, CX (Li, Chenxia) Deng, DG (Deng, Degang) Ruan, FP (Ruan, Fengping) Wu, M (Wu, Ming) Wang, L (Wang, Le) Zhu, YT (Zhu, Yanting) Xu, SQ (Xu, Shiqing)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page702-712 PublishedJUL 5 2019
207. Local Structure Modulation Induced Highly Efficient Far-Red Luminescence of  $La_{1-x}Lu_xAlO_3:Mn^{4+}$  for Plant Cultivation  
Chen, JQ (Chen, Jinquan) Yang, CH (Yang, Conghua) Chen, YB (Chen, Yibo) He, J (He, Jin) Liu, ZQ (Liu, Zhao-Qing) Wang, J (Wang, Jing) Zhang, JL (Zhang, Jilin)  
INORGANIC CHEMISTRY Volume58 Issue13 Page8379-8387 PublishedJUL 1 2019
206. Microscopic Mechanisms of Local Interfacial Resistive Switching in  $LaMnO_3+\delta$   
Meunier, B (Meunier, Benjamin) Pla, D (Pla, Dolores) Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Boudard, M (Boudard, Michel) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Martinez, E (Martinez, Eugenie) Chevalier, N (Chevalier, Nicolas) Jimenez, C (Jimenez, Carmen) Burriel, M (Burriel, Monica) Renault, O (Renault, Olivier)  
ACS APPLIED ELECTRONIC MATERIALS Volume1 Issue5 Page675-683 PublishedMAY 2019
205. Controlling the Electronic, Structural, and Optical Properties of Novel  $MgTiO_3/LaNiO_3$  Nanostructured Films for Enhanced Optoelectronic Devices  
Mazzo, TM (Mazzo, T. M.) Macario, LR (Macario, L. R.) Gorup, LF (Gorup, L. F.) Bouquet, V (Bouquet, V) Deputier, S (Deputier, S.) Ollivier, S (Ollivier, S.) Guilloux-Viry, M (Guilloux-Viry, M.) Albuquerque, AR (Albuquerque, A. R.) Sambrano, JR (Sambrano, J. R.) La Porta, FA (La Porta, F. A.)  
ACS APPLIED NANO MATERIALS Volume2 Issue5 Page2612-2620 PublishedMAY 2019
204. Rare Earth  $Sm^{3+}$  Doped  $LaCoO_3$  Cobaltite: Synthesis and Characterizations  
Tiwari, S (Tiwari, S.) Saleem, M (Saleem, M.) Mishra, A (Mishra, A.) Varshney, M (Varshney, M.) Varshney, D (Varshney, D.)  
AIP Conference Proceedings Volume2100 Article Number020172 Published2019
203. Temperature Dependent Raman Spectroscopic Study of the Fe Doped  $La_{0.67}Sr_{0.33}MnO_3$  Prepared Using Ball Milling Method  
Astik, N (Astik, Nidhi) Jha, PK (Jha, Prafulla K.) Sathe, V (Sathe, Vasant)  
PHYSICS OF THE SOLID STATE Volume61 Issue4 Page618-626 PublishedAPR 2019
202. Monovalent doping effects on the structural, magnetic and magnetotransport properties of  $La_{0.833}R_{0.167}MnO_3$  ( $R = Li^+, Na^+, Ag^+, K^+$ )  
Joseph, S (Joseph, Smitha) Saban, KV (Saban, K., V)  
CERAMICS INTERNATIONAL Volume45 Issue5 Page6425-6439PublishedAPR 1 2019
201. Accelerated Ionic Motion in Amorphous Memristor Oxides for Nonvolatile Memories and Neuromorphic Computing  
Schmitt, R (Schmitt, Rafael) Kubicek, M (Kubicek, Markus) Sediva, E (Sediva, Eva) Trassin, M (Trassin, Morgan) Weber, MC (Weber, Mads C.) Rossi, A (Rossi, Antonella) Hutter, H (Hutter, Herbert) Kreisel, J (Kreisel, Jens) Fiebig, M (Fiebig, Manfred) Rupp, JLM (Rupp, Jennifer L. M.)  
ADVANCED FUNCTIONAL MATERIALS Volume29 Issue5 Article Number1804782 PublishedFEB 1 2019
200. Infrared reflectivity analysis of  $Y^{3+}$  substituted  $LaMnO_3$   
Ahmad, J., Abbas, H., Bukhari, S.H., (...), Khan, J.A., Ali, S.A.  
Journal of Ovonic Research 14(6), pp. 429-439 (2018)



199. Thin film nano-photocatalysts with low band gap energy for gas phase degradation of p-xylene: TiO<sub>2</sub> doped Cr, UiO66-NH<sub>2</sub> and LaBO<sub>3</sub> (B = Fe, Mn, and Co)  
Luu, C.L., Van Nguyen, T.T., Nguyen, T., (...), Hoang, T.C., Ha, C.A.  
Advances in Natural Sciences: Nanoscience and Nanotechnology 9(1),015003 (2018)
198. RE<sub>3+</sub>:LaAlO<sub>3</sub> doped luminescent polymer composites  
Piramidowicz, R (Piramidowicz, Ryszard) Jusza, A (Jusza, Anna) Lipinska, L (Lipinska, Ludwika) Gil, M (Gil, Malgorzata) Mergo, P (Mergo, Pawel)  
OPTICAL MATERIALS Volume87 Page35-41 PublishedJAN 2019
197. 1.2 μm persistent luminescence of Ho<sup>3+</sup> in LaAlO<sub>3</sub> and LaGaO<sub>3</sub> perovskites  
Xu, J (Xu, Jian) Murata, D (Murata, Daisuke) So, B (So, Byoungjin) Asami, K (Asami, Kazuki) Ueda, J (Ueda, Jumpei) Heo, J (Heo, Jong) Tanabe, S (Tanabe, Setsuhisa)  
JOURNAL OF MATERIALS CHEMISTRY C Volume6 Issue42 Page11374-11383 PublishedNOV 14 2018
196. Synthesis and Characterization of the Aurivillius Phase CoBi<sub>2</sub>O<sub>2</sub>F<sub>4</sub>  
Vagourdi, EM (Vagourdi, Eleni Mitoudi) Mullner, S (Muellner, Silvia) Lemmens, P (Lemmens, Peter) Kremer, RK (Kremer, Reinhard K.) Johnsson, M (Johnsson, Mats)  
INORGANIC CHEMISTRY Volume57 Issue15 Page9115-9121 PublishedAUG 6 2018
195. Synthesis and optical properties of La<sub>1-x</sub>Ce<sub>x</sub>MnO<sub>3</sub> studied by infrared reflectivity measurements  
Ahmad, J (Ahmad, Javed) Ahmad, U (Ahmad, Uzaira) Bukhari, SH (Bukhari, Syed Hamad)  
CHINESE JOURNAL OF PHYSICS Volume56 Issue4 Page1439-1448 PublishedAUG 2018
194. An insight into the effects of transition metals on the thermal expansion of complex perovskite compounds: an experimental and density functional theory investigation  
Wang, X (Wang, Xiao) Han, Y (Han, Ye) Song, XJ (Song, Xiaojie) Liu, WH (Liu, Weihui) Jin, YX (Jin, Yinxi) Liu, WT (Liu, Wentao) Cui, HZ (Cui, Hongzhi)  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume20 Issue26 Page17781-17789 PublishedJUL 14 2018
193. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiayi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
NANO ENERGY Volume47 Page474-480 PublishedMAY 2018
192. Correlated oxygen displacements and phonon mode changes in LaCoO<sub>3</sub> single crystal  
Sikolenko, VV (Sikolenko, V. V.) Molodtsov, SL (Molodtsov, S. L.) Izquierdo, M (Izquierdo, M.) Troyanchuk, IO (Troyanchuk, I. O.) Karpinsky, D (Karpinsky, D.) Tiutiunnikov, SI (Tiutiunnikov, S. I.) Efimova, E (Efimova, E.) Prabhakaran, D (Prabhakaran, D.) Novoselov, D (Novoselov, D.) Efimov, V (Efimov, V.)  
PHYSICA B-CONDENSED MATTER Volume536 Page597-599 PublishedMAY 1 2018
191. Defect and Optical Properties of Sb doped and hydrogenated BaSnO<sub>3</sub>  
Sarkar, A (Sarkar, Ankita) De, SK (De, S. K.)  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY Volume33 Issue3 Article Number035018 PublishedMAR 2018
190. Evolution of bulk and surface structures in stoichiometric LaAlO<sub>3</sub> mixed oxide prepared by using starch as template  
Stathopoulos, VN (Stathopoulos, Vassilis N.) Kuznetsova, T (Kuznetsova, Tatyana) Lapina, O (Lapina, Olga) Khabibulin, D (Khabibulin, Dzhali) Pandis, PK (Pandis, Pavlos K.) Krieger, T (Krieger, Tamara) Chesalov, Y (Chesalov, Yuri) Gulyalev, R (Gulyalev, Roman) Krivensov, V (Krivensov, Vladimir) Larina, T (Larina, Tatyana)  
MATERIALS CHEMISTRY AND PHYSICS Volume207 Page423-434 PublishedMAR 1 2018
189. Anomalous magnetic and spin glass behavior in Nb-substituted LaCo<sub>1-x</sub>Nb<sub>x</sub>O<sub>3</sub>  
Shukla, R (Shukla, Rishabh) Dhaka, RS (Dhaka, R. S.)  
PHYSICAL REVIEW B Volume97 Issue2 Article Number024430 PublishedJAN 26 2018
188. Enhanced degradation of organic pollutants over Cu-doped LaAlO<sub>3</sub> perovskite through heterogeneous Fenton-like reactions  
Wang, HH (Wang, Huihui) Zhang, LL (Zhang, Lili) Hu, C (Hu, Chun) Wang, XK (Wang, Xiangke) Lyu, L (Lyu, Lai) Sheng, GD (Sheng, Guodong)  
CHEMICAL ENGINEERING JOURNAL Volume332 Page572-581 PublishedJAN 15 2018
187. Structural, thermal, and transport properties of La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> nanoparticles synthesized via the sol-gel auto-combustion technique  
Saleem, M (Saleem, M.) Varshney, D (Varshney, Dinesh)  
RSC ADVANCES Volume8 Issue3 Page1600-1609 Published2018
186. Wang, Huihui; Zhang, Lili; Hu, Chun; et al.  
Enhanced degradation of organic pollutants over Cu-doped LaAlO<sub>3</sub> perovskite through heterogeneous Fenton-like reactions  
CHEMICAL ENGINEERING JOURNAL Volume: 332 Pages: 572-581 Published: JAN 15 2018
185. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saoussen; et al.  
Effects of Mn<sub>3</sub>O<sub>4</sub> precipitates on the vibrational properties of epitaxial Ca-doped LaMnO<sub>3</sub> films  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017
184. Rodrigues, J. E.; Bezerra, D. M.; Costa, R. C.; et al.  
Raman signatures of monoclinic distortion in (Ba<sub>1-x</sub>Sr<sub>x</sub>)<sub>3</sub>CaNb<sub>2</sub>O<sub>9</sub> complex perovskites  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 9 Pages: 1243-1249 Published: SEP 2017

183. Antunes, Isabel; Amador, Ulises; Alves, Adriana; et al.  
Structure and Electrical -Transport Relations in Ba(Zr,Pr)O<sub>3</sub>-delta Perovskites  
INORGANIC CHEMISTRY Volume: 56 Issue: 15 Pages: 9120-9131 Published: AUG 7 2017
182. Kubicek, Markus; Bork, Alexander H.; Rupp, Jennifer L. M.  
Perovskite oxides - a review on a versatile material class for solar-to-fuel conversion processes  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 5 Issue: 24 Pages: 11983-12000 Published: JUN 28 2017
181. Ebeoglugil, M. Faruk  
Production and characterization of LaMnO<sub>3</sub> thin films prepared by Sol-Gel technique  
REVISTA DE METALURGIA Volume: 53 Issue: 2 Article Number: e091 Published: APR-JUN 2017
180. Aman, Amjad; Jordan, Ryan; Chen, Yan; et al.  
Non-congruence of high-temperature mechanical and structural behaviors of LaCoO<sub>3</sub> based perovskites  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 37 Issue: 4 Pages: 1563-1576 Published: APR 2017
179. Cannuccia, Elena; Vinh Ta Phuoc; Briere, Benjamin; et al.  
Combined First-Principles Calculations and Experimental Study of the Phonon Modes in the Multiferroic Compound GeV<sub>4</sub>S<sub>8</sub>  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 121 Issue: 6 Pages: 3522-3529 Published: FEB 16 2017
178. Liu, Y.; Crespillo, M. L.; Huang, Q.; et al.  
Lattice damage assessment and optical waveguide properties in LaAlO<sub>3</sub> single crystal irradiated with swift Si ions  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 5 Article Number: 055303 Published: FEB 8 2017
177. Singh, D.; Kaur, J.; Suryanarayana, N. S.; et al.  
Synthesis and luminescent behavior of UV induced Dy<sup>3+</sup> activated LaAlO<sub>3</sub>  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 3 Pages: 2462-2470 Published: FEB 2017
176. Liu, Y.; Huang, Q.; Crespillo, M. L.; et al.  
Ion beam damage assessment and waveguide formation induced by energetic Si-ion irradiation in lanthanum aluminate crystal  
OPTICAL MATERIALS Volume: 64 Pages: 391-400 Published: FEB 2017
175. Behrendt, Miroslaw; Mahlik, Sebastian; Grinberg, Marek; et  
Influence of charge transfer state on Eu<sup>3+</sup> luminescence in LaAlO<sub>3</sub>, by high pressure spectroscopy  
OPTICAL MATERIALS Volume: 63 Special Issue: SI Pages: 158-166 Published: JAN 2017
174. Rodrigues, J. E. F. S.; Castro, P. J.; Pizani, P. S.; et al.  
Structural ordering and dielectric properties of Ba<sub>3</sub>CaNb<sub>2</sub>O<sub>9</sub>-based microwave ceramics  
CERAMICS INTERNATIONAL Volume: 42 Issue: 16 Pages: 18087-18093 Published: DEC 2016
173. Saha, S., Cao, B.-C., Motapothula, M., Cong, C.-X., Sarkar, T., Srivastava, A., Sarkar, S., Patra, A., Ghosh, S., Ariando, Coey, J.M.D., Yu, T., Venkatesan, T.  
Magnetic Modes in Rare Earth Perovskites: A Magnetic-Field-Dependent Inelastic Light Scattering study  
Scientific Reports 6, 36859 DOI: 10.1038/srep36859 (2016)
172. Araki, W (Araki, Wakako); Takeda, K (Takeda, Kazutaka); Arai, Y (Arai, Yoshio)  
Mechanical behaviour of ferroelastic lanthanum metal oxides LaMO<sub>3</sub> (M = Co, Al, Ga, Fe)  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 36 Issue: 16 Pages: 4089-4094 DOI:  
10.1016/j.jeurceramsoc.2016.07.006 Published: DEC 2016
171. Nicoletti, D., Cavalleri, A.  
Nonlinear light-matter interaction at terahertz frequencies  
ADVANCES IN OPTICS AND PHOTONICS Volume: 8 Issue: 3 Pages: 401-464 DOI: 10.1364/AOP.8.000401 Published: SEP 30 2016
170. Nunley, T.N., Willett-Gies, T.I., Cooke, J.A., Manciu, F.S., Marsik, P., Bernhard, C., Zollner, S.  
Optical constants, band gap, and infrared-active phonons of (LaAlO<sub>3</sub>)(0.3)(Sr<sub>2</sub>AlTaO<sub>6</sub>)(0.35) (LSAT) from spectroscopic ellipsometry  
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A Volume: 34 Issue: 5 Article Number: 051507 DOI: 10.1116/1.4960356  
Published: SEP 2016
169. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016
168. Othmen, Z., Copie, O., Daoudi, K., Boudard, M., Gemeiner, P., Oueslati, M., Dkhil, B.  
Spin transitions in La<sub>0.7</sub>Ba<sub>0.3</sub>CoO<sub>3</sub> thin films revealed by combining Raman spectroscopy and X-ray diffraction  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 1 Article Number: 015308 DOI: 10.1063/1.4955220 Published: JUL 7 2016
167. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
Published: JUL 2016
166. Mankowsky, R., Först, M., Cavalleri, A.  
Non-equilibrium control of complex solids by nonlinear phononics

165. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)  
Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of  $\text{La}_{0.85}\text{Te}_{0.15}\text{MnO}_3$  deposited on  $\text{LaAlO}_3$   
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15 2016
164. Hu, W., Catalano, S., Gibert, M., Triscone, J.-M., Cavalleri, A.  
Broadband terahertz spectroscopy of the insulator-metal transition driven by coherent lattice deformation at the  $\text{SmNiO}_3/\text{LaAlO}_3$  interface  
PHYSICAL REVIEW B Volume: 93 Issue: 16 Article Number: 161107 DOI: 10.1103/PhysRevB.93.161107 Published: APR 12 2016
163. Fredrickson, K.D., Lin, C., Zollner, S., Demkov, A.A.  
Theoretical study of negative optical mode splitting in  $\text{LaAlO}_3$   
PHYSICAL REVIEW B Volume: 93 Issue: 13 Article Number: 134301 DOI: 10.1103/PhysRevB.93.134301 Published: APR 1 2016
162. Das, P.T., Singh, R., Das, A., Nath, T.K.  
Structural, magnetic, and physical properties of  $\text{La}_{1-x}\text{MnO}_3$   $\pm$   $\delta$  nano-manganite  
PHILOSOPHICAL MAGAZINE Volume: 96 Issue: 3 Pages: 286-300 DOI: 10.1080/14786435.2015.1131344 Published: JAN 22 2016
161. Varshney, D., Choudhary, D., Varshney, M., Singh, N.  
Thermal conductivity of ferromagnetic metallic  $\text{La}_{0.95}\text{Ag}_{0.05}\text{MnO}_3$  manganites: role of carrier, spin waves and lattice-impurity scattering  
MOLECULAR SIMULATION Volume: 42 Issue: 2 Pages: 110-121 DOI: 10.1080/08927022.2015.1012643 Published: JAN 22 2016
160. Tepech-Carrillo, L., Escobedo-Morales, A., Pérez-Centeno, A., Chigo-Anota, E., Sánchez-Ramírez, J.F., López-Apreza, E., Gutiérrez-Gutiérrez, J.  
Preparation of Nanosized  $\text{LaCoO}_3$  through Calcination of a Hydrothermally Synthesized Precursor  
JOURNAL OF NANOMATERIALS Article Number: 6917950 DOI: 10.1155/2016/6917950 Published: 2016
159. Sakhya, A.P., Dutta, A., Sinha, T.P.  
Dielectric Relaxation, Modulus Behaviour and Conduction Mechanism in  $\text{NdAlO}_3$  Ceramics  
JOURNAL OF ELECTRONIC MATERIALS Volume: 44 Issue: 10 Pages: 3801-3810 DOI: 10.1007/s11664-015-3820-7 Published: OCT 2015
158. Shelke, A.R., Deshpande, N.G.  
Influence of the Calcination Temperature on the Combustion Synthesized Perovskite  $\text{LaMnO}_3$  Compound  
JOURNAL OF NANO- AND ELECTRONIC PHYSICS Volume: 7 Issue: 3 Article Number: 03009 Published: 2015
157. Abdel-Latif, I. A.; Ismail, Adel A.; Bouzid, Houcine; et al.  
Synthesis of novel perovskite crystal structure phase of strontium doped rare earth manganites using sol gel method  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 393 Pages: 233-238 Published: NOV 1 2015
156. Xu, Peng; Huffman, T. J.; Branagan, N. C.; et al.  
Novel aspects of charge and lattice dynamics in the hole-doped manganite  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$   
PHILOSOPHICAL MAGAZINE Volume: 95 Issue: 19 Pages: 2078-2091 Published: JUL 3 2015
155. Euler, C.; Holuj, P.; Talkenberger, A.; et al.  
Magnetic field dependent thermal conductance in  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$   
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015
154. Islam, Mohammad A.; Xie, Yujun; Scafetta, Mark D.; et al.  
Raman scattering in  $\text{La}_{1-x}\text{Sr}_x\text{FeO}_{3-\delta}$  thin films: annealing-induced reduction and phase transformation  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 27 Issue: 15 Article Number: 155401 Published: APR 22 2015
153. Arenas, D. J.; Middleton, Carl; Kemper, A. F.  
First-principles study of the phonon modes in bismuth sillenites  
PHYSICAL REVIEW B Volume: 91 Issue: 14 Article Number: 144103 Published: APR 9 2015
152. Bachar, N.; Bechor, Y.; Gorshunov, B.; et al.  
Observation of a Bulk Nodal-Gap in Overdoped  $\text{Y}_{0.9}\text{Ca}_{0.1}\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  Thin Films  
JOURNAL OF LOW TEMPERATURE PHYSICS Volume: 179 Issue: 1-2 Pages: 108-112 Published: APR 2015
151. Varshney, Dinesh; Choudhary, Dinesh; Khan, Elias  
Electrical transport in the ferromagnetic state of silver substituted manganites  $\text{La}_{1-x}\text{Ag}_x\text{MnO}_3$  ( $x=0.05$  and  $0.1$ )  
JOURNAL OF MATERIALS RESEARCH Volume: 30 Issue: 5 Pages: 654-665 Published: MAR 14 2015
150. Foerst, M.; Mankowsky, R.; Cavalleri, A.  
Mode-Selective Control of the Crystal Lattice  
ACCOUNTS OF CHEMICAL RESEARCH Volume: 48 Issue: 2 Pages: 380-387 Published: FEB 2015
149. Doig, K. I.; Peters, J. J. P.; Nawaz, S.; et al.  
Structural, optical and vibrational properties of self-assembled  $\text{Pb}_{n+1}(\text{Ti}_{1-x}\text{Fex})_n\text{O}_{3n+1-\delta}$  Ruddlesden-Popper superstructures  
SCIENTIFIC REPORTS Volume: 5 Article Number: 7719 Published: JAN 16 2015
148. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.

- Thickness-dependent phase boundary in Sm-doped BiFeO<sub>3</sub> piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates  
 PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015
147. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.  
 Phase transition and piezoelectricity of sol-gel-processed Sm-doped BiFeO<sub>3</sub> thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 2115-2122 Published: 2015
146. Medina, J.Z., Martínez, G.T., Esparza, B.E., Hernández, A.M., Saldaña, J.M.  
 Processing and microstructural characterization of sintered lanthanum aluminate obtained by two different routes  
 Ceramic Transactions 249, 105-113 (2014)
145. Sultan, K., Habib, Z., Jan, A., Ahmad Mir, S., Ikram, M., Asokan, K.  
 Temperature dependent Raman spectroscopy of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x = 0.0, and 0.3)  
 Advanced Materials Letters 5(1), 9-13 DOI: 10.5185/amlett.2013.6496 (2014)
144. Willett-Gies, Travis; DeLong, Eric; Zollner, Stefan  
 Vibrational properties of bulk LaAlO<sub>3</sub> from Fourier-transform infrared ellipsometry  
 THIN SOLID FILMS Volume: 571 Pages: 620-624 Part: 3 Published: NOV 28 2014
143. Qiao, Mei; Wang, Tie-Jun; Yu, Xiao-Fei; et al.  
 Comparison of waveguide properties and Raman spectroscopic visualization of C and O ion implantation on LaAlO<sub>3</sub> crystals  
 APPLIED OPTICS Volume: 53 Issue: 32 Pages: 7619-7623 Published: NOV 10 2014
142. Wang, Q.; Duan, P.; Wang, J. Y.; et al.  
 Effects of different sintering temperatures on microstructural, transport, and magnetic properties of La<sub>0.93</sub>Sb<sub>0.07</sub>MnO<sub>3</sub> compound  
 INTERNATIONAL JOURNAL OF MODERN PHYSICS B 28 (24), Art. No. 1450166 SEP 30 2014
141. Marcondes, S. P.; Figueiredo Soares Rodrigues, Joao Elias; Andreetab, M. Rubens Barsi; et al.  
 Resonance Raman spectroscopy of NdAlO<sub>3</sub> single-crystal fibers grown by the laser-heated pedestal growth technique  
 VIBRATIONAL SPECTROSCOPY 73, 144-149 JUL 2014
140. Othmen, Z.; Schulman, A.; Daoudi, K.; et al.  
 Structural, electrical and magnetic properties of epitaxial La<sub>0.7</sub>Sr<sub>0.3</sub>CoO<sub>3</sub> thin films grown on SrTiO<sub>3</sub> and LaAlO<sub>3</sub> substrates  
 APPLIED SURFACE SCIENCE 306, pp. 60-65 JUL 1 2014
139. Elkhouni, T.; Amami, M.; Colin, C. V.; et al.  
 The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr<sub>1-x</sub>MxO<sub>2</sub> (M=Mn and Rh) compounds  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014
138. Lloyd-Hughes, J.; Jones, S. P. P.; Castro-Camus, E.; et al.  
 Modifying the polarization state of terahertz radiation using anisotropic twin-domains in LaAlO<sub>3</sub>  
 OPTICS LETTERS 39 (5), pp. 1121-1124 MAR 1 2014
137. Lemanski, K.; Deren, P. J.  
 Luminescent properties of LaAlO<sub>3</sub> nanocrystals, doped with Pr<sup>3+</sup> and Yb<sup>3+</sup> ions  
 JOURNAL OF LUMINESCENCE 146, 239-242 FEB 2014
136. Bachar, N.; Farber, E.; Zhukova, E.; et al.  
 Direct evidence of a bulk nodal gap in the overdoped regime of Y<sub>0.9</sub>Ca<sub>0.1</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> thin films from THz spectroscopy  
 EPL 104 (6), Art. No. 67006 DEC 2013
135. Fu, Jianhui; Zhao, Jianxiong; Sa, Tongliang; et al.  
 Photoluminescent and dielectric properties of Eu<sup>3+</sup>-doped LaAlO<sub>3</sub> thin films fabricated by chemical solution deposition method  
 APPLIED SURFACE SCIENCE 286, pp. 1-6 DEC 1 2013
134. Di Castro, D.; Caramazza, S.; Innocenti, D.; et al.  
 Raman spectroscopy study of the interface structure in (CaCuO<sub>2</sub>)<sub>n</sub>/(SrTiO<sub>3</sub>)<sub>m</sub> superlattices  
 APPLIED PHYSICS LETTERS 103 (19), Art. No. 191903 NOV 4 2013
133. Först, M., Mankowsky, R., Bromberger, H., Fritz, D.M., Lemke, H., Zhu, D., Chollet, M., (...), Cavalleri, A.  
 Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction  
 Solid State Communications 169, pp. 24-27, 2013
132. Duan, P., Duan, W.J., Wang, J.Y., Wang, Q., Chang, L., Kong, L.  
 Study on extraordinary transport behaviors of polycrystalline La-Sb-Mn-O ceramic  
 Advanced Materials Research 746, pp. 234-239, 2013
131. Varshney, D., Choudhary, D., Khan, E.  
 Electrical transport in the ferromagnetic and paramagnetic state of potassium-substituted manganites La<sub>1-x</sub>K<sub>x</sub>MnO<sub>3</sub> (x = 0.05, 0.1 and 0.15)  
 Journal of Materials Science 48 (17), pp. 5904-5916, 2013
130. Huang, F., Zhou, Q., Ma, C., Li, L., Huang, X., Li, F., Cui, Q., (...), Zou, G.  
 High pressure Raman scattering and X-ray diffraction studies of MgNb<sub>2</sub>O<sub>6</sub>  
 RSC Advances 3 (32), pp. 13210-13213, 2013

129. Islam, M.A., Rondinelli, J.M., Spanier, J.E.  
Normal mode determination of perovskite crystal structures with octahedral rotations: Theory and applications  
Journal of Physics Condensed Matter 25 (17), art. no. 175902, 2013
128. Khanduri, H., Chandra Dimri, M., Vasala, S., Leinberg, S., Löhmus, R., Ashworth, T.V., Mere, A., (...), Stern, R.  
Magnetic and structural studies of LaMnO<sub>3</sub> thin films prepared by atomic layer deposition  
Journal of Physics D: Applied Physics 46 (17), art. no. 175003, 2013
127. Majumdar, S., Huhtinen, H., Paturi, P., Palai, R.  
The effect of oxygen on the Jahn-Teller distortion and magnetization dynamics of Pr<sub>0.9</sub>Ca<sub>0.1</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 25 (6), art. no. 066005, 2013
126. Stanislavchuk, T. N.; Sirenko, A. A.; Litvinchuk, A. P.; et al.  
Electronic band structure and optical phonons of BaSnO<sub>3</sub> and Ba<sub>0.97</sub>La<sub>0.03</sub>SnO<sub>3</sub> single crystals: Theory and experiment  
JOURNAL OF APPLIED PHYSICS 112 (4), 044108, AUG 15 2012
125. Maczka, M., Bednarkiewicz, A., Mendoza-Mendoza, E., Fuentes, A.F., Kepiński, L.  
Optical properties of Eu and Er doped LaAlO<sub>3</sub> nanopowders prepared by low-temperature method  
Journal of Solid State Chemistry 194, pp. 264-269, 2012
124. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.  
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.
123. McZka, M., Mendoza-Mendoza, E., Fuentes, A.F., Lemański, K., Dereń, P.  
Low-temperature synthesis, luminescence and phonon properties of Er and/or Dy doped LaAlO<sub>3</sub> nanopowders  
Journal of Solid State Chemistry 187, pp. 249-257, 2012.
122. Lepetit, M.-B., Mercey, B., Simon, C.  
Interface effects in perovskite thin films  
Physical Review Letters 108 (8), art. no. 087202, 2012.
121. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
120. Kintaka, Y., Kuretake, S., Hayashi, T., Tanaka, N., Ando, A., Takagi, H.  
Crystal structures and optical properties of transparent ceramics based on LaAlO<sub>3</sub>-Sr(Al,Ta)O<sub>3</sub> solid solution  
Journal of the American Ceramic Society 94 (12), 4399-4403, 2011.
119. Först, M., Manzoni, C., Kaiser, S., Tomioka, Y., Tokura, Y., Merlin, R., Cavalleri, A.  
Nonlinear phononics as an ultrafast route to lattice control  
Nature Physics 7 (11), 854-856, 2011.
118. Simon, E., Borodavka, F., Gregora, I., Nuzhnyy, D., Kamba, S., Hlinka, J., Bartasyte, A., Margueron, S.  
Ferroelectric domains in epitaxial PbTiO<sub>3</sub> films on LaAlO<sub>3</sub> substrate  
Journal of Applied Physics 110 (8), art. no. 084115, 2011.
117. Gou, G., Grinberg, I., Rappe, A.M., Rondinelli, J.M.  
Lattice normal modes and electronic properties of the correlated metal LaNiO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 84 (14), art. no. 144101, 2011.
116. Rubinger, C.P.L., Moreira, R.L., Ribeiro, G.M., Matinaga, F.M., Autier Laurent, S., Mercey, B., Lobo, R.P.S.M.  
Intrinsic and extrinsic dielectric responses of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> thin films  
Journal of Applied Physics 110 (7), art. no. 074102, 2011.
115. Jia, B.W., Liu, X.Q., Chen, X.M.  
Structure, magnetic and dielectric properties in Mn-substituted Sm 1.5Sr<sub>0.5</sub>NiO<sub>4</sub> ceramics  
Journal of Applied Physics 110 (6), art. no. 064110, 2011.
114. Mishra, D.K., Ahlawat, A., Sathe, V.G.  
Influence of oxygen content in oriented LaCoO<sub>3-δ</sub> thin films: Probed by X-ray diffraction and Raman spectroscopy  
AIP Conference Proceedings 1349 (PART A), pp. 637-638, 2011.
113. Dhak, P., Pramanik, P., Bhattacharya, S., Roy, A., Achary, S.N., Tyagi, A.K.  
Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 248 (8) Pages: 1884-1893, AUG 2011.
112. Golosova, N.O., Kozlenko, D.P., Kolesnikov, A.I., Kazimirov, V.Yu., Smirnov, M.B., Jiráček, Z., Savenko, B.N.  
Evolution of the phonon density of states of LaCoO<sub>3</sub> over the spin state transition  
PHYSICAL REVIEW B 83 (21) Article Number: 214305, JUN 30 2011.
111. Ma T. P.  
Inelastic electron tunneling spectroscopy (IETS) study of high-k gate dielectrics  
SCIENCE CHINA-INFORMATION SCIENCES 54 (5) Pages: 980-989, MAY 2011.

110. Bachar, N., Zhukova, E., Gorshunov, B., Farber, E., Roth, M.  
Anomaly in the Complex Conductivity of Overdoped  $Y(1-x)Ca(x)Ba(2)Cu(3)O(7-\delta)$  Thin Films from THz Spectroscopy  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 24 (3) Pages: 1225-1228, APR 2011.
109. Deren P. J.; Lemanski K.  
On tuning the spectroscopic properties of  $LaAlO(3):Pr(3+)$  nanocrystallites  
JOURNAL OF LUMINESCENCE 131 (3) Pages: 445-448, MAR 2011.
108. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
Temperature-dependent Raman study of  $PrFeO(3)$  thin film  
JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.
107. Nomura, K.-I., Okami, S., Xie, X., Mizuno, M., Fukunaga, K., Ohki, Y.  
Effect of Annealing on Optical Absorption of  $LaAlO(3)$  at Terahertz Frequencies  
JAPANESE JOURNAL OF APPLIED PHYSICS 50 (2) Article Number: UNSP 021502, FEB 2011.
106. Chaix-Pluchery O.; Kreisel J.  
Raman scattering of perovskite  $SmScO_3$  and  $NdScO_3$  single crystals  
PHASE TRANSITIONS 84 (5-6) Pages: 542-554, 2011.
105. Gohil, S., Iyer, K.K., Aswathi, P., Ghosh, S., Sampathkumaran, E.V.  
Raman study of  $Ca(3)Co(2)O(6)$  single crystals  
JOURNAL OF APPLIED PHYSICS 108 (10) Article Number: 103517, NOV 15 2010.
104. Deren P. J.; Lemanski K.; Gagor A.; et al.  
Symmetry of  $LaAlO(3)$  nanocrystals as a function of crystallite size  
JOURNAL OF SOLID STATE CHEMISTRY 183 (9) Pages: 2095-2100, SEP 2010.
103. Reiner, J.W., Cui, S., Liu, Z., Wang, M., Ahn, C.H., Ma, T.P.  
Inelastic Electron Tunneling Spectroscopy Study of Thin Gate Dielectrics  
ADVANCED MATERIALS 22 (26-27) Pages: 2962-2968, JUL 20 2010.
102. Chaban, N., Weber, M., Pignard, S., Kreisel, J.  
Phonon Raman scattering of perovskite  $LaNiO(3)$  thin films  
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010.
101. Varshney D.; Choudhary D.; Shaikh M. W.; et al.  
Electrical resistivity behaviour of sodium substituted manganites: electron-phonon, electron-electron and electron-magnon interactions  
EUROPEAN PHYSICAL JOURNAL B 76 (2) Pages: 327-338, JUL 2010.
100. Laref, A., Luo, S.J.  
Magnetic excitation and phonon dispersion in  $LaCoO_3$  compound  
Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).
99. Samal, D., Venkateswarlu, D., Anil Kumar, P.S.  
Influence of finite size effect on magnetic and magnetotransport properties of  $La_{0.5}Sr_{0.5}CoO_3$  thin films  
Solid State Communications 150 (13-14), pp. 576-580 (2010).
98. Kumar, P., Saha, S., Muthu, D.V.S., Sahu, J.R., Sood, A.K., Rao, C.N.R.  
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic  $TbMnO_3$   
Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).
97. Malavasi, L., Baldini, M., Di Castro, D., Nucara, A., Crichton, W., Mezouar, M., Blasco, J., Postorino, P.  
High pressure behavior of Ga-doped  $LaMnO_3$ : A combined X-ray diffraction and optical spectroscopy study  
Journal of Materials Chemistry 20 (7), pp. 1304-1311 (2010).
96. Gupta, R.K., Kim, E.Y., Kim, Y.H., Whang, C.M.  
Effect of strontium ion doping on structural, thermal, morphological and electrical properties of a co-doped lanthanum manganite system  
Journal of Alloys and Compounds 490 (1-2), pp. 56-61 (2010).
95. Varshney, D., Choudhary, D., Shaikh, M.W.  
Interpretation of metallic and semiconducting temperature-dependent resistivity of  $La_{1-x}Na_xMnO_3$  ( $x = 0.07, 0.13$ ) manganites  
Computational Materials Science 47 (3), pp. 839-847 (2010).
94. Yusa, H., Belik, A.A., Takayama-Muromachi, E., Hirao, N., Ohishi, Y.  
High-pressure phase transitions in  $BiMO_3$  ( $M=Al, Ga, In$ ): In situ x-ray diffraction and Raman scattering experiments  
PHYSICAL REVIEW B Volume: 80 Issue: 21 Article Number: 214103 DOI: 10.1103/PhysRevB.80.214103 Published: DEC 2009
93. Suda, J., Kamishima, O., Kawamura, J., Hattori, T., Sato, T.  
Anharmonicity on Raman active phonon modes of  $LaAlO_3$   
Journal of Physics Conference Series Volume: 150 Issue: 5a Article Number: 052249 DOI: 10.1088/1742-6596/150/5/052249 Published: 2009
92. Liu, X.-Q., Han, G.-J., Huang, C.-K., Lan, W.  
Thickness dependence of microstructure for  $La_{0.9}Sr_{0.1}MnO_3/Si$  films determined by micro-Raman spectroscopy  
Wuli Xuebao/Acta Physica Sinica 58 (11), pp. 8008-8013 (2009).

91. Talati, M., Jha, P.K.  
Temperature effect on vibrational properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>  
International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).
90. Reiner, J.W., Posadas, A., Wang, M., Sidorov, M., Krivokapic, Z., Walker, F.J., Ma, T.P., Ahn, C.H.  
Electrical properties and interfacial structure of epitaxial LaAlO<sub>3</sub> on Si (001)  
Journal of Applied Physics 105 (12), art. no. 124501 (2009).
89. Orlovskaya, N., Lugovy, M., Carpenter, C., Pathak, S., Steinmetz, D., Lara-Curzio, E., Klemen, C., Radovic, M.  
On thermal and vibrational properties of LaGaO<sub>3</sub> single crystals  
Acta Materialia 57 (10), pp. 2984-2992 (2009).
88. Rousseau, S., Loridant, S., Delichere, P., Boreave, A., Deloume, J.P., Vernoux, P.  
La(1-x)SrxCo1-yFeyO<sub>3</sub> perovskites prepared by sol-gel method: Characterization and relationships with catalytic properties for total oxidation of toluene  
Applied Catalysis B: Environmental 88 (3-4), pp. 438-447 (2009).
87. Varshney, D., Mansuri, I., Kaurav, N.  
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons  
Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).
86. Gupta, R.K., Choi, I.-J., Cho, Y.-S., Lee, H.-L., Hyun, S.-H.  
Characterization of perovskite-type cathode, La<sub>0.75</sub>Sr<sub>0.25</sub>Mn<sub>0.95-x</sub>CoxNi<sub>0.05</sub>O<sub>3+δ</sub> (0.1 ≤ x ≤ 0.3), for intermediate-temperature solid oxide fuel cells  
Journal of Power Sources 187 (2), pp. 371-377 (2009).
85. Dereñ, P.J., Mahiou, R., Goldner, P.  
Multiphonon transitions in LaAlO<sub>3</sub> doped with rare earth ions  
Optical Materials 31 (3), pp. 465-469 (2009).
84. Vali, R.  
Phonons and heat capacity of LaAlO<sub>3</sub>  
Computational Materials Science 44 (2), pp. 779-782 (2008).
83. Dubey, A., Sathe, V.G., Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+δ</sub> thin films  
Journal of Applied Physics 104 (11), art. no. 113530 (2008).
82. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.  
IR-active optical phonons in Pnma-1, Pnma-2 and R over(3, -) c phases of LaMnO<sub>3</sub> + δ  
Physica B: Condensed Matter 403 (21-22), pp. 3896-3902 (2008).
81. Xing, X.J., Yu, Y.P., Xu, L.M., Wu, S.X., Li, S.W.  
Magnetic properties of β-MnO<sub>2</sub> thin films grown by plasma-assisted molecular beam epitaxy  
Journal of Physical Chemistry C 112 (39), pp. 15526-15531 (2008).
80. Van Minh, N., Kim, S.-J., Yang, I.-S.  
A Raman Spectroscopy Study of Disorder and Local Vibrational Modes in La<sub>0.7</sub>Sr<sub>0.3</sub>Mn<sub>1-x</sub>MxO<sub>3</sub> (M=Fe, Co)  
Journal of the Korean Physical Society 52 (5), pp. 1402-1405 (2008).
79. Dubey, A., Sathe, V.G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 34 Article Number: 346232 DOI: 10.1088/0953-8984/19/34/346232 Published: AUG 29 2007
78. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.  
Micro-Raman and magnetization studies of Nd<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> phase transitions  
Journal of Physics: Conference Series 92 (1), art. no. 012125 (2007).
77. Giraudon, J.-M., Elhachimi, A., Wyrwalski, F., Siffert, S., Aboukaïs, A., Lamonier, J.-F., Leclercq, G.  
Studies of the activation process over Pd perovskite-type oxides used for catalytic oxidation of toluene  
Applied Catalysis B: Environmental 75 (3-4), pp. 157-166 (2007)
76. Sathe, V.G., Dubey, A.  
Broken symmetry in LaAlO<sub>3</sub> single crystal probed by resonant Raman spectroscopy  
Journal of Physics Condensed Matter 19 (38), art. no. 382201 (2007)
75. Zinenko, V.I., Pavlovskii, M.S.  
Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the LaMnO<sub>3</sub> crystal within the polarizable-ion model  
Physics of the Solid State 49 (9), pp. 1749-1758 (2007)
74. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.  
Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of La(2+x)/3Sr(1-x)/3Mn<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> perovskites

Journal of Physics and Chemistry of Solids 68 (9), pp. 1749-1755 (2007)

73. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.  
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
Journal of Applied Physics 101 (12), art. no. 123910 (2007)

72. Sadykov, V.A., Borchert, Yu.V., Alikina, G.M., Lukashevich, A.I., Mezentseva, N.V., Muzykantov, V.S., Moroz, E.M., (...), Smirnova, A.  
Synthesis and properties of nanocomposites with mixed ionic-electronic conductivity on the basis of oxide phases with perovskite and fluorite structures  
Glass Physics and Chemistry 33 (4), pp. 320-334 (2007)

71. Varshney, D., Mansuri, I., Kaurav, N.  
Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO<sub>3</sub>  
Journal of Physics Condensed Matter 19 (24), art. no. 246211 (2007)

70. Varshney, D., Kaurav, N.  
Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La<sub>0.80</sub>Ca<sub>0.20</sub>MnO<sub>3</sub> manganites  
Journal of Low Temperature Physics 147 (1-2), pp. 7-30 (2007)

69. Li, W.J., Zhang, B., Lu, W.  
Structural properties and Raman spectroscopy of La<sub>(2+4x)</sub>/3Sr<sub>(1-4x)</sub>/3Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.2)  
Physics Letters, Section A: General, Atomic and Solid State Physics 362 (4), pp. 327-330 (2007)

68. Wang, M., He, W., Ma, T.P., Edge, L.F., Schlom, D.G.  
Electron tunneling spectroscopy study of amorphous films of the gate dielectric candidates LaAlO<sub>3</sub> and LaScO<sub>3</sub>  
Applied Physics Letters 90 (5), art. no. 053502 (2007)

67. Varshney, D., Kaurav, N., Choudhary, K.K., Singh, R.K.  
Analysis of low temperature resistivity in the ferromagnetic metallic state of Pb-doped manganites  
AIP Conference Proceedings 850, pp. 1183-1184 (2006)

66. Zhang, T., Li, G., Qian, T., Qu, J.F., Xiang, X.Q., Li, X.G.  
Effect of particle size on the structure and magnetic properties of La<sub>0.6</sub>Pb<sub>0.4</sub>MnO<sub>3</sub> nanoparticles  
Journal of Applied Physics 100 (9), art. no. 094324 (2006)

65. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)

64. Minh, N.V., Hoc, N.Q., Ha Phuong, L.T., Yang, I.-S.  
The effect of Fe substitution on the structural transition of LaMn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> manganites: A raman spectroscopy study  
Journal of Nonlinear Optical Physics and Materials 15 (3), pp. 315-321 (2006)

63. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.  
Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)

62. Talati, M., Jha, P.K.  
Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

61. Lunkenheimer, P., Mayr, F., Loidl, A.  
Dynamic conductivity from audio to optical frequencies of semiconducting manganites approaching the metal-insulator transition  
Annalen der Physik (Leipzig) 15 (7-8), pp. 498-507 (2006)

60. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)

59. Kobayashi, Y., Sin Naing, T., Suzuki, M., Akimitsu, M., Asai, K., Yamada, K., Akimitsu, J., (...), Shirane, G.  
Neutron scattering study of phonons in LaCoO<sub>3</sub>  
Physica B: Condensed Matter 378-380 (SPEC. ISS.), pp. 532-533 (2006)

58. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

57. Gnezdilov V, Fomin V, Yeremenko AV, et al.  
Low-temperature mixed spin state of Co<sup>3+</sup> in LaCoO<sub>3</sub> evidenced from Jahn-Teller lattice distortions  
LOW TEMPERATURE PHYSICS 32 (2): 162-168 FEB 2006

56. Dore P, Postorino P, Sacchetti A, et al.  
Raman measurements on thin films of the La<sub>0.7</sub>Str<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005



55. Polychronopoulou K, Galisteo FC, Granados ML, et al.  
Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H<sub>2</sub>S from gas streams in the presence of H<sub>2</sub>, CO<sub>2</sub>, and H<sub>2</sub>O  
JOURNAL OF CATALYSIS 236 (2): 205-220 DEC 10 2005
54. Kobayashi Y, Naing TS, Suzuki M, et al.  
Inelastic neutron scattering study of phonons and magnetic excitations in LaCoO<sub>3</sub>  
PHYSICAL REVIEW B 72 (17): Art. No. 174405 NOV 2005
53. Varshney D, Kaurav N  
Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction  
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005
52. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005
51. Hayward SA, Morrison FD, Redfern SAT, et al.  
Transformation processes in LaAlO<sub>3</sub>: Neutron diffraction, dielectric, thermal, optical, and Raman studies  
PHYSICAL REVIEW B 72 (5): Art. No. 054110 AUG 2005
50. Orlovskaya N, Steinmetz D, Yarmolenko S, et al.  
Detection of temperature- and stress-induced modifications of LaCoO<sub>3</sub> by micro-Raman spectroscopy  
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005
49. Jandl S, Mukhin AA, Ivanov VY, et al.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005
48. Ghosh S, Kamaraju N, Seto M, et al.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005
47. Hartinger C, Mayr F, Loidl A, et al.  
Phonon metamorphosis in ferromagnetic manganite films: Probing the evolution of an inhomogeneous state  
PHYSICAL REVIEW B 71 (18): Art. No. 184421 MAY 2005
46. Popovic ZV, Cantarero A, Thijssen WHA, et al.  
Novel phase transitions in B-site doped manganites  
PHYSICA B-CONDENSED MATTER 359: 1276-1278 APR 30 2005
45. Delugas P, Fiorentini V, Filippetti A  
Dielectric properties and long-wavelength optical modes of the high-kappa oxide LaAlO<sub>3</sub>  
PHYSICAL REVIEW B 71 (13): Art. No. 134302 APR 2005
44. Popovic ZV, Cantarero A, Thijssen WHA, et al.  
Short range charge/orbital ordering in La<sub>1-x</sub>Sr<sub>x</sub>Mn<sub>1-z</sub>BzO<sub>3</sub> (B = Cu, Zn) manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (2): 351-360 JAN 19 2005
43. Seikh MM, Sood AK, Narayana C  
Electronic and vibrational Raman spectroscopy of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> through the phase transitions  
PRAMANA-JOURNAL OF PHYSICS 64 (1): 119-128 JAN 2005
42. Venimadhav A, Yates KA, Blamire MG  
Scanning Raman spectroscopy for characterizing compositionally spread films  
JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005
41. Orlovskaya N; Browning N  
Raman diagnostics of LaCoO<sub>3</sub> based perovskites  
MIXED IONIC ELECTRONIC CONDUCTING PEROVSKITES FOR ADVANCED ENERGY SYSTEMS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 173 Pages: 39-51 Published: 2004
41. Bergenti, I, Biscarini, F.; Cavallini, M, Dediu, V, Murgia, M, Nozar, P, Ruani, G, Taliani, C.  
Spin polarized effects at the interface between manganites and organic semiconductors  
MOLECULAR NANOWIRES AND OTHER QUANTUM OBJECTS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY Volume: 148 Pages: 415-424 Published: 2004
40. Hartinger C, Mayr F, Loidl A, et al.  
Cooperative dynamics in doped manganite films: Phonon anomalies in the ferromagnetic state  
PHYSICAL REVIEW B 70 (13): Art. No. 134415 OCT 2004
39. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
38. Ishikawa A, Nohara J, Sugai S

- Raman study of the orbital-phonon coupling in LaCoO<sub>3</sub>  
 PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 24 2004
37. Varshney D, Kaurav N  
 Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO<sub>3</sub>: Role of electron-phonon interaction  
 EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004
36. Maczka M, Hanuza J, Fuentes AF, et al.  
 Vibrational studies of A(B<sup>1</sup>B<sup>2</sup>/3<sup>1/3</sup>)O<sub>3</sub> perovskites (A = Ba, Sr; B<sup>1</sup> = Y, Sm, Dy, Gd, In; B<sup>2</sup> = Mo, W)  
 JOURNAL OF PHYSICS-CONDENSED MATTER 16 (13): 2297-2310 APR 7 2004
35. Busani, T., Devine, R.A.B.  
 Substrate/oxide interface interaction in LaAlO<sub>3</sub>/Si structures  
 Materials Research Society Symposium - Proceedings 786, pp. 189-194 (2004)
34. Nikiforov AE, Popov SE  
 Cooperative dynamical effect in rhombohedral LaMnO<sub>3</sub>  
 ADV QUANTUM CHEM 44: 587-598 2003
33. Tan S, Yue S, Zhang YH  
 Jahn-Teller distortion induced by Mg/Zn substitution on Mn sites in the perovskite manganites  
 PHYS LETT A 319 (5-6): 530-538 DEC 15 2003
32. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al.  
 Phonon Raman scattering in LaMn<sub>1-x</sub>CoxO<sub>3</sub> (x = 0, 0.2, 0.3, 0.4, and 1.0)  
 LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003
31. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
 Raman study of anharmonic effects in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
 PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
30. De Marzi G, Popovic ZV, Cantarero A, et al.  
 Effect of A-site and B-site substitution on the infrared reflectivity spectra of La<sub>1-y</sub>AyMn<sub>1-x</sub>BxO<sub>3</sub> (A=Ba,Sr; B=Cu,Zn,Sc; 0 < y <= 0.3; 0 <= x <= 0.1) manganites  
 PHYS REV B 68 (6): Art. No. 064302 AUG 1 2003
29. Devine RAB  
 Infrared and electrical properties of amorphous sputtered (LaxAl<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> films  
 J APPL PHYS 93 (12): 9938-9942 JUN 15 2003
28. Malavasi L, Alessandri I, Mozzati MC, et al.  
 Preparation, structural and magnetic characterisation of RF-sputtered La<sub>1-x</sub>NaxMnO<sub>3</sub> +/-delta thin films manganites  
 PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
27. Deren PJ, Krupa JC  
 Spectroscopic investigations of LaAlO<sub>3</sub> : Eu<sup>3+</sup>  
 J LUMIN 102: 386-390 MAY 2003
26. Popa M, Van Hong L, Kakihana M  
 Nanopowders of LaMeO<sub>3</sub> perovskites obtained by a solution-based ceramic processing technique  
 PHYSICA B 327 (2-4): 233-236 APR 2003
25. Souza AG, Faria JLB, Guedes I, et al.  
 Evidence of magnetic polaronic states in La<sub>0.70</sub>Sr<sub>0.30</sub>Mn<sub>1-x</sub>FexO<sub>3</sub> manganites  
 PHYS REV B 67 (5): Art. No. 052405 FEB 1 2003
24. Guttler B, Amelichev VA, Gorbenko OY, et al.  
 Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study  
 PHASE TRANSIT 76 (1-2): 63-72 Part B JAN-FEB 2003
23. Taliani C, Dediu V, Biscarini F, et al.  
 Organic-inorganic hybrid spin-valve: A novel approach to spintronics  
 PHASE TRANSIT 75 (7-8): 1049-1058 Part B OCT-NOV 2002
22. Popa M, Franti J, Kakihana M  
 Characterization of LaMeO<sub>3</sub> (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method  
 SOLID STATE IONICS 154: 135-141 Part B Sp. Iss. SI DEC 2002
21. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
 Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
 PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002
20. Hayward SA, Redfern SAT, Salje EKH  
 Order parameter saturation in LaAlO<sub>3</sub>  
 J PHYS-CONDENS MAT 14 (43): 10131-10144 NOV 4 2002

19. Bouvier P, Kreisel J  
Pressure-induced phase transition in LaAlO<sub>3</sub>  
J PHYS-CONDENS MAT 14 (15): 3981-3991 APR 22 2002
18. Frost, R.L., Kristóf, J., Horváth, E., Klopogge, J.T.  
Raman phonons and Raman Jahn-Teller bands in perovskite-like manganites  
Journal of Raman Spectroscopy 32(10), 805-811 DOI: 10.1002/jrs.770 (2001)
17. Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.M., Pantoja, A.E.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
Physical Review B - Condensed Matter and Materials Physics 63(13), 132406 (2001)
16. Nagaev EL  
Off-stoichiometry mechanism of the isotope effect in manganites  
PHYS REV B 64 (14): art. no. 144409 OCT 1 2001
15. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons and light scattering in RMnO<sub>3</sub> (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites  
J ALLOY COMPD 323: 494-497 JUL 12 2001
14. Pantoja, A.E., Trodahl, H.J., Fainstein, A., Pregliasco, R.G., Buckley, R.G., Balakrishnan, G., Lees, M.R., Paul, D.McK.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
Physical Review B - Condensed Matter and Materials Physics 63 (13), pp. 1324061-1324064 (2001)
13. Nagaev EL  
Colossal-magnetoresistance materials: manganites and conventional ferromagnetic semiconductors  
PHYS REP 346 (6): 388-531 JUN 2001
12. Amelichev VA, Guttler B, Gorbenko OY, et al.  
Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry  
PHYS REV B 63 (10): art no. 104430 MAR 1 2001
11. Saitoh E, Okamoto S, Takahashi KT, et al.  
Observation of orbital waves as elementary excitations in a solid  
NATURE 410: (6825) 180-183 MAR 8 2001
10. Amado, A.M., Ribeiro-Claro, P.J.A.  
Raman phonons in La(2-2x)Sr(1+2x)Mn<sub>2</sub>O<sub>7</sub> layered manganites  
Journal of Raman Spectroscopy 31(11), 1013-1015 DOI: 10.1002/1097-4555(200011)31:11<1013::AID-JRS637>3.0.CO;2-9 (2000)
9. Mayr F, Hartinger C, Paraskevopoulos M, et al.  
High-frequency conductivity and phonon properties of La<sub>7/8</sub>Sr<sub>1/8</sub>MnO<sub>3</sub>  
PHYS REV B 62: (23) 15673-15679 DEC 15 2000
8. Guedes I, Mitchell JF, Argyriou D, et al.  
Raman phonons in La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> layered manganites  
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000
7. Granado E, Sanjurjo JA, Rettori C, et al.  
Effects of cation vacancies in the phonon Raman spectra of LaMnO<sub>3</sub>  
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
6. Yamamoto K, Kimura T, Ishikawa T, et al.  
Raman spectroscopy of the charge-orbital ordering in layered manganites  
PHYS REV B 61: (21) 14706-14715 JUN 1 2000
5. Dediu V, Ferdeghini C, Maticotta FC, et al.  
Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy  
PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000
4. Paraskevopoulos M, Mayr F, Hartinger C, et al.  
The phase diagram and optical properties of La<sub>2-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> for x ≤ 0.2  
J MAGN MAGN MATER 211: (1-3) 118-127 Sp. Iss. SI MAR 2000
3. Bjornsson P, Rubhausen M, Backstrom J, et al.  
Lattice and charge excitations in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYS REV B 61: (2) 1193-1197 JAN 1 2000
2. Rubhausen M  
Study of the interplay between spin, charge, and lattice degrees of freedom by inelastic light scattering  
PHYS STATUS SOLIDI B 215: (1) 489-493 SEP 1999
1. Nagaev EL  
Polarons and isotope effect in manganites  
PHYS LETT A 258: (1) 65-73 JUL 12 1999

28. "Raman Study of the Variations of the Jahn-Teller Distortions through the Metal-Insulator Transition in Magnetoresistive  $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$  Thin Films"

M. V. Abrashev, V. G. Ivanov, M. N. Iliev, R. A. Chakalov, R. I. Chakalova, and C. Thomsen  
phys. stat. sol. (b) 215 (1999) 631 - 636.

42. Schüler, L., Ross, U., Moshnyaga, V.  
Strain-induced phase transition at the surface of epitaxial  $\text{La}_{0.65}\text{Sr}_{0.35}\text{MnO}_3$  films  
Surfaces and Interfaces 45,103906 (2024)
41. Lakouader, A., Hadouch, Y., Mezzane, D., (...), Luk'yanchuk, I.A., El Marssi, M.  
Impact of polymeric precursor and auto-combustion on the structural, microstructural, magnetic, and magnetocaloric properties of  $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3$   
Journal of Magnetism and Magnetic Materials 586,171225 (2023)
40. Kumar, A., Kim, J.-W., Yadav, N., (...), Huh, S.-H., Koo, B.H.  
Structural insights into the rare-earth modified  $\text{La}_{1.4-x}\text{Sm}_x\text{Sr}_{1.6}\text{Mn}_2\text{O}_7$  layered perovskites and probing their complex magnetic and magnetocaloric properties  
Materials Chemistry and Physics 302,127695 (2023)
39. Choudhary, B.L., Kumar, U., Quraishi, A.M., (...), Dolia, S.N., Alvi, P.A.  
Oxygen vacancy induced structural and domain size-controlled magnetic behavior of  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$  perovskite  
Journal of Materials Science: Materials in Electronics 33(9), pp. 6829-6841 (2022)
38. High-density sol-gel derived, cold-isostatically pressed  $\text{La}_{0.67}\text{Ca}_{0.27}\text{Sr}_{0.06}\text{MnO}_3$  polycrystalline ceramics and their room-temperature TCR improvement  
Liu, Y (Liu, Yang) Dong, G (Dong, Gang) Zhang, S (Zhang, Shuai) Liu, X (Liu, Xiang)  
CERAMICS INTERNATIONAL Volume47 Issue6 Page7674-7682 PublishedMAR 15 2021
37. Electronic configuration and magnetic properties of  $\text{La}_{0.7}\text{Ca}_{0.3}\text{Mn}_{1-x}\text{Fe}_x\text{O}_3$  perovskite NPs: The effect of a lower  $\text{Fe}^{3+}$  concentration  
Martinez-Rodriguez, HA (Martinez-Rodriguez, H. A.) Onyekachi, K (Onyekachi, Kalu) Concha-Balderrama, A (Concha-Balderrama, A.) Herrera-Perez, G (Herrera-Perez, G.) Matutes-Aquino, JA (Matutes-Aquino, J. A.) Jurado, JF (Jurado, J. F.) Bocanegra-Bernal, MH (Bocanegra-Bernal, M. H.) Ramos-Sanchez, VH (Ramos-Sanchez, V. -H.) Duarte-Moller, JA (Duarte-Moller, J. A.) Reyes-Rojas, A (Reyes-Rojas, A.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume816 Article Number152668 PublishedMAR 5 2020
36. Microstructure and electrical transport mechanisms of the Ca-doped  $\text{LaMnO}_3$  films grown on  $\text{MgO}$  substrate  
Daoudi, K (Daoudi, Kais) El-Helali, S (El-Helali, S.) Othmen, Z (Othmen, Z.) Suleiman, BM (Suleiman, B. M.) Tsuchiya, T (Tsuchiya, T.)  
JOURNAL OF MATERIMICS Volume6 Issue1 Page17-23 PublishedMAR 2020
35. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
34. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
33. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in  $(\text{La}_{0.6}\text{Pr}_{0.4})(0.7)\text{Ca}_{0.3}\text{MnO}_3$ : the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy  
Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019
32. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saoussen; et al.  
Effects of  $\text{Mn}_3\text{O}_4$  precipitates on the vibrational properties of epitaxial Ca-doped  $\text{LaMnO}_3$  films  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017
31. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
Synthesis and Physicochemical Studies of Perovskite Manganite  $\text{La}_{0.8}\text{Ca}_{0.2}\text{Nn}_{(1-x)}\text{Co}_x\text{O}_3$  ( $0 \leq x \leq 0.3$ )  
JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
30. Zhang, A. M.; Zhang, W. C.; Wu, X. S.; et al.  
Abnormal enhancement of ferromagnetism for  $\text{LaMnO}_3+\delta$  thin films with decreasing oxygen pressure  
AIP ADVANCES Volume: 7 Issue: 5 Article Number: 055837 Published: MAY 2017
29. Bhat, I (Bhat, Irshad); Husain, S (Husain, Shahid); War, TA (War, Tariq Ahmad)  
Magnetic and Raman spectroscopic study of laser ablated 100 (nm) thin film of  $\text{La}_{0.85}\text{Te}_{0.15}\text{MnO}_3$  deposited on  $\text{LaAlO}_3$   
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 667 Pages: 225-228 DOI: 10.1016/j.jallcom.2016.01.149 Published: MAY 15 2016

28. Arnache, O., Osorio, J.  
Comparative study of the Raman vibrational modes in pure and Fe-doped La<sub>2/3</sub>Ca<sub>1/3</sub>MnO<sub>3</sub> thin films  
SUPERLATTICES AND MICROSTRUCTURES Volume: 92 Pages: 181-189 DOI: 10.1016/j.spmi.2016.02.020 Published: APR 2016
27. McBride, K., Cook, J., Gray, S., Felton, S., Stella, L., Poulidi, D.  
Evaluation of La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (0 ≤ x < 0.4) synthesised via a modified sol-gel method as mediators for magnetic fluid hyperthermia  
CRYSTENGCOMM Volume: 18 Issue: 3 Pages: 407-416 DOI: 10.1039/c5ce01890k Published: 2016
26. Euler, C.; Holuj, P.; Talkenberger, A.; et al.  
Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015
25. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
Symmetry breaking in Ni-doped PrFeO(3) thin films established by Raman study  
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.
24. Talati, M., Jha, P.K.  
Temperature effect on vibrational properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>  
International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).
23. Varshney, D., Mansuri, I., Kaurav, N.  
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La<sub>0.83</sub>Sr<sub>0.17</sub>MnO<sub>3</sub> manganites: Scattering of phonons and magnons  
Journal of Low Temperature Physics 155 (3-4), pp. 177-199 (2009).
22. Dubey, A., Sathe, V.G., Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+δ</sub> thin films  
Journal of Applied Physics 104 (11), art. no. 113530 (2008).
21. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in La<sub>x</sub>Pry Ca<sub>1-x-y</sub>MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).
20. Talati, M., Jha, P.K.  
Phonons and Jahn-Teller distortion in manganites  
Journal of Molecular Structure 838 (1-3), pp. 227-231 (2007)
19. Varshney, D., Mansuri, I., Kaurav, N.  
Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO<sub>3</sub>  
Journal of Physics Condensed Matter 19 (24), art. no. 246211 (2007)
18. Varshney, D., Kaurav, N.  
Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La<sub>0.80</sub>Ca<sub>0.20</sub>MnO<sub>3</sub> manganites  
Journal of Low Temperature Physics 147 (1-2), pp. 7-30 (2007)
17. Gouadec, G., Colombari, P.  
Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties  
Progress in Crystal Growth and Characterization of Materials 53 (1), pp. 1-56 (2007)
16. Talati, M., Jha, P.K.  
Pressure-dependent phonon properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (13), art. no. 134406 (2006)
15. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)
14. Li T, Wang B, Dai HY, et al.  
Annealing effect on the structural and magnetic properties of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> films  
JOURNAL OF APPLIED PHYSICS 98 (12): Art. No. 123505 DEC 15 2005
13. Varshney D, Kaurav N  
Interpretation of temperature-dependent resistivity of La-Pb-MnO<sub>3</sub>: Role of electron-phonon interaction  
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005
12. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
11. Varshney D, Kaurav N  
Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO<sub>3</sub>: Role of electron-phonon interaction  
EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004
10. Liu, Y., Li, G., Feng, S.-J., Li, X.-G.  
Jahn-Teller Distortions Cooperating with Magnetic Interaction in the Raman Spectra of La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub> Thin Film  
Chinese Physics Letters 20 (9), pp. 1603-1606 (2003)

9. Malavasi L, Alessandri I, Mozzati MC, et al.  
Preparation, structural and magnetic characterisation of RF-sputtered  $\text{La}_{1-x}\text{Na}_x\text{MnO}_3$  +/-delta thin films manganites  
PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
8. Postorino P, Congeduti A, Degiorgi E, et al.  
High-pressure behavior of  $\text{La}_x\text{Sr}_{2-x}\text{MnO}_4$  layered manganites investigated by Raman spectroscopy and x-ray diffraction  
PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002
7. Frost, R.L., Kristóf, J., Horváth, E., Klopogge, J.T.  
Raman phonons and Raman Jahn-Teller bands in perovskite-like manganites  
Journal of Raman Spectroscopy 32(10), 805-811 DOI: 10.1002/jrs.770 (2001)
6. Zhang PX, Huang SJ, Habermeier HU, et al.  
Isotope effect on Raman spectra of polycrystalline  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$   
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001
5. Pantoja AE, Trodahl HJ, Buckley RG, et al.  
Raman spectroscopy of orthorhombic  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ ,  $x=0.1-0.3$   
J PHYS-CONDENS MAT 13 (16): 3741-3752 APR 23 2001
4. Pantoja AE, Trodahl HJ, Fainstein A, et al.  
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering  
PHYS REV B 63 (13): art. no. 132406 APR 1 2001
3. Granado E, Garcia A, Sanjurjo JA, et al.  
Effects of phase separation on the magnetization, x-ray diffraction, and Raman scattering of  $(\text{La}_{1-y}\text{Nd}_y)_{1-x}\text{Ca}_x\text{MnO}_3$   
( $y=0,0.5,1.0$ ;  $x=1/3$ )  
PHYS REV B 63 (6): art. no. 064404 FEB 1 2001
2. Granado E, Sanjurjo JA, Rettori C, et al.  
Effects of cation vacancies in the phonon Raman spectra of  $\text{LaMnO}_3$   
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000
1. Yamamoto K, Kimura T, Ishikawa T, et al.  
Raman spectroscopy of the charge-orbital ordering in layered manganites  
PHYS REV B 61: (21) 14706-14715 JUN 1 2000
29. *"Raman Scattering Study of Heavily Oxygenated  $\text{YSr}_2\text{Cu}_3\text{O}_{7+y}$  and  $\text{AuBa}_2\text{YCu}_2\text{O}_{7+y}$  Superconductors"*  
A. P. Litvinchuk, M. N. Iliev, H. G. Lee, M. V. Abrashev, L. M. Dezaneti, B. R. Hickey, Y. Y. Xue, and C. W. Chu  
Physica C 341-348 (2000) 2205 - 2208.
30. *"Raman Monitoring of Dynamical Jahn-Teller Distortions in Rhombohedral Antiferromagnetic  $\text{LaMnO}_3$  and Ferromagnetic Magnetoresistive  $\text{La}_{0.93}\text{Mn}_{0.98}\text{O}_3$ "*  
M. N. Iliev, A. P. Litvinchuk, M. V. Abrashev, V. G. Ivanov, H. G. Lee, W. H. McCarroll, M. Greenblatt, R. L. Meng, and C. W. Chu  
Physica C 341-348 (2000) 2257 - 2258.
16. Volkov, D.V., Pavelko, A.A., Nagaenko, A.V., (...), Kubrin, S.P., Verbenko, I.A.  
Influence of phase formation conditions on the dielectric properties of  $\text{Bi}_{0.5}\text{La}_{0.5}\text{MnO}_3$  ceramics modified with magnetoactive elements  
Ferroelectrics 592(1), pp. 143-150 (2022)
15. Rini, E.G., Gupta, M.K., Mittal, R., (...), Al Saeed, M.H., Sen, S.  
Structural change from  $\text{Pbnm}$  to  $\text{R}\bar{3}\text{c}$  phase with varying Fe/Mn content in  $(1-x)\text{LaFeO}_3.x\text{LaMnO}_3$  solid solution leading to modifications in octahedral tilt and valence states  
Journal of Alloys and Compounds 883,160761 (2021)
14. Novel synthetic approach to the preparation of single-phase  $\text{Bi}_x\text{La}_{1-x}\text{MnO}_3$ +delta solid solutions  
Karoblis, D (Karoblis, Dovydas) Mazeika, K (Mazeika, Kestutis) Baltrunas, D (Baltrunas, Dalis) Lukowiak, A (Lukowiak, Anna) Streck, W (Streck, Wieslaw) Zarkov, A (Zarkov, Aleksej) Kareiva, A (Kareiva, Aivaras)  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume93 Issue3 Page650-656 PublishedMAR 2020
13. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
12. Self-doped  $\text{La}_{1-x}\text{MnO}_3$ +delta perovskites: Electron state hybridization and Raman modes  
Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)

11. Electrical behavior and structure - property correlations in  $\text{La}_{1-x}\text{Pr}_x\text{MnO}_3$  ( $0 \leq x \leq 1$ ) ceramics  
Udeshi, B (Udeshi, Bhagyashree) Boricha, H (Boricha, Hetal) Rajyaguru, B (Rajyaguru, Bhargav) Gadani, K (Gadani, Keval) Rathod, KN (Rathod, K. N.) Dhruv, D (Dhruv, Davit) Kansara, SB (Kansara, S. B.) Trivedi, RK (Trivedi, R. K.) Pandya, DD (Pandya, D. D.) Asokan, K (Asokan, K.)  
CERAMICS INTERNATIONAL Volume45 Issue1 Page1098-1109 PublishedJAN 2019
10. CHARACTERIZATION OF  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $0 \leq x \leq 0.2$ ) NANOPOWDERS SYNTHESIZED BY DIFFERENT METHODS  
Djani, F (Djani, Faical) Noureddine, I (Noureddine, Ikram) Martinez Arias, A (Martinez Arias, Arturo)  
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE  
Volume80 Issue1 Page101-112 Published 2018
9. Gadani, Keval; Keshvani, M. J.; Dhruv, Davit; et al.  
Low field magnetoelectric and magnetotransport properties of sol-gel grown nanostructured  $\text{LaMnO}_3$  manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 719 Pages: 47-57 Published: SEP 30 2017
8. Jiang Shaoqun; Ma Xinxin; Tang Guangze; et al.  
Microstructure and nano-scratch behaviors of  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  films  
THIN SOLID FILMS 519 (15) Pages: 4880-4883, MAY 31 2011.
7. Talati, Mina; Jha, Prafulla K.  
TEMPERATURE EFFECT ON VIBRATIONAL PROPERTIES OF  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$   
INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 23 Issue: 23 Pages: 4767-4777 Published: SEP 20 2009
6. Dubey, Aditi; Sathe, V. G.; Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial  $\text{LaMnO}_3+\delta$  thin films  
JOURNAL OF APPLIED PHYSICS Volume: 104 Issue: 11 Article Number: 113530 Published: DEC 1 2008
5. Smirnova, I. S.; Bazhenov, A. V.; Fursova, T. N.; et al.  
IR-active optical phonons in  $\text{Pnma-1}$ ,  $\text{Pnma-2}$  and  $\text{R}3\text{over-bar}$  phases of  $\text{LaMnO}_3+\delta$   
PHYSICA B-CONDENSED MATTER Volume: 403 Issue: 21-22 Pages: 3896-3902 Published: NOV 30 2008
4. Choi, Y., Abernathy, H., Lynch, M.E., Liu, M.  
Modeling, simulation, and in-situ characterization of functionally graded porous electrodes for solid oxide fuel cells  
Advances in Heterogeneous Material Mechanics 2008 - Proceedings of the 2nd International Conference on Heterogeneous Material Mechanics, ICHMM 2008 , pp. 290-293 (2008).
3. Chan TS, Liu RS, Yang CC, et al.  
Influence of oxygen defects on the crystal structure and magnetic properties of the  $(\text{Tb}_{1-x}\text{Na}_x)\text{MnO}_3$ -y ( $0 \leq x \leq 0.3$ ) system  
INORGANIC CHEMISTRY 46 (11), pp. 4575-4582 (2007)
2. Li WJ, Zhang B, Lu W  
Structural properties and Raman spectroscopy of  $\text{La}_{(2+4x)/\text{Sr}_{(1-4x)}/\text{Mn}_{-3(1-x)}\text{Cu}_x\text{O}_3$  ( $0 \leq x \leq 0.2$ )  
PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).
1. Talati M, Jha PK  
Structure dependent phonon properties of  $\text{LaMnO}_3$   
COMPUTATIONAL MATERIALS SCIENCE 37 (1-2): 64-68 AUG 2006
31. *"Nanosize gold catalysts promoted by vanadium oxide supported on titania and zirconia for complete benzene oxidation"*  
D. Andreeva, T. Tabakova, L. Ilieva, A. Naydenov, D. Mehanjiev, and M. V. Abrashev  
Applied Catalysis A - General 209 (1-2) 291 – 300 Feb 28 (2001)
87. Lee, J., Kim, Y., Jung, D.G., (...), Kong, S.H., Jung, D.  
Annealing temperature effect on the temperature coefficient of resistance for vanadium oxide ( $\text{VO}_x$ ) thin films as bolometer materials  
Japanese Journal of Applied Physics 62(SG),SG1039 (2023)
86. Activity boosting of gold nanoparticles supported on  $\text{V}_2\text{O}_5/\text{TiO}_2$  nanostructures for CO oxidation at low temperature  
Camposeco, R., Zanella, R.  
Catalysis Today 392-393, pp. 49-59 (2022)
85. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
He, C (He, Chi) Cheng, J (Cheng, Jie) Zhang, X (Zhang, Xin) Douthwaite, M (Douthwaite, Mark) Patisson, S (Patisson, Samuel) Hao, ZP (Hao, Zhengping)  
CHEMICAL REVIEWS Volume119 Issue7 Page4471-4568 PublishedAPR 10 2019
84. Multipronged Validation of Oxalate C-C Bond Cleavage Driven by Au-TiO<sub>2</sub> Interfacial Charge Transfer Using Operando DRIFTS  
Tan, TH (Tan, Tze Hao) Wong, RJ (Wong, Roong Jien) Scott, J (Scott, Jason) Ng, YH (Ng, Yun Hau) Taylor, RA (Taylor, Robert A.)  
Aguey-Zinsou, KF (Aguey-Zinsou, Kondo-Francois) Amal, R (Amal, Rose)  
ACS CATALYSIS Volume8 Issue8 Page7158-7163 PublishedAUG 2018
83. Tan, Tze Hao; Scott, Jason A.; Ng, Yun Hau; et al.

- Plasmon enhanced selective electronic pathways in TiO<sub>2</sub> supported atomically ordered bimetallic Au-Cu alloys  
 JOURNAL OF CATALYSIS Volume: 352 Pages: 638-648 Published: AUG 2017
82. Magadzu, T.; Scurrall, M. S.  
 Stability of gold particles in NaY-type zeolites: Promotional effects of co-exchanged metal cations  
 MICROPOROUS AND MESOPOROUS MATERIALS Volume: 241 Pages: 52-57 Published: MAR 15 2017
81. Li, Y.-K., Li, Z.-Y., Zhao, Y.-X., Liu, Q.-Y., Meng, J.-H., He, S.-G.  
 Activation and Transformation of Ethane by Au<sub>2</sub>VO<sub>3</sub><sup>+</sup> Clusters with Closed-Shell Electronic Structures  
 Chemistry - A European Journal 22(5), 1825-1830 DOI: 10.1002/chem.201503676 (2016)
80. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
 Characterisation of gold catalysts  
 CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
79. Panayotov, D.A., Morris, J.R.  
 Surface chemistry of Au/TiO<sub>2</sub>: Thermally and photolytically activated reactions  
 SURFACE SCIENCE REPORTS Volume: 71 Issue: 1 Pages: 77-271 DOI: 10.1016/j.surfrep.2016.01.002 Published: MAR 2016
78. Santacruz-Chávez, J.A., Oros-Ruiz, S., Prado, B., Zanella, R.  
 Photocatalytic degradation of atrazine using TiO<sub>2</sub> superficially modified with metallic nanoparticles  
 CHEMISTRY-A EUROPEAN JOURNAL Volume: 22 Issue: 5 Pages: 1825-1830 DOI: 10.1002/chem.201503676 Published: JAN 26 2016
77. Eliyas, A (Eliyas, A.); Petrova, P (Petrova, P.); Lopez-Tenllado, FJ (Lopez-Tenllado, F. J.); Tomova, D (Tomova, D.); Marinas, A (Marinas, A.)  
 Experimental arrangements for determining the photocatalytic activity of Au/TiO<sub>2</sub> in air and wastewater purification  
 BULGARIAN CHEMICAL COMMUNICATIONS Volume: 47 Issue: 4 Pages: 978-984 Published: 2015
76. Garcia, Tomas; Agouram, Said; Taylor, Stuart H.; et al.  
 Total oxidation of propane in vanadia-promoted platinum-alumina catalysts: Influence of the order of impregnation  
 CATALYSIS TODAY Volume: 254 Pages: 12-20 Published: OCT 1 2015
75. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
 Gold supported on metal oxides for volatile organic compounds total oxidation  
 CATALYSIS TODAY Volume: 244 Pages: 103-114 Published: APR 15 2015
74. Balzer, R.; Probst, L. F. D.; Drago, V.; et al.  
 Catalytic oxidation of volatile organic compounds (n-hexane, benzene, toluene, o-xylene) promoted by cobalt catalysts supported on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>  
 Brazilian Journal of Chemical Engineering 31 (3), pp. 757-769 SEP 2014
73. Thimmaraju, N.; Shamsuddin, S. Z. Mohamed; Pratap, S. R.; et al.  
 Transesterification of diethyl malonate with benzyl alcohol catalyzed by modified zirconia: Kinetic study  
 JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL 391, pp. 55-65 SEP 2014
72. Jiang, Xin; Hua, Jiefeng; Deng, Hui; et al.  
 Influence of pre-added NaOH on the microstructure of Au-CeO<sub>2</sub> catalyst and its activity for benzene oxidation  
 JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL 383, pp. 188-193 MAR 2014
71. Oros-Ruiz, Socorro; Zanella, Rodolfo; Lopez, Rosendo; et al.  
 Photocatalytic hydrogen production by water/methanol decomposition using Au/TiO<sub>2</sub> prepared by deposition-precipitation with urea  
 JOURNAL OF HAZARDOUS MATERIALS 263, pp. 2-10 Part: 1 DEC 15 2013
70. Oros-Ruiz, Socorro; Zanella, Rodolfo; Prado, Blanca  
 Photocatalytic degradation of trimethoprim by metallic nanoparticles supported on TiO<sub>2</sub>-P25  
 JOURNAL OF HAZARDOUS MATERIALS 263, pp. 28-35 Part: 1 DEC 15 2013
69. Delaigle, R.; Joseph, M. M. F.; Debecker, D. P.; et al.  
 An Alternative Method for the Incorporation of Silver in Ag-VO<sub>x</sub>/TiO<sub>2</sub> Catalysts for the Total Oxidation of Benzene  
 TOPICS IN CATALYSIS 56 (18-20) SI, pp. 1867-1874 DEC 2013
68. Balzer, R., Drago, V., Schreiner, W.H., Probst, L.F.D.  
 Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO<sub>2</sub>(1-x)Cu<sub>x</sub>  
 Journal of the Brazilian Chemical Society 24 (10), pp. 1592-1598, 2013
67. Einaga, H., Maeda, N., Teraoka, Y.  
 Effect of catalyst composition and preparation conditions on catalytic properties of unsupported manganese oxides for benzene oxidation with ozone  
 Applied Catalysis B: Environmental 142-143, pp. 406-413, 2013
66. Liu, Y., Dai, H., Deng, J., Li, X., Wang, Y., Arandiyani, H., Xie, S., (...), Guo, G.  
 Au/3DOM La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub>: Highly active nanocatalysts for the oxidation of carbon monoxide and toluene  
 Journal of Catalysis 305, pp. 146-153, 2013
65. Wang, C.-T., Chen, H.-Y., Chen, Y.-C.



- Gold/vanadium-tin oxide nanocomposites prepared by co-precipitation method for carbon monoxide gas sensors  
*Sensors and Actuators, B: Chemical* 176, pp. 945-951, 2013
64. Barakat, T., Rooke, J.C., Genty, E., Cousin, R., Siffert, S., Su, B.-L.  
Gold catalysts in environmental remediation and water-gas shift technologies  
*Energy and Environmental Science* 6 (2), pp. 371-391, 2013
63. Rezaei, E., Soltan, J., Chen, N., Lin, J.  
Effect of noble metals on activity of MnOx/ $\gamma$ -alumina catalyst in catalytic ozonation of toluene  
*Chemical Engineering Journal* 214, pp. 219-228, 2013
62. Delaigle, R., Eloy, P., Gaigneaux, E.M.  
Influence of the impregnation order on the synergy between Ag and V 2O 5/TiO 2 catalysts in the total oxidation of Cl-aromatic VOC  
*Catalysis Today* 192 (1), pp. 2-9, 2012
61. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
*Applied Catalysis B: Environmental* 125, pp. 222-246, 2012.
60. Zanella, R., Rodríguez-González, V., Arzola, Y., Moreno-Rodríguez, A.  
Au/Y-TiO<sub>2</sub> catalyst: High activity and long-term stability in CO oxidation  
*ACS Catalysis* 2 (1), pp. 1-11, 2012.
59. Wu, H., Wang, L., Shen, Z., Zhao, J.  
Catalytic oxidation of toluene and p-xylene using gold supported on Co<sub>3</sub>O<sub>4</sub> catalyst prepared by colloidal precipitation method  
*Journal of Molecular Catalysis A: Chemical* 351, pp. 188-195, 2011.
58. Garcia, T., Weng, W., Solsona, B., Carter, E., Carley, A.F., Kiely, C.J., Taylor, S.H.  
The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation  
*Catalysis Science and Technology* 1 (8), pp. 1367-1375, 2011.
57. Jiang, X., Deng, H.  
Synthesis of Au-CeO<sub>2</sub>/SiO<sub>2</sub> catalyst via adsorbed-layer reactor technique combined with alcohol-thermal treatment  
*Applied Surface Science* 257 (24), pp. 10883-10887, 2011.
56. Kalbasi Roozbeh Javad, Massah Ahmad Reza, Zamani Farzad, et al.  
Metal (Co, Mn)-amine-functionalized mesoporous silica SBA-15: synthesis, characterization and catalytic properties in hydroxylation of benzene  
*JOURNAL OF POROUS MATERIALS* 18 (4) Pages: 475-482, AUG 2011.
55. Sandoval Alberto; Aguilar Antonio; Louis Catherine; et al.  
Bimetallic Au-Ag/TiO<sub>2</sub> catalyst prepared by deposition-precipitation: High activity and stability in CO oxidation  
*JOURNAL OF CATALYSIS* 281 (1) Pages: 40-49, JUL 1 2011.
54. Luciani Silvia; Cavani Fabrizio; Dal Santo Vladimiro; et al.  
The mechanism of surface doping in vanadyl pyrophosphate, catalyst for n-butane oxidation to maleic anhydride: The role of Au promoter  
*CATALYSIS TODAY* 169 (1) Pages: 200-206, JUL 2011.
53. Wu, H., Wang, L., Zhang, J., Shen, Z., Zhao, J.  
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
*CATALYSIS COMMUNICATIONS* 12 (10) Pages: 859-865, MAY 15 2011.
52. Einaga Hisahiro; Teraoka Yasutake; Ogat Atsushi  
Benzene oxidation with ozone over manganese oxide supported on zeolite catalysts  
*CATALYSIS TODAY* 164 (1) Pages: 571-574, APR 30 2011.
51. Solsona, B., Aylón, E., Murillo, R., Mastral, A.M., Monzonis, A., Agouram, S., Davies, T.E., (...), Garcia, T.  
Deep oxidation of pollutants using gold deposited on a high surface area cobalt oxide prepared by a nanocasting route  
*JOURNAL OF HAZARDOUS MATERIALS* 187 (1-3) Pages: 544-552, MAR 15 2011.
50. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.  
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O(2) catalysts  
*APPLIED CATALYSIS B-ENVIRONMENTAL* 103 (1-2) Pages: 143-148, MAR 14 2011.
49. Solsona, B., Garcia, T., Agouram, S., Hutchings, G.J., Taylor, S.H.  
The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane  
*APPLIED CATALYSIS B-ENVIRONMENTAL* 101 (3-4) Pages: 388-396, JAN 14 2011.
48. Hong, Y.-C., Sun, K.-Q., Han, K.-H., Liu, G., Xu, B.-Q.  
Comparison of catalytic combustion of carbon monoxide and formaldehyde over Au/ZrO(2) catalysts  
*CATALYSIS TODAY* 158 (3-4) Pages: 415-422, DEC 22 2010.
47. Li, W.B., Wang, J.X., Gong, H.  
Catalytic combustion of VOCs on non-noble metal catalysts  
*Catalysis Today* 148 (1-2), pp. 81-87 (2010).

46. Hernández, W.Y., Romero-Sarria, F., Centeno, M.A., Odriozola, J.A.  
In situ characterization of the dynamic gold-support interaction over ceria modified  $\text{Eu}^{3+}$ . Influence of the oxygen vacancies on the CO oxidation reaction  
Journal of Physical Chemistry C 114 (24), pp. 10857-10865 (2010).
45. Einaga, H., Ogata, A.  
Catalytic oxidation of benzene in the gas phase over alumina-supported silver catalysts  
Environmental Science and Technology 44 (7), pp. 2612-2617 (2010).
44. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.  
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
Advanced Materials Research 96, pp. 21-27 (2010).
43. Wu, HJ (Wu, Hongjing); Shuai, Q (Shuai, Qin); Zhu, ZL (Zhu, Zhenli); Hu, SH (Hu, Shenghong)  
Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide  
ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series: Advanced Materials Research Volume: 96 Pages: 21-27 DOI: 10.4028/www.scientific.net/AMR.96.21 Published: 2010
42. Li, WB (Li, W. B.); Wang, JX (Wang, J. X.); Gong, H (Gong, H.)  
Catalytic combustion of VOCs on non-noble metal catalysts  
CATALYSIS TODAY Volume: 148 Issue: 1-2 Pages: 81-87 DOI: 10.1016/j.cattod.2009.03.007 Published: OCT 30 2009
41. Hosseini, M, Siffert, S, Tidahy, HL, Cousin, R, Aboukais, A, De Weireld, G, Canet, X, Hadj-Sadok, Z, Su, BL  
CHARACTERISATION OF NANOSTRUCTURED MACRO-MESOPOROUS  $\text{TiO}_2$ - $\text{ZrO}_2$  IMPREGNATED BY NOBLE METALS FOR VOC OXIDATION  
CHARACTERISATION OF POROUS SOLIDS VIII Book Series: ROYAL SOCIETY OF CHEMISTRY SPECIAL PUBLICATIONS Issue: 318 Pages: 225-232 Published: 2009
40. Song, C., Chen, M., Ma, Y., Ma, C, Zheng, X.  
The effect of preparation parameters on the structure and catalytic performance of Ce-Pt-Pd/SSWM stainless steel wire mesh catalyst  
Cailiao Yanjiu Xuebao/Chinese Journal of Materials Research 23 (5), pp. 508-512 (2009).
39. Ma, T.-Y., Cao, J.-L., Shao, G.-S., Zhang, X.-J., Yuan, Z.-Y.  
Hierarchically structured squama-like cerium-doped titania: Synthesis, photoactivity, and catalytic CO oxidation  
Journal of Physical Chemistry C 113 (38), pp. 16658-16667 (2009).
38. Hosseini, M., Siffert, S., Cousin, R., Aboukais, A., Hadj-Sadok, Z., Su, B.-L.  
Total oxidation of VOCs on Pd and/or Au supported on  $\text{TiO}_2/\text{ZrO}_2$  followed by "operando" DRIFT  
Comptes Rendus Chimie 12 (6-7), pp. 654-659 (2009).
37. Einaga, H., Ogata, A.  
Benzene oxidation with ozone over supported manganese oxide catalysts: Effect of catalyst support and reaction conditions  
Journal of Hazardous Materials 164 (2-3), pp. 1236-1241 (2009).
36. Einaga, H., Harada, M., Ogata, A.  
Relationship between the structure of manganese oxides on alumina and catalytic activities for benzene oxidation with ozone  
Catalysis Letters 129 (3-4), pp. 422-427 (2009).
35. Delaigle, R., Debecker, D.P., Bertinchamps, F., Gaigneaux, E.M.  
Revisiting the behaviour of vanadia-based catalysts in the abatement of (chloro)-aromatic pollutants: Towards an integrated understanding  
Topics in Catalysis 52 (5), pp. 501-516 (2009).
34. Yang, S.M., Liu, D.M., Liu, S.Y.  
Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
Topics in Catalysis 47 (3-4), pp. 101-108 (2008).
33. Silva, A.M., Farias, A.M.D.d., Costa, L.O.O., Barandas, A.P.M.G., Mattos, L.V., Fraga, M.A., Noronha, F.B.  
Partial oxidation and water-gas shift reaction in an integrated system for hydrogen production from ethanol  
Applied Catalysis A: General 334 (1), pp. 179-186 (2008)
32. Della Pina, C (Della Pina, Cristina); Dimitratos, N (Dimitratos, Nikolaos); Falletta, E (Falletta, Ermelinda); Rossi, M (Rossi, Michele); Siani, A (Siani, Attilio)  
Catalytic performance of gold catalysts in the total oxidation of VOCs  
GOLD BULLETIN Volume: 40 Issue: 1 Pages: 67-72 Published: 2007
31. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)  
Catalytic Applications for Gold Nanotechnology  
NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007
30. Sandoval, A., Gómez-Cortés, A., Zanella, R., Díaz, G., Saniger, J.M.  
Gold nanoparticles: Support effects for the WGS reaction  
Journal of Molecular Catalysis A: Chemical 278 (1-2), pp. 200-208 (2007)
29. Dos Santos, A.A., Lima, K.M.N., Figueiredo, R.T., Egues, S.M.D.S., Ramos, A.L.D.  
Toluene deep oxidation over noble metals, Copper and Vanadium Oxides  
Catalysis Letters 114 (1-2), pp. 59-63 (2007)

28. Cellier, C., Lambert, S., Gaigneaux, E.M., Poleunis, C., Ruaux, V., Eloy, P., Lahousse, C., (...), Grange, P.  
Investigation of the preparation and activity of gold catalysts in the total oxidation of n-hexane  
*Applied Catalysis B: Environmental* 70 (1-4), pp. 406-416 (2007)
27. Trudeau, M.L.  
Nanostructured Materials for Gas Reactive Applications  
Nanostructured Materials: Processing, Properties, and Applications: Second Edition 365-437 DOI: 10.1016/B978-081551534-0.50011-7  
(2006)
26. Hutchings, GJ (Hutchings, Graham J.).  
Reactions of Environmental Importance  
CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006
25. Yuan, M.-H., Chang, C.-Y., Shie, J.-L., Du, W.-K., Lee, D.-J., Tsai, W.-T.  
Catalytic oxidation of naphthalene using a Pt/Al<sub>2</sub>O<sub>3</sub> catalyst with ozone  
Proceedings of the Air and Waste Management Association's Annual Conference and Exhibition, AWMA 2, pp. 1135-1146 (2006)
24. Ahn HG, Choi BM, Lee DJ  
Complete oxidation of ethylene over supported gold nanoparticle catalysts  
*JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY* 6 (11): 3599-3603 NOV 2006
23. Solsona, B.E., Garcia, T., Jones, C., Taylor, S.H., Carley, A.F., Hutchings, G.J.  
Supported gold catalysts for the total oxidation of alkanes and carbon monoxide  
*Applied Catalysis A: General* 312 (1-2), pp. 67-76 (2006)
22. Ho, K.Y., Yeung, K.L.  
Effects of ozone pretreatment on the performance of Au/TiO<sub>2</sub> catalyst for CO oxidation reaction  
*Journal of Catalysis* 242 (1), pp. 131-141 (2006)
21. Grzybowska-Swierkosz B  
Nano-Au/oxide support catalysts in oxidation reactions: Provenance of active oxygen species  
*CATALYSIS TODAY* 112 (1-4): 3-7 MAR 15 2006
20. Einaga H, Futamura S  
Oxidation behavior of cyclohexane on alumina-supported manganese oxides with ozone  
*APPLIED CATALYSIS B-ENVIRONMENTAL* 60 (1-2): 49-55 SEP 1 2005
19. Alvim-Ferraz MCM, Gaspar CMTB  
Impregnated active carbons to control atmospheric emissions: Influence of impregnation methodology and raw material on the catalytic activity  
*ENVIRONMENTAL SCIENCE & TECHNOLOGY* 39 (16): 6231-6236 AUG 15 2005
18. Hua JM, Zheng Q, Zheng YH, et al.  
Influence of modifying additives on the catalytic activity and stability of Au/Fe<sub>2</sub>O<sub>3</sub>-MO<sub>x</sub> catalysts for the WGS reaction  
*CATALYSIS LETTERS* 102 (1-2): 99-108 JUL 2005
17. Ruszel M, Grzybowska B, Gasior M, et al.  
Effect of Au in V(2)O(5)/SiO<sub>2</sub> and MoO<sub>3</sub>/SiO<sub>2</sub> catalysts on physicochemical and catalytic properties in oxidation of C-3 hydrocarbons and of CO  
*CATALYSIS TODAY* 99 (1-2): 151-159 JAN 15 2005
16. Alvim-Ferraz MDM, Gaspar CMTB  
Catalytic activity of active carbons impregnated before activation of pinewood sawdust and nutshells to be used on the control of atmospheric emissions  
*JOURNAL OF HAZARDOUS MATERIALS* 119 (1-3): 135-143 MAR 17 2005
15. Garcia T, Solsona B, Murphy DM, et al.  
Deep oxidation of light alkanes over titania-supported palladium/vanadium catalysts  
*JOURNAL OF CATALYSIS* 229 (1): 1-11 JAN 1 2005
14. Wang, CM (Wang, CM); Shutthanandan, V (Shutthanandan, V); Zhang, Y (Zhang, Y); Baer, DR (Baer, DR); Thomas, LE (Thomas, LE); Thevuthasan, S (Thevuthasan, S)  
Microstructure of precipitated Au nanoclusters in TiO<sub>2</sub>  
CONTINUOUS NANOPHASE AND NANOSTRUCTURED MATERIALS Book Series: MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS Volume: 788 Pages: 249-253 Published: 2004
13. Einaga H, Futamura S  
Catalytic oxidation of benzene with ozone over alumina-supported manganese oxides  
*JOURNAL OF CATALYSIS* 227 (2): 304-312 OCT 25 2004
12. Meyer R, Lemire C, Shaikhutdinov SK, et al.  
Surface chemistry of catalysis by gold  
*GOLD BULLETIN* 37 (1-2): 72-124 2004
11. Narayana KV, Raju BD, Masthan SK, et al.

ESR spectroscopic characterization of V<sub>2</sub>O<sub>5</sub>/AlF<sub>3</sub> ammoxidation catalysts  
CATALYSIS COMMUNICATIONS 5 (8): 457-462 AUG 2004

10. Gasior M, Grzybowska B, Samson K, et al.  
Oxidation of CO and C-3 hydrocarbons on gold dispersed on oxide supports  
CATALYSIS TODAY 91-92: 131-135 JUL 15 2004

9. Wang CM, Zhang Y, Shutthanandan V, et al.  
Microstructure of precipitated Au nanoclusters in TiO<sub>2</sub>  
JOURNAL OF APPLIED PHYSICS 95 (12): 8185-8193 JUN 15 2004

8. De M, Kunzru D  
Oxidative dehydrogenation of propane on V<sub>2</sub>O<sub>5</sub>/ZrO<sub>2</sub> catalyst  
CATALYSIS LETTERS 96 (1-2): 33-42 JUL 2004

7. Einaga H, Futamura S  
Comparative study on the catalytic activities of alumina-supported metal oxides for oxidation of benzene and cyclohexane with ozone  
REACT KINET CATAL L 81 (1): 121-128 2004

6. Alvim-Ferraz MCM, Gaspar CMTB  
Active carbons impregnated before activation of olive stones: catalytic activity to remove benzene from gaseous emissions  
J PHYS CHEM SOLIDS 65 (2-3): 655-659 FEB-MAR 2004

5. Wang, C.M., Shutthanandan, V., Zhang, Y., Baer, D.R., Thomas, L.E., Thevuthasan, S.  
Microstructure of precipitated Au nanoclusters in TiO<sub>2</sub>  
Materials Research Society Symposium - Proceedings 788, pp. 249-253 (2003)

4. Fan L, Ichikuni N, Shimazu S, et al.  
Preparation of Au/TiO<sub>2</sub> catalysts by suspension spray reaction method and their catalytic property for CO oxidation  
APPL CATAL A-GEN 246 (1): 87-95 JUN 25 2003

3. Dutta H, Pradhan SK  
Microstructure characterization of high energy ball-milled nanocrystalline V<sub>2</sub>O<sub>5</sub> by Rietveld analysis  
MATER CHEM PHYS 77 (3): 868-877 JAN 30 2003

2. Centeno MA, Paulis M, Montes M, et al.  
Catalytic combustion of volatile organic compounds on Au/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> and Au/Al<sub>2</sub>O<sub>3</sub> catalysts  
APPL CATAL A-GEN 234 (1-2): 65-78 AUG 8 2002

1. Gupta NM, Tripathi AK  
The role of nanosized gold particles in adsorption and oxidation of carbon monoxide over Au/Fe<sub>2</sub>O<sub>3</sub> catalyst  
GOLD BULL 34 (4): 120-128 2001

32. *"About the possible diminution of the sp<sup>3</sup> C presence along with the increase of the nitrogen enclosure in the CN<sub>x</sub> thin films produced by reactive pulsed laser deposition"*

E. Gyorgy, I. N. Mihailescu, M. Baleva, E. P. Trifonova, M. Abrashev, V. Darakchieva, A. Zocco, and A. Perrone  
J. Materials Science 36 (2001) 1951 - 1956.

33. *"Impact of MOCVD-GaN "templates" on the spatial non-uniformities of strain and doping distribution in hydride vapour phase epitaxial GaN"*

E. Valcheva, T. Paskova, M. V. Abrashev, P. A. O. Persson, P. P. Paskov, E. M. Goldys, R. Beccard, M. Heuken, and M. Monemar  
Mater. Sci. Eng. B82 (2001) 35 - 38.

5. Matsubara, Tohoru; Denpo, Yusho; Okada, Narihito; et al.  
V-shaped pits in HVPE-grown GaN associated with columnar inversion domains originating from foreign particles of alpha-Si<sub>3</sub>N<sub>4</sub> and graphitic carbon  
MICRON Volume: 94 Pages: 9-14 Published: MAR 2017

4. Meng, F.Y., Han, I., McFelea, H., Lindow, E., Bertram, R., Werkhoven, C., Arena, C., Mahajan, S.  
Sapphire surface pits as sources of threading dislocations in hetero-epitaxial GaN layers  
Scripta Materialia 65 (3), pp. 257-260, 2011.

3. Meng, F.Y., Han, I., McFelea, H., Lindow, E., Bertram, R., Werkhoven, C., Arena, C., Mahajan, S.  
Structural evolution of GaN layers grown on (0 0 1) sapphire by hydride vapor phase epitaxy  
JOURNAL OF CRYSTAL GROWTH 327 (1) Pages: 13-21, JUL 15 2011.

2. Dam, C.E.C., Grzegorzczak, A.P., Hageman, P.R., Larsen, P.K.  
What makes good templates for HVPE GaN growth?  
Materials Research Society Symposium Proceedings 892, pp. 737-741 (2006)

1. Dam, C.E.C., Grzegorzczak, A.P., Hageman, P.R., Larsen, P.K.  
Method for HVPE growth of thick crack-free GaN layers  
Journal of Crystal Growth 290 (2), pp. 473-478 (2006)
34. “Investigations of the crystal distortions in perovskites using Raman spectroscopy”  
M. V. Abrashev, V. G. Ivanov and M. N. Iliev  
Balkan Physics Letters 9 (2001) 188 – 192.
35. “Defect and stress relaxation in HVPE-GaN films using high temperature reactively sputtered AlN buffer”  
T. Paskova, E. Valcheva, J. Birch, S. Tungasmita, P. A. O. Persson, P. P. Paskov, S. Evtimova, M. Abrashev, and B. Monemar  
J. Cryst. Growth 230, no. ER3-4 (2001) 381 - 386.
22. Chen, Q., Gao, J., Chen, C., (...), Ye, J., Guo, W.  
Evolution of Dislocations and Strains in AlN Grown by High-Temperature Metal-Organic Chemical Vapor Deposition  
Crystal Growth and Design 24(4), pp. 1784-1791 (2024)
21. Misaku, R., Tanigawa, S., Okada, N., Tadatomo, K.  
Direct growth of GaN on sapphire substrate via polarity transition from N- to Ga-polar using only hydride vapor phase epitaxy  
Japanese Journal of Applied Physics 61(SA),SA1016
20. Liang, Z., Du, H., Yuan, Y., (...), Wang, X., Zhang, G.  
Ultra-thin AlGaIn/GaN HFET with a high breakdown voltage on sapphire substrates  
Applied Physics Letters 119(25),252101 (2021)
19. Epitaxial Growth of GaN on Magnetron Sputtered AlN/Hexagonal BN/Sapphire Substrates  
Wu, JX (Wu, Jinxing) Li, PX (Li, Peixian) Xu, SR (Xu, Shengrui) Zhou, XW (Zhou, Xiaowei) Tao, HC (Tao, Hongchang) Yue, WK (Yue, Wenkai) Wang, YL (Wang, Yanli) Wu, JT (Wu, Jiangtao) Zhang, YC (Zhang, Yachao) Hao, Y (Hao, Yue)  
MATERIALS Volume13 Issue22 Article Number5118 PublishedNOV 2020
18. Emergence of high quality sputtered III-nitride semiconductors and devices  
Izyumskaya, N (Izyumskaya, N.) Avrutin, V (Avrutin, V) Ding, K (Ding, K.) Ozgur, U (Ozgur, U.) Morkoc, H (Morkoc, H.) Fujioka, H (Fujioka, H.)  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY Volume34 Issue9 Article Number093003 PublishedSEP 2019
17. AlN gradient interlayer design for the growth of high-quality AlN epitaxial film on sputtered AlN/sapphire substrate  
Tan, B (Tan, Bo) Hu, JH (Hu, Jiahui) Zhang, J (Zhang, Jun) Zhang, Y (Zhang, Yi) Long, HL (Long, Hanling) Chen, JW (Chen, Jingwen) Du, SD (Du, Shida) Dai, JN (Dai, Jiangnan) Chen, CQ (Chen, Changqing) Xu, JT (Xu, Jintong)  
CRYSTENGCOMM Volume20 Issue41 Page6557-6564 PublishedNOV 7 2018
16. Wang, Jiaying; Chen, Zhen; Xing, Yuchen; et al.  
The influences of sputtered AlN buffer layer on AlInGaIn based blue and near-ultraviolet light emitting diodes  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE Volume: 214 (6) Article No: 1600714 Published: JUN 2017
15. Redkov, A.V., Kukushkin, S.A.  
Surface defects formation on strained thin films growing via chemical reaction: a model  
Journal of Physics Conference Series Volume: 643 Article Number: 012005 DOI: 10.1088/1742-6596/643/1/012005 Published: 2015
14. Chen, Y. A.; Kuo, C. H.; Wu, J. P.; et al.  
Interruption-free growth of 10 μm-thick GaN film prepared on sputtered AlN/PSS template by hydride vapor phase epitaxy  
JOURNAL OF CRYSTAL GROWTH Volume: 426 Pages: 180-185 Published: SEP 15 2015
13. Kong, W.; Jiao, W. Y.; Li, J. C.; et al.  
Effect of strain in sputtered AlN buffer layers on the growth of GaN by molecular beam epitaxy  
APPLIED PHYSICS LETTERS Volume: 107 Issue: 3 Article Number: 032102 Published: JUL 20 2015
12. Oda, O.  
Nitride and Other III-V Compounds  
COMPOUND SEMICONDUCTOR BULK MATERIALS AND CHARACTERIZATIONS, VOL 2 Pages: 27-125 Published: 2012
11. Long, H., Yu, T.J., Fang, H., Yang, Z.J., Zhang, G.Y.  
Modulation of anisotropic crystalline in a-plane GaN on HT-AlN buffer layer  
Applied Surface Science 258 (15), 5579-5582, 2012.
10. Weyher, J.L., Ucznik, B., Grzegory, I., Smalc-Koziorowska, J., Paskova, T.  
Revealing extended defects in HVPE-grown GaN  
JOURNAL OF CRYSTAL GROWTH 312 (18) Pages: 2611-2615, SEP 1 2010.
9. Matoussi, A., Ben Nasr, F., Boufaden, T., Salh, R., Fakhfakh, Z., Guermazi, S., ElJani, B., Fitting, H.-J.  
Luminescent properties of GaN films grown on porous silicon substrate

Journal of Luminescence 130 (3), pp. 399-403 (2010).

8. Li, X., Qiu, K., Zhong, F., Yin, Z., Ji, C., Wang, Y.  
Preparation of porous GaN buffer and its influence on the residual stress of GaN epilayers grown by hydride vapor phase epitaxy  
Journal of Materials Science and Technology 23 (4), pp. 574-576 (2007)

7. Medjani, F., Sanjinés, R., Allidi, G., Karimi, A.  
Effect of substrate temperature and bias voltage on the crystallite orientation in RF magnetron sputtered AlN thin films  
Thin Solid Films 515 (1), pp. 260-265 (2006)

6. Zhang JX, Cheng H, Chen YZ, et al.  
Growth of AlN films on Si(100) and Si(111) substrates by reactive magnetron sputtering  
SURFACE & COATINGS TECHNOLOGY 198 (1-3): 68-73 AUG 1 2005

5. Mynbaeva MG, Mynbaev KD, Sarua A, et al.  
Porous GaN/SiC templates for homoepitaxial growth: effect of the built-in stress on the formation of porous structures  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY 20 (1): 50-55 JAN 2005

4. Zhang JX, Chen YZ, Cheng H, et al.  
Interface study of AlN grown on Si substrates by radio-frequency magnetron reactive sputtering  
THIN SOLID FILMS 471 (1-2): 336-341 JAN 3 2005

3. Nouet G, Ruterana P, Chen J, et al.  
Characterization of thick HVPE GaN films  
SUPERLATTICES AND MICROSTRUCTURES 36 (4-6): 417-424 OCT-DEC 2004

2. Starikov, E., Gruinskis, V., Shiktorov, P.  
Strain evolution in high temperature AlN buffer layers for HVPE-GaN growth  
2002 Physica Status Solidi (A) Applied Research 190 (1), pp. 59-64

1. Wrobel, J.M., Placzek-popko, E., Dubowski, J.J., Tang, H., Webb, J.B.  
A photoluminescence study of laser ablated gallium nitride thin films  
Proceedings of SPIE - The International Society for Optical Engineering 4637, pp. 82-89 (2002)

### 36. *"Raman spectroscopy of the charge- and orbital-ordered state in La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>"*

M. V. Abrashev, J. Bäckström, L. Börjesson, M. Pissas, N. Kolev, and M. N. Iliev

Phys. Rev. B 64 (2001) 144429.

59. Abdulvakhidov, K., Li, Z., Abdulvakhidov, B., (...), Ubushaeva, E., Sitalo, E.  
Structure phase state and physical properties of YbMn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> compositions  
Applied Physics A: Materials Science and Processing 129(3),185 (2023)

58. Laajimi, K., Kchaw, M., Fourati, I., (...), Gazzah, M.H., Dhahri, J.  
Large magnetocaloric effect in 0.25(La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub> + La<sub>0.67</sub>Ca<sub>0.13</sub>Sr<sub>0.2</sub>Mn<sub>0.98</sub>Ni<sub>0.02</sub>O<sub>3</sub>) /0.5  
La<sub>0.67</sub>Ca<sub>0.23</sub>Sr<sub>0.1</sub>Mn<sub>0.98</sub>Ni<sub>0.02</sub>O<sub>3</sub> composite close to room temperature  
European Physical Journal Plus 137(8),943 (2022)

57. Structural-distortion modes and transport properties of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> by co-doping Dy<sup>3+</sup> and Sr<sup>2+</sup> ions  
Tang, Y.F., Zhang, A.M., Shi, J.Y., Wu, X.S.  
Ceramics International 46(8), pp. 10598-10602 (2020)

56. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured Ca<sub>1-x</sub>Ln<sub>3</sub>+xMnO<sub>3-δ</sub> (Ln<sup>3+</sup> = Sm, Ce, La; x = 0, 0.1)  
Mary, S.B., Rajesh, A.L.  
Journal of Materials Science: Materials in Electronics 31(8), pp. 6479-6487 (2020)

55. Backfolded acoustic phonons as ultrasonic probes in metal-oxide superlattices  
Lyzwa, F., Chan, A., Khmaladze, J., (...), Minola, M., Mallett, B.P.P.  
Physical Review Materials 4(4),043606 (2020)

54. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, R.D., Ogawa, K., Yamada, S., Liu, H.-L.  
Scientific Reports 9(1),18164 (2019)

53. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3-δ</sub> by Raman spectroscopy  
Trotsenko, V.G., Lahmar, A., Lyanguzov, N.V., El Marssi, M., Torgashev, V.I.  
Superlattices and Microstructures 127, pp. 100-108 (2019)

52. Effects of A-site cation disordering on the transport properties of half-doping La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> manganites  
Shi, J.Y., Zhang, A.M., Wang, W.X., (...), Zhang, W.J., Wu, X.S.  
Chemical Physics Letters 706, pp. 223-227 (2018)

51. Superconductor sandwiches: Cuprate-manganite multilayers with a remarkable new ground state  
Mallett, B.P.P., Marsik, P., Khmaladze, J., (...), Simpson, M.C., Bernhard, C.

50. Raman Scattering as a tool for studying complex materials (Book Chapter)  
Cooper, S.L., Abbamonte, P., Mason, N., (...), Casa, D., Gan, Y.  
Optical Techniques for Solid-State Materials Characterization pp. 193-234 (2016)
49. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
48. Panda, S., Purohit, P.K., Rout, G.C.  
Study of Ferromagnetism Through Electron Self-Energy of Charge Ordered Manganites  
ADVANCED SCIENCE LETTERS Volume: 20 Issue: 3-4 Special Issue: SI Pages: 643-646 DOI: 10.1166/asl.2014.5373 Published:  
MAR-APR 2014
47. Norpoth, Jonas; Mildner, Stephanie; Scherff, Malte; et al.  
In situ TEM analysis of resistive switching in manganite based thin-film heterostructures  
NANOSCALE 6 (16), 9852-9862 AUG 21 2014
46. Gasparov, L.; Jegorel, T.; Loetgering, L.; et al.  
Thin film substrates from the Raman spectroscopy point of view  
JOURNAL OF RAMAN SPECTROSCOPY 45 (6), pp. 465-469 JUN 2014
45. Chaturvedi, Aditi; Sathe, V. G.  
Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234, OCT 2013
44. Foerst, M.; Mankowsky, R.; Bromberger, H.; et al.  
Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction  
SOLID STATE COMMUNICATIONS 169, 24-27, SEP 2013
43. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.  
Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO<sub>3</sub>  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), 064708, JUN 2013
42. Nikolaev, S. A.; Mazurenko, V. G.; Rudenko, A. N.  
Influence of magnetic order on phonon spectra of multiferroic orthorhombic YMnO<sub>3</sub>  
SOLID STATE COMMUNICATIONS 164, 16-21, JUN 2013
41. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.  
Investigation of the Properties of Ba-Substituted La<sub>0.7</sub>Sr<sub>0.3-x</sub> Ba (x) MnO<sub>3</sub> Perovskite Manganite Films for Resistive Switching  
Applications  
JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201, JUN 2013
40. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.  
Structural, magnetic, infrared and Raman studies of La<sub>0.8</sub>Sr<sub>x</sub> Ca<sub>0.2-x</sub> MnO<sub>3</sub> (0 ≤ x ≤ 0.2)  
Journal of Materials Science: Materials in Electronics 24 (7) , pp. 2292-2301, 2013
39. Dodiya, N., Yogi, A., Varshney, D.  
Low temperature Raman spectra of rhombohedral La<sub>0.925</sub>Na<sub>0.075</sub>MnO<sub>3</sub>  
AIP Conference Proceedings 1512 , pp. 798-799, 2013
38. Dodiya, N., Varshney, D.  
Structural properties and Raman spectroscopy of rhombohedral La<sub>1-x</sub>NaxMnO<sub>3</sub> (0.075 ≤ x ≤ 0.15)  
Journal of Molecular Structure 1031 , pp. 104-109, 2013
37. Cooper, SL, Abbamonte, P, Mason, N.; Snow, CS, Kim, M, Barath, H.; Karpus, JF  
RAMAN SCATTERING AS A TOOL FOR STUDYING COMPLEX MATERIALS  
OPTICAL TECHNIQUES FOR SOLID-STATE MATERIALS CHARACTERIZATION Pages: 193-234 Published: 2012
36. Ravindra, A.V., Padhan, P., Prellier, W.  
Electronic structure and optical band gap of CoFe<sub>2</sub>O<sub>4</sub> thin films  
Applied Physics Letters 101 (16), art. no. 161902, 2012
35. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.  
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.
34. Laverdiere J.; Jandl S.; Fournier P.  
Colossal magnetoresistance of Nd<sub>2/3</sub>Sr<sub>1/3</sub>MnO<sub>3</sub> ultrathin films grown on charge-ordered Nd<sub>1/2</sub>Ca<sub>1/2</sub>MnO<sub>3</sub> manganite  
PHYSICAL REVIEW B 84 (10) Article Number: 104434, SEP 19 2011.
33. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.  
Strain induced phase separation on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.

32. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P.  
Investigation of phonon behavior in Pr(2)NiMnO(6) by micro-Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (5) Article Number: 052202, FEB 9 2011.
31. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al.  
Thickness dependence of microstructure for La(0.9)Sr(0.1)MnO(3)/Si films determined by micro-Raman spectroscopy  
ACTA PHYSICA SINICA 58 (11) Pages: 8008-8013, NOV 2009.
30. Mansouri, S., Charpentier, S., Jandl, S., Fournier, P., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.  
A micro-Raman study of a Pr0.5Ca0.5MnO3 single crystal and thinfilms  
Journal of Physics Condensed Matter 21 (38), art. no. 386004 (2009).
29. Matsuzaki, H., Uemura, H., Matsubara, M., Kimura, T., Tokura, Y., Okamoto, H.  
Detecting charge and lattice dynamics in photoinduced charge-order melting in perovskite-type manganites using a 30-femtosecond time resolution  
Physical Review B - Condensed Matter and Materials Physics 79 (23), art. no. 235131 (2009).
28. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.  
Pressure induced insulator-metal phase transition on Pr0.6Ca0.4MnO3 thin films  
Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008
27. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.  
Evaluation of the strains in charge-ordered Pr1-xCaxMnO3 thin films using Raman spectroscopy  
Journal of Applied Physics 104 (6), art. no. 063508 (2008).
26. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in LaxPr1-x-yMnO3  
Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).
25. Antonakos A, Lampakis D, Palles D, et al.  
Low temperature micro-Raman measurements under magnetic field of Pr1-xCaxMnO3 thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 310 (2), pp. 2164-2166 (2007)
24. Wu, L., Klie, R.F., Zhu, Y., Jooss, Ch.  
Experimental confirmation of Zener-polaron-type charge and orbital ordering in Pr1-x Cax MnO3  
Physical Review B - Condensed Matter and Materials Physics 76 (17), art. no. 174210 (2007)
23. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U.  
Strain effects on La0.5Ca0.5MnO3 thin films  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 144 (1-3), pp. 83-88 (2007)
22. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
Impact of Co Mn cation ordering on phonon anomalies in La2 CoMn O6 double perovskites: Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 76 (13), art. no. 132413 (2007)
21. Jooss, Ch., Wu, L., Beetz, T., Klie, R.F., Beleggia, M., Schofield, M.A., Schramm, S., (...), Zhu, Y.  
Polaron melting and ordering as key mechanisms for colossal resistance effects in manganites  
Proceedings of the National Academy of Sciences of the United States of America 104 (34), pp. 13597-13602 (2007)
20. Kawasaki, T., Ogimoto, Y., Ogawa, N., Miyano, K., Tamaru, H., Izumi, M.  
Charge- and orbital-ordering patterns in Bi1/2Sr 1/2MnO3 thin films studied by Raman scattering  
Journal of Applied Physics 101 (12), art. no. 123714 (2007)
19. Kozlenko, D.P., Dubrovinsky, L.S., Goncharenko, I.N., Savenko, B.N., Voronin, V.I., Kiselev, E.A., Proskurmina, N.V.  
Pressure-induced monoclinic distortion and charge and orbital ordering in La0.5 Ca0.5 Mn O3  
Physical Review B - Condensed Matter and Materials Physics 75 (10), art. no. 104408 (2007)
18. Antonakos, A., Lampakis, D., Palles, D., Liarokapis, E., Prellier, W., Mercey, B.  
Low temperature micro-Raman measurements under magnetic field of Pr1 - x Cax MnO3 thin films  
Journal of Magnetism and Magnetic Materials 310 (2 SUPPL. PART 3), pp. 2164-2166 (2007)
17. Huang, S., Ruan, K., Pang, Z., Lv, Z., Wu, H., Shen, Z., Cao, L., Li, X.  
Molecular vibrations of the layered-perovskite cobalt oxides characterized by infrared and Raman spectroscopies coupled with crystal structure refinement  
Solid State Communications 141 (3), pp. 150-155 (2007)
16. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd0.5Ca0.5MnO3 thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006)
15. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO3  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006
14. Gozar, A., Koomiya, S., Ando, Y., Blumberg, G.  
Magnetic and charge correlations in La2-x-yNdySrxCuO3: Raman scattering studyH2O



Frontiers in Magnetic Materials 755-789 DOI: 10.1007/3-540-27284-4\_24 (2005)

13. Polychronopoulou K, Galisteo FC, Granados ML, et al.  
Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H<sub>2</sub>S from gas streams in the presence of H<sub>2</sub>, CO<sub>2</sub>, and H<sub>2</sub>O  
JOURNAL OF CATALYSIS 236 (2): 205-220 DEC 10 2005
12. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005
11. Lim D, Thorsmølle VK, Averitt RD, et al.  
Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La<sub>1-x</sub>CaxMnO<sub>3</sub>  
PHYSICAL REVIEW B 71 (13): Art. No. 134403 APR 2005
10. Xiong YM, Wang GY, Luo XG, et al.  
Magnetotransport properties in La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) thin films deposited on different substrates  
JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 083909 APR 15 2005
9. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
8. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004
7. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al.  
Phonon Raman scattering in LaMn<sub>1-x</sub>CoxO<sub>3</sub> (x = 0, 0.2, 0.3, 0.4, and 1.0)  
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003
6. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003
5. Kuroe H, Habu I, Sakuta A, et al.  
Optical study in the charge-ordered phase of (Nd<sub>1-x</sub>Srx)MnO<sub>3</sub>  
PHYSICA B 329: 822-823 Part 2 MAY 2003
4. Choi KY, Lemmens P, Guntherodt G, et al.  
Raman scattering study of Nd<sub>1-x</sub>SrxMnO<sub>3</sub> (x = 0.3, 0.5)  
J PHYS-CONDENS MAT 15 (19): 3333-3342 MAY 21 2003
3. Takenaka K, Okuyama S, Sugai S, et al.  
Optical reflectivity spectra measured on cleaved surfaces of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
J PHYS SOC JPN 71 (12): 3065-3068 DEC 2002
2. Gorbenko OY, Graboy IE, Amelichev VA, et al.  
The structure and properties of Mn<sub>3</sub>O<sub>4</sub> thin films grown by MOCVD  
SOLID STATE COMMUN 124 (1-2): 15-20 2002
1. Naler S, Rubhausen M, Yoon S, et al.  
Lattice dynamics and charge ordering in La<sub>1-x</sub>CaxMnO<sub>3</sub> (0.45 ≤ x ≤ 0.76)  
PHYS REV B 65 (9): art. no. 092401 MAR 1 2002

### 37. "Raman phonons and Jahn-Teller bands in perovskite-like manganites"

Milko N. Iliev and Miroslav V. Abrashev

J. Raman Spectrosc. 32 (2001) 805 - 811.

148. Sahadevan, Jhelai; Madavan, Mugesh; Sankaran, Esakki Muthu; Kim, Ikhyun; Venkatesan, Rajesh; Alharbi, Naiyf S.; Khaled, Jamal M.; Paramasivam, Sivaprakash  
Influence of doping concentrations on the structural, optical, and magnetic properties of Ba-doped LaCoO<sub>3</sub> nanostructure  
ZEITSCHRIFT FÜR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS (in print) 10.1515/zpch-2024-0600 2024
147. Laajimi, Kawther; Khelifi, Mouadh; Hlil, El Kebir; Brahem, Rahma Ayed; Alshahrani, Thamraa; Albedah, Mohammed A.; Gazzah, Mohamed Hichem; Dhahri, Jemai; Belmabrouk, Hafedh  
Two metal-insulator transitions and magnetoresistive properties investigation in La<sub>0.67</sub>Ca<sub>(0.33-x)</sub>Sr<sub>x</sub>Mn<sub>0.98</sub>Ni<sub>0.02</sub>O<sub>3</sub> (0.1 ≤ x ≤ 0.3)  
JOURNAL OF ALLOYS AND COMPOUNDS 977 173361 10.1016/j.jallcom.2023.173361 MAR 15 2024
146. Liu, Cijie; Zhang, Dawei; Li, Wei; Trindell, Jamie A.; King, Keith A.; Bishop, Sean R.; Sugar, Joshua D.; Mcdaniel, Anthony H.; Smith, Andrew I.; Salinas, Perla A.; Coker, Eric N.; Clauser, Arielle L.; Velayutham, Murugesan; Neuefeind, Joerg C.; Yang, Jingjing; De Santiago, Hector A.; Ma, Liang; Wang, Yi; Wang, Qiang; Li, Wenyan; Wang, Qingsong; Li, Qingyuan; Tian, Hanchen; Ngan Tran, Ha

- Ngoc; Li, Xuemei; Robinson, Brandon; Deibel, Angela M.; Collins, Gregory; Thieu, Nhat Anh; Hu, Jianli; Khramtsov, Valery V.; Luo, Jian; Liu, Xingbo  
Manganese-based A-site high-entropy perovskite oxide for solar thermochemical hydrogen production  
JOURNAL OF MATERIALS CHEMISTRY A 12 7 3910-3922 10.1039/d3ta03554a FEB 13 2024
145. Rafiq, Muhammad; Ahmed, Adeel; Usman, Muhammad; Ullah, Raza; Gao, Fengyuan; Mateen, Muhammad; Yu, Bing; Shen, Youqing; Cong, Hailin  
Efficient heterogeneous activation of peroxymonosulfate by manganese-doped LaCoO<sub>3</sub> perovskites for metronidazole degradation: A mechanistic study and reaction pathways  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING 11 6 111608 10.1016/j.jece.2023.111608 DEC 2023
144. Zhao, Yajun; Zhang, Shuoxiao; Zhang, Yangyang; Liang, Jinrui; Ren, Longtao; Fan, Hong Jin; Liu, Wen; Sun, Xiaoming  
Vacancy-rich Al-doped MnO<sub>2</sub> cathodes break the trade-off between kinetics and stability for high-performance aqueous Zn-ion batteries  
ENERGY & ENVIRONMENTAL SCIENCE 17 3 1279 1290 10.1039/d3ee01659e FEB 6 2024
143. Rana, Sumesh; Sahlot, Pooja; Dwij, Vivek; Sharma, Gaurav; Kunwar, Hemant Singh; Deshpande, Uday P.; Shukla, D. K.; Sathe, Vasant  
Spin-phonon coupling-mediated magnetodielectricity in B-site disordered PrFe<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 34 26 1802 10.1007/s10854-023-11221-z SEP 2023
142. Sahadevan, Jhelai; Sivaprakash, P.; Muthu, S. Esakki; Kim, Ikhyun; Padmanathan, N.; Eswaramoorthi, V.  
Influence of Te-Incorporated LaCoO<sub>3</sub> on Structural, Morphology and Magnetic Properties for Multifunctional Device Applications  
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 24 12 10107 10.3390/ijms241210107 JUN 2023
141. Xu, Lincheng; Wang, Yue; Yan, Yong; Hao, Zhanzhong; Chen, Xin; Li, Fan  
Optimisation of the electronic structure by rare earth doping to enhance the bifunctional catalytic activity of perovskites  
APPLIED ENERGY 339 120931 10.1016/j.apenergy.2023.120931 JUN 1 2023
140. Abdulkhaidov, Kamaludin; Li, Zhengyou; Abdulkhaidov, Bashir; Soldatov, Alexander; Otajonov, Salim; Ergashev, Ravshan; Yuldashaliyev, Dilshod; Karimov, Bohodir; Nazarenko, Alexander; Plyaka, Pavel; Shapovalova, Svetlana; Vitchenko, Marina; Mardasova, Irina; Ubushaeva, Elza; Sitalo, Evgeniy  
Structure phase state and physical properties of YbMn<sub>1-x</sub>FexO<sub>3</sub> compositions  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 129 3 185 10.1007/s00339-023-06469-5 MAR 2023
139. Qi, Wenming; Li, Pengwei; Gao, Min; Hushur, Anwar; Zhang, Hongyan  
Mineral pressure gauge based on lattice stability and plasmonic enhancement of cobalt titanate under high pressure  
PHYSICAL REVIEW B 107 8 85429 10.1103/PhysRevB.107.085429 FEB 15 2023
138. Sun, Xiyu; Wang, Danhao; Memon, Muhammad Hunain; Zhu, Siqi; Yu, Huabin; Wang, Hongxuan; Fang, Shi; Kang, Yang; Liu, Xin; Luo, Yuanmin; Zhang, Haochen; Luo, Dongyang; Sun, Haiding  
Anisotropic photoresponse behavior of a LaAlO<sub>3</sub> single-crystal-based vacuum-ultraviolet photodetector  
NANOSCALE 14 45 16829-16836 10.1039/d2nr04552d NOV 24 2022
137. Manju, V; Rohith, R.; Prasannakumar, Anandhu Thejas; Bhavija, B., V; Varma, Sreekanth J.  
Dielectric and electrochemical performance of rhombohedral lanthanum manganite perovskite nanostructures  
NEW JOURNAL OF CHEMISTRY 46 41 19874-19887 10.1039/d2nj04213d OCT 24 2022
136. Laajimi, K.; Kchaw, M.; Fourati, I; Juraszek, J.; Gazzah, M. H.; Dhahri, J.  
Large magnetocaloric effect in 0.25(La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub> + La<sub>0.67</sub>Ca<sub>0.13</sub>Sr<sub>0.2</sub>Mn<sub>0.98</sub>Ni<sub>0.02</sub>O<sub>3</sub>)/0.5  
La<sub>0.67</sub>Ca<sub>0.23</sub>Sr<sub>0.1</sub>Mn<sub>0.98</sub>Ni<sub>0.02</sub>O<sub>3</sub> composite close to room temperature  
EUROPEAN PHYSICAL JOURNAL PLUS 137 8 943 10.1140/epjplus13360-022-03153-0 AUG 20 2022
135. Chen, Hongliang; Zheng, Dongxing; Wang, Yue; Wang, Ping; Jin, Chao; Li, Zhiqing; Bai, Haili  
Secondary insulator-to-metal transition and magnetic properties in epitaxial La<sub>0.92</sub>Sr<sub>0.08</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 106 6 64103 10.1103/PhysRevB.106.064103 AUG 10 2022
134. Pant, Pooja; Agarwal, Harshit; Bharadwaj, Suresh; Shaz, M. A.  
Low-temperature investigation of conduction mechanism and dielectric properties in polycrystalline Gd<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub>  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 33 23 18871-18883 10.1007/s10854-022-08736-2 AUG 2022
133. Sahadevan, Jhelai; Radhakrishnan, M.; Padmanathan, N.; Muthu, S. Esakki; Sivaprakash, P.; Kadiresan, Mohanrangam  
Effect of Mn substitution on magnetic behaviour of oxygen defective LaCoO<sub>3</sub> perovskite oxide  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 284 115875 10.1016/j.mseb.2022.115875 OCT 2022
132. Dorofeeva, N. V.; Kharlamova, T. S.; La Parola, V.; Liotta, L. F.; Vodyankina, O. V.  
Dry Reforming of Methane on Ni-Containing La<sub>2</sub>O<sub>3</sub> and La<sub>2</sub>O<sub>3</sub>-Mn<sub>2</sub>O<sub>3</sub> Catalysts: Effect of the Preparation Method  
DOKLADY PHYSICAL CHEMISTRY 505 1 95-107 10.1134/S0012501622600176 JUL 2022
131. Hao, Zhanzhong; Xu, Lincheng; Yan, Yong; Li, Fan  
Understanding the Effect of the Valence State of Perovskite B-Site Ions on Its Oxygen Electrocatalytic Performance  
ADVANCED MATERIALS INTERFACES 9 16 2200298 10.1002/admi.202200298 JUN 2022
130. Sahu, Mrinmay; Ghosh, Bishnupada; Jana, Rajesh; Cheng, Jinguang; Dev Mukherjee, Goutam  
Pressure driven phase transitions in honeycomb Fe<sub>4</sub>Nb<sub>2</sub>O<sub>9</sub>: A possible re-entrant multiferroic behavior

129. Zhang, Xinxin; Dai, Jiajuan; Ding, Jiageng; Tan, Kok Bing; Zhan, Guowu; Huang, Jiale; Li, Qingbiao  
Activation of molecular oxygen over Mn-doped La<sub>2</sub>CuO<sub>4</sub> perovskite for direct epoxidation of propylene  
CATALYSIS SCIENCE & TECHNOLOGY 12 8 2426-2437 10.1039/d1cy02185k APR 19 2022
128. Qi, Wenming; Hushur, Anwar  
Lattice stability of nickel titanate under high pressure up to 30.3 GPa  
EUROPEAN PHYSICAL JOURNAL B 95 2 30 10.1140/epjb/s10051-022-00291-3 FEB 2022
127. Padilla, Ornel; Munera, Jessica; Gallego, Jaime; Santamaria, Alexander  
Approach to the Characterization of Monolithic Catalysts Based on La Perovskite-like Oxides and Their Application for VOC Oxidation under Simulated Indoor Environment Conditions  
CATALYSTS 12 2 168 10.3390/catal12020168 FEB 2022
126. Lakshmi, R., V; Bera, Parthasarathi; Hiremath, Maheshwarayya; Dubey, Varun; Kundu, Asish K.; Barshilia, Harish C.  
Structural, magnetic, and dielectric properties of solution combustion synthesized LaFeO<sub>3</sub>, LaFe<sub>0.9</sub>Mn<sub>0.1</sub>O<sub>3</sub>, and LaMnO<sub>3</sub> perovskites  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24 9 5462-5478 10.1039/d1cp05501a MAR 2 2022
125. Aguilar, C. J.; Diosa, J. E.; Mosquera, E.; Alcazar, G. A. Perez; Rodriguez-Paez, J. E.; Bolanos, G.  
Mixed oxides of the Pr<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (0.1 ≤ x ≤ 0.5) system synthesized by a chemical route: Structural, electric and magnetic characterization  
JOURNAL OF ALLOYS AND COMPOUNDS 899 163291 10.1016/j.jallcom.2021.163291 APR 5 2022
124. Liu, Xiaoqing; Mi, Jinxing; Shi, Lin; Liu, Haiyan; Liu, Jun; Ding, Yun; Shi, Jianqiang; He, Minghua; Wang, Zisha; Xiong, Shangchao; Zhang, Qinfang; Liu, Yuefeng; Wu, Zhong-Shuai; Chen, Jianjun; Li, Junhua  
In Situ Modulation of A-Site Vacancies in LaMnO<sub>3</sub> Perovskite for Surface Lattice Oxygen Activation and Boosted Redox Reactions  
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 60 51 26747-26754 10.1002/anie.202111610 DEC 13 2021
123. Bhoriya, Ankit; Raghav, D. S.; Bura, Neha; Yadav, Deepa; Singh, Jasveer; Singh, H. K.; Sharma, Nita Dilawar  
Probing phase separation in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> (x ≈ 0.4, 0.5) polycrystals through temperature dependent magnetic and Raman spectroscopy studies  
JOURNAL OF ALLOYS AND COMPOUNDS 894 162424 10.1016/j.jallcom.2021.162424 FEB 15 2022
122. Chen, Gong; Hong, Dongsun; Xia, Hangqi; Sun, Wei; Shao, Shijie; Gong, Binwei; Wang, Shun; Wu, Jinyan; Wang, Xingyi; Dai, Qiguang  
Amorphous and homogeneously Zr-doped MnO<sub>x</sub> with enhanced acid and redox properties for catalytic oxidation of 1,2-Dichloroethane  
CHEMICAL ENGINEERING JOURNAL 428 131067 10.1016/j.cej.2021.131067 JAN 15 2022
121. Mn- or Cu- substituted LaFeO<sub>3</sub>-based three-way catalysts: Highlighting different catalytically operating modes of La<sub>0.67</sub>Fe<sub>0.8</sub>Mn<sub>0.2</sub>O<sub>3</sub> (M=Cu, Mn)  
Nandi, S; Wu, JX; (...); Berrier, E  
Applied Catalysis B - Environmental Nov 5 2021 296 120330
120. Epitaxial LaMnO<sub>3</sub> films with remarkably fast oxygen transport properties at low temperature  
Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Pirovano, C (Pirovano, Caroline) Stangl, A (Stangl, Alexander) Pla, D (Pla, Dolores) Jonsson, R (Jonsson, Ragnar) Rapenne, L (Rapenne, Laetitia) Sarigiannidou, E (Sarigiannidou, Eirini) Nuns, N (Nuns, Nicolas) Roussel, H (Roussel, Herve) Chaix-Pluchery, O (Chaix-Pluchery, Odette)  
JOURNAL OF MATERIALS CHEMISTRY A DOI10.1039/d0ta12253j Early AccessMAY 2021
119. Structural and magnetic properties of yttrium-substituted La<sub>0.6-x</sub>Y<sub>x</sub>Sr<sub>0.4</sub>MnO<sub>3</sub>(x=0-0.3)  
Hosseinnejad, SS (Hosseinnejad, S. S.) Ehsani, MH (Ehsani, M. H.) Esmacili, S (Esmacili, S.)  
CERAMICS INTERNATIONAL Volume47 Issue8 Page11536-11546 PublishedAPR 15 2021
118. Spray-Flame Synthesis of LaMnO<sub>3</sub>+delta Nanoparticles for Selective CO Oxidation (SELOX)  
Angel, S (Angel, Steven) Tapia, JD (Tapia, Juan David) Gallego, J (Gallego, Jaime) Hagemann, U (Hagemann, Ulrich) Wiggers, H (Wiggers, Hartmut)  
ENERGY & FUELS Volume35 Issue5 Page4367-4376 PublishedMAR 4 2021
117. Polaronic Contributions to Friction in a Manganite Thin Film  
Weber, NA (Weber, Niklas A.) Schmidt, H (Schmidt, Hendrik) Sievert, T (Sievert, Tim) Jooss, C (Jooss, Christian) Guthoff, F (Guthoff, Friedrich) Moshneaga, V (Moshneaga, Vasily) Samwer, K (Samwer, Konrad) Kruger, M (Krueger, Matthias) Volkert, CA (Volkert, Cynthia A.)  
ADVANCED SCIENCE Volume8 Issue8 Article Number2003524 PublishedAPR 2021
116. Manipulating the Raman scattering rotation via magnetic field in an MoS<sub>2</sub> monolayer  
Wan, Y (Wan, Yi) Cheng, X (Cheng, Xing) Li, YF (Li, Yanfang) Wang, YQ (Wang, Yaqian) Du, YP (Du, Yongping) Zhao, YB (Zhao, Yibin) Peng, B (Peng, Bo) Dai, L (Dai, Lun) Kan, EJ (Kan, Erjun)  
RSC ADVANCES Volume11 Issue7 Page4035-4041 PublishedJAN 29 2021
115. Structural, optical, and low-temperature resistivity of Ca-doped PrMnO<sub>3</sub> nanoparticles  
Kumar, S (Kumar, Satyam) Ram, I (Ram, Indrasen) Kumar, A (Kumar, Aditya) Kumar, U (Kumar, Upendra)  
EMERGENT MATERIALS Volume3 Issue5 Page595-604 PublishedOCT 2020
114. Physical investigations on LaMn(1-x)Ni(x)O<sub>3</sub> perovskite sprayed thin films along with surface magnetic applications

- Gharbi, B (Gharbi, B.) Boukhachem, A (Boukhachem, A.) Amlouk, M (Amlouk, M.) Oueslati, M (Oueslati, M.) Dkhil, B (Dkhil, B.) Meftah, A (Meftah, A.)  
 APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume126 Issue8 Article Number604 PublishedJUL 11 2020
113. Surface Conditions That Constrain Alkane Oxidation on Perovskites  
 Koch, G (Koch, Gregor) Havecker, M (Haevecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)  
 ACS CATALYSIS Volume10 Issue13 Page7007-7020 PublishedJUL 2 2020
112. Particle dispersion and lattice distortion induced magnetic behavior of La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> perovskite nanoparticles grown by salt-assisted solid-state synthesis  
 Ortiz-Quinonez, JL (Ortiz-Quinonez, Jose-Luis) Garcia-Gonzalez, L (Garcia-Gonzalez, Lorena) Cancino-Gordillo, FE (Enrique Cancino-Gordillo, Francisco) Pal, U (Pal, Umapada)  
 MATERIALS CHEMISTRY AND PHYSICS Volume246 Article Number122834 PublishedMAY 1 2020
111. Enhanced ferromagnetism and conductivity in epitaxial LaMnO<sub>3</sub> thin films by oxygen-atmosphere annealing  
 Sun, QC (Sun, Qincao) Luo, X (Luo, Xin) Xia, QT (Xia, Qingtao) Guo, YF (Guo, Yunfeng) Su, J (Su, Jie) Li, Q (Li, Qiang) Miao, GX (Miao, Guoxing)  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume499 Article Number166317 PublishedAPR 1 2020
110. Effect of Magnetic Ordering on Phonon Raman Spectra in Magnetic Systems  
 Swami, J., Dixit, A., Tiwari, B.  
 Springer Proceedings in Physics 236, pp. 289-299 (2019)
109. Polaronic Emergent Phases in Manganite-Based Heterostructures  
 Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
 CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
108. Frequency-dependent ferro-antiferro phase transition and internal bias field influenced piezoelectric response of donor and acceptor doped bismuth sodium titanate ceramics  
 Verma, R (Verma, Rolly) Rout, SK (Rout, S. K.)  
 JOURNAL OF APPLIED PHYSICS Volume126 Issue9 Article Number094103 PublishedSEP 7 2019
107. Self-doped La<sub>1-x</sub>MnO<sub>3</sub>+delta perovskites: Electron state hybridization and Raman modes  
 Ulyanov, AN (Ulyanov, A. N.) Sidorov, AV (Sidorov, A., V) Pismenova, NE (Pismenova, N. E.) Goodilin, EA (Goodilin, E. A.) Savilov, SV (Savilov, S., V)  
 SOLID STATE SCIENCES Volume94 Page41-44 PublishedAUG 2019
106. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
 Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
 PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
105. Electric field and temperature induced local polarization switching and piezoresponse in Bi<sub>0.88</sub>Sm<sub>0.12</sub>FeO<sub>3</sub> ceramics for nanoscale applications  
 Anthoniappen, J (Anthoniappen, Jesuraj) Chang, WS (Chang, Wei Sea) Ruiz, FM (Ruiz, Flora Mae) Tu, CS (Tu, Chi-Shun) Blaise, CT (Blaise, Carvyn Tutong) Chen, PY (Chen, Pin-Yi) Chen, CS (Chen, Cheng-Sao) Mana-ay, H (Mana-ay, Haidee)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume790 Page587-596 PublishedJUN 25 2019
104. Microscopic Mechanisms of Local Interfacial Resistive Switching in LaMnO<sub>3</sub>+delta  
 Meunier, B (Meunier, Benjamin) Pla, D (Pla, Dolors) Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Boudard, M (Boudard, Michel) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Martinez, E (Martinez, Eugenie) Chevalier, N (Chevalier, Nicolas) Jimenez, C (Jimenez, Carmen) Burriel, M (Burriel, Monica) Renault, O (Renault, Olivier)  
 ACS APPLIED ELECTRONIC MATERIALS Volume1 Issue5 Page675-683 PublishedMAY 2019
103. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub>-delta by Raman spectroscopy  
 Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lyanguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.)  
 SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019
102. Integration of LaMnO<sub>3</sub>+delta films on platinized silicon substrates for resistive switching applications by PI-MOCVD  
 Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Plat, D (Plat, Dolors) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Meunier, B (Meunier, Benjamin) Wilhelm, F (Wilhelm, Fabrice) Rogalev, A (Rogalev, Andrei) Rapenne, L (Rapenne, Laetitia) Mescot, X (Mescot, Xavier) Rafhay, Q (Rafhay, Quentin) Roussel, H (Roussel, Herve)  
 BEILSTEIN JOURNAL OF NANOTECHNOLOGY Volume10 Page389-398 PublishedFEB 7 2019
101. Composition and thermal structural evolution in Pr modified bismuth ferrite near the morphotropic phase boundary  
 Tu, CS (Tu, Chi-Shun) Chen, CS (Chen, Cheng-Sao) Chen, PY (Chen, Pin-Yi) Hsieh, YL (Hsieh, Yi Lin) Chien, RR (Chien, R. R.) Schmidt, VH (Schmidt, V. Hugo) Feng, KC (Feng, Kuei-Chih) Chang, HW (Chang, Huang-Wei)  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume768 Page903-913 PublishedNOV 5 2018
100. Synthesis and characterization of Sr<sub>1-x</sub>La<sub>x</sub>MnO<sub>3</sub>/SiOC nanocomposites decorated with 1D nanostructures for high temperature CO<sub>2</sub> splitting  
 Casado, E (Casado, Eva) Garcia, B (Garcia, Beatriz) Tamayo, A (Tamayo, Aitana)

99. The Jahn-Teller distortion influenced ferromagnetic order in Pr<sub>1-x</sub>La<sub>x</sub>MnO<sub>3</sub>  
He, FF (He, Feifei) Mao, ZQ (Mao, Zhongquan) Tang, LY (Tang, Lingyun) Zhang, J (Zhang, Jiang) Chen, X (Chen, Xi)  
SOLID STATE COMMUNICATIONS Volume274 Page21-26 PublishedJUN 2018
98. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Li, XX (Li, Xiayi) Ding, D (Ding, Dong) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang)  
Ding, Y (Ding, Yong) Zhao, BT (Zhao, Bote) Murphy, R (Murphy, Ryan) Deglee, B (Deglee, Ben)  
NANO ENERGY Volume47 Page474-480 PublishedMAY 2018
97. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub>  
Vilarinho, R (Vilarinho, R.) Passos, DJ (Passos, D. J.) Queiros, EC (Queiros, E. C.) Tavares, PB (Tavares, P. B.) Almeida, A (Almeida, A.) Weber, MC (Weber, M. C.) Guennou, M (Guennou, M.) Kreisel, J (Kreisel, J.) Moreira, JA (Agostinho Moreira, J.)  
PHYSICAL REVIEW B Volume97 Issue14 Article Number144110 PublishedAPR 19 2018
96. Characterization of B site codoped LaFeO<sub>3</sub> nanoparticles prepared via co-precipitation route  
Varandili, SB (Varandili, Seyedeh Behnaz) Babaei, A (Babaei, Alireza) Ataie, A (Ataie, Abolghasem)  
RARE METALS Volume37 Issue3 Page181-190 PublishedMAR 2018
95. Fabrication of Ca-Mn-Nb-O compounds and their structural, electrical, magnetic and thermoelectric properties  
Oz, E (Oz, E.) Demirel, S (Demirel, S.) Altin, S (Altin, S.) Altin, E (Altin, E.) Baglayan, O (Baglayan, O.) Bayri, A (Bayri, A.) Avci, S (Avci, S.)  
MATERIALS RESEARCH EXPRESS Volume5 Issue3 Article Number036304 PublishedMAR 2018
94. Nano-structured Pd doped LaFe(Co)O<sub>3</sub> perovskite, synthesis, characterization and catalytic behavior  
Varandili, SB (Varandili, Seyedeh Behnaz) Babaei, A (Babaei, Alireza) Ataie, A (Ataie, Abolghasem) Khodadadi, AA (Khodadadi, Abbas Ali) Kazerooni, H (Kazerooni, Hossein)  
MATERIALS CHEMISTRY AND PHYSICS Volume205 Page228-239 PublishedFEB 1 2018
93. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
Chen, Y (Chen, Yu) Yoo, S (Yoo, Seonyoung) Pei, K (Pei, Kai) Chen, DC (Chen, Dongchang) Zhang, L (Zhang, Lei) deGlee, B (deGlee, Ben) Murphy, R (Murphy, Ryan) Zhao, BT (Zhao, Bote) Zhang, YX (Zhang, Yanxiang) Chen, Y (Chen, Yan)  
ADVANCED FUNCTIONAL MATERIALS Volume28 Issue5 Article Number1704907 PublishedJAN 31 2018
92. Oumezzine, Marwene; Hassayoun, Oumayma; Bellouz, Ridha; et al.  
On the role of disorder produced by manganese vacancy at the B site on the structural and magnetic properties of La<sub>0.67</sub>Ba<sub>0.33</sub>Mn<sub>1-x</sub>O<sub>3</sub> nanocrystalline  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 729 Pages: 156-161 Published: DEC 30 2017
91. Daoudi, Kais; Alawadhi, Hussain; El Helali, Saoussen; et al.  
Effects of Mn<sub>3</sub>O<sub>4</sub> precipitates on the vibrational properties of epitaxial Ca-doped LaMnO<sub>3</sub> films  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 39 Article Number: 395305 Published: OCT 4 2017
90. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
Synthesis and Physicochemical Studies of Perovskite Manganite La(0.8)Ca(0.2)Nn(1-x)Co(x)O(3) (0 <= x <= 0.3)  
JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
89. Kubicek, Markus; Bork, Alexander H.; Rupp, Jennifer L. M.  
Perovskite oxides - a review on a versatile material class for solar-to-fuel conversion processes  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 5 Issue: 24 Pages: 11983-12000 Published: JUN 28 2017
88. Concha-Balderrama, A.; Rojas-George, G.; Alvarado-Flores, J.; et al.  
Nucleation and growth kinetics of La<sub>0.7</sub>Sr<sub>0.3</sub>Cr<sub>0.4</sub>Mn<sub>0.6</sub>O<sub>3-delta</sub> SOFC perovskite: Symmetry alteration evolution induced by Cu<sup>2+</sup> and Ni<sup>2+</sup> impregnation  
PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL Volume: 26 Issue: 6 Pages: 665-670 Published: DEC 2016
87. Golosova, NO, Kozlenko, DP, Kichanov, SE, Lukin, EV, Dubrovinsky, LS, Mammadov, AI, Mehdiyeva, RZ, Jabarov, SH, Liermann, HP, Glazyrin, KV, Dang, TN, Smotrakov, VG, Eremkin, VV, Savenko, BN  
Structural, magnetic and vibrational properties of multiferroic GaFeO<sub>3</sub> at high pressure  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 684 Pages: 352-358 DOI: 10.1016/j.jallcom.2016.04.316 Published: NOV 5 2016
86. Pomar, Alberto; Konstantinovic, Zorica; Bagues, Nuria; et al.  
Formation of Self-Organized Mn<sub>3</sub>O<sub>4</sub> Nanoinclusions in LaMnO<sub>3</sub> Films  
FRONTIERS IN PHYSICS Volume: 4 Article Number: 41 Published: SEP 20 2016
85. Praveena, K (Praveena, K.); Bharathi, P (Bharathi, P.); Liu, HL (Liu, Hsiang-Lin); Varma, KBR (Varma, K. B. R.)  
Structural, multiferroic properties and enhanced magnetoelectric coupling in Sm<sub>1-x</sub>CaxFeO<sub>3</sub>  
CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 Published: SEP 2016
84. Yoon, KR (Yoon, Ki Ro); Kim, DS (Kim, Dae Sik); Ryu, WH (Ryu, Won-Hee); Song, SH (Song, Sung Ho); Youn, DY (Youn, Doo-Young); Jung, JW (Jung, Ji-Won); Jeon, S (Jeon, Seokwoo); Park, YJ (Park, Yong Joon); Kim, ID (Kim, Il-Doo)  
Tailored Combination of Low Dimensional Catalysts for Efficient Oxygen Reduction and Evolution in Li-O<sub>2</sub> Batteries  
CHEMSUSCHEM Volume: 9 Issue: 16 Pages: 2080-2088 DOI: 10.1002/cssc.201600341 Published: AUG 23 2016

83. Drichko, N (Drichko, Natalia); Broholm, C (Broholm, Collin); Kimura, K (Kimura, K.); Ishii, R (Ishii, R.); Nakasutji, S (Nakasutji, Satoru)  
Collective versus local Jahn-Teller distortion in Ba<sub>3</sub>CuSb<sub>2</sub>O<sub>9</sub>: Raman scattering study  
PHYSICAL REVIEW B Volume: 93 Issue: 18 Article Number: 184425 DOI: 10.1103/PhysRevB.93.184425 Published: MAY 20 2016
82. Pandey, S (Pandey, Suchita); Kumar, J (Kumar, Jitender); Awasthi, AM (Awasthi, A. M.)  
Magneto-thermally activated spin-state transition in La<sub>0.95</sub>Ca<sub>0.05</sub>CoO<sub>3</sub>: magnetically-tunable dipolar glass and giant magneto-electricity  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 18 Issue: 9 Pages: 6569-6579 DOI: 10.1039/c5cp06932g Published: MAR 7 2016
81. Abdel-Latif, I. A.; Ismail, Adel A.; Bouzid, Houcine; et al.  
Synthesis of novel perovskite crystal structure phase of strontium doped rare earth manganites using sol gel method  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 393 Pages: 233-238 Published: NOV 1 2015
80. Katayama, Naoyuki; Kimura, Kenta; Han, Yibo; et al.  
Absence of Jahn-Teller transition in the hexagonal Ba<sub>3</sub>CuSb<sub>2</sub>O<sub>9</sub> single crystal  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA Volume: 112 Issue: 30 Pages: 9305-9309 Published: JUL 28 2015
79. Mota, Noelia; Barrio, Laura; Alvarez-Galvan, Consuelo; et al.  
Ruthenium Effect on Formation Mechanism and Structural Characteristics of LaCo<sub>1-x</sub>Ru<sub>x</sub>O<sub>3</sub> Perovskites and Its Influence on Catalytic Performance for Hydrocarbon Oxidative Reforming  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 119 Issue: 29 Pages: 16708-16723 Published: JUL 23 2015
78. Euler, C.; Holuj, P.; Talkenberger, A.; et al.  
Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015
77. Islam, Mohammad A.; Xie, Yujun; Scafetta, Mark D.; et al.  
Raman scattering in La<sub>1-x</sub>Sr<sub>x</sub>FeO<sub>3-δ</sub> thin films: annealing-induced reduction and phase transformation  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 27 Issue: 15 Article Number: 155401 Published: APR 22 2015
76. Vilarinho, R.; Almeida, A.; Machado da Silva, J. M.; et al.  
Dzyaloshinskii-Moriya nature of ferroelectric ordering in magnetoelectric Gd<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> system  
SOLID STATE COMMUNICATIONS Volume: 208 Pages: 34-40 Published: APR 2015
75. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in La<sub>5/8-y</sub>PryCa<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
74. Bork, A. H.; Kubicek, M.; Struzik, M.; et al.  
Perovskite La<sub>0.6</sub>Sr<sub>0.4</sub>Cr<sub>1-x</sub>CoxO<sub>3-δ</sub> solid solutions for solar-thermochemical fuel production: strategies to lower the operation temperature  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 3 Issue: 30 Pages: 15546-15557 Published: 2015
73. Sun, Wei; Li, Jing-Feng; Zhu, Fangyuan; et al.  
Thickness-dependent phase boundary in Sm-doped BiFeO<sub>3</sub> piezoelectric thin films on Pt/Ti/SiO<sub>2</sub>/Si substrates  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 30 Pages: 19759-19765 Published: 2015
72. Sun, Wei; Li, Jing-Feng; Yu, Qi; et al.  
Phase transition and piezoelectricity of sol-gel-processed Sm-doped BiFeO<sub>3</sub> thin films on Pt(111)/Ti/SiO<sub>2</sub>/Si substrates  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 9 Pages: 2115-2122 Published: 2015
71. Lee, Hong-Sub; Choi, Sun Gyu; Yeom, Geun Young; et al.  
The effect of Gd substitution in perovskite lanthanum strontium manganite films for use in resistive switching devices  
JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 122 (1428), pp. 622-625 AUG 2014
70. Elkhouni, T.; Amami, M.; Colin, C. V.; et al.  
The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr<sub>1-x</sub>MxO<sub>2</sub> (M=Mn and Rh) compounds  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014
69. Moshnyaga, V.; Belenchuk, A.; Huehn, S.; et al.  
Intrinsic antiferromagnetic coupling underlies colossal magnetoresistance effect: Role of correlated polarons  
PHYSICAL REVIEW B 89 (2), Art. No. 024420 JAN 30 2014
68. Zhu, L. P.; Deng, H. M.; Sun, L.; et al.  
Optical properties of multiferroic LuFeO<sub>3</sub> ceramics  
CERAMICS INTERNATIONAL 40 (1), pp. 1171-1175 Part: A JAN 2014
67. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hyejung; et al.  
The effect of Ca substitution on the structural and electrical properties of La<sub>0.7</sub>Sr<sub>0.3-x</sub>CaxMnO<sub>3</sub> perovskite manganite films  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (42), Art. No. 425102 OCT 23 2013
66. Chaturvedi, Aditi; Sathe, V. G.  
Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234 OCT 2013

65. Foerst, M.; Mankowsky, R.; Bromberger, H.; et al.  
Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction  
SOLID STATE COMMUNICATIONS 169, pp. 24-27 SEP 2013
64. Phong, P. T.; Jang, S. J.; Huy, B. T.; et al.  
Structural, magnetic, infrared and Raman studies of  $\text{La}_{0.8}\text{Sr}_x\text{Ca}_{0.2-x}\text{MnO}_3$  ( $0 \leq x \leq 0.2$ )  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (7), pp. 2292-2301 JUL 2013
63. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.  
Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic  $\text{DyMnO}_3$   
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), Art. No. 064708 JUN 2013
62. Nikolaev, S. A.; Mazurenko, V. G.; Rudenko, A. N.  
Influence of magnetic order on phonon spectra of multiferroic orthorhombic  $\text{YMnO}_3$   
SOLID STATE COMMUNICATIONS 164, pp. 16-21 JUN 2013
61. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.  
Investigation of the Properties of Ba-Substituted  $\text{La}_{0.7}\text{Sr}_{0.3-x}\text{Ba}(x)\text{MnO}_3$  Perovskite Manganite Films for Resistive Switching Applications  
JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201 JUN 2013
60. Islam, Mohammad A.; Rondinelli, James M.; Spanier, Jonathan E.  
Normal mode determination of perovskite crystal structures with octahedral rotations: theory and applications  
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (17), 175902, MAY 1 2013
59. Khanduri, H.; Dimri, M. Chandra; Vasala, S.; et al.  
Magnetic and structural studies of  $\text{LaMnO}_3$  thin films prepared by atomic layer deposition  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (17), 175003, MAY 1 2013
58. Dodiya, Neha; Varshney, Dinesh  
Structural properties and Raman spectroscopy of rhombohedral  $\text{La}_{1-x}\text{Na}_x\text{MnO}_3$  ( $0.075 \leq x \leq 0.15$ )  
JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013
57. Mishra, Dileep K.; Sathe, V. G.  
Temperature Dependent Raman Study of  $\text{Eu}_{0.75}\text{Y}_{0.25}\text{MnO}_3$   
AIP Conference Proceedings 1512, 800-801, 2013
56. Nima Ramirez Fabian Enrique; Ferreira Fabio Furlan; Alves Wendel Andrade; et al.  
Magnetic, structural, and transport properties at very high temperature in manganites  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 324 (13), 2011-2018, JUL 2012.
55. Himcinschi, Cameliu; Vrejoiu, Ionela; Weissbach, Torsten; et al.  
Raman spectra and dielectric function of  $\text{BiCrO}_3$ : Experimental and first-principles studies  
JOURNAL OF APPLIED PHYSICS 110 (7) Article Number: 073501, OCT 1 2011.
54. Yun B. K.; Koo Y. S.; Jung J. H.; et al.  
Effect of hydroxyl group on global and local structures of hydrothermally grown  $\text{KNbO}_3$  nanorods  
MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.
53. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.  
Strain induced phase separation on  $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
52. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
Temperature-dependent Raman study of  $\text{PrFeO}_3$  thin film  
JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.
51. Parhi Nilima; Rout G. C.; Behera S. N.  
Study of J-T effect on the self-energy of electrons in manganite systems  
INDIAN JOURNAL OF PHYSICS 84 (10) Pages: 1369-1377, OCT 2010.
50. Liang Shuhui; Xu Tongguang; Teng Fei; et al.  
The high activity and stability of  $\text{La}_{0.5}\text{Ba}_{0.5}\text{MnO}_3$  nanocubes in the oxidation of CO and CH<sub>4</sub>  
APPLIED CATALYSIS B-ENVIRONMENTAL 96 (3-4) Pages: 267-275, JUN 7 2010.
49. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al.  
Coupling between phonons and magnetic excitations in orthorhombic  $\text{Eu}_{1-x}\text{Y}_x\text{MnO}_3$   
PHYSICAL REVIEW B 81 (5) Article Number: 054447, Published: FEB 2010.
48. Issing S.; Fuchs F.; Ziereis C.; et al.  
Lattice dynamics of  $\text{Eu}_{1-x}\text{Y}_x\text{MnO}_3$  ( $0 \leq x \leq 0.5$ ) studied by Raman and infrared spectroscopy  
EUROPEAN PHYSICAL JOURNAL B 73 (3) Pages: 353-360, FEB 2010.
47. Malavasi Lorenzo; Baldini Maria; di Castro Daniele; et al.  
High pressure behavior of Ga-doped  $\text{LaMnO}_3$ : a combined X-ray diffraction and optical spectroscopy study

- JOURNAL OF MATERIALS CHEMISTRY 20 (7) Pages: 1304-1311, 2010.
46. Issing, S.; Fuchs, F.; Ziereis, C.; et al.  
Lattice dynamics of  $\text{Eu}_{1-x}\text{Y}_x\text{MnO}_3$  ( $0 \leq x \leq 0.5$ ) studied by Raman and infrared spectroscopy  
EUROPEAN PHYSICAL JOURNAL B 73 (3) Pages: 353-360, FEB 2010.
45. Chen C. Z.; Cai C. B.; Liu Z. Y.; et al.  
Stress evolution and lattice distortion induced by thickness variation and lattice misfit in  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_{3-\delta}$  films  
SOLID STATE COMMUNICATIONS 150 (1-2) Pages: 66-69, JAN 2010.
44. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al.  
Thickness dependence of microstructure for  $\text{La}_{0.9}\text{Sr}_{0.1}\text{MnO}_3/\text{Si}$  films determined by micro-Raman spectroscopy  
ACTA PHYSICA SINICA 58 (11) Pages: 8008-8013, NOV 2009.
43. Mansouri, S.; Charpentier, S.; Jandl, S.; et al.  
A micro-Raman study of a  $\text{Pr}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  single crystal and thin films  
JOURNAL OF PHYSICS-CONDENSED MATTER 21 (38) Article Number: 386004, SEP 23 2009.
42. Cao Xian-Sheng; Chen Chang-Le  
Phonon spectra of  $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$   
CHINESE PHYSICS B 18 (7) Pages: 2928-2932, JUL 2009.
41. Baldini, M.; Di Castro, D.; Cestelli-Guidi, M.; et al.  
Phase-separated states in high-pressure  $\text{LaMn}_{1-x}\text{GaxO}_3$  manganites  
PHYSICAL REVIEW B 80 (4) Article Number: 045123, JUL 2009.
40. Cao, Xian-Sheng; Chen, Chang-Le  
Raman spectra of  $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$   
PHYSICA SCRIPTA 79 (4) Article Number: 045701, APR 2009.
39. Antonakos, A.; Filippi, M.; Aydogdu, G. H.; et al.  
Tuning of the charge ordered state in the manganite thin films by internal or external strains  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 246 (3) Pages: 635-642, MAR 2009.
38. Sathe, V. G.; Rawat, R.; Dubey, Aditi; et al.  
Photo-induced insulator-metal transition probed by Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 21 (7) Article Number: 075603, FEB 18 2009.
37. Antonakos, A.; Liarokapis, E.; Filippi, M.; et al.  
Infrared Reflectivity Spectra of Manganite Thin Films Grown on Different Substrates  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 22 (2) Pages: 109-113, FEB 2009.
36. Minh, NV (Nguyen Van Minh); Kim, SJ (Kim, Sung-Jin); Yang, IS (Yang, In-Sang)  
A Raman spectroscopy study of disorder and local vibrational modes in  $\text{La}_{0.7}\text{Sr}_{0.3}\text{Mn}_{1-x}\text{M}_x\text{O}_3$  ( $\text{M}=\text{Fe}, \text{Co}$ )  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 52 Issue: 5 Pages: 1402-1405 Published: MAY 2008
35. Antonakos, A.; Lampakis, D.; Liarokapis, E.; et al.  
Pressure effects on the phase separation of  $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3$  thin films  
JOURNAL OF PHYSICS-CONDENSED MATTER 20 (48) Article Number: 485202, DEC 3 2008.
34. Sacchetti, A.; Corridoni, T.; Arcangeletti, E.; et al.  
High pressure Raman study of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_{3-\delta}$  manganites  
EUROPEAN PHYSICAL JOURNAL B 66 (3) Pages: 301-305, DEC 2008.
33. Andreasson, Jakob; Holmlund, Joakim; Rauer, Ralf; et al.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
PHYSICAL REVIEW B 78 (23) Article Number: 235103, DEC 2008.
32. Antonakos, A.; Lampakis, D.; Liarokapis, E.; et al.  
Phase separation in manganite thin films  
JOURNAL OF PHYSICS-CONDENSED MATTER 20 (43) Article Number: 434232, OCT 29 2008.
31. Nguyen Van Minh; Kim, Sung-Jin; Yang, In-Sang  
A Raman spectroscopy study of disorder and local vibrational modes in  $\text{La}_{0.7}\text{Sr}_{0.3}\text{Mn}_{1-x}\text{M}_x\text{O}_3$  ( $\text{M}=\text{Fe}, \text{Co}$ )  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 52 (5) Pages: 1402-1405, MAY 2008.
30. Kim, M.; Barath, H.; Cooper, S. L.; et al.  
Raman scattering studies of the temperature- and field-induced melting of charge order in  $\text{La}_x\text{Pr}_y\text{Ca}_{1-x-y}\text{MnO}_3$   
PHYSICAL REVIEW B 77 (13) Article Number: 134411, APR 2008.
29. Rossiny, JCH.; Fearn, S, Kilner, JA, Zhang, Y, Chen, L, Yang, S, Evans, J, Zhang, T, Yates, K, Cohen, LF  
Characterisation of Combinatorial Libraries of Perovskite Materials for SOFC Cathode Applications  
SOLID OXIDE FUEL CELLS 10 (SOFC-X), PTS 1 AND 2 Book Series: ECS Transactions Volume: 7 Issue: 1 Pages: 1005-1013 DOI: 10.1149/1.2729196 Published: 2007



28. Antonakos A, Liarokapis E, Aydogdu GH, et al.  
Strain effects on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
MATER. SCIENCE AND ENG. B-SOLID STATE MATER.FOR ADV.TECHNOL.144 (1-3) Sp. Iss. SI, pp. 83-88 (2007).
27. Liang S, Teng F, Bulgan G, et al.  
Effect of jahn-teller distortion in La<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> cubes and nanoparticles on the catalytic oxidation of CO and CH<sub>4</sub>  
JOURNAL OF PHYSICAL CHEMISTRY C 111 (45), pp. 16742-16749 (2007).
26. Sathe VG, Dubey A  
Broken symmetry in LaAlO<sub>3</sub> single crystal probed by resonant Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (38) Art. No. 382201 (2007).
25. Dubey, Aditi; Sathe, V. G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (34) Article Number: 346232, AUG 29 2007.
24. Wesselinowa JM, St Kovachev  
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO<sub>3</sub> compounds  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (17), Art. No. 176211 (2007).
23. Jandl, S.; Mukhin, A. A.; Ivanov, V. Yu; et al.  
Micro-Raman and magnetization studies of Nd(1-x)Ca(x)MnO<sub>3</sub> phase transitions  
12TH INTERNATIONAL CONFERENCE ON PHONON SCATTERING IN CONDENSED MATTER (PHONONS 2007) Book Series:  
Journal of Physics Conference Series 92 Article Number: 012125, 2007.
22. Li WJ, Zhang B, Lu W  
Structural properties and Raman spectroscopy of La((2+4x))/Sr-3((1-4x))/Mn-3(1-x) CuxO<sub>3</sub>(0 ≤ x ≤ 0.2)  
PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).
21. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.  
Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)
20. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)
19. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006
18. Cairns, DL (Cairns, DL); Reaney, IM (Reaney, IM); Zheng, H (Zheng, H); Iddles, D (Iddles, D); Price, T (Price, T)  
Synthesis and characterisation of La(Co<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub>  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 25 Issue: 4 Pages: 433-439 DOI: 10.1016/j.jeurceramsoc.2004.02.016  
Published: APR 2005
17. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Nekvasil, V., Sadowski, M.L.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 72 (2), art. no. 024423 (2005)
16. Dore P, Postorino P, Sacchetti A, et al.  
Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: a probe of substrate-induced effects  
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005
15. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005
14. Orlovskaya N, Steinmetz D, Yarmolenko S, et al.  
Detection of temperature- and stress-induced modifications of LaCoO<sub>3</sub> by micro-Raman spectroscopy  
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005
13. Ghosh S, Kamaraju N, Seto M, et al.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005
12. Jandl S, Nekvasil V, Divis M, et al.  
Infrared study of the crystal-field excitations in NdMnO<sub>3</sub> in high magnetic fields  
PHYSICAL REVIEW B 71 (2): Art. No. 024417 JAN 2005
11. Motin Seikh, Md., Sudheendra, L., Narayana, C., Rao, C.N.R.  
A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO<sub>3</sub>  
Journal of Molecular Structure 706 (1-3 SPEC. ISS.), pp. 121-126 (2004)
10. Cairns DL, Reaney IM, Zheng H, et al.  
Synthesis and characterisation of La(Co<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub>

9. Alessandri I, Bontempi E, Sangaletti L, et al.  
Sodium doped lanthanum manganites thin films: Influence of the oxygen content on the structural parameters  
JOURNAL DE PHYSIQUE IV 118: 165-171 NOV 2004
8. Rao CNR, Seikh M, Narayana C  
Spin-state transition in LaCoO<sub>3</sub> and related materials  
TOPICS IN CURRENT CHEMISTRY 234: 1-21 2004
7. Seikeh MM, Sudheendra L, Narayana C, et al.  
A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO<sub>3</sub>  
JOURNAL OF MOLECULAR STRUCTURE 706 (1-3): 121-126 NOV 12 2004
6. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
5. Sudheendra L, Seikh M, Raju AR, et al.  
Dielectric properties of rare earth cobaltates, LnCoO<sub>3</sub> (Ln = La, Pr, Nd), across the spin-state transition  
FERROELECTRICS 306: 227-234 2004
4. Alessandri I, Malavasi L, Bontempi E, et al.  
Synthesis and characterisation of La<sub>1-x</sub>NaxMnO<sub>3+δ</sub> thin films manganites  
MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY 109 (1-3): 203-206 JUN 15 2004
3. Orlovskaya, N; Steinmetz, D  
Raman diagnostics of LaCOO(3) based perovskites  
MIXED IONIC ELECTRONIC CONDUCTING PEROVSKITES FOR ADVANCED ENERGY SYSTEMS Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY 173 Pages: 39-51, 2004.
2. Nikiforov AE, Popov SE  
Cooperative dynamical effect in rhombohedral LaMnO<sub>3</sub>  
ADV QUANTUM CHEM 44: 587-598 2003
1. Malavasi L, Alessandri I, Mozzati MC, et al.  
Preparation, structural and magnetic characterisation of RF-sputtered La<sub>1-x</sub>NaxMnO<sub>3+δ</sub> thin films manganites  
PHYS CHEM CHEM PHYS 5 (11): 2274-2278 2003
38. *"Elimination of nonuniformities in thick GaN films using chemical vapor deposited GaN templates"*  
E. Valcheva, T. Paskova, M. V. Abrashev, P. P. Paskov, P. O. A. Persson, E. M. Goldys, R. Beccard, M. Heuken, and B. Monemar  
J. Appl. Phys. 90 (2001) 6011 - 6016.
5. Zhou, A, Xiu, XQ, Zhang, R, Xie, ZL, Chen, DJ, Liu, B, Zheng, YD  
Effect of lattice defects on the property of GaN crystal: A molecular dynamics simulation study  
SUPERLATTICES AND MICROSTRUCTURES Volume: 88 Pages: 679-684 DOI: 10.1016/j.spmi.2015.10.027 Published: DEC 2015
4. Sochacki, Tomasz; Bryan, Zachary; Amilusik, Mikolaj; et al.  
HVPE-GaN grown on MOCVD-GaN/sapphire template and ammonothermal GaN seeds: Comparison of structural, optical, and electrical properties  
JOURNAL OF CRYSTAL GROWTH 394, pp. 55-60 MAY 15 2014
3. Zhou, A., Xiu, X.-Q., Zhang, R., Xie, Z.-L., Hua, X.-M., Liu, B., Han, P., (...), Zheng, Y.-D.  
Roles of V/III ratio and mixture degree in GaN growth: CFD and MD simulation study  
Chinese Physics B 22 (1), art. no. 017801, 2013
2. Wei, T.B., Duan, R.F., Wang, J.X., Li, J.M., Huo, Z.Q., Ma, P., Liu, Zh., Zeng, Y.P.  
Characterization of free-standing GaN substrate grown through hydride vapor phase epitaxy with a TiN interlayer  
Applied Surface Science 253 (18), pp. 7423-7428 (2007)
1. Hageman PR, Kirilyuk V, Corbeek WHM, et al.  
Thick GaN layers grown by hydride vapor-phase epitaxy: hetero- versus homo-epitaxy  
J CRYST GROWTH 255 (3-4): 241-249 AUG 2003
39. *"Raman spectroscopy of CaMnO<sub>3</sub>: Mode assignment and relationship between Raman line intensities and structural distortions"*  
M. V. Abrashev, J. Backstrom, L. Borjesson, V. N. Popov, R. A. Chakalov, N. Kolev, R. -L. Meng, and M. N. Iliev  
Phys. Rev. B 65 (2002) 184301.

111. Chahal, J., Shukla, R., Srinivasu, K., (...), Roy, A., Grover, V.  
Cationic substitution engineering in GdInO<sub>3</sub> at A-site: Insights into phase evolution and search for compositionally tailored relaxors  
*Materials Chemistry and Physics* 317,129182 (2024)
110. Sharma, S., Khan, S.  
Tailoring the structural, optical, electrical and multiferroic properties of Sm<sub>1-x</sub>R<sub>x</sub>FeO<sub>3</sub> (x = 0.0 and 0.5; R = Pr, Nd, and Gd) and their synergistic photocatalytic activity  
*Ceramics International* 50(6), pp. 9185-9205 (2024)
109. Mary, S.B., Mohan, K.S., Krishnan, M.M.  
Effect of A-site and B-site ion substitution on the electrical and thermoelectric properties of nanostructured perovskite CaMnO<sub>3</sub>  
*Journal of Materials Science: Materials in Electronics* 35(8),600 (2024)
108. Pant, M., Mahapatro, A.K.  
Perfectly dense ceramics of highly pure calcium manganese oxide  
*Ceramics International* (Article in Press) DOI: 10.1016/j.ceramint.2024.03.158 (2024)
107. Mall, AK; Garg, N; Verma, AK; Errandonea, D; Chitnis, AV; Srihari, V; Gupta, R  
Discovery of high-pressure post-perovskite phase in HoCrO<sub>3</sub>  
*J. Phys. Chem. Solids* 172 111078 10.1016/j.jpcs.2022.111078 JAN 2023
106. Bao, X., Wang, J., Wu, X., (...), Liu, J., Zhao, S.  
The symmetry aspect of magnetocaloric effect in La<sub>x</sub>Bi<sub>0.3-x</sub>Ca<sub>0.7</sub>MnO<sub>3</sub> manganites  
*Physica B: Condensed Matter* 671,415410 (2023)
105. Oh, D., Colombo, F., Nodari, L., (...), Mascotto, S., Jung, W.  
Rocking chair-like movement of ex-solved nanoparticles on the Ni-Co doped La<sub>0.6</sub>Ca<sub>0.4</sub>FeO<sub>3-δ</sub> oxygen carrier during chemical looping reforming coupled with CO<sub>2</sub> splitting  
*Applied Catalysis B: Environmental* 332,122745 (2023)
104. Soumya, S., Vinod, K., Harsita, M., (...), Bhatnagar, A.K., Sattibabu, B.  
Studies on the effect of In<sup>3+</sup> ion on magnetic and magneto caloric properties of polycrystalline TbMnO<sub>3</sub>  
*Journal of Solid State Chemistry* 322,123971 (2023)
103. Samantaray, K.S., Amin, R., Ayaz, S., (...), Harrabi, K., Sen, S.  
Room temperature magneto-dielectric coupling in the CaMnO<sub>3</sub> modified NBT lead-free ceramics  
*Applied Physics A: Materials Science and Processing* 129(4),237 (2023)
102. Modem, N., Nurhayati, A., Venkata Ramana, K., Swamy, B., Reddy, C.V.  
Structural, Electrical, and Thermoelectric Properties of La and Sr Co-Doped CaMnO<sub>3</sub> Compounds  
*ECS Journal of Solid State Science and Technology* 12(3),033008 (2023)
101. Vijay, A; Prasanth, SC; Jose, R; Vineetha, P; Saravanan, KV  
A Study on the Effects of La/Sm Codoping on the Structural and High Temperature Thermoelectric Properties of n-Type CaMnO<sub>3-δ</sub> Perovskite  
*Cryst. Res. Technol.* 57 9 2200041 10.1002/crat.202200041 SEP 2022
100. Gopi, U.V., Bhojane, P., Smaran, K.S.  
Engineering oxygen-deficient nanocomposite comprising LaNiO<sub>3-δ</sub> and reduced graphene oxide for high-performance pseudocapacitors  
*Journal of Energy Storage* 54,105301 (2022)
99. Selmi, R., Cherif, W., Sarabando, A.R., Ferreira, N.M., Ktari, L.  
Physicochemical properties of Ca<sub>3</sub>Mn<sub>1.5</sub>Fe<sub>1.5</sub>O<sub>8</sub> sample prepared using the conventional solid-state reaction  
*Journal of Molecular Structure* 1264,133151 (2022)
98. Shi, Z., Tong, S., Wei, J., (...), Wang, L., Zhang, J.  
Regulating Multiscale Defects to Enhance the Thermoelectric Performance of Ca<sub>0.87</sub>Ag<sub>0.1</sub>Dy<sub>0.03</sub>MnO<sub>3</sub> Ceramics  
*ACS Applied Materials and Interfaces* 14(28), pp. 32166-32175 (2022)
97. Xiong, Z., Zhang, X., Fang, Z., (...), Tang, B., Zhang, S.  
Characterization of structural and electrical properties of Ca<sub>0.61</sub>Nd<sub>0.26</sub>TiO<sub>3</sub> ceramic tailored by complex ions (Al<sub>0.5</sub>Nb<sub>0.5</sub>)<sub>4+</sub>  
*Journal of Alloys and Compounds* 899,163234 (2022)
96. Jankowska-Sumara, I., Ko, J.-H., Majchrowski, A.  
The complexity of structural phase transitions in Pb(Hf<sub>0.92</sub>Sn<sub>0.08</sub>)O<sub>3</sub> single crystals  
*Journal of the American Ceramic Society* 104(11), pp. 5990-6001 (2021)
95. Bhadram, V.S., Sen, A., Sunil, J., (...), Sundaresan, A., Narayana, C.  
Pressure-driven evolution of structural distortions in RCrO<sub>3</sub> perovskites: The curious case of LaCrO<sub>3</sub>  
*Solid State Sciences* 119,106708 (2021)
94. Mero, R.D., Ogawa, K., Yamada, S., Liu, H.-L.  
Optical Studies on the Phase Transitions in YBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
*ACS Omega* 6(34), pp. 22137-22150 (2021)

93. Maity, R., Dutta, A., Halder, S., (...), Mandal, K., Sinha, T.P.  
Enhanced photocatalytic activity, transport properties and electronic structure of Mn doped GdFeO<sub>3</sub> synthesized using the sol-gel process  
Physical Chemistry Chemical Physics 23(30), pp. 16060-16076 (2021)
92. Investigation of electron and phonon transport in Bi-doped CaMnO<sub>3</sub> for thermoelectric applications  
Suprayoga, E., Putri, W.B.K., Singsoog, K., (...), Seetawan, T., Hasdeo, E.H.  
Materials Research Bulletin 141,111359 (2021)
91. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X., Tang, B., (...), Fang, Z., Zhang, S.  
Materials Characterization 176,111108 (2021)
90. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties  
Mahana, S (Mahana, Sudipta) Pandey, SK (Pandey, Shishir Kumar) Rakshit, B (Rakshit, Bipul) Nandi, P (Nandi, Pronoy) Basu, R (Basu, Raktima) Dhara, S (Dhara, Sandip) Turchini, S (Turchini, S.) Zema, N (Zema, N.) Manju, U (Manju, U.) Mahanti, SD (Mahanti, Subhendra D.)  
PHYSICAL REVIEW B Volume102 Issue24 Article Number245120 PublishedDEC 15 2020
89. Field-driven spin reorientation in SmMnO<sub>3</sub> polycrystalline powders  
Mantilla, J (Mantilla, John) Morales, M (Morales, Marco) Venceslau, W (Venceslau, Wenderson) Corredor, L (Corredor, Laura) Morais, PC (Morais, P. C.) Aragon, FFH (Aragon, Fermin F. H.) da Silva, SW (da Silva, Sebastiao William) Coaquira, JA (Coaquira, Jose A.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume845 Article Number156327 PublishedDEC 10 2020
88. Cooperative Catalysis toward Oxygen Reduction Reaction under Dual Coordination Environments on Intrinsic AMnO(3)-Type Perovskites via Regulating Stacking Configurations of Coordination Units  
Zhao, CN (Zhao, Chunning) Zhang, XL (Zhang, Xilin) Yu, M (Yu, Meng) Wang, AS (Wang, Ansheng) Wang, LX (Wang, Linxia) Xue, LN (Xue, Lina) Liu, JY (Liu, Jieyu) Yang, ZX (Yang, Zongxian) Wang, WC (Wang, Weichao)  
ADVANCED MATERIALS Volume32 Issue50 Article Number2006145 PublishedDEC 2020
87. One-Step Integrated Comodification to Improve the Electrochemical Performances of High-Voltage LiCoO<sub>2</sub> for Lithium-Ion Batteries  
Gu, R (Gu, Run) Qian, RC (Qian, Ruicheng) Lyu, YC (Lyu, Yingchun) Guo, BK (Guo, Bingkun)  
ACS SUSTAINABLE CHEMISTRY & ENGINEERING Volume8 Issue25 Page9346-9355 PublishedJUN 29 2020
86. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured Ca<sub>1-x</sub>Ln<sub>(3+)(x)</sub>MnO<sub>3-delta</sub> (Ln(3+) = Sm, Ce, La; x=0, 0.1)  
Mary, SB (Mary, S. Berbeth) Rajesh, AL (Rajesh, A. Leo)  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue8 Page6479-6487 PublishedAPR 2020
85. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline YCrO<sub>3</sub> ceramics across the T-C similar to 460 K  
Mall, AK (Mall, Ashish Kumar) Paul, B (Paul, Barnita) Garg, A (Garg, Ashish) Gupta, R (Gupta, Rajeev)  
JOURNAL OF RAMAN SPECTROSCOPY Volume51 Issue3 Page537-545 PublishedMAR 2020
84. One-Step Integrated Comodification to Improve the Electrochemical Performances of High-Voltage LiCoO<sub>2</sub> for Lithium-Ion Batteries  
Gu, R (Gu, Run) Qian, RC (Qian, Ruicheng) Lyu, YC (Lyu, Yingchun) Guo, BK (Guo, Bingkun)  
ACS SUSTAINABLE CHEMISTRY & ENGINEERING Volume8 Issue25 Page9346-9355 PublishedJUN 29 2020
83. Influence of Mn doping on dielectric properties, conduction mechanism and photocatalytic nature of gadolinium-based orthochromites  
Qahtan, AAA (Qahtan, Aref A. A.) Husain, S (Husain, Shahid) Somvanshi, A (Somvanshi, Anand) Khan, W (Khan, Wasi) Manea, YK (Manea, Yahiya K.)  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue12 Page9335-9351 PublishedJUN 2020
82. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019
81. Enhanced thermoelectric property of nanostructured CaMnO<sub>3</sub> by sol-gel hydrothermal method  
Mary, SB (Mary, S. Berbeth) Francis, M (Francis, M.) Sathe, VG (Sathe, V. G.) Ganesan, V (Ganesan, V) Rajesh, AL (Rajesh, A. Leo)  
PHYSICA B-CONDENSED MATTER Volume575 Article Number411707 PublishedDEC 15 2019
80. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeki) Liu, HL (Liu, Hsiang-Lin)  
SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019
79. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds: Dy<sub>0.55</sub>Sr<sub>0.45</sub>Mn<sub>1-x</sub>FexO<sub>3</sub>  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019
78. Structural and electrochemical properties of B-site Ru-doped (La<sub>0.8</sub>Sr<sub>0.2</sub>)(O<sub>9</sub>)Sc<sub>0.2</sub>Mn<sub>0.8</sub>O<sub>3-delta</sub> as symmetrical electrodes for reversible solid oxide cells  
Zhou, J (Zhou, Jun) Wang, N (Wang, Ning) Cui, JJ (Cui, Jiajia) Wang, JK (Wang, Junkai) Yang, JM (Yang, Jiaming) Zong, Z (Zong, Zheng) Zhang, ZH (Zhang, Zihang) Chen, QC (Chen, Qianchang) Zheng, XC (Zheng, Xinchu) Wu, K (Wu, Kai)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page1132-1140 PublishedJUL 5 2019
77. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy

- Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
76. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3-δ</sub> by Raman spectroscopy  
Trotsenko, VG (Trotsenko, V. G.) Lahmar, A (Lahmar, A.) Lyanguzov, NV (Lyanguzov, N. V.) El Marssi, M (El Marssi, M.) Torgashev, VI (Torgashev, V. I.)  
SUPERLATTICES AND MICROSTRUCTURES Volume127 Page100-108 PublishedMAR 2019
75. Ion-beam-induced ferromagnetism in Ca-doped LaMnO<sub>3</sub> thin films grown on Si (100)  
Sultan, K., Aarif ul Islam, S., Habib, Z., Ikram, M., Asokan, K.  
Radiation Effects and Defects in Solids 173(3-4), pp. 184-197 (2018)
74. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, KD (Singh, Kapil Dev) Pandit, R (Pandit, Rabia) Kumar, R (Kumar, Ravi)  
SOLID STATE SCIENCES Volume85 Page70-75 PublishedNOV 2018
73. Ion-beam-induced ferromagnetism in Ca-doped LaMnO<sub>3</sub> thin films grown on Si (100)  
Sultan, K (Sultan, Khalid) ul Islam, SA (ul Islam, Shah Aarif) Habib, Z (Habib, Zubida) Ikram, M (Ikram, M.) Asokan, K (Asokan, K.)  
RADIATION EFFECTS AND DEFECTS IN SOLIDS Volume173 Issue3-4 Page184-197 Published2018
72. Analysis of Zn substitution on structure, optical absorption, magnetization, and high temperature specific heat anomaly of the nano-crystalline LaFeO<sub>3</sub>  
Manzoor, S (Manzoor, Samiya) Husain, S (Husain, Shahid)  
JOURNAL OF APPLIED PHYSICS Volume124 Issue6 Article Number065110 PublishedAUG 14 2018
71. Observation of transient lattice disorder at the onset of multiferroic ordering in Eu<sub>1-x</sub>HoxMnO<sub>3</sub> by Raman spectroscopy  
Elsaesser, S (Elsaesser, S.) Mukhin, AA (Mukhin, A. A.) Balbashov, AM (Balbashov, A. M.) Geurts, J (Geurts, J.)  
PHYSICAL REVIEW B Volume97 Issue22 Article Number224307 PublishedJUN 25 2018
70. Hole doping effect on structure, transport and magnetic properties of Dy<sub>1-x</sub>BaxMnO<sub>3</sub> (0 ≤ x ≤ 1)  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume744 Page82-89 PublishedMAY 5 2018
69. Fabrication of Ca-Mn-Nb-O compounds and their structural, electrical, magnetic and thermoelectric properties  
Oz, E (Oz, E.) Demirel, S (Demirel, S.) Altin, S (Altin, S.) Altin, E (Altin, E.) Baglayan, O (Baglayan, O.) Bayri, A (Bayri, A.) Avci, S (Avci, S.)  
MATERIALS RESEARCH EXPRESS Volume5 Issue3 Article Number036304 PublishedMAR 2018
68. Modification of low temperature magnetic interactions in Dy<sub>1-x</sub>EuxMnO<sub>3</sub>  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
RSC ADVANCES Volume8 Issue24 Page13537-13545 Published2018
67. Tailoring the bandgap and magnetic properties by bismuth substitution in neodymium chromite  
Mannepalli, VR (Mannepalli, Venkateswara Rao) Mohan, MMS (Mohan, M. M. Saj) Ranjith, R (Ranjith, R.)  
BULLETIN OF MATERIALS SCIENCE Volume40 Issue7 Page1503-1511 PublishedDEC 2017
66. Ben Khelifa, H.; M'nassri, R.; Cheikhrouhou-Koubaa, W.; et al.  
Structural characterization and magnetic field dependence of the magnetocaloric properties in Pr<sub>0.8</sub>Na<sub>0.05</sub>K<sub>0.15</sub>MnO<sub>3</sub> ceramic  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 439 Pages: 148-155 Published: OCT 1 2017
65. Kumar, Shiv; Dwivedi, G. D.; Joshi, Amish G.; et al.  
Study of structural, dielectric, optical properties and electronic structure of Cr-doped LaInO<sub>3</sub> perovskite nanoparticles  
MATERIALS CHARACTERIZATION Volume: 131 Pages: 108-115 Published: SEP 2017
64. Mannepalli, Venkateswara Rao; Raghunathan, Rajamani; Ramadurai, Ranjith; et al.  
Local structural distortion and interrelated phonon mode studies in yttrium chromite  
JOURNAL OF MATERIALS RESEARCH Volume: 32 Issue: 8 Pages: 1541-1547 Published: APR 2017
63. Yadagiri, K.; Nithya, R.; Shukla, Neeraj; et al.  
Role of trivalent bismuth ion substitution at Dy site on the physical properties of DyMnO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 695 Pages: 2959-2964 Published: FEB 25 2017
62. Bhat, M.A., Modi, A., Tarachand, Bhattacharya, S., Gaur, N.K., Okram, G.S.  
Impact of silver substitution on the magnetotransport and thermal behavior of polycrystalline Sm<sub>0.55</sub>Sr<sub>0.45-x</sub>Ag<sub>x</sub>MnO<sub>3</sub> (x=0 & 0.15) manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 691 Pages: 230-238 DOI: 10.1016/j.jallcom.2016.08.222 Published: JAN 15 2017
61. Praveena, K., Bharathi, P., Liu, H.-L., Varma, K.B.R.  
Structural, multiferroic properties and enhanced magnetoelectric coupling in Sm<sub>1-x</sub>CaxFeO<sub>3</sub>  
CERAMICS INTERNATIONAL Volume: 42 Issue: 12 Pages: 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 Published: SEP 2016
60. Mishra, S.K., Gupta, M.K., Mittal, R., Kolesnikov, A.I., Chaplot, S.L.

Spin-phonon coupling and high-pressure phase transitions of RMnO<sub>3</sub> (R = Ca and Pr): An inelastic neutron scattering and first-principles study

PHYSICAL REVIEW B Volume: 93 Issue: 21 Article Number: 214306 DOI: 10.1103/PhysRevB.93.214306 Published: JUN 22 2016

59. Elsässer, S., Geurts, J., Mukhin, A. A., Balbashov, A. M.

Lattice dynamics and spin-phonon coupling in orthorhombic Eu<sub>1-x</sub>HoxMnO<sub>3</sub> ( $x \leq 0.3$ ) studied by Raman spectroscopy  
PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016

58. Karchev, N (Karchev, Naoum)

Leggett's modes in magnetic systems with Jahn-Teller distortion  
ANNALS OF PHYSICS Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015

57. Singh, Brajendra

Room temperature large positive and negative magnetocapacitance in CaMn<sub>0.95</sub>Fe<sub>0.05</sub>O<sub>3- $\delta$</sub>   
MATERIALS LETTERS Volume: 156 Pages: 76-78 Published: OCT 1 2015

56. Modi, Anchit; Gaur, N. K

Structural, electrical and magnetic phase evolution of Cr substituted GdMn<sub>1-x</sub>CrxO<sub>3</sub> ( $0 \leq x \leq 0.2$ ) manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 644 Pages: 575-581 Published: SEP 25 2015

55. Euler, C.; Holuj, P.; Talkenberger, A.; et al.

Magnetic field dependent thermal conductance in La<sub>0.67</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 381 Pages: 188-193 Published: MAY 1 2015

54. Goian, V.; Kamba, S.; Borodavka, F.; et al.

The manifestation of spin-phonon coupling in CaMnO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 16 Article Number: 164103 Published: APR 28 2015

53. Sultan, Khalid; Ikram, M.; Gautam, Sanjeev; et al.

Electrical and magnetic properties of the pulsed laser deposited Ca doped LaMnO<sub>3</sub> thin films on Si (100) and their electronic structures  
RSC ADVANCES Volume: 5 Issue: 85 Pages: 69075-69085 Published: 2015

52. Singh, Brajendra

Structural, transport, magnetic and magnetoelectric properties of CaMn<sub>1-x</sub>FexO<sub>3- $\delta$</sub>  ( $0.0 \leq x \leq 0.4$ )  
RSC ADVANCES Volume: 5 Issue: 50 Pages: 39938-39945 Published: 2015

51. Gupta, Preeti; Poddar, Pankaj

Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015

50. Sood, Kapil; Singh, K.; Pandey, O. P.

Co-existence of cubic and orthorhombic phases in Ba-doped LaInO<sub>3</sub> and their effect on conductivity  
PHYSICA B-CONDENSED MATTER Volume: 456 Pages: 250-257 Published: JAN 1 2015

49. Cai, Xuan; Shi, Lei; Zhou, Shiming; et al.

Size-dependent structure and magnetic properties of DyMnO<sub>3</sub> nanoparticles  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 10 Article Number: 103903 Published: SEP 14 2014

48. Garcia-Saiz, Abel; de Pedro, Imanol; Migowski, Pedro; et al.

Anion- $\pi$  and Halide-Halide Nonbonding Interactions in a New Ionic Liquid Based on Imidazolium Cation with Three-Dimensional Magnetic Ordering in the Solid State  
INORGANIC CHEMISTRY 53 (16), pp. 8384-8396 AUG 18 2014

47. Muneeswaran, M.; Giridharan, N. V.

Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO<sub>3</sub> nanoparticles  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014

46. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al.

Raman and X-ray diffraction study of (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> multilayer heterostructures  
THIN SOLID FILMS 545, pp. 267-271 OCT 31 2013

45. Belik, Alexei A.; Matsushita, Yoshitaka; Tanaka, Masahiko; et al.

High-Pressure Synthesis, Crystal Structures, and Properties of ScRhO<sub>3</sub> and InRhO<sub>3</sub> Perovskites  
INORGANIC CHEMISTRY 52 (20), pp. 12005-12011 OCT 21 2013

44. Kozlenko, D. P.; Dang, N. T.; Kichanov, S. E.; et al.

Pressure-induced structural transformations, orbital order and antiferromagnetism in La<sub>0.75</sub>Ca<sub>0.25</sub>MnO<sub>3</sub>  
EUROPEAN PHYSICAL JOURNAL B 86 (8), 360, AUG 2013

43. Tiwari, Brajesh; Surendra, M. Krishna; Rao, M. S. Ramachandra

HoCrO<sub>3</sub> and YCrO<sub>3</sub>: a comparative study  
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (21), 216004, MAY 29 2013

42. Kumar, A.; Shahi, P.; Kumar, S.; et al.

Raman effect and magnetic properties of doped TbMnO<sub>3</sub>  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013

41. Anokhin, A.S., Bunina, O.A., Golovko, Yu.I., Mukhortov, V.M., Yuzyuk, Yu.I., Simon, P. Raman and X-ray diffraction study of (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> multilayer heterostructures *Thin Solid Films* 545, pp. 267-271, 2013
40. Dang, N.T., Kozlenko, D.P., Kichanov, S.E., Dubrovinsky, L.S., Jiráček, Z., Levin, D.M., Lukin, E.V., Savenko, B.N. Structural and magnetic phase transitions occurring in Pr<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite at high pressures *JETP Letters* 97 (9), pp. 540-545, 2013
39. Pham, D.H.Y., Nguyen, D.T., Pham, D.T., Hoang, N.N., Pham, T.T. Optical spectra of the colloidal Fe-doped manganate CaMn<sub>1-x</sub>FexO<sub>3</sub> (x = 0, 0.01, 0.03, 0.05) *Journal of the Korean Physical Society* 62 (12), pp. 2133-2138, 2013
38. Yi, W., Liang, Q., Matsushita, Y., Tanaka, M., Hu, X., Belik, A.A. Crystal structure and properties of high-pressure-synthesized BiRhO<sub>3</sub>, LuRhO<sub>3</sub>, and NdRhO<sub>3</sub> *Journal of Solid State Chemistry* 200, pp. 271-278, 2013
37. Jativa, J.; Jurado, J. F.; Vargas-Hernandez, C. Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure La<sub>0.5</sub>Ba<sub>0.5</sub>MnO<sub>3</sub> *REVISTA MEXICANA DE FISICA* 58 (2) Suppl. S, 19-23, DEC 2012
36. Bielecki, J., Svedlindh, P., Tibebe, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S. Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy *Physical Review B - Condensed Matter and Materials Physics* 86 (18), art. no. 184422, 2012
35. Stanislavchuk, T.N., Sirenko, A.A., Litvinchuk, A.P., Luo, X., Cheong, S.-W. Electronic band structure and optical phonons of BaSnO<sub>3</sub> and Ba<sub>0.97</sub>La<sub>0.03</sub>SnO<sub>3</sub> single crystals: Theory and experiment *Journal of Applied Physics* 112 (4), art. no. 044108, 2012
34. Álvarez-Serrano, I., López, M.L., Rubio, F., García-Hernández, M., Cuello, G.J., Pico, C., Luisa Veiga, M. Non-symmetric superparamagnetic clusters in the relaxor manganites Sr<sub>2-x</sub>BixMnTiO<sub>6</sub> (0 ≤ x ≤ 0.75) *Journal of Materials Chemistry* 22 (23), pp. 11826-11835, 2012.
33. Runka, T., Berkowski, M. Perovskite La<sub>1-x</sub>Sr<sub>x</sub>Ga<sub>1-y</sub>Mn<sub>y</sub>O<sub>3</sub> solid solution crystals: Raman spectroscopy characterization *Journal of Materials Science* 47 (14), pp. 5393-5401, 2012.
32. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V. Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites *RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A* 86 (4), 606-620, APR 2012.
31. Kozlenko, D.P., Chan, T.A., Trukhanov, A.V., Kichanov, S.E., Trukhanov, S.V., Dubrovinsky, L.S., Savenko, B.N. Effect of high pressure on the crystal and magnetic structure and on the Raman spectra in Pr<sub>0.7</sub>Ba<sub>0.3</sub>MnO<sub>3</sub> *JETP Letters* 94 (7), 579-584, 2011.
30. Chopelas, A. Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites *Physics and Chemistry of Minerals* 38 (9), pp. 709-726, 2011.
29. Hirai, S., Kojima, Y., Ohfuji, H., Nishiyama, N., Irifune, T., Klemme, S., Bromiley, G., Attfield, J.P. High-pressure Raman studies and heat capacity measurements on the MgSiO<sub>3</sub> analogue CaIr<sub>(0.5)</sub>Pt<sub>(0.5)</sub>O<sub>(3)</sub> *PHYSICS AND CHEMISTRY OF MINERALS* 38 (8) Pages: 631-637, SEP 2011.
28. Antonakos, A., Liarokapis, E., Aydogdu, G.H., Habermeier, H.-U. Strain induced phase separation on La<sub>(0.5)</sub>Ca<sub>(0.5)</sub>MnO<sub>(3)</sub> thin films *JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS* 323 (5) Pages: 620-630, MAR 2011.
27. Kozlenko, D.P., Chan, T.A., Kichanov, S.E., Jiráček, Z., Dubrovinsky, L.S., Savenko, B.N. Structural and magnetic phase transitions in Pr<sub>(0.7)</sub>Ca<sub>(0.3)</sub>MnO<sub>(3)</sub> at high pressures *JETP LETTERS* 92 (9) Pages: 590-594, Published: JAN 2011.
26. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G. High-pressure investigation of CaTiO<sub>(3)</sub> up to 60 GPa using x-ray diffraction and Raman spectroscopy *PHYSICAL REVIEW B* 82 (13) Article Number: 134101, OCT 4 2010.
25. Rout G. C.; Panda Saswati; Behera S. N. Theoretical study of the Raman active CDW gap mode in manganites *JOURNAL OF PHYSICS-CONDENSED MATTER* 22 (37) Article Number: 376003, SEP 22 2010.
24. Liu Ying-Xin; Qin Shan; Jiang Jian-Zhong; et al. High pressure X-ray diffraction study of CaMnO<sub>(3)</sub> perovskite *CHINESE PHYSICS C* 34 (7) Pages: 1025-1028, JUL 2010.
23. Paszkowicz, W., Pietosa, J., Woodley, S.M., Dłuzewski, P.A., Kozłowski, M., Martin, C. Lattice parameters and orthorhombic distortion of CaMnO<sub>3</sub>

- Powder Diffraction 25 (1), art. no. 013001PDJ, pp. 46-59 (2010).
22. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.  
Infrared study of the phonon modes in PrMnO<sub>3</sub> and CaMnO<sub>3</sub>  
Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).
21. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W.  
Pressure induced insulator-metal phase transition on Pr<sub>0.6</sub>Ca<sub>0.4</sub>MnO<sub>3</sub> thin films  
Journal of Physics Conference Series Volume: 121 Article Number: 052002 DOI: 10.1088/1742-6596/121/5/052002 Published: 2008
20. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.  
Evaluation of the strains in charge-ordered Pr<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> thin films using Raman spectroscopy  
Journal of Applied Physics 104 (6), art. no. 063508 (2008).
19. Bhattacharjee, S., Bousquet, E., Ghosez, P.  
First-principles study of the dielectric and dynamical properties of orthorhombic CaMnO<sub>3</sub>  
Journal of Physics Condensed Matter 20 (25), art. no. 255229 (2008).
18. Kim, M., Barath, H., Cooper, S.L., Abbamonte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.  
Raman scattering studies of the temperature- and field-induced melting of charge order in La<sub>x</sub>PryCa<sub>1-x-y</sub>MnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 77 (13), art. no. 134411 (2008).
17. Buch, J.J.U., Lalitha, G., Pathak, T.K., Vasoya, N.H., Lakhani, V.K., Reddy, P.V., Kumar, R., Modi, K.B.  
Structural and elastic properties of Ca-substituted LaMnO<sub>3</sub> at 300 K  
Journal of Physics D: Applied Physics 41 (2), art. no. 025406 (2008).
16. Nikiforov, A.E., Gontchar, L.E., Popov, S.E., Kotomanov, S.V., Larin, A.V.  
Charge-ordering in La<sub>0.333</sub>Ca<sub>0.667</sub>MnO<sub>3</sub>  
Physica Status Solidi (C) Current Topics in Solid State Physics 4 (3), pp. 1222-1225 (2007).
15. Chan TS, Liu RS, Yang CC, et al.  
Chemical size effect on the magnetic and electrical properties in the (Tb<sub>1-x</sub>Eux)MnO<sub>3</sub> (0 ≤ x ≤ 1.0) System  
JOURNAL OF PHYSICAL CHEMISTRY B 111 (9), pp.2262-2267 (2007).
14. Andreasson J, Holmlund J, Knee CS, et al.  
Franck-Condon higher order lattice excitations in the LaFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects  
PHYSICAL REVIEW B 75 (10) Art. No. 103402 (2007).
13. Chan TS, Liu RS, Yang CC, et al.  
Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb<sub>1-x</sub>Nax)MnO<sub>3-y</sub> (0 ≤ x ≤ 0.3) system  
INORGANIC CHEMISTRY 46 (11) , 4575-4582 (2007).
12. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006).
11. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
Journal of Physics Condensed Matter 18 (5), pp. 1667-1676 (2006).
10. Kim, J., Jung, S., Park, M.S., Lee, S.-I., Drew, H.D., Cheong, H., Kim, K.H., Choi, E.J.  
Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (5), art. no. 052406 (2006)
9. Rozenberg, G.Kh., Pasternak, M.P., Xu, W.M., Dubrovinsky, L.S., Carlson, S., Taylor, R.D.  
Consequences of pressure-instigated spin crossover in RFeO<sub>3</sub> perovskites; a volume collapse with no symmetry modification  
Europhysics Letters 71 (2), pp. 228-234 (2005)
8. Cohn, J.L., Chiorescu, C., Neumeier, J.J.  
Polaron transport in the paramagnetic phase of electron-doped manganites  
Physical Review B - Condensed Matter and Materials Physics 72 (2), art. no. 024422 (2005)
7. Ghosh, S., Kamaraju, N., Seto, M., Fujimori, A., Takeda, Y., Ishiwata, S., Kawasaki, S., Sood, A.K.  
Raman scattering in CaFeO<sub>3</sub> and La<sub>0.33</sub>Sr<sub>0.67</sub>FeO<sub>3</sub> across the charge-disproportionation phase transition  
Physical Review B - Condensed Matter and Materials Physics 71 (24), pp. 1-7 (2005)
6. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
5. Garbarino G, Acha C, Vega D, et al.  
Revealing polarons with high pressure on low electron-doped manganites  
PHYSICAL REVIEW B 70 (1): Art. No. 014414 JUL 2004
4. Tatsi A, Papadopoulou EL, Lampakis D, et al.



Raman study in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004

3. Tatsi A, Papadopoulou EL, Lampakis D, et al.  
Raman study of anharmonic effects in Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

2. Wang ZW, Saxena SK, Neumeier JJ  
Raman scattering study on pressure-induced phase transformation of marokite (CaMn<sub>2</sub>O<sub>4</sub>)  
J SOLID STATE CHEM 170 (2): 382-389 FEB 1 2003

1. Martin-Carron L, de Andres A, Martinez-Lope MJ, et al.  
Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites  
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002

#### 40. "Raman spectroscopy of CaRuO<sub>3</sub>"

N. Kolev, C. L. Chen, M. Gospodinov, R. P. Bontchev, V. N. Popov, A. P. Litvinchuk, M. V. Abrashev, V. G. Hadjiev, and M. N. Iliev  
Phys. Rev. B 66, 014101 (2002).

18. Teknowijoyo, S; Dulal, R; (...); Gulian, A  
Raman Spectroscopy as a Tool for Rapid Feedback of Perovskite Growth Crystallinity and Composition  
Spectroscopy 36, pp.8-15 Jun 2021

17. Adar, F.  
Effect of sampling optics on raman depth profiling  
Spectroscopy (Santa Monica) 36(6), pp. 9-15 (2021)

16. Spin-phonon coupling in epitaxial SrRuO<sub>3</sub> heterostructures  
Jeong, SG (Jeong, Seung Gyo) Lim, SY (Lim, Soo Yeon) Kim, J (Kim, Jiwoong) Park, S (Park, Sungkyun) Cheong, H (Cheong, Hyeonsik) Choi, WS (Choi, Woo Seok)  
NANOSCALE Volume12 Issue26 Page13926-13932 PublishedJUL 14 2020

15. Investigation of New B-Site-Disordered Perovskite Oxide CaLaScRuO<sub>6+δ</sub>: An Efficient Oxygen Bifunctional Electrocatalyst in a Highly Alkaline Medium

Kumar, N (Kumar, Nikhil) Kumar, M (Kumar, Mukesh) Nagaiah, TC (Nagaiah, Tharamani C.) Siruguri, V (Siruguri, Vasudeva) Rayaprol, S (Rayaprol, Sudhindra) Yadav, AK (Yadav, Ashok Kumar) Jha, SN (Jha, Shambhu Nath) Bhattacharyya, D (Bhattacharyya, Dibyendu) Paul, AK (Paul, Avijit Kumar)  
ACS APPLIED MATERIALS & INTERFACES Volume12 Issue8 Page9190-9200 PublishedFEB 26 2020

14. Effect of microstructure on the electronic transport properties of epitaxial CaRuO<sub>3</sub> thin films  
Daptary, G.N., Sow, C., Sarkar, S., (...), Sil, A., Bid, A.  
Physica B: Condensed Matter 511, pp. 74-79 (2017)

13. Thakur, R., Thakur, R.K., Gaur, N.K.  
Elastic and thermal properties of Sr<sub>1-x</sub>CaxRuO<sub>3</sub>  
International Journal of Modern Physics B 27 (17), art. no. 1350054, 2013

12. Tai, T., Nishide, M., Matsuoka, M., Kamo, T., Funakubo, H., Katoda, T., Shima, H., (...), Yamamoto, T.  
Investigation of sputtering damage in SrRuO<sub>3</sub> films prepared by sputtering with raman and x-ray photoemission spectroscopies  
Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012

11. Demkó, L., Bordács, S., Vojta, T., Nozadze, D., Hrahsheh, F., Svoboda, C., Dóra, B., (...), Kézsmárki, I.  
Disorder promotes ferromagnetism: Rounding of the quantum phase transition in Sr<sub>1-x</sub>CaxRuO<sub>3</sub>  
Physical Review Letters 108 (18), art. no. 185701, 2012.

10. Gat-Malureanu, I.M., Carlo, J.P., Goko, T., Fukaya, A., Ito, T., Kyriakou, P.P., Larkin, M.L., (...), Uemura, Y.J.  
Muon spin relaxation and susceptibility measurements of an itinerant-electron system Sr<sub>1-x</sub>CaxRuO<sub>3</sub>: Quantum evolution from ferromagnet to paramagnet  
Physical Review B - Condensed Matter and Materials Physics 84 (22), art. no. 224415, 2011.

9. Chopelas, A.  
Single-crystal Raman spectra of YAlO<sub>3</sub> and GdAlO<sub>3</sub>: Comparison to several orthorhombic ABO<sub>3</sub> perovskites  
Physics and Chemistry of Minerals 38 (9), pp. 709-726, 2011.

8. Yun, B.K., Koo, Y.S., Jung, J.H., Song, M., Yoon, S.  
Effect of hydroxyl group on global and local structures of hydrothermally grown KNbO<sub>3</sub> nanorods  
MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.

7. Wang, G.-T., Zhang, M.-P., Yang, Z.-X., Fang, Z.  
Orbital orderings and optical conductivity of SrRuO<sub>3</sub> and CaRuO<sub>3</sub>: First-principles studies  
Journal of Physics Condensed Matter 21 (26), art. no. 265602 (2009).

6. Samata, H., Saeki, Y., Mizusaki, S., Nagata, Y., Ozawa, T.C., Sato, A.

- Electrochemical crystal growth of perovskite ruthenates  
Journal of Crystal Growth 311 (3), pp. 623-626 (2009).
5. Maiti, K., Singh, R.S., Medicherla, V.R.R.  
Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates  
Europhysics Letters 78 (1), art. no. 17002 (2007)
4. Kamal, S., Kim, D.M., Eom, C.B., Dodge, J.S.  
Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal CaRuO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 74 (16), art. no. 165115 (2006)
3. Markovich V, Auslender M, Fita I, et al.  
Interplay between itinerant and localized states in CaMn<sub>1-x</sub>Ru<sub>x</sub>O<sub>3</sub> (x <= 0.5) manganites  
PHYSICAL REVIEW B 73 (1): Art. No. 014416 JAN 2006
2. Tkach A, Vilarinho PM, Kholkin AL, et al.  
Lattice dynamics and dielectric response of Mg-doped SrTiO<sub>3</sub> ceramics in a wide frequency range  
JOURNAL OF APPLIED PHYSICS 97 (4): Art. No. 044104 FEB 15 2005
1. Mathieu R, Asamitsu A, Yamada H, et al.  
Scaling of the anomalous Hall effect in Sr<sub>1-x</sub>Ca<sub>x</sub>RuO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 93 (1): Art. No. 016602 JUL 2 2004
41. *“Correlation between the chemical bonding and the physical properties of the CN<sub>x</sub> films obtained by pulsed laser deposition from C targets in low-pressure N<sub>2</sub>”*  
E. György, I. N. Mihailescu, M. Baleva, M. Abrashev, E. P. Trifonova, A. Szekeres, and A. Perrone  
Mater. Sci. Engineering B 97, 251 – 257 (2003).
6. Tsvetkova, T., Balabanov, S., Bischoff, L., Krastev, V., Stefanov, P., Avramova, I.  
X-ray photoelectron study of Si<sup>+</sup> ion implanted polymers  
Journal of Physics: Conference Series 253 (1), art. no. 012070, 2010.
5. Wnuk, J.D., Gorham, J.M., Fairbrother, D.H.  
Growth and microstructure of nanoscale amorphous carbon nitride films deposited by electron beam irradiation of 1, 2-diaminopropane  
Journal of Physical Chemistry C 113 (28), pp. 12345-12354 (2009).
4. Riascos, H., Zambrano, G., Camps, E., Prieto, P.  
Influence of nitrogen gas pressure on plume-plasma and chemical bonding of carbon nitride films synthesized by pulsed laser deposition  
Revista Mexicana de Fisica 53 (7), pp. 274-278 (2007).
3. Yang, L., May, P.W., Yin, L., Scott, T.B., Smith, J.A., Rosser, K.N.  
Growth and characterization of self-assembled carbon nitride leaf-like nanostructures  
Nanotechnology 17 (23), art. no. 015, pp. 5798-5804 (2006)
2. Petrik, P., Lohner, T., Égerházi, L., Geretovszky, Zs.  
Optical models for the ellipsometric characterization of carbon nitride layers prepared by inverse pulsed laser deposition  
Applied Surface Science 253 (1 SPEC. ISS.), pp. 173-176 (2006)
1. Naydenov, N., Popov, A.  
Pre- and post-service microhardness measurements of electrical contacts operating at Kozloduy NPP  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology 132 (3), pp. 247-252 (2006)
42. *“Role of Jahn-Teller disorder in Raman scattering of mixed-valence manganites”*  
M. N. Iliev, M. V. Abrashev, V. N. Popov, and V. G. Hadjiev  
Phys. Rev. B 67, 212301 (2003).
113. Schüler, L., Ross, U., Moshnyaga, V.  
Strain-induced phase transition at the surface of epitaxial La<sub>0.65</sub>Sr<sub>0.35</sub>MnO<sub>3</sub> films  
Surfaces and Interfaces 45,103906 (2024)
112. Bao, X., Wang, J., Wu, X., (...), Liu, J., Zhao, S.  
The symmetry aspect of magnetocaloric effect in La<sub>x</sub>Bi<sub>0.3-x</sub>Ca<sub>0.7</sub>MnO<sub>3</sub> manganites  
Physica B: Condensed Matter 671,415410 (2023)
111. Yang, H., Chen, H., Zhou, W., (...), Wang, J., Fu, J.  
Defect engineered efficient catalytic transfer hydrogenation of furfural to furfuryl alcohol in ethanol by Co-doped LaMnO<sub>3</sub>  
Fuel 354,129388 (2023)
110. Baral, S.C., Maneesha, P., Rini, E.G., Sen, S.  
Recent advances in La<sub>2</sub>NiMnO<sub>6</sub> double perovskites for various applications; challenges and opportunities  
Progress in Solid State Chemistry 72,100429 (2023)

109. Chen, S., Ren, T., Zhou, Z., (...), Huang, X., Zhang, X.  
Insights into Mn loaded carbon-silica-membrane based catalytic ozonation process for efficient wastewater treatment: Performance and mechanism  
Chemical Engineering Journal 475,145874 (2023)
108. Ren, T., Ouyang, C., Zhou, Z., (...), Huang, X., Zhang, X.  
Mn-doped carbon-Al<sub>2</sub>SiO<sub>5</sub> fibers enable catalytic ozonation for wastewater treatment: Interface modulation and mass transfer enhancement  
Journal of Hazardous Materials 460,132307 (2023)
107. Rana, S., Sahlot, P., Dwij, V., (...), Shukla, D.K., Sathe, V.  
Spin-phonon coupling-mediated magnetodielectricity in B-site disordered PrFe<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3</sub>  
Journal of Materials Science: Materials in Electronics 34(26),1802 (2023)
106. Soumya, S., Vinod, K., Harsita, M., (...), Bhatnagar, A.K., Sattibabu, B.  
Studies on the effect of In<sup>3+</sup> ion on magnetic and magneto caloric properties of polycrystalline TbMnO<sub>3</sub>  
Journal of Solid State Chemistry 322,123971 (2023)
105. López-Toro, J.F., Lezama, L., Salazar, D., Mendoza, A.  
Influence of Nonmagnetic Dilution on the Magnetic Properties of La<sub>1-x</sub>Dy<sub>x</sub>Mn<sub>1-y</sub>Zn<sub>y</sub>O<sub>3</sub> Perovskites at High Temperature  
Physica Status Solidi (A) Applications and Materials Science 219(15),2100513 (2022)
104. Dantelle, G., Beauquis, S., Le Dantec, R., (...), Galez, C., Mugnier, Y.  
Solution-Based Synthesis Routes for the Preparation of Noncentrosymmetric 0-D Oxide Nanocrystals with Perovskite and Nonperovskite Structures  
Small 18(30),2200992 (2022)
103. Tozri, A., Alhalafi, S., Alrowaili, Z.A., (...), Costa, B.F.O., Ildiz, G.O.  
Investigation of the magnetocaloric effect and the critical behavior of the interacting superparamagnetic nanoparticles of La<sub>0.8</sub>Sr<sub>0.15</sub>Na<sub>0.05</sub>MnO<sub>3</sub>  
Journal of Alloys and Compounds 890,161739 (2022)
102. Chen, G., Hong, D., Xia, H., (...), Wang, X., Dai, Q.  
Amorphous and homogeneously Zr-doped MnO<sub>x</sub> with enhanced acid and redox properties for catalytic oxidation of 1,2-Dichloroethane  
Chemical Engineering Journal 428,131067 (2022)
101. Agarwal, H., Alonso, J.A., Muñoz, Á., (...), Srivastava, O.N., Shaz, M.A.  
Evolution from sinusoidal to collinear A-type antiferromagnetic spin-ordered magnetic phase transition in Tb<sub>1-x</sub>Pr<sub>x</sub>MnO<sub>3</sub> solid solution  
Journal of Physics Condensed Matter 33(26),265802 (2021)
100. Compression effect on structure of the Li-stabilized high-temperature phase of Mn<sub>3</sub>(VO<sub>4</sub>)<sub>2</sub> with composition Li<sub>0.2</sub>Mn<sub>2.9</sub>(VO<sub>4</sub>)<sub>2</sub> - Raman spectroscopic and X-ray diffraction investigations  
Kesari, S (Kesari, Swayam) Garg, AB (Garg, Alka B.) Clemens, O (Clemens, Oliver) Rao, R (Rao, Rekha)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume870 Article Number159418 PublishedJUL 25 2021
99. Structural, dielectric, and magnetic properties of LaCo<sub>0.2</sub>Mn<sub>0.8</sub>O<sub>3</sub> and La<sub>2</sub>CoMnO<sub>6</sub> perovskite materials  
Yousif, NM (Yousif, N. M.) Makram, N (Makram, N.) Wahab, LA (Wahab, L. A.)  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume98 Issue1 Page238-251 PublishedAPR 2021
98. Effects of particle sizes of starting oxides on the properties of spinel-type Mn<sub>1.1</sub>Co<sub>1.5</sub>Fe<sub>0.4</sub>O<sub>4</sub> negative temperature coefficient ceramics  
Wang, B (Wang, Bing) Wang, JH (Wang, Junhua) Chang, AM (Chang, Aimin) Yao, JC (Yao, Jincheng)  
CERAMICS INTERNATIONAL Volume47 Issue2 Page2531-2537 PublishedJAN 15 2021
97. Surface Restructuring of Thin-Film Electrodes Based on Thermal History and Its Significance for the Catalytic Activity and Stability at the Gas/Solid and Solid/Solid Interfaces  
Celikbilek, O., Cavallaro, A., Kerherve, G., (...), Kilner, J.A., Skinner, S.J.  
ACS Applied Materials and Interfaces 12(30), pp. 34388-34401 (2020)
96. Role of Ni substitution on structural, magnetic and electronic properties of epitaxial CoCr<sub>2</sub>O<sub>4</sub> spinel thin films  
Mohanty, P., Chowdhury, S., Choudhary, R.J., (...), Prinsloo, A.R.E., Sheppard, C.J.  
Nanotechnology 31(28),285708 (2020)
95. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties  
Mahana, S (Mahana, Sudipta) Pandey, SK (Pandey, Shishir Kumar) Rakshit, B (Rakshit, Bipul) Nandi, P (Nandi, Pronoy) Basu, R (Basu, Raktima) Dhara, S (Dhara, Sandip) Turchini, S (Turchini, S.) Zema, N (Zema, N.) Manju, U (Manju, U.) Mahanti, SD (Mahanti, Subhendra D.)  
PHYSICAL REVIEW B Volume102 Issue24 Article Number245120 PublishedDEC 15 2020
94. Anomalous magnetism in Al doped La<sub>2</sub>CoMnO<sub>6</sub> ceramics  
Xin, Y (Xin, Yang) Shi, L (Shi, Lei) Zhao, JY (Zhao, Jiyin) Yuan, XY (Yuan, Xueyou) Zhou, SM (Zhou, Shiming) Hou, L (Hou, Li) Tong, RX (Tong, Ruixue)  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume510 Article Number166950 PublishedSEP 15 2020
93. Valence-induced distortion controls the resistivity and thermal stability of Co<sub>2.77</sub>Mn<sub>1.71</sub>Fe<sub>1.10</sub>Zn<sub>0.42</sub>O<sub>8</sub> ceramics  
Wang, B (Wang, Bing) Yao, JC (Yao, Jincheng) Wang, JH (Wang, Junhua) Chang, AM (Chang, Aimin)

92. Surface Conditions That Constrain Alkane Oxidation on Perovskites  
Koch, G (Koch, Gregor) Havecker, M (Havecker, Michael) Teschner, D (Teschner, Detre) Carey, SJ (Carey, Spencer J.) Wang, YQ (Wang, Yuanqing) Kube, P (Kube, Pierre) Hetaba, W (Hetaba, Walid) Lunkenbein, T (Lunkenbein, Thomas) Auffermann, G (Auffermann, Gudrun) Timpe, O (Timpe, Olaf)  
ACS CATALYSIS Volume10 Issue13 Page7007-7020 PublishedJUL 2 2020
91. Structural-distortion modes and transport properties of La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> by co-doping Dy<sup>3+</sup> and Sr<sup>2+</sup> ions  
Tang, YF (Tang, Y. F.) Zhang, AM (Zhang, A. M.) Shi, JY (Shi, J. Y.) Wu, XS (Wu, X. S.)  
CERAMICS INTERNATIONAL Volume46 Issue8 Page10598-10602 PartA PublishedJUN 1 2020
90. Backfolded acoustic phonons as ultrasonic probes in metal-oxide superlattices  
Lyzwa, F (Lyzwa, F.) Chan, A (Chan, A.) Khmaladze, J (Khmaladze, J.) Fursich, K (Fuersich, K.) Keimer, B (Keimer, B.) Bernhard, C (Bernhard, C.) Minola, M (Minola, M.) Mallett, BPP (Mallett, B. P. P.)  
PHYSICAL REVIEW MATERIALS Volume4 Issue4 Article Number043606 PublishedAPR 28 2020
89. Role of Ni substitution on structural, magnetic and electronic properties of epitaxial CoCr<sub>2</sub>O<sub>4</sub> spinel thin films  
Mohanty, P (Mohanty, P.) Chowdhury, S (Chowdhury, S.) Choudhary, RJ (Choudhary, R. J.) Gome, A (Gome, A.) Reddy, VR (Reddy, V. R.) Umapathy, GR (Umapathy, G. R.) Ojha, S (Ojha, S.) Carleschi, E (Carleschi, E.) Doyle, BP (Doyle, B. P.) Prinsloo, ARE (Prinsloo, A. R. E.)  
NANOTECHNOLOGY Volume31 Issue28 Article Number285708 PublishedAPR 24 2020
88. Influence of trivalent lanthanides substitution on the thermoelectric properties of nanostructured Ca<sub>1-x</sub>Ln<sub>(3+)(x)</sub>MnO<sub>3-delta</sub> (Ln<sub>(3+)</sub> = Sm, Ce, La; x=0, 0.1)  
Mary, SB (Mary, S. Berbeth) Rajesh, AL (Rajesh, A. Leo)  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume31 Issue8 Page6479-6487 PublishedAPR 2020
87. Structural, optical and magneto-electric coupling analysis in 'Y' doped double perovskite La<sub>2</sub>NiMnO<sub>6</sub> nanoparticles  
Kumar, M (Kumar, Manish) Prajapati, B (Prajapati, Brijmohan) Singh, A (Singh, Abhishek) Kumar, S (Kumar, Shiv) Kumar, A (Kumar, Arvind) Mittal, S (Mittal, Srishti) Aditya (Aditya)  
CHEMICAL PHYSICS Volume532 Article Number110688 PublishedAPR 1 2020
86. Microstructure and electrical transport mechanisms of the Ca-doped LaMnO<sub>3</sub> films grown on MgO substrate  
Daoudi, K (Daoudi, Kais) El-Helali, S (El-Helali, S.) Othmen, Z (Othmen, Z.) Suleiman, BM (Suleiman, B. M.) Tsuchiya, T (Tsuchiya, T.)  
JOURNAL OF MATERIMICS Volume6 Issue1 Page17-23 PublishedMAR 2020
85. Monitoring intermediate species formation by DRIFT during the simultaneous removal of soot and NO<sub>x</sub> over LaAgMnO<sub>3</sub> catalyst  
Urán, L., Gallego, J., Ruiz, W., (...), Bueno-López, A., Santamaría, A.  
Applied Catalysis A: General 588,117280 (2019)
84. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Hoang, NN (Nam Nhat Hoang) Pham, DHY (Duc Huyen Yen Pham) Nguyen, TN (The Nghia Nguyen)  
SCIENTIFIC REPORTS Volume9 Article Number19204 PublishedDEC 16 2019
83. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, RD (Mero, Rea Divina) Ogawa, K (Ogawa, Kirari) Yamada, S (Yamada, Shigeki) Liu, HL (Liu, Hsiang-Lin)  
SCIENTIFIC REPORTS Volume9 Article Number18164 PublishedDEC 3 2019
82. Probing the Subtle Magnetic Transitions with Raman Spectroscopy in a Bi-layered La<sub>1.15</sub>Sr<sub>1.85</sub>Mn<sub>2</sub>O<sub>7</sub> Single Crystal  
Egilmez, M (Egilmez, M.) Hamdan, NM (Hamdan, N. M.) Alawadhi, H (Alawadhi, H.) AlGhabra, MS (AlGhabra, M. S.) Prabhakaran, D (Prabhakaran, D.)  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume32 Issue12 Page3939-3945 PublishedDEC 2019
81. Polaronic Emergent Phases in Manganite-Based Heterostructures  
Moshnyaga, V (Moshnyaga, Vasily) Samwer, K (Samwer, Konrad)  
CRYSTALS Volume9 Issue10 Article Number489 PublishedOCT 2019
80. Evidence for ferromagnetic clusters at room temperature in Dy and Mn site co-substituted compounds: Dy<sub>0.55</sub>Sr<sub>0.45</sub>Mn<sub>1-x</sub>FexO<sub>3</sub>  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume792 Page411-417 PublishedJUL 5 2019
79. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
Merten, S (Merten, S.) Bruchmann-Bamberg, V (Bruchmann-Bamberg, V) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
PHYSICAL REVIEW MATERIALS Volume3 Issue6 Article Number060401 PublishedJUN 28 2019
78. Mechano-synthesis of the Whole Y<sub>1-x</sub>BixMn<sub>1-x</sub>FexO<sub>3</sub> Perovskite System: Structural Characterization and Study of Phase Transitions  
Quintana-Cilleruelo, JA (Angel Quintana-Cilleruelo, Jose) Veerapandian, VK (Veerapandian, Vignaswaran K.) Deluca, M (Deluca, Marco) Alguero, M (Alguero, Miguel) Castro, A (Castro, Alicia)  
MATERIALS Volume12 Issue9 Article Number1515 PublishedMAY 1 2019
77. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in (La<sub>0.6</sub>Pr<sub>0.4</sub>)(<sub>0.7</sub>)Ca<sub>0.3</sub>MnO<sub>3</sub>: the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy

- Merten, S (Merten, S.) Shapoval, O (Shapoval, O.) Damaschke, B (Damaschke, B.) Samwer, K (Samwer, K.) Moshnyaga, V (Moshnyaga, V)  
SCIENTIFIC REPORTS Volume9 Article Number2387 PublishedFEB 20 2019
76. Integration of LaMnO<sub>3</sub>+delta films on platinized silicon substrates for resistive switching applications by PI-MOCVD  
Rodriguez-Lamas, R (Rodriguez-Lamas, Raquel) Plat, D (Plat, Dolors) Chaix-Pluchery, O (Chaix-Pluchery, Odette) Meunier, B (Meunier, Benjamin) Wilhelm, F (Wilhelm, Fabrice) Rogalev, A (Rogalev, Andrei) Rapenne, L (Rapenne, Laetitia) Mescot, X (Mescot, Xavier) Raffhay, Q (Raffhay, Quentin) Roussel, H (Roussel, Herve)  
BEILSTEIN JOURNAL OF NANOTECHNOLOGY Volume10 Page389-398 PublishedFEB 7 2019
75. Surface reconstructions and modified surface states in La<sub>1-x</sub>CaxMnO<sub>3</sub>  
Vasudevan, RK (Vasudevan, Rama K.) Dixit, H (Dixit, Hemant) Tselev, A (Tselev, Alexander) Qiao, L (Qiao, Liang) Meyer, TL (Meyer, Tricia L.) Cooper, VR (Cooper, Valentino R.) Baddorf, AP (Baddorf, Arthur P.) Lee, HN (Lee, Ho Nyung) Ganesh, P (Ganesh, P.) Kalinin, SV (Kalinin, Sergei, V)  
PHYSICAL REVIEW MATERIALS Volume2 Issue10 Article Number104418 PublishedOCT 31 2018
74. First principles investigation of electronic and optical properties of AgAlO<sub>2</sub>  
Rizwan, M (Rizwan, Muhammad) Haider, I (Haider, Imran) Mahmood, T (Mahmood, Tariq) Shakil, M (Shakil, Muhammad) ul Hassan, M (ul Hassan, Mahmood) Jin, HB (Jin, Hai-Bo) Bao, CC (Bao, Cao Chuan)  
CHINESE JOURNAL OF PHYSICS Volume56 Issue5 Page2186-2190 PublishedOCT 2018
73. Effects of A-site cation disordering on the transport properties of half-doping La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> manganites  
Shi, JY (Shi, J. Y.) Zhang, AM (Zhang, A. M.) Wang, WX (Wang, W. X.) Cui, JY (Cui, J. Y.) Zhang, WJ (Zhang, W. J.) Wu, XS (Wu, X. S.)  
CHEMICAL PHYSICS LETTERS Volume706 Page223-227 PublishedAUG 16 2018
72. Hole doping effect on structure, transport and magnetic properties of Dy<sub>1-x</sub>BaxMnO<sub>3</sub> (0 ≤ x ≤ 1)  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Satya, AT (Satya, A. T.) Sethupathi, K (Sethupathi, K.)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume744 Page82-89 PublishedMAY 5 2018
71. Effect of Annealing Temperature on the Structural and the Electrical Transport Properties of La<sub>2</sub>NiMnO<sub>6</sub> Nanoparticles  
Chakraborty, D (Chakraborty, Deblina) Nandi, U (Nandi, Upendranath) Dey, AK (Dey, Animesh Kumar) Dasgupta, P (Dasgupta, Papri) Poddar, A (Poddar, Asok) Jana, D (Jana, Debnarayan)  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume255 Issue4 Article Number1700436 PublishedAPR 2018
70. Superconductor sandwiches: cuprate-manganite multilayers with a remarkable new ground state  
Mallett, BPP (Mallett, B. P. P.) Marsik, P (Marsik, P.) Khmaladze, J (Khmaladze, J.) Arul, R (Arul, R.) Minola, M (Minola, M.) Simpson, MC (Simpson, M. C.) Bernhard, C (Bernhard, C.)  
OXIDE-BASED MATERIALS AND DEVICES IX Book SeriesProceedings of SPIE Volume10533 Article NumberUNSP 105330Y  
Published2018
69. Modification of low temperature magnetic interactions in Dy<sub>1-x</sub>EuxMnO<sub>3</sub>  
Yadagiri, K (Yadagiri, K.) Nithya, R (Nithya, R.) Sharma, S (Sharma, Shilpam) Satya, AT (Satya, A. T.)  
RSC ADVANCES Volume8 Issue24 Page13537-13545 Published2018
68. Structural, thermal, and transport properties of La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> nanoparticles synthesized via the sol-gel auto-combustion technique  
Saleem, M (Saleem, M.) Varshney, D (Varshney, Dinesh)  
RSC ADVANCES Volume8 Issue3 Page1600-1609 Published2018
67. Defective and "c-Disordered" Hortensia-like Layered MnOx as an Efficient Electrocatalyst for Water Oxidation at Neutral pH  
Zhang, B., Chen, H., Daniel, Q., (...), Rensmo, H., Sun, L.  
ACS Catalysis 7(9), pp. 6311-6322 (2017)
66. Manifestation of quantum rotor orbital excitations in Raman spectra of Jahn-Teller crystal LaMnO<sub>3</sub>  
Kovaleva, N.N., Kusmartseva, O.E., Kugel, K.I., Kusmartsev, F.V.  
Journal of Physics: Conference Series 833(1),012005 (2017)
65. Synthesis and physicochemical studies of perovskite manganite La<sub>0.8</sub>Ca<sub>0.2</sub>Nn<sub>1-x</sub>CoxO<sub>3</sub>(0≤x≤0.3)  
Turki, D., Ghouri, Z.K., Al-Meer, S., (...), Ellouze, M., Hlil, E.K.  
Journal of Magnetism 22(3), pp. 353-359 (2017)
64. Khanahmadzadeh, Salah; Khojasteh, Hossein; Mikaeili, Negar; et al.  
Facile synthesis of CaMn<sub>2</sub>O<sub>4</sub> nanoparticles and investigation of photocatalytic activity, optical and magnetic properties and its influence on the thermal stability of polymeric nanocomposite  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 5 Pages: 4521-4529 Published: MAR 2017
63. Yadagiri, K.; Nithya, R.; Shukla, Neeraj; et al.  
Role of trivalent bismuth ion substitution at Dy site on the physical properties of DyMnO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 695 Pages: 2959-2964 Published: FEB 25 2017
62. Baranovskiy, Andrei; Amouyal, Yaron  
Dependence of electrical transport properties of CaO(CaMnO<sub>3</sub>)<sub>m</sub> (m=1, 2, 3, infinity) thermoelectric oxides on lattice periodicity  
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 6 Article Number: 065103 Published: FEB 14 2017

61. Karchev, N (Karchev, Naoum)  
Leggett's modes in magnetic systems with Jahn-Teller distortion  
ANNALS OF PHYSICS Volume: 363 Pages: 371-384 DOI: 10.1016/j.aop.2015.10.008 Published: DEC 2015
60. Shi, L., Liu, W., Zhao, J., Li, Y., Zhou, S., Guo, Y., Wang, Y.  
The magnetic properties and spin-phonon coupling of Pr<sub>2</sub>CoMnO<sub>6</sub> particles  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 076104 DOI: 10.1088/2053-1591/2/7/076104 Published: JUL 2015
59. Singh, Brajendra  
Room temperature large positive and negative magnetocapacitance in CaMn<sub>0.95</sub>Fe<sub>0.05</sub>O<sub>3-δ</sub>  
MATERIALS LETTERS Volume: 156 Pages: 76-78 Published: OCT 1 2015
58. Fan, Jiyu; Xu, Lisha; Zhang, Xiyuan; et al.  
Effect of A-site average radius and cation disorder on magnetism and electronic properties in manganite (A = Sm, Dy, Er)  
JOURNAL OF MATERIALS SCIENCE Volume: 50 Issue: 5 Pages: 2130-2137 Published: MAR 2015
57. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in La<sub>5/8-y</sub>Pr<sub>y</sub>Ca<sub>3/8</sub>MnO<sub>3</sub> (y=0.45) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
56. Singh, Brajendra  
Structural, transport, magnetic and magnetoelectric properties of CaMn<sub>1-x</sub>Fe<sub>x</sub>O<sub>3-δ</sub> (0.0 ≤ x ≤ 0.4)  
RSC ADVANCES Volume: 5 Issue: 50 Pages: 39938-39945 Published: 2015
55. Cai, Xuan; Shi, Lei; Zhou, Shiming; et al.  
Size-dependent structure and magnetic properties of DyMnO<sub>3</sub> nanoparticles  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 10 Article Number: 103903 Published: SEP 14 2014
54. Patwe, Sadequa J.; Patra, Atanu; Dey, Rita; et al.  
Probing the Local Structure and Phase Transitions of Bi<sub>4</sub>V<sub>2</sub>O<sub>11</sub>-Based Fast Ionic Conductors by Combined Raman and XRD Studies  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (11), pp. 3448-3456 NOV 2013
53. Reshak, A. H.  
First Principle Calculations of Transition Metal Oxide, AgAlO<sub>2</sub>, as Active Photocatalyst: Sustainable Alternative Sources of Energy  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE 8 (7), pp. 9371-9383 JUL 2013
52. Bin, Zhan; Lan Jinle; Lin Yuanhua  
Preparation and Characterization of CaMnO<sub>3</sub> Thermoelectric Film  
RARE METAL MATERIALS AND ENGINEERING 42 Suppl. 1A, 54-56, JUN 2013
51. M'nassri, R.; Cheikhrouhou-Koubaa, W.; Boudjada, N.; et al.  
Magnetocaloric Effects in Pr<sub>0.6-x</sub>Er<sub>x</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> (0.0 ≤ x ≤ 0.2) Manganese Oxides  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 26 (5) SI, 1429-1435, MAY 2013
50. Kovaleva, N. N.; Kusmartseva, O. E.; Kugel, K. I.; et al.  
Anomalous multi-order Raman scattering in LaMnO<sub>3</sub>: a signature of quantum lattice effects in a Jahn-Teller crystal  
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (15), 155602, APR 17 2013
49. Kumar, A.; Shahi, P.; Kumar, S.; et al.  
Raman effect and magnetic properties of doped TbMnO<sub>3</sub>  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013
48. Reshak, A.H.  
First principle calculations of transition metal oxide, AgAlO<sub>2</sub>, as active photocatalyst: Sustainable alternative sources of energy  
International Journal of Electrochemical Science 8 (7), pp. 9371-9383, 2013
47. Liu, H., Zhang, H., Li, Y., Chen, Y., Chen, L., Dong, X., Chen, K., Li, Q.  
Magnetism and resistances of slightly dy doped LaMnO<sub>3</sub> solid solutions  
Journal of Superconductivity and Novel Magnetism 25 (4) , pp. 1049-1054, 2012.
46. Wu, X.-W., Zhang, H.-X., Liu, X.-J., Zhang, X.-G.  
Optical properties and photocatalytic activity of marokite-type CaMn<sub>2</sub>O<sub>4</sub>  
Chinese Physics Letters 28 (10), art. no. 107101, 2011.
45. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
Synthesis, structural and magnetic study of polycrystalline LaNi<sub>(1-x)</sub>Mn<sub>(x)</sub>O<sub>(3)</sub> films  
PHYSICA B-CONDENSED MATTER 406 (14) Pages: 2876-2879, JUL 15 2011.
44. Mishra Dileep K.; Sathe V. G.  
Evidence of orbital excitations in CaCu<sub>(3)</sub>Ti<sub>(4)</sub>O<sub>(12)</sub> probed by Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (7) Article Number: 072203, FEB 23 2011.
43. Jugdersuren, B., Kang, S., DiPietro, R.S., Heiman, D., McKeown, D., Pegg, I.L., Philip, J.  
Large low field magnetoresistance in La<sub>(0.67)</sub>Sr<sub>(0.33)</sub>MnO<sub>(3)</sub> nanowire devices  
JOURNAL OF APPLIED PHYSICS 109 (1) Article Number: 016109, JAN 1 2011.

42. Laref Amel; Luo Shi Jun  
Magnetic Excitation and Phonon Dispersion in LaCoO(3) Compound  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 79 (6) Article Number: 064702, JUN 2010.
41. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al.  
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO(3)  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (11) Article Number: 115403, MAR 24 2010.
40. Wang Tao; Shi Wangzhou; Fang Xiaodong; et al.  
Fabrication of polycrystalline La(2)NiMnO(6) thin films on Si (100) substrates by chemical solution deposition  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 53 (3) Pages: 655-659, MAR 2010.
39. Sopracase Rodolphe; Gruener Gisele; Olive Enrick; et al.  
Infrared study of the phonon modes in PrMnO(3) and CaMnO(3)  
PHYSICA B-CONDENSED MATTER 405 (1) Pages: 45-52, JAN 1 2010.
38. Jandl S.; Nugroho A. A.; Palstra T. T. M.  
A comparative Raman study between YbVO(3) and YVO(3)  
Book Series: Journal of Physics Conference Series 200, Article Number: 032025, 2010.
37. Laref, A., Luo, S.J.  
Magnetic excitation and phonon dispersion in LaCoO3 compound  
Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).
36. Kumar, P., Saha, S., Muthu, D.V.S., Sahu, J.R., Sood, A.K., Rao, C.N.R.  
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO3  
Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).
35. Chen, C.Z., Cai, C.B., Liu, Z.Y., Peng, L., Gao, B., Fan, F., Lu, Y.M., (...), Dou, S.X.  
Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La0.67Sr0.33MnO3 -  $\delta$  films  
Solid State Communications 150 (1-2), pp. 66-69 (2010).
34. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.  
Infrared study of the phonon modes in PrMnO3 and CaMnO3  
Physica B: Condensed Matter 405 (1), pp. 45-52 (2010).
33. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of orthorhombic perovskite yttrium manganite, YMnO3  
Journal of Physics Condensed Matter 21 (35), art. no. 355402 (2009).
32. Cao, X.-S., Chen, C.-L.  
Raman spectra of La0.5Ca0.5MnO3  
Physica Scripta 79 (4), art. no. 045701 (2009).
31. Zhao, S., Shi, L., Zhou, S., Zhao, J., Yang, H., Guo, Y.  
Size-dependent magnetic properties and Raman spectra of La2NiMnO6 nanoparticles  
Journal of Applied Physics 106 (12), art. no. 123901 (2009).
30. Talati, M., Jha, P.K.  
Temperature effect on vibrational properties of La0.7Sr0.3MnO3  
International Journal of Modern Physics B 23 (23), pp. 4767-4777 (2009).
29. Cao, X.-S., Chen, C.-L.  
Phonon spectra of La0.5Ca0.5MnO3  
Chinese Physics B 18 (7), pp. 2928-2932 (2009).
28. Wang, T., Xu, W., Fang, X., Dong, W., Tao, R., Li, D., Zhao, Y., Zhu, X.  
Chemical solution deposition preparation of double-perovskite La2NiMnO6 film on LaAlO3 (0 0 1) substrate  
Journal of Alloys and Compounds 475 (1-2), pp. 9-12 (2009).
27. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.  
Photo-induced insulator-metal transition probed by Raman spectroscopy  
Journal of Physics Condensed Matter 21 (7), art. no. 075603 (2009).
26. Guo, H.Z., Burgess, J., Ada, E., Street, S., Gupta, A., Iliev, M.N., Kellock, A.J., Magen, C., Varela, M., Pennycook, S.J.  
Influence of defects on structural and magnetic properties of multifunctional La2NiMnO6 thin films  
PHYSICAL REVIEW B Volume: 77 Issue: 17 Article Number: 174423 DOI: 10.1103/PhysRevB.77.174423 Published: MAY 2008
25. Dubey, A., Sathe, V.G., Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO3+ $\delta$  thin films  
Journal of Applied Physics 104 (11), art. no. 113530 (2008).
24. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

- Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
23. Smirnova, I.S., Bazhenov, A.V., Fursova, T.N., Dubovitskii, A.F., Uspenskaya, L.S., Maksimuk, M.Yu.  
IR-active optical phonons in Pnma-1, Pnma-2 and R over(3, -) c phases of LaMnO<sub>3</sub> +  $\delta$   
Physica B: Condensed Matter 403 (21-22), pp. 3896-3902 (2008).
22. Wang, T., Fang, X., Dong, W., Tao, R., Deng, Z., Li, D., Zhao, Y., (...), Zhu, X.  
Fabrication of polycrystalline La<sub>2</sub>NiMnO<sub>6</sub> thin films on LaAlO<sub>3</sub> (1 0 0) substrates by chemical solution deposition  
Journal of Crystal Growth 310 (14), pp. 3386-3390 (2008).
21. Ramakrishnan, TV  
Modelling colossal magnetoresistance manganites  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 12 Article Number: 125211 DOI: 10.1088/0953-8984/19/12/125211 Published: MAR 28 2007
20. Rossiny, J.C.H., Fearn, S., Kilner, J.A., Zhang, Y., Chen, L., Yang, S., Evans, J., (...), Cohen, L.F.  
Characterisation of combinatorial libraries of perovskite materials for SOFC cathode applications  
ECS Transactions 7 (1 PART 1), pp. 1003-1013 (2007).
19. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.  
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites  
Journal of Applied Physics 101 (12), art. no. 123910 (2007)
18. Chan, T.S., Liu, R.S., Yang, C.C., Li, W.-H., Lien, Y.H., Huang, C.Y., Lynn, J.W., (...), Sheu, H.-S.  
Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb<sub>1-x</sub>Nax)MnO<sub>3-y</sub> (0 ≤ x ≤ 0.3) system  
Inorganic Chemistry 46 (11), pp. 4575-4582 (2007)
17. Chan, T.S., Liu, R.S., Yang, C.C., Li, W.-H., Lien, Y.H., Huang, C.Y., Lee, J.-F.  
Chemical size effect on the magnetic and electrical properties in the (Tb<sub>1-x</sub>Eux)MnO<sub>3</sub> (0 ≤ x ≤ 1.0) system  
Journal of Physical Chemistry B 111 (9), pp. 2262-2267 (2007)
16. Li, W.J., Zhang, B., Lu, W.  
Structural properties and Raman spectroscopy of La<sub>(2+4x)</sub>Sr<sub>(1-4x)</sub>Mn<sub>1-x</sub>Cu<sub>x</sub>O<sub>3</sub> (0 ≤ x ≤ 0.2)  
Physics Letters, Section A: General, Atomic and Solid State Physics 362 (4), pp. 327-330 (2007)
15. Guo, H., Burgess, J., Street, S., Gupta, A., Calvarese, T.G., Subramanian, M.A.  
Growth of epitaxial thin films of the ordered double perovskite La<sub>2</sub>NiMnO<sub>6</sub> on different substrates  
Applied Physics Letters 89 (2), art. no. 022509 (2006)
14. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.  
Preparation and characterization of LaMnO<sub>3</sub> thin films grown by pulsed laser deposition  
Journal of Applied Physics 100 (2), art. no. 023910 (2006)
13. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.  
Observation of charge ordering by Raman scattering in Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 18 (31), art. no. 014, pp. 7193-7202 (2006)
12. Talati, M., Jha, P.K.  
Structure dependent phonon properties of LaMnO<sub>3</sub>  
Computational Materials Science 37 (1-2), pp. 64-68 (2006)
11. Jandl, S., Laverdière, J., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.M.  
Raman and infrared quest for orbitons in Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
Physica B: Condensed Matter 381 (1-2), pp. 214-218 (2006)
10. Jandl S, Mukhin AA, Ivanov VY, et al.  
Micro-Raman study and phase transitions of Nd<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006
9. Kartopu G, Es-Souni M  
Microstructural properties of solution-deposited La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> and LaMnO<sub>3</sub> thin films  
JOURNAL OF APPLIED PHYSICS 99 (3): Art. No. 033501 FEB 1 2006
8. Dore, P., Postorino, P., Sacchetti, A., Baldini, M., Giambelluca, R., Angeloni, M., Balestrino, G.  
Raman measurements on thin films of the La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite: A probe of substrate-induced effects  
European Physical Journal B 48 (2), pp. 255-258 (2005)
7. Sacchetti A, Baldini M, Crispoldi F, et al.  
Temperature dependence of the optical phonons in SrMnO<sub>3</sub> manganite: Evidence of a low-temperature structural transition in the hexagonal compound  
PHYSICAL REVIEW B 72 (17): Art. No. 172407 NOV 2005
6. Asselin S, Jandl S, Fournier P, et al.  
Resonant micro-Raman study of Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005



5. Jandl S, Mukhin AA, Ivanov VY, et al.  
Raman-active phonons and Nd<sup>3+</sup> crystal-field studies of weakly doped Nd<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>  
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005
4. Venimadhav A, Yates KA, Blamire MG  
Scanning Raman spectroscopy for characterizing compositionally spread films  
JOURNAL OF COMBINATORIAL CHEMISTRY 7 (1): 85-89 JAN-FEB 2005
3. Guo HZ, Chen ZH, Liu LF, et al.  
Structural properties and spin-phonon coupling effect of La<sub>1-x</sub>TexMnO<sub>3</sub> thin films  
APPLIED PHYSICS LETTERS 85 (15): 3172-3174 OCT 11 2004
2. Xiong YM, Chen T, Wang GY, et al.  
Raman spectra in epitaxial thin films of La<sub>1-x</sub>CaxMnO<sub>3</sub> (x=0.33, 0.5) grown on different substrates  
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004
1. Ishikawa A, Nohara J, Sugai S  
Raman study of the orbital-phonon coupling in LaCoO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 24 2004
43. “*Nanosize gold-ceria catalysts promoted by vanadia for complete benzene oxidation*”  
D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev  
Appl. Catalysis A: General 246(1) (2003) 29 - 38.
52. Wang, Y., Zheng, G., Zhu, Q., (...), Ueda, W., Zhang, Z.  
Metal-Support Interaction in Gold Zeolitic Octahedral Metal Oxide and the Catalytic Activity for Low-Temperature Alcohol Oxidation  
Langmuir 39(29), pp. 10163-10177 (2023)
51. Zhang, T., Dong, A., Wan, X., (...), Chen, D., Wang, W.  
Promotion of Low-Temperature Oxidation of Propane through Introduction of Ce into Mullite Oxide YMn<sub>2</sub>O<sub>5</sub>  
ChemPlusChem 87(2), e202100455 (2022)
50. Niobium Modification of Au/CeO<sub>2</sub> for Enhanced Catalytic Performance over Benzene Combustion  
Liu, Zhe; Zhang, Xiaolan; Cai, Ting; et al.  
NANOMATERIALS Volume: 11 Issue: 1 Article Number: 189 Published: JAN 2021
49. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.  
JOURNAL OF CATALYSIS Volume: 375 Pages: 171-182 Published: JUL 2019
48. Heterogeneous Gold Catalysis: From Discovery to Applications  
Alshammari, Ahmad S.  
CATALYSTS Volume: 9 Issue: 5 Article Number: 402 Published: MAY 2019
47. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
He, Chi; Cheng, Jie; Zhang, Xin; et al.  
CHEMICAL REVIEWS Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
46. Ferric sludge derived from the process of water purification as an efficient catalyst and/or support for the removal of volatile organic compounds  
Sanchis, Rut; Dejoj, Ana; Vazquez, Isabel; et al.  
CHEMOSPHERE Volume: 219 Pages: 286-295 Published: MAR 2019
45. Theoretical investigation of the effect of phosphate doping on the aggregation of Au atoms on an Al<sub>2</sub>O<sub>3</sub> (0001) surface  
Tada, Kohei; Koga, Hiroaki; Sakurai, Hiroaki; et al.  
APPLIED SURFACE SCIENCE Volume: 465 Pages: 1003-1013 Published: JAN 28 2019
44. Deposition of Au nanoparticles inside porous CeO<sub>2</sub> nanocubes using Langmuir-Blodgett technique  
Das, Subhasis; Bhattacharjee, Gourab; Satpati, Biswarup; et al.  
NEW JOURNAL OF CHEMISTRY Volume: 42 Issue: 2 Pages: 1379-1386 Published: JAN 21 2018
43. Han, Zhong-Kang; Wang, Yang-Gang; Gao, Yi  
Catalytic role of vacancy diffusion in ceria supported atomic gold catalyst  
CHEMICAL COMMUNICATIONS Volume: 53 Issue: 65 Pages: 9125-9128 Published: AUG 21 2017
42. Calzada, Lina A.; Collins, Sebastian E.; Han, Chang W.; et al.  
Synergetic effect of bimetallic Au-Ru/TiO<sub>2</sub> catalysts for complete oxidation of methanol  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 207 Pages: 79-92 Published: JUN 15 2017
41. Wang, Z., Deng, Y., Shen, G., Akram, S., Han, N., Chen, Y., Wang, Q.  
Catalytic Degradation of Benzene over Nanocatalysts containing Cerium and Manganese  
CHEMISTRYOPEN Volume: 5 Issue: 5 Pages: 495-504 DOI: 10.1002/open.201600047 Published: OCT 2016
40. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.

- Characterisation of gold catalysts  
CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
39. Topka, P (Topka, Pavel); Kaluza, L (Kaluza, Ludek); Gaalova, J (Gaalova, Jana)  
Total oxidation of ethanol and toluene over ceria-zirconia supported platinum catalysts  
CHEMICAL PAPERS Volume: 70 Issue: 7 Pages: 898-906 DOI: 10.1515/chempap-2016-0028 Published: JUL 2016
38. Panayotov, D.A., Morris, J.R.  
Surface chemistry of Au/TiO<sub>2</sub>: Thermally and photolytically activated reactions  
SURFACE SCIENCE REPORTS Volume: 71 Issue: 1 Pages: 77-271 DOI: 10.1016/j.surfrep.2016.01.002 Published: MAR 2016
37. Aguilar-Tapia, A., Zanella, R., Calers, C., Louis, C., Delannoy, L.  
Synergistic effects of Ir-Au/TiO<sub>2</sub> catalysts in the total oxidation of propene: influence of the activation conditions  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 42 Pages: 28022-28032 DOI: 10.1039/c5cp00590f Published: 2015
36. Garcia, Tomas; Agouram, Said; Taylor, Stuart H.; et al.  
Total oxidation of propane in vanadia-promoted platinum-alumina catalysts: Influence of the order of impregnation  
CATALYSIS TODAY Volume: 254 Pages: 12-20 Published: OCT 1 2015
35. Stadnichenko, A. I.; Koshcheev, S. V.; Boronin, A. I.  
An XPS and TPD study of gold oxide films obtained by exposure to RF-activated oxygen  
JOURNAL OF STRUCTURAL CHEMISTRY Volume: 56 Issue: 3 Pages: 557-565 Published: JUN 2015
34. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
Gold supported on metal oxides for volatile organic compounds total oxidation  
CATALYSIS TODAY Volume: 244 Pages: 103-114 Published: APR 15 2015
33. Yosefi, Leila; Haghighi, Mohammad; Allahyari, Somaiyeh; et al.  
The beneficial use of HCl-activated natural zeolite in ultrasound assisted synthesis of Cu/clinoptilolite-CeO<sub>2</sub> nanocatalyst used for catalytic oxidation of diluted toluene in air at low temperature  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY Volume: 90 Issue: 4 Pages: 765-774 Published: APR 2015
32. Garcia, T., Solsona, B., Taylor, S.H.  
The catalytic oxidation of hydrocarbon volatile organic compounds  
Handbook of Advanced Methods and Processes in Oxidation Catalysis: From Laboratory to Industry 51-90 DOI: 10.1142/9781848167513\_0003 (2014)
31. Zuo, Shufeng; Sun, Xuejie; Lv, Ningning; et al.  
Rare Earth-Modified Kaolin/NaY-Supported Pd-Pt Bimetallic Catalyst for the Catalytic Combustion of Benzene  
ACS APPLIED MATERIALS & INTERFACES 6 (15), pp. 11988-11996 AUG 13 2014
30. Wang, Zhen; Yang, Min; Shen, Genli; et al.  
Catalytic removal of benzene over CeO<sub>2</sub>-MnO (x) composite oxides with rod-like morphology supporting PdO  
JOURNAL OF NANOPARTICLE RESEARCH 16 (5), Art. No. 2367 APR 6 2014
29. Jiang, Xin; Hua, Jiefeng; Deng, Hui; et al.  
Influence of pre-added NaOH on the microstructure of Au-CeO<sub>2</sub> catalyst and its activity for benzene oxidation  
JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL 383, pp. 188-193 MAR 2014
28. Aw, M. S.; Crnivec, I. G. Osojnik; Pintar, A.  
Toward enhanced conversion of model biogas mixtures: parametric tuning and mechanistic study for ceria-zirconia supported nickel-cobalt catalyst  
CATALYSIS SCIENCE & TECHNOLOGY 4 (5), pp. 1340-1349 2014
27. Sedjame, H.-J., Fontaine, C., Lafaye, G., Barbier Jr, J.  
On the promoting effect of the addition of ceria to platinum based alumina catalysts for VOCs oxidation  
Applied Catalysis B: Environmental 144 (1), pp. 233-242, 2014
26. Balzer, R., Drago, V., Schreiner, W.H., Probst, L.F.D.  
Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO<sub>2</sub>(1-x)Cu<sub>x</sub>  
Journal of the Brazilian Chemical Society 24 (10), pp. 1592-1598, 2013
25. Zuo, S., Du, Y., Liu, F., Han, D., Qi, C.  
Influence of ceria promoter on shell-powder-supported Pd catalyst for the complete oxidation of benzene  
Applied Catalysis A: General 451, pp. 65-70, 2013
24. Chen, Q.-Y., Li, N., Luo, M.-F., Lu, J.-Q.  
Catalytic oxidation of dichloromethane over Pt/CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> catalysts  
Applied Catalysis B: Environmental 127, pp. 159-166, 2012
23. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.
22. Garcia, T., Weng, W., Solsona, B., Carter, E., Carley, A.F., Kiely, C.J., Taylor, S.H.  
The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation

- Catalysis Science and Technology 1 (8), 1367-1375, 2011.
21. Ousmane, M., Liotta, L.F., Pantaleo, G., Venezia, A.M., Di Carlo, G., Aouine, M., Retailleau, L., Giroir-Fendler, A. Supported Au catalysts for propene total oxidation: Study of support morphology and gold particle size effects  
Catalysis Today 176 (1), 7-13, 2011.
20. Wu Hongjing; Wang Liuding; Zhang Jiaoqiang; et al.  
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
CATALYSIS COMMUNICATIONS 12 (10) Pages: 859-865, MAY 15 2011.
19. Abbasi Zahra; Haghighi Mohammad; Fatehifar Esmaeil; et al.  
Synthesis and physicochemical characterizations of nanostructured Pt/Al(2)O(3)-CeO(2) catalysts for total oxidation of VOCs  
JOURNAL OF HAZARDOUS MATERIALS 186 (2-3) Pages: 1445-1454, FEB 28 2011.
18. Solsona, B., Garcia, T., Agouram, S., Hutchings, G.J., Taylor, S.H.  
The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 388-396, JAN 14 2011.
17. Ousmane, M., Liotta, L.F., Di Carlo, G., Pantaleo, G., Venezia, A.M., Deganello, G., Retailleau, L., (...), Giroir-Fendler, A.  
Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 629-637, JAN 14 2011.
16. Song Haiyan; Li Gang; Wang Xiangsheng  
Preparation and Application of Porous Material Supported Gold Catalysts  
PROGRESS IN CHEMISTRY 22 (4) Pages: 573-579, APR 2010.
15. Wu Hongjing; Shuai Qin; Zhu Zhenli; et al.  
Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide  
ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series: Advanced Materials Research 96 Pages: 21-27, 2010.
14. Ying Fang; Wang Shuiju; Au Chak-Tong; et al.  
Effect of the oxidation state of gold on the complete oxidation of isobutane on Au/CeO(2) catalysts  
GOLD BULLETIN 43 (4) Pages: 241-251, 2010.
13. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.  
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
Advanced Materials Research 96, pp. 21-27 (2010).
12. Rossi, M., Della Pina, C., Falletta, E., Matarrese, R.  
Gold Nanoparticles: From Preparation to Catalytic Evaluation  
METAL NANOCLUSTERS IN CATALYSIS AND MATERIALS SCIENCE: THE ISSUE OF SIZE CONTROL Pages: 253-262 DOI: 10.1016/B978-044453057-8.50014-3 Published: 2008
11. Yang, X., Dong, X., Huang, L., Wang, J., Liu, G.  
Synthesis and properties of CeO<sub>2</sub>@Au core-shell structure nanoparticles  
Zhongguo Xitu Xuobao / Journal of the Chinese Rare Earth Society 26 (6), pp. 683-688 (2008).
10. Tang, X., Xu, Y., Shen, W.  
Promoting effect of copper on the catalytic activity of MnOx-CeO<sub>2</sub> mixed oxide for complete oxidation of benzene  
Chemical Engineering Journal 144 (2), pp. 175-180 (2008).
9. Yang, S.M., Liu, D.M., Liu, S.Y.  
Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
Topics in Catalysis 47 (3-4), pp. 101-108 (2008).
8. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)  
Catalytic Applications for Gold Nanotechnology  
NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007
7. Della Pina C, Dimitratos N, Falletta E, et al.  
Catalytic performance of gold catalysts in the total oxidation of VOCs  
GOLD BULLETIN 40 (1), pp.67-72 (2007).
6. Delannoy, L., Weiher, N., Tsapatsaris, N., Beesley, A.M., Nchari, L., Schroeder, S.L.M., Louis, C.  
Reducibility of supported gold (III) precursors: Influence of the metal oxide support and consequences for CO oxidation activity  
Topics in Catalysis 44 (1-2), pp. 263-273 (2007)
5. Hutchings, GJ (Hutchings, Graham J.)  
Reactions of Environmental Importance  
CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006
4. Solsona, B.E., Garcia, T., Jones, C., Taylor, S.H., Carley, A.F., Hutchings, G.J.  
Supported gold catalysts for the total oxidation of alkanes and carbon monoxide  
Applied Catalysis A: General 312 (1-2), pp. 67-76 (2006)

3. Radhika, T., Sugunan, S.  
Structural and catalytic investigation of vanadia supported on ceria promoted with high surface area rice husk silica  
Journal of Molecular Catalysis A: Chemical 250 (1-2), pp. 169-176 (2006)
2. Lai SY, Qiu YF, Wang SJ  
Effects of the structure of ceria on the activity of gold/ceria catalysts for the oxidation of carbon monoxide and benzene  
JOURNAL OF CATALYSIS 237 (2): 303-313 JAN 25 2006
1. Burda C, Chen XB, Narayanan R, et al.  
Chemistry and properties of nanocrystals of different shapes  
CHEMICAL REVIEWS 105 (4): 1025-1102 APR 2005
44. “Phonons and magnetic excitations in the Mott insulator  $\text{LaTiO}_3$ ”  
M. N. Iliev, A. P. Litvinchuk, M. V. Abrashev, V. N. Popov, J. Cmaidalka, B. Lorenz, and R. L. Meng  
Phys. Rev. B 69, 172301 (2004).
19. Reza, MS; Dey, T; (...); Wistey, MA  
Growth of tin-free germanium carbon alloys using carbon tetrabromide ( $\text{CBr}_4$ )  
Journal of Applied Physics 134 (18) Nov 14 2023
18. Zhang, T., Gong, Y., Lu, Z., Bai, Y., Xu, F.  
Critical behavior at ferromagnetic to paramagnetic phase transition in single crystalline  $\text{MnNiSi}$  ferromagnet  
Journal of Applied Physics 134(18),183901 (2023)
17. Kovaleva, N.N.  
Lattice-dynamics study of Raman-active modes in  $\text{LaTiO}_3$   
Physics Letters, Section A: General, Atomic and Solid State Physics 479,128942 (2023)
16. Negative dielectric behavior in tetragonal  $\text{La}_{0.8}\text{Co}_{0.2-x}\text{Eu}_x\text{TiO}_3$  ( $x=0.01-0.04$ ) nanorods  
Kumar, N. Suresh; Suvarna, R. Padma; Naidu, K. Chandra Babu  
MATERIALS CHARACTERIZATION Volume: 166 Article Number: 110425 Published: AUG 2020
15. Orbital Floquet engineering of exchange interactions in magnetic materials  
Chaudhary, Swati; Hsieh, David; Refael, Gil  
PHYSICAL REVIEW B Volume: 100 Issue: 22 Article Number: 220403 Published: DEC 9 2019
14. Structural and metal-insulator transitions in rhenium-based double perovskites via orbital ordering  
Lee, Alex Taekyung; Marianetti, Chris A.  
PHYSICAL REVIEW B Volume: 97 Issue: 4 Article Number: 045102 Published: JAN 3 2018
13. Li, Bing; Louca, Despina; Niedziela, Jennifer; et al.  
Lattice and magnetic dynamics in perovskite  $\text{Y}_{1-x}\text{La}_x\text{TiO}_3$   
PHYSICAL REVIEW B Volume: 94 Issue: 22 Article Number: 224301 Published: DEC 7 2016
12. Ulrich, C., Khaliullin, G., Guennou, M., Roth, H., Lorenz, T., Keimer, B.  
Spin-Orbital Excitation Continuum and Anomalous Electron-Phonon Interaction in the Mott Insulator  $\text{LaTiO}_3$   
PHYSICAL REVIEW LETTERS Volume: 115 Issue: 15 Article Number: 156403 DOI: 10.1103/PhysRevLett.115.156403 Published: OCT 9 2015
11. Kumar, Pradeep; Bera, Achintya; Muthu, D. V. S.; et al.  
Coupled phonons, magnetic excitations, and ferroelectricity in  $\text{AlFeO}_3$ : Raman and first-principles studies  
PHYSICAL REVIEW B 85 (13) Article Number: 134449, APR 27 2012.
10. Kowalczyk Radoslaw M.; Kemp Thomas F.; Walker David; et al.  
A variable temperature solid-state nuclear magnetic resonance, electron paramagnetic resonance and Raman scattering study of molecular dynamics in ferroelectric fluorides  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (31) Article Number: 315402, AUG 10 2011.
9. Liu Chun-Mei; Ge Ni-Na; Cheng Yan; et al.  
Structural and elastic properties of  $\text{LaTiO}_3$  under pressure  
PHYSICA B-CONDENSED MATTER 406 (10) Pages: 1926-1931, MAY 1 2011.
8. Girardot, C., Kreisel, J., Pignard, S., Caillault, N., Weiss, F.  
Raman scattering investigation across the magnetic and metal-insulator transition in rare earth nickelate  $\text{RNiO}_3$  ( $R=\text{Sm}, \text{Nd}$ ) thin films  
Physical Review B - Condensed Matter and Materials Physics 78 (10), art. no. 104101 (2008).
7. Cheng, J.-G., Sui, Y., Zhou, J.-S., Goodenough, J.B., Su, W.H.  
Transition from orbital liquid to Jahn-Teller insulator in orthorhombic perovskites  $\text{RTiO}_3$   
Physical Review Letters 101 (8), art. no. 087205 (2008).
6. Haumont, R., Kreisel, J., Bouvier, P.  
Raman scattering of the model multiferroic oxide  $\text{BiFeO}_3$ : Effect of temperature, pressure and stress  
Phase Transitions 79 (12), pp. 1043-1064 (2006)

5. Ulrich, C., Gössling, A., Grüniger, M., Guennou, M., Roth, H., Cwik, M., Lorenz, T., (...), Keimer, B.  
Raman scattering in the Mott insulators LaTiO<sub>3</sub> and YTiO<sub>3</sub>: Evidence for orbital excitations  
Physical Review Letters 97 (15), art. no. 157401 (2006)
4. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.  
Phonon anomalies and the ferroelectric phase transition in multiferroic BiFeO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 73 (13), art. no. 132101, pp. 1-4 (2006)
3. Pavarini E, Yamasaki A, Nuss J, et al.  
How chemistry controls electron localization in 3d(1) perovskites: a Wannier-function study  
NEW JOURNAL OF PHYSICS 7: Art. No. 188 SEP 2 2005
2. Schmitz R, Entin-Wohlman O, Aharony A, et al.  
Magnetic structure of the Jahn-Teller system LaTiO<sub>3</sub>  
PHYSICAL REVIEW B 71 (14): Art. No. 144412 APR 2005
1. Masahito Mochizuki and Masatoshi Imada  
Orbital physics in the perovskite Ti oxides  
New Journal of Physics 6: 154 – 196 NOV 5 2004
45. *“Photoluminescence depending on the ZnS shell thickness of CdS/ZnS core-shell semiconductor nanoparticles”*  
Alexandre R. Loukanov, Ceco D. Dushkin, Karolina I. Papazova, Andrey V. Kirov, Miroslav V. Abrashev and Eiki Adachi  
Colloids and Surfaces, A: Physicochem. and Eng. Asp. 245, 9-14 (2004).
67. Ipatov, AN  
Dipole Plasmon Mode in Nanosize Semiconductor Core-Shell Quantum Dots with a Type II Heterojunction  
Journal of Experimental and Theoretical Physics 136 (6) , pp.765-777 Jun 2023
66. Iqbal, M.A., Malik, M., Bakhsh, S., (...), Arellano-Ramírez, I.D., Morsy, K.  
Theoretical Insights into Pressure-Driven Stability and Optoelectronic Response of Cd<sub>0.75</sub>Zn<sub>0.25</sub>S Alloy for Blue-Violet Display  
Advanced Theory and Simulations 6(9),2300270 (2023)
65. Sobhanan, J., Rival, J.V., Anas, A., (...), Takano, Y., Biju, V.  
Luminescent quantum dots: Synthesis, optical properties, bioimaging and toxicity  
Advanced Drug Delivery Reviews 197,114830 (2023)
64. Jayaseelan, S.J., Parasuraman, K., Anburaj, D.B., Jothibas, M., Arunkumar, B.  
The impacts of Mn ion incorporation on the structural, optical, and magnetic properties of hematite NPs  
Nanotechnology for Environmental Engineering 8(1), pp. 15-26 (2023)
63. Iqbal, M.A., Ahmad, A., Malik, M., Choi, J.R., Pham, P.V.  
Pressure-Induced Bandgap Engineering and Tuning Optical Responses of Cd<sub>0.25</sub> Zn<sub>0.75</sub> S Alloy for Optoelectronic and Photovoltaic Applications  
Materials 15(7),2617 (2022)
62. Mallick, T., Karmakar, A., Sultana, Z.  
Quantum Dots: Potential Cell Imaging Agent ( Book Chapter)  
Application of Quantum Dots in Biology and Medicine: Recent Advances pp. 191-207 (2022)
61. Abd-Elrahim, A.G., Ali, M.A.  
Facile synthesis of nano-sized zinc-rich ZnCdS ternary alloy and UV-irradiation curing of photoluminescence emission characteristics  
Optical Materials 122,111774 (2021)
60. Singh, S., Garg, S., Saran, A.D.  
Photocatalytic activity of CdS and CdSe quantum dots for degradation of 3-aminopyridine  
Nanotechnology for Environmental Engineering 6(3),65 (2021)
59. Singh, K.J., Ahmed, T., Gautam, P., (...), Chueh, Y.-L., Kuo, H.-C.  
Recent advances in two-dimensional quantum dots and their applications  
Nanomaterials 11(6),1549 (2021)
58. Atomistic modeling of InGaN/GaN quantum dots-in-nanowire for graded surface-emitting low-threshold, blue exciton laser  
TaHER, Mayada M.; Al-yousif, Shahad; Ahmed, Naser M.  
RESULTS IN PHYSICS Volume: 20 Article Number: 103732 Published: JAN 2021
57. Morphological characterisation of zinc sulfide nanoparticles using electron microscopy and X-ray diffraction assay  
Rajeshkumar, S., Santhoshkumar, J., Lakshmi, T., (...), Vanaja, M., Pavunraj, M.  
Plant Cell Biotechnology and Molecular Biology 21(29-30), pp. 97-105 (2020)
56. Effect of annealed ZnS nanoparticles on the structural and optical properties of PVA polymer nanocomposite  
Mohamed, Mohamed Bakr; Abdel-Kader, M. H.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 241 Article Number: 122285 Published: FEB 1 2020

55. Exciton states in InGaAsP/InP core-shell quantum dots under an external electric field  
Hu, Min; Wang, Hailong; Gong, Qian; et al.  
JOURNAL OF COMPUTATIONAL ELECTRONICS Volume: 18 Issue: 4 Pages: 1243-1250 Published: DEC 2019
54. The effect of Cd- substitution on the Raman vibrational characteristics of sphalerite  
Babedi, L.; von der Heyden, B. P.; Neethling, P. H.; et al.  
VIBRATIONAL SPECTROSCOPY Volume: 105 Article Number: 102968 Published: NOV 2019
53. Recent advances in metal sulfides: from controlled fabrication to electrocatalytic, photocatalytic and photoelectrochemical water splitting and beyond  
Chandrasekaran, Sundaram; Yao, Lei; Deng, Libo; et al.  
CHEMICAL SOCIETY REVIEWS Volume: 48 Issue: 15 Pages: 4178-4280 Published: AUG 7 2019
52. The External Electric and Magnetic Fields Effect on Binding Energy of Hydrogenic Donor Impurity in a InGaAsP/InP Core-Shell Quantum Dot  
Hul, Min; Wang, Hailong; Gong, Qian; et al.  
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS Volume: 14 Issue: 7 Pages: 1016-1023 Published: JUL 2019
51. Dielectric properties of polyvinyl alcohol (PVA) nanocomposites filled with green synthesized zinc sulphide (ZnS) nanoparticles  
Reddy, P. Lokanatha; Deshmukh, Kalim; Chidambaram, K.; et al.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 30 Issue: 5 Pages: 4676-4687 Published: MAR 2019
50. Photoluminescence properties of Co and Ni co-doped CdS/ZnS Core/Shell Nanoparticles  
Sabir, Nadeem; Qayyum, Wahid; Hussain, Syed Zajif; et al.  
COLLOIDAL NANOPARTICLES FOR BIOMEDICAL APPLICATIONS XIII Book Series: Proceedings of SPIE Volume: 10507 Article Number: UNSP 1050705 Published: 2018
49. Wang, Zhenli; Zhang, Haiyue; Cao, Hongwei; et al.  
Facile preparation of ZnS/CdS core/shell nanotubes and their enhanced photocatalytic performance  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 42 Issue: 27 Pages: 17394-17402 Published: JUL 6 2017
48. Benhaddou, F.; Zorkani, I.; Jorio, A.  
The confinement effect in spherical inhomogeneous quantum dots and stability of excitons  
AIP ADVANCES Volume: 7 Issue: 6 Article Number: 065112 Published: JUN 2017
47. Silva Adaya, Daniela; Aguirre-Cruz, Lucinda; Guevara, Jorge; et al.  
Nanobiomaterials' applications in neurodegenerative diseases  
JOURNAL OF BIOMATERIALS APPLICATIONS Volume: 31 Issue: 7 Pages: 953-984 Published: FEB 2017
46. Zahra, H.; Elmaghroui, D.; Fezai, I.; et al.  
II-VI colloidal quantum-dot/quantum-rod heterostructures under electric field effect and their energy transfer rate to graphene  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 20 Article Number: 205702 Published: NOV 28 2016
45. Ozga, K., Michel, J., Nechporuk, B.D., Ebothé, J., Kityk, I.V., Albassam, A.A., El-Naggar, A.M., Fedorchuk, A.O.  
ZnS/PVA nanocomposites for nonlinear optical applications  
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 81 Pages: 281-289 DOI: 10.1016/j.physe.2016.03.041 Published: JUL 2016
44. Ahmadi, R., Sadreznhad, S.K., Zangeneh, R.N., Oghabian, M.A.  
Kinetics of oxygen adsorption on ZnS nanoparticles synthesized by precipitation process  
MATERIALS SCIENCE-POLAND Volume: 34 Issue: 2 Pages: 260-265 DOI: 10.1515/msp-2016-0037 Published: JUN 2016
43. Mandal, A.R., Ishteev, A.R., Volchematev, S.A., Mazov, V.N., Kuznetsov, D.V.  
Synthesis of water-soluble core/shell CdS/ZnS nanoparticles at room temperature under ultrasonic irradiation: Potential for human serum detection  
INORGANIC MATERIALS Volume: 52 Issue: 3 Pages: 256-261 DOI: 10.1134/S0020168516030109 Published: MAR 2016
42. Mendonça, L.T.B., De Azevedo, W.M.  
A fast bottom-up route for preparing CdS quantum dots using laser ablation in a liquid environment  
JOURNAL OF LUMINESCENCE Volume: 171 Pages: 79-84 DOI: 10.1016/j.jlumin.2015.10.031 Published: MAR 2016
41. Sanders, G.D., Musfeldt, J.L., Stanton, C.J.  
Tuning g factors of core-shell nanoparticles by controlled positioning of magnetic impurities  
PHYSICAL REVIEW B Volume: 93 Issue: 7 Article Number: 075431 DOI: 10.1103/PhysRevB.93.075431 Published: FEB 23 2016
40. Li, N., Kerman, K.  
Nanomaterial-based dual detection platforms: Optics meets electrochemistry  
Nanobiosensors and Nanobioanalyses 99-120 DOI: 10.1007/978-4-431-55190-4\_6 (2015)
39. Kocevski, V., Eriksson, O., Gerard, C., Sarma, D.D., Rusz, J.  
Influence of dimensionality and interface type on optical and electronic properties of CdS/ZnS core-shell nanocrystals-A first-principles study  
JOURNAL OF CHEMICAL PHYSICS Volume: 143 Issue: 16 Article Number: 164701 DOI: 10.1063/1.4933058 Published: OCT 28 2015

38. Chen, L., Liu, Y., Lai, C., Berry, R.M., Tam, K.C.  
Aqueous synthesis and biostabilization of CdS@ZnS quantum dots for bioimaging applications  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 10 Article Number: 105401 DOI: 10.1088/2053-1591/2/10/105401 Published: OCT 2015
37. Luo, Jian; Zhao, Suqing; Wu, Panpan; et al.  
Synthesis and characterization of new Cd-doped ZnO/ZnS core-shell quantum dots with tunable and highly visible photoluminescence  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 14 Pages: 3391-3398 Published: 2015
36. Andal, V.; Buvanewari, G.  
Effect of Nature of Surfactant on the Formation of beta-Ag<sub>2</sub>Se Nanoparticles and Optical Properties of beta-Ag<sub>2</sub>Se and ZnS/beta-Ag<sub>2</sub>Se Nanocomposite  
JOURNAL OF NANO RESEARCH Volume: 30 Pages: 96-105 Published: 2015
34. Zhu, Yinglian; Li, Chunsheng; Xu, Ying; et al.  
Ultrasonic-assisted synthesis of aqueous CdTe/CdS QDs in salt water bath heating  
JOURNAL OF ALLOYS AND COMPOUNDS 608, pp. 141-147 SEP 25 2014
33. Yang, Lin; Zhu, Jianguo; Xiao, Dingquan  
Synthesis and characterization of ZnSe:Fe/ZnSe core/shell nanocrystals  
JOURNAL OF LUMINESCENCE 148, pp. 129-133 APR 2014
32. Hosseini, Z.; Azizian-Kalandaragh, Y.; Khodayari, A.; et al.  
Sonochemically prepared PbS nanostructures and investigation of their optical and structural properties  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS 8 (3-4), pp. 201-203 MAR-APR 2014
31. Shahi, A. K.; Pandey, B. K.; Gopal, R.  
PEG mediated solvothermal synthesis of fine ZnS sub-micro and microspheres and their optical properties  
MATERIALS LETTERS 116, pp. 112-115 FEB 1 2014
30. Malarkodi, C.; Rajeshkumar, S.; Paulkumar, K.; et al.  
Biosynthesis and Antimicrobial Activity of Semiconductor Nanoparticles against Oral Pathogens  
BIOINORGANIC CHEMISTRY AND APPLICATIONS Art. No.347167 2014
29. Xiong, Gang; Xu, Hang; Cui, Jian-Zhong; et al.  
The multiple core-shell structure in Cu(24)Ln(6) cluster with magnetocaloric effect and slow magnetization relaxat  
DALTON TRANSACTIONS 43 (15), pp. 5639-5642 2014
28. Xu, L., Xia, H.  
Multi-metal sulfide for absorbing near infrared light  
Zhongguo Jiguang/Chinese Journal of Lasers 40 (6), art. no. 0606001, 2013
27. Kharazmi, A., Saion, E., Faraji, N., Soltani, N., Dehhangi, A.  
Optical properties of CdS/PVA nanocomposite films synthesized using the gamma-irradiation-induced method  
Chinese Physics Letters 30 (5), art. no. 057803, 2013
26. Tripathi, S.K., Sharma, M.  
Synthesis and optical study of green light emitting polymer coated CdSe/ZnSe core/shell nanocrystals  
Materials Research Bulletin 48 (5), pp. 1837-1844, 2013
25. Ladj, R., Bitar, A., Eissa, M., Mugnier, Y., Le Dantec, R., Fessi, H., Elaissari, A.  
Individual inorganic nanoparticles: Preparation, functionalization and in vitro biomedical diagnostic applications  
Journal of Materials Chemistry B 1 (10), pp. 1381-1396, 2013
24. Soltani, N., Dehhangi, A., Saion, E., MAJLIS, M.Y., ZARE, M.R., Kharazmi, A., Navasery, M.  
Influence of exposure time on structural, optical and electrical properties of zinc sulphide nanoparticles synthesized by microwave technique  
Chalcogenide Letters 10 (1), pp. 27-37, 2013
23. Li, C., Jiang, Z., Yao, Z.  
Self-assembly of large scale CdS/TiO<sub>2</sub> film photocatalyst  
Advanced Materials Research 512-515, pp. 1692-1698, 2012.
22. Saran, A.D., Mehra, A., Bellare, J.R.  
Superposition of Quantum Confinement Energy (SQCE) model for estimating shell thickness in core-shell quantum dots: Validation and comparison  
Journal of Colloid and Interface Science 378 (1), pp. 21-29, 2012.
21. Saran Amit D.; Sadawana Mayur M.; Srivastava Rohit; et al.  
An optimized quantum dot-ligand system for biosensing applications: Evaluation as a glucose biosensor  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 384 (1-3) Pages: 393-400, JUL 5 2011.
20. Heera T. R.; Cindrella L.  
PbS/CoS-Pani composite semiconductor films  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING 14 (2) Pages: 151-156, JUN 2011.

19. Saran Amit D.; Bellare Jayesh R.  
Green engineering for large-scale synthesis of water-soluble and bio-tagable CdSe and CdSe-CdS quantum dots from microemulsion by double-capping  
COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS 369 (1-3) Pages: 165-175, OCT 20 2010.
18. Khaorapapong Nithima; Ontam Areeporn; Ogawa Makoto  
Formation of ZnS and CdS in the interlayer spaces of montmorillonite  
APPLIED CLAY SCIENCE 50 (1) Pages: 19-24, SEP 2010.
17. Heera, T.R., Cindrella, L.  
Synthesis and characterization of NiS/MnS core-shell embedded conducting polyaniline composite for photovoltaic application  
International Journal of Polymeric Materials 59 (8), pp. 607-621 (2010).
16. Ganguli, A.K., Ganguly, A., Vaidya, S.  
Microemulsion-based synthesis of nanocrystalline materials  
Chemical Society Reviews 39 (2), pp. 474-485 (2010).
15. Wang, Y., Wang, H., Li, R., Du, Y.-K.  
Recent progress in synthesis and properties of the core-shell nanoparticles  
Yingxiang Kexue yu Guanghuaxue/Imaging Science and Photochemistry 28 (1), pp. 65-78 (2010).
14. Cindrella, L., Heera, T.R.  
Wide spectrum responsive polyaniline based solid state solar cell  
Journal of Bionanoscience 3(2), 124-130 DOI: 10.1166/jbns.2009.1019 (2009)
13. Su, X., Qian, R., Tang, A.-M.  
Preparation and characterization of in-situ composition of microcrystalline cellulose/CdS fluorescent nanoparticles  
PROCEEDINGS OF 2009 INTERNATIONAL CONFERENCE ON ADVANCED FIBERS AND POLYMER MATERIALS, VOLS 1 AND 2 Pages: 1174-1176 Published: 2009
12. Behboudnia, M., Habibi-Yangjeh, A., Jafari-Tarzanag, Y., Khodayari, A.  
Template free preparation and characterization of CuS nanoparticles in aqueous solutions of [EMIM][EtSO<sub>4</sub>] as a low cost ionic liquid using ultrasonic irradiation  
Journal of Optoelectronics and Advanced Materials 11 (2), pp. 134-139 (2009).
11. Bala, H., Fu, W., Yu, Y., Yang, H., Zhang, Y.  
Preparation, optical properties, magnetic properties and thermal stability of core-shell structure cobalt/zinc oxide nanocomposites  
Applied Surface Science 255 (7), pp. 4050-4055 (2009).
10. Bala, H., Yu, Y., Cao, X., Fu, W.  
Preparation and characterization of nickel/zinc sulphide: Bifunctional magnetic-optical nanocomposites  
Materials Chemistry and Physics 111 (1), pp. 50-53 (2008).
9. Wu, Y., Wang, L., Xiao, M., Huang, X.  
A novel sonochemical synthesis and nanostructured assembly of polyvinylpyrrolidone-capped CdS colloidal nanoparticles  
Journal of Non-Crystalline Solids 354 (26), pp. 2993-3000 (2008).
8. Khaorapapong, N., Ontam, A., Youngme, S., Ogawa, M.  
Solid-state intercalation and in situ formation of cadmium sulfide in the interlayer space of montmorillonite  
Journal of Physics and Chemistry of Solids 69 (5-6), pp. 1107-1111 (2008).
7. Li, L., Tang, Y., Yang, J., Zhang, Y., Du, B.  
Facile synthesis of ZnS hollow microspheres with open holes in solution containing ethylenediamine and CS<sub>2</sub>  
Chemical Journal on Internet 10 (1) (2008).
6. Bumajdad, A., Eastoe, J., Zaki, M.I., Heenan, R.K., Pasupulety, L.  
Generation of metal oxide nanoparticles in optimised microemulsions  
Journal of Colloid and Interface Science 312 (1), pp. 68-75 (2007)
5. Piret, F., Bouvy, C., Marine, W., Su, B.L.  
A new series of optoelectronic nanocomposites: CMI-1 mesoporous core/ZnS shell  
Chemical Physics Letters 441 (1-3), pp. 83-87 (2007)
4. Ethayaraja, M., Ravikumar, C., Muthukumar, D., Dutta, K., Bandyopadhyaya, R.  
CdS-ZnS core-shell nanoparticle formation: Experiment, mechanism, and simulation  
Journal of Physical Chemistry C 111 (8), pp. 3246-3252 (2007)
3. Shukla, D., Mehra, A.  
Modeling shell formation in core-shell nanocrystals in reverse micelle systems  
Langmuir 22 (23), pp. 9500-9506 (2006)
2. Fu, W., Yang, H., Hari-Bala, Liu, S., Li, M., Zou, G.  
Preparation and magnetic characterization of core-shell structure stainless steel/silica nanoparticles  
Materials Letters 60 (13-14), pp. 1728-1732 (2006)



1. Stroyuk, A.L., Kryukov, A.I., Kuchmii, S.Ya., Pokhodenko, V.D.  
Quantum size effects in the photonics of semiconductor nanoparticles  
Theoretical and Experimental Chemistry 41 (2), pp. 67-91 (2005)
46. “*Gold–vanadia catalysts supported on ceria–alumina for complete benzene oxidation*”  
D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev  
Appl. Catalysis B: Environmental 52, 157 – 165 (2004).
79. Liu, H., Li, Y., Hu, Z., (...), Chen, J., Lu, C.-Z.  
A novel CeO<sub>2</sub> nanowire catalyst prepared by the freeze-drying method with significantly improved catalytic performance for toluene oxidation  
Separation and Purification Technology 342,126948 (2024)
78. Persembe, E., Parra-Cabrera, C., Ameloot, R.  
Ceramic Foams with Controlled Geometries Through 3D-Printed Sacrificial Templates  
Advanced Engineering Materials 25(16),2300076 (2023)
77. Ernst, W.E., Lasserus, M., Knez, D., Hofer, F., Hauser, A.W.  
Mixed-metal nanoparticles: phase transitions and diffusion in Au-VO clusters  
Faraday Discussions 242, pp. 160-173 (2022)
76. Wang, R., Zhong, C., Li, D., (...), Wei, Y., Liu, J.  
Preparation of 3DOM ZrTiO<sub>4</sub> Support, WxCeMnO<sub>δ</sub>/3DOM ZrTiO<sub>4</sub> Catalysts, and Their Catalytic Performance for the Simultaneous Removal of Soot and NO<sub>x</sub>  
Frontiers in Chemistry 10,880884 (2022)
75. Gaálová, J., Topka, P.  
Gold and ceria as catalysts for voc abatement: A review  
Catalysts 11(7),789 (2021)
74. Preparation of NiZnCe composite oxide and its catalytic performance for dehydrogenation of n-butane  
Wang, L., Wan, C., Cheng, D., Chen, F., Zhan, X.  
Huangong Xuebao/CIESC Journal 72(1), pp. 534-542 (2021)
73. Highly efficient catalytic oxidation of benzene over Ag assisted Co<sub>3</sub>O<sub>4</sub> catalysts  
Ma, X., Yu, X., Ge, M.  
Catalysis Today 376, pp. 262-268 (2021)
72. Unveiling the Remarkable Arsenic Resistance Origin of Alumina Promoted Cerium-Tungsten Catalysts for NH<sub>3</sub>-SCR  
Jiang, Si; Li, Teng; Zheng, JiKai; et al.  
ENVIRONMENTAL SCIENCE & TECHNOLOGY Volume: 54 Issue: 22 Pages: 14740-14749 Published: NOV 17 2020
71. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.  
JOURNAL OF CATALYSIS Volume: 375 Pages: 171-182 Published: JUL 2019
70. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
He, Chi; Cheng, Jie; Zhang, Xin; et al.  
CHEMICAL REVIEWS Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
69. An environmentally friendly wide temperature CeWTiO<sub>x</sub> catalyst with superior performance for the selective catalytic reduction NO<sub>x</sub> with NH<sub>3</sub>  
Huang Xiaosheng; Zhang Guodong; Dong Fang; et al.  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: 69 Pages: 66-76 Published: JAN 25 2019
68. Effect of Ca Doping on the Selective Catalytic Reduction of NO with NH<sub>3</sub> Over Ce-Ti Oxide Catalyst  
Jiang, Ye; Wang, Xuechong; Lai, Chengzhen; et al.  
CATALYSIS LETTERS Volume: 148 Issue: 9 Pages: 2911-2917 Published: SEP 2018
67. Ce-Co interaction effects on the catalytic performance of uniform mesoporous Ce-x-Co-y catalysts in Hg-0 oxidation process  
Zhang, Xiaopeng; Wang, Jinxin; Tan, Bojian; et al.  
FUEL Volume: 226 Pages: 18-26 Published: AUG 15 2018
66. Role of Silver Nanoclusters in the Enhanced Photocatalytic Activity of Cerium Oxide Nanoparticles  
Samai, Bobby; Chall, Sayantani; Mati, Soumya Sundar; et al.  
EUROPEAN JOURNAL OF INORGANIC CHEMISTRY Issue: 27 Pages: 3224-3231 Published: JUL 23 2018
65. In situ pyrolysis of Ce-MOF to prepare CeO<sub>2</sub> catalyst with obviously improved catalytic performance for toluene combustion  
Chen, Xi; Chen, Xi; Yu, Enqi; et al.  
CHEMICAL ENGINEERING JOURNAL Volume: 344 Pages: 469-479 Published: JUL 15 2018
64. Yan, Zheng; Qu, Yanxin; Liu, Lili; et al.  
Promotional effect of rare earth-doped manganese oxides supported on activated semi-coke for selective catalytic reduction of NO with NH<sub>3</sub>

63. Jin, Qijie; Shen, Yuesong; Zhu, Shemin; et al.  
Rare earth ions (La, Nd, Sm, Gd, and Tm) regulate the catalytic performance of CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> for NH<sub>3</sub>-SCR of NO  
JOURNAL OF MATERIALS RESEARCH Volume: 32 Issue: 12 Pages: 2438-2445 Published: JUN 2017
62. Jiang, Ye; Wang, Xuechong; Bao, Changzhong; et al.  
Poisoning effect of CaO on CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: 34 Issue: 6 Pages: 1874-1881 Published: JUN 2017
61. Jin, Qijie; Shen, Yuesong; Zhu, Shemin  
Praseodymium Oxide Modified CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> Catalyst for Selective Catalytic Reduction of NO by NH<sub>3</sub>  
CHINESE JOURNAL OF CHEMISTRY Volume: 34 Issue: 12 Pages: 1283-1290 Published: DEC 2016
60. Li, G., Wu, B., Li, L.  
Surface-structure effect of nano-crystalline CeO<sub>2</sub> support on low temperature CO oxidation  
Journal of Molecular Catalysis A: Chemical 424, 304-310 DOI: 10.1016/j.molcata.2016.08.035 (2016)
59. Jin, QJ (Jin Qijie); Shen, YS (Shen Yuesong); Zhu, SM (Zhu Shemin); Liu, Q (Liu Qing); Li, XH (Li Xihong); Yan, W (Yan Wei)  
Effect of praseodymium additive on CeO<sub>2</sub>(ZrO<sub>2</sub>)/TiO<sub>2</sub> for selective catalytic reduction of NO by NH<sub>3</sub>  
JOURNAL OF RARE EARTHS Volume: 34 Issue: 11 Pages: 1111-1120 DOI: 10.1016/S1002-0721(16)60142-4 Published: NOV 2016
58. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
Characterisation of gold catalysts  
CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
57. Jin, Q., Shen, Y., Zhu, S., Li, X., Hu, M.  
Promotional effects of Er incorporation in CeO<sub>2</sub>(ZrO<sub>2</sub>)/TiO<sub>2</sub> for selective catalytic reduction of NO by NH<sub>3</sub>  
CHINESE JOURNAL OF CATALYSIS Volume: 37 Issue: 9 Pages: 1521-1529 DOI: 10.1016/S1872-2067(16)62450-6 Published: SEP 2016
56. Jin, B., Wei, Y., Zhao, Z., Liu, J., Jiang, G., Duan, A.  
Effects of Au-Ce strong interactions on catalytic activity of Au/CeO<sub>2</sub>/3DOM Al<sub>2</sub>O<sub>3</sub> catalyst for soot combustion under loose contact conditions  
CHINESE JOURNAL OF CATALYSIS Volume: 37 Issue: 6 Pages: 923-933 DOI: 10.1016/S1872-2067(15)61094-4 Published: JUN 2016
55. He, D., Wan, G., Hao, H., Chen, D., Lu, J., Zhang, L., Liu, F., Zhong, L., He, S., Luo, Y.  
Microwave-assisted rapid synthesis of CeO<sub>2</sub> nanoparticles and its desulfurization processes for CH<sub>3</sub>SH catalytic decomposition  
CHEMICAL ENGINEERING JOURNAL Volume: 289 Pages: 161-169 DOI: 10.1016/j.ccej.2015.12.103 Published: APR 1 2016
54. Chu, B., An, H., Nijhuis, T.A., Schouten, J.C., Cheng, Y.  
A self-redox pure-phase M1 MoVNbTeO<sub>x</sub>/CeO<sub>2</sub> nanocomposite as a highly active catalyst for oxidative dehydrogenation of ethane  
Journal of Catalysis 329, Art. No. 11790, pages 471-478 DOI: 10.1016/j.jcat.2015.06.009 (2015)
53. Jin, B., Wei, Y., Zhao, Z., Liu, J., Yu, X., Li, Y., Li, J.  
Synthesis of three-dimensionally ordered macroporous Al-Ce mixed oxide catalysts with high catalytic activity and stability for diesel soot combustion  
CATALYSIS TODAY Volume: 258 Pages: 487-497 DOI: 10.1016/j.cattod.2015.01.021 Part: 2 Published: DEC 1 2015
52. Jiang, Y (Jiang, Ye); Xing, ZM (Xing, Zhimin); Wang, XC (Wang, Xuechong); Huang, SB (Huang, Shanbo); Liu, QY (Liu, Qingyu); Yang, JS (Yang, Jingshan)  
MoO<sub>3</sub> modified CeO<sub>2</sub>/TiO<sub>2</sub> catalyst prepared by a single step sol-gel method for selective catalytic reduction of NO with NH<sub>3</sub>  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: 29 Pages: 43-47 DOI: 10.1016/j.jiec.2015.04.023  
Published: SEP 25 2015
51. Palcheva, R (Palcheva, R.); Pawelec, B (Pawelec, B.); Gaigneaux, E (Gaigneaux, E.); Fierro, JL (Fierro, J. L.); Damyanova, S (Damyanova, S.)  
Redox properties of ceria-alumina oxides  
BULGARIAN CHEMICAL COMMUNICATIONS Volume: 47 Special Issue: C Pages: 19-24 Published: 2015
50. Jiang, Ye; Xing, Zhimin; Wang, Xuechong; et al.  
Activity and characterization of a Ce-W-Ti oxide catalyst prepared by a single step sol-gel method for selective catalytic reduction of NO with NH<sub>3</sub>  
FUEL Volume: 151 Pages: 124-129 Published: JUL 1 2015
49. Li, Gengnan; Li, Liang; Jiang, Dong  
Facile Synthesis of Highly Active Mesoporous PdCeO<sub>x</sub> Solid Solution for Low-Temperature CO Oxidation  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 119 Issue: 22 Pages: 12502-12507 Published: JUN 4 2015
48. Tang, Wenxiang; Wu, Xiaofeng; Chen, Yunfa  
Catalytic removal of gaseous benzene over Pt/SBA-15 catalyst: the effect of the preparation method  
REACTION KINETICS MECHANISMS AND CATALYSIS Volume: 114 Issue: 2 Pages: 711-723 Published: APR 2015
47. Li, Gengnan; Li, Liang  
Highly efficient formaldehyde elimination over meso-structured M/CeO<sub>2</sub> (M = Pd, Pt, Au and Ag) catalyst under ambient conditions

46. Garcia, T., Solsona, B., Taylor, S.H.  
The catalytic oxidation of hydrocarbon volatile organic compounds  
Handbook of Advanced Methods and Processes in Oxidation Catalysis: From Laboratory to Industry 51-90 DOI:  
10.1142/9781848167513\_0003 (2014)
45. Yu, Shen-Wei; Huang, Hsin-Hua; Tang, Chih-Wei; et al.  
The effect of accessible oxygen over Co<sub>3</sub>O<sub>4</sub>-CeO<sub>2</sub> catalysts on the steam reforming of ethanol  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 39 Issue: 35 Pages: 20700-20711 Published: DEC 3 2014
44. Manuel Lopez, Jose; Arenal, Raul; Puertolas, Begona; et al.  
Au deposited on CeO<sub>2</sub> prepared by a nanocasting route: A high activity catalyst for CO oxidation  
JOURNAL OF CATALYSIS 317, pp. 167-175 AUG 2014
43. Tang, Wenxiang; Wu, Xiaofeng; Li, Dongyan; et al.  
Oxalate route for promoting activity of manganese oxide catalysts in total VOCs' oxidation: effect of calcination temperature and preparation method  
JOURNAL OF MATERIALS CHEMISTRY A 2 (8), pp. 2544-2554 2014
42. Venezia, AM (Venezia, Anna Maria); Liotta, LF (Liotta, Leonarda Francesca); Pantaleo, G (Pantaleo, Giuseppe); Longo, A (Longo, Alessandro)  
CERIA-BASED CATALYSTS FOR AIR POLLUTION ABATEMENT  
CATALYSIS BY CERIA AND RELATED MATERIALS, 2ND EDITION Book Series: Catalytic Science Series Volume: 12 Pages: 813-879 Published: 2013
41. Delaigle, R.; Joseph, M. M. F.; Debecker, D. P.; et al.  
An Alternative Method for the Incorporation of Silver in Ag-VO<sub>x</sub>/TiO<sub>2</sub> Catalysts for the Total Oxidation of Benzene  
TOPICS IN CATALYSIS 56 (18-20) SI, pp. 1867-1874 DEC 2013
40. Sellick, D.R., Aranda, A., García, T., López, J.M., Solsona, B., Mastral, A.M., Morgan, D.J., (...), Taylor, S.H.  
Influence of the preparation method on the activity of ceria zirconia mixed oxides for naphthalene total oxidation  
Applied Catalysis B: Environmental 132-133, pp. 98-106, 2013
39. Neto, R.C.R., Schmal, M.  
Synthesis of CeO<sub>2</sub> and CeZrO<sub>2</sub> mixed oxide nanostructured catalysts for the iso-syntheses reaction  
Applied Catalysis A: General 450, pp. 131-142, 2013
38. Aranda, A., Agouram, S., López, J.M., Mastral, A.M., Sellick, D.R., Solsona, B., Taylor, S.H., García, T.  
Oxygen defects: The key parameter controlling the activity and selectivity of mesoporous copper-doped ceria for the total oxidation of naphthalene  
Applied Catalysis B: Environmental 127, pp. 77-88, 2012
37. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.
36. Reina, T.R., Moreno, A.Á., Ivanova, S., Odriozola, J.A., Centeno, M.A.  
Influence of Vanadium or Cobalt Oxides on the CO Oxidation Behavior of Au/MO<sub>x</sub>/CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> Systems  
ChemCatChem 4 (4), 512-520, 2012.
35. Solsona, B., Concepción, P., Hernández, S., Demicol, B., Nieto, J.M.L.  
Oxidative dehydrogenation of ethane over NiO-CeO<sub>2</sub> mixed oxides catalysts  
Catalysis Today 180 (1), 51-58, 2012.
33. Ntainjua, E.N., Davies, T.E., Garcia, T., Solsona, B., Taylor, S.H.  
The influence of platinum addition on nano-crystalline ceria catalysts for the total oxidation of naphthalene a model polycyclic aromatic hydrocarbon  
Catalysis Letters 141 (12), 1732-1738, 2011.
32. Wu Hongjing; Wang Liuding; Zhang Jiaoqiang; et al.  
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst  
CATALYSIS COMMUNICATIONS 12 (10) Pages: 859-865, MAY 15 2011.
31. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.  
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O(2) catalysts  
APPLIED CATALYSIS B-ENVIRONMENTAL 103 (1-2) Pages: 143-148, MAR 14 2011.
30. Abbasi Zahra; Haghghi Mohammad; Fatehifar Esmaeil; et al.  
Synthesis and physicochemical characterizations of nanostructured Pt/Al(2)O(3)-CeO(2) catalysts for total oxidation of VOCs  
JOURNAL OF HAZARDOUS MATERIALS 186 (2-3) Pages: 1445-1454, FEB 28 2011.
29. Ribeiro Nielson F. P.; Bonfim Rodrigo P. F.; Souza Mariana M. V. M.; et al.  
Investigation of activity losses of gold nanoparticles in the CO selective oxidation  
JOURNAL OF POWER SOURCES 195 (21) Pages: 7386-7390, NOV 1 2010.

28. Xia Yunsheng; Dai Hongxing; Zhang Lei; et al  
 Ultrasound-assisted nanocasting fabrication and excellent catalytic performance of three-dimensionally ordered mesoporous chromia for the combustion of formaldehyde, acetone, and methanol  
 APPLIED CATALYSIS B-ENVIRONMENTAL 100 (1-2) Pages: 229-237, OCT 11 2010.
27. Yin Hongfeng; Ma Zhen; Zhu Haoguo; et al.  
 Evidence for and mitigation of the encapsulation of gold nanoparticles within silica supports upon high-temperature treatment of Au/SiO<sub>2</sub> catalysts: Implication to catalyst deactivation  
 APPLIED CATALYSIS A-GENERAL 386 (1-2) Pages: 147-156 SEP 30 2010.
26. Gao Xiang; Jiang Ye; Fu Yincheng; et al.  
 Preparation and characterization of CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
 CATALYSIS COMMUNICATIONS 11 (5) Pages: 465-469, JAN 25 2010.
25. Puertolas Begona; Solsona Benjamin; Agouram Said; et al.  
 The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene  
 APPLIED CATALYSIS B-ENVIRONMENTAL 93 (3-4) Pages: 395-405, JAN 12 2010.
24. Wu Hongjing; Shuai Qin; Zhu Zhenli; et al.  
 Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide  
 Source: ADVANCE IN ECOLOGICAL ENVIRONMENT FUNCTIONAL MATERIALS AND ION INDUSTRY Book Series:  
 Advanced Materials Research Volume: 96 Pages: 21-27, 2010.
23. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
 Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
 Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 38 (2), pp. 223-229 (2010).
22. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.  
 Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide  
 Advanced Materials Research 96, pp. 21-27 (2010).
21. Gao, X., Jiang, Y., Fu, Y., Zhong, Y., Luo, Z., Cen, K.  
 Preparation and characterization of CeO<sub>2</sub>/TiO<sub>2</sub> catalysts for selective catalytic reduction of NO with NH<sub>3</sub>  
 Catalysis Communications 11 (5), pp. 465-469 (2010).
20. Puertolas, B., Solsona, B., Agouram, S., Murillo, R., Mastral, A.M., Aranda, A., Taylor, S.H., Garcia, T.  
 The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene  
 Applied Catalysis B: Environmental 93 (3-4), pp. 395-405 (2010).
19. Aranda, A., López, J.M., Murillo, R., Mastral, A.M., Dejoz, A., Vázquez, I., Solsona, B., (...), García, T.  
 Total oxidation of naphthalene with high selectivity using a ceria catalyst prepared by a combustion method employing ethylene glycol  
 Journal of Hazardous Materials 171 (1-3), pp. 393-399 (2009).
18. Solsona, B., García, T., Murillo, R., Mastral, A.M., Ntainjua Ndifor, E., Hetrick, C.E., Amiridis, M.D., Taylor, S.H.  
 Ceria and gold/ceria catalysts for the abatement of polycyclic aromatic hydrocarbons: An in situ DRIFTS study  
 Topics in Catalysis 52 (5), pp. 492-500 (2009).
17. Zhang, Y., Wang, Z., Zhou, J., Cen, K.  
 Ceria as a catalyst for hydrogen iodide decomposition in sulfur-iodine cycle for hydrogen production  
 International Journal of Hydrogen Energy 34 (4), pp. 1688-1695 (2009).
16. Edwin, NN (Edwin, Ntainjua N.); Garcia, T (Garcia, Tomas); Solsona, B (Solsona, Benjamin); Taylor, SH (Taylor, Stuart H.)  
 The influence of cerium to urea preparation ratio of nanocrystalline ceria catalysts for the total oxidation of naphthalene  
 CATALYSIS TODAY Volume: 137 Issue: 2-4 Pages: 373-378 DOI: 10.1016/j.cattod.2007.12.140 Published: SEP 30 2008
15. Tang, X., Xu, Y., Shen, W.  
 Promoting effect of copper on the catalytic activity of MnO<sub>x</sub>-CeO<sub>2</sub> mixed oxide for complete oxidation of benzene  
 Chemical Engineering Journal 144 (2), pp. 175-180 (2008).
14. Ntainjua N., E., Garcia, T., Solsona, B., Taylor, S.H.  
 The influence of cerium to urea preparation ratio of nanocrystalline ceria catalysts for the total oxidation of naphthalene  
 Catalysis Today 137 (2-4), pp. 373-378 (2008).
13. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N.  
 Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on β-MnO<sub>2</sub> nanorods  
 Applied Catalysis A: General 344 (1-2), pp. 150-157 (2008).
12. Yang, S.M., Liu, D.M., Liu, S.Y.  
 Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria  
 Topics in Catalysis 47 (3-4), pp. 101-108 (2008).
11. Li, C., Shen, Y., Jia, M., Sheng, S., Adebajo, M.O., Zhu, H.  
 Catalytic combustion of formaldehyde on gold/iron-oxide catalysts  
 Catalysis Communications 9 (3), pp. 355-361 (2008)

10. Della Pina, C (Della Pina, Cristina); Dimitratos, N (Dimitratos, Nikolaos); Falletta, E (Falletta, Ermelinda); Rossi, M (Rossi, Michele); Siani, A (Siani, Attilio)

Catalytic performance of gold catalysts in the total oxidation of VOCs  
GOLD BULLETIN Volume: 40 Issue: 1 Pages: 67-72 Published: 2007

9. Carabineiro, SAC (Carabineiro, Sonia A. C.); Thompson, DT (Thompson, David T.)

Catalytic Applications for Gold Nanotechnology  
NANOCATALYSIS Book Series: Nanoscience and Technology Pages: 377-489 DOI: 10.1007/978-3-540-32646-5\_6 Published: 2007

8. Ndifor, E.N., Garcia, T., Solsona, B., Taylor, S.H.

Influence of preparation conditions of nano-crystalline ceria catalysts on the total oxidation of naphthalene, a model polycyclic aromatic hydrocarbon

Applied Catalysis B: Environmental 76 (3-4), pp. 248-256 (2007)

7. Hai, F., Jia, M., Zhaorigetu, Sagala, Li, Y.

Preparation of Au/ZrO<sub>2</sub> catalyst and its activity in CO oxidation  
Petrochemical Technology 36 (9), pp. 876-881 (2007)

6. Hutchings, GJ (Hutchings, Graham J.)

Reactions of Environmental Importance  
CATALYSIS BY GOLD Book Series: Catalytic Science Series Volume: 6 Pages: 286-310 Published: 2006

5. Liotta, L.F., Di Carlo, G., Pantaleo, G., Venezia, A.M., Deganello, G.

Co<sub>3</sub>O<sub>4</sub>/CeO<sub>2</sub> composite oxides for methane emissions abatement: Relationship between Co<sub>3</sub>O<sub>4</sub>-CeO<sub>2</sub> interaction and catalytic activity  
Applied Catalysis B: Environmental 66 (3-4), pp. 217-227 (2006)

4. García, T., Solsona, B., Taylor, S.H.

Naphthalene total oxidation over metal oxide catalysts  
Applied Catalysis B: Environmental 66 (1-2), pp. 92-99 (2006)

3. Garcia T, Solsona B, Cazorla-Amoros D, et al.

Total oxidation of volatile organic compounds by vanadium promoted palladium-titania catalysts: Comparison of aromatic and polyaromatic compounds

APPLIED CATALYSIS B-ENVIRONMENTAL 62 (1-2): 66-76 JAN 10 2006

2. Garcia T, Solsona B, Taylor SH

Nano-crystalline ceria catalysts for the abatement of polycyclic aromatic hydrocarbons  
CATALYSIS LETTERS 105 (3-4): 183-189 DEC 2005

1. Centeno MA, Portales C, Carrizosa I, et al.

Gold supported CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> catalysts for CO oxidation: influence of the ceria phase  
CATALYSIS LETTERS 102 (3-4): 289-297 AUG 2005

#### 47. "Plasma-assisted deposition of thin carbon films from methane and the influence of the plasma parameters and additional gases"

F. Hamelmann, A. Aschentrup, A. Brechling, U. Heinzmann, M. Abrashev, A. Szekeres and K. Gesheva

Vacuum 76, 139-142 (2004)

3. Impact of plasma treatment in CH<sub>4</sub>/N<sub>2</sub> on the properties of reduced graphene oxide  
Neustroev, E.P., Prokopiev, A.R., Timofeev, V.B., (...), Alekseev, A.A., Semenov, S.O.  
IOP Conference Series: Materials Science and Engineering 693(1),012043 (2019)

2. Formation of nanographite flakes on SiO<sub>2</sub> substrate by plasma deposition of carbon and subsequent annealing

Neustroev, E.P., Popov, V.I., Prokopiev, A.R., Davydova, Z.Y., Semenov, S.O.  
AIP Conference Proceedings 2179, 020019 (2019)

1. Pereira J, Massereau-Guilbaud V, Geraud-Grenier I, et al.

CH and CN radical contribution in the particle formation generated in a radio-frequency CH<sub>4</sub>/N<sub>2</sub> plasma  
PLASMA PROCESSES AND POLYMERS 2 (8): 633-640 OCT 11 2005

#### 48. "Low-pressure sublimation epitaxy of AlN films—growth and characterization"

M. Beshkova, Z. Zakhariyev, M.V. Abrashev, E. Birch, A. Kakanakova and R. Yakimova  
Vacuum 76, 143-146 (2004)

4. Abid M. A.; Abu Hassan H.; Ng S. S.

Theoretical and experimental investigations of zone-center optical phonons in wurtzite Al(x)Ga(1-x)N using pseudo unit cell model  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS 4 (5) Pages: 693-698, MAY 2010.

3. Han, Q., Duan, C., Ji, C., Qiu, K., Zhong, F., Li, X., Yin, Z., (...), Wang, Y.

Polarity analysis of self-seeded aluminum nitride crystals grown by sublimation  
Journal of Electronic Materials 37 (8), pp. 1058-1063 (2008).

2. Iborra, E., Clement, M., Vergara, L., Sanz-Hervás, A., Olivares, J., Sangrador, J.  
Dependence of the IR reflectance LO absorption bands on the crystalline texture of AlN films  
Applied Physics Letters 88 (23), art. no. 231901 (2006)
1. Fisher AS, Goodall PS, Hinds MW, et al.  
Atomic spectrometry update. Industrial analysis: metals, chemicals and advanced materials  
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY 20 (12): 1398-1424 DEC 2005
49. “*Optical and electrochromic properties of CVD mixed MoO<sub>3</sub>–WO<sub>3</sub> thin films*”  
T. Ivanova, K. Gesheva, F. Hamelmann, G. Popkirov, M. Abrashev, M. Ganchev and E. Tzvetkova  
Vacuum 76, 195-198 (2004)
22. Cheng, M., Yang, J., Hao, Z., (...), Wang, G., Huan, K.  
Preparation and electrochromic properties of MoO<sub>3</sub>O/WO<sub>3</sub>O composite film  
Cailiao Gongcheng/Journal of Materials Engineering 51(3), pp. 98-104 (2023)
21. Duan, Y., Wang, C., Hao, J., (...), Xu, Y., Wang, J.  
Electrochromic performance and capacitor performance of α-moo<sub>3</sub> nanorods fabricated by a one-step procedure  
Coatings 11(7),783 (2021)
20. Wang, J., Liu, Z., Cao, W.  
Electrochromic Properties of α-MoO<sub>3</sub> Nanorods Fabricated by Hydrothermal Synthesis  
Lecture Notes in Electrical Engineering 754 LNEE, pp. 793-800 (2021)
19. Detailed transmittance analysis of high-performance SnO<sub>2</sub>-doped WO<sub>3</sub> thin films in UV–Vis region for electrochromic devices  
Olkun, A., Pat, S., Akkurt, N., (...), Özgür, M., Korkmaz, Ş.  
Journal of Materials Science: Materials in Electronics 31(21), pp. 19074-19084 (2020)
18. Structural, electronic, optical and lattice dynamic properties of the different WO<sub>3</sub> phases: First-principle calculation  
Yang, H., Sun, H., Li, Q., (...), Song, B., Wang, L.  
Vacuum 164, pp. 411-420 (2019)
17. Polyoxometalates as promising materials for electrochromic devices  
Wang, S.-M., Hwang, J., Kim, E.  
Journal of Materials Chemistry C 7(26), pp. 7828-7850 (2019)
16. Indium-doped and positively charged ZnO nanoclusters: versatile materials for CO detection  
Omidvar, A.  
Vacuum 147, pp. 126-133 (2018)
15. Chu, Ximo S.; Li, Duo O.; Green, Alexander A.; et al.  
Formation of MoO<sub>3</sub> and WO<sub>3</sub> nanoscrolls from MoS<sub>2</sub> and WS<sub>2</sub> with atmospheric air plasma  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 5 Issue: 43 Pages: 11301-11309 Published: NOV 21 2017
14. Jittiarporn, Phuriwat; Sikong, Lek; Kooptarnond, Kalayanee; et al.  
Electrochromic properties of MoO<sub>3</sub>-WO<sub>3</sub> thin films prepared by a sol-gel method, in the presence of a triblock copolymer template  
SURFACE & COATINGS TECHNOLOGY Volume: 327 Pages: 66-74 Published: OCT 25 2017
13. Balaji, M., Chandrasekaran, J., Raja, M., Rajesh, S.  
Structural, optical and electrical properties of Ru doped MoO<sub>3</sub> thin films and its P–N diode application by JNS pyrolysis technique  
Journal of Materials Science: Materials in Electronics 27(11), 11646-11658 DOI: 10.1007/s10854-016-5300-0 (2016)
12. Kim, M.H., Bark, C.W., Choi, H.W., Kim, K.H.  
Working pressure dependence of WO<sub>3-x</sub> thin films prepared by reactive facing targets sputtering  
Molecular Crystals and Liquid Crystals 602(1), 185-192 DOI: 10.1080/15421406.2014.944761 (2014)
11. Kim, M.H., Choi, H.W., Kim, K.H.  
Thickness dependence of WO<sub>3-x</sub> thin films for electrochromic device application  
Molecular Crystals and Liquid Crystals 598(1), 54-61 DOI: 10.1080/15421406.2014.933298 (2014)
10. Choi, D.S., Han, S.H., Kim, H., Kim, T.Y., Rhyu, S.H., Yoon, D.H., Yang, W.S.  
Electrochromic characterization of amorphous tungsten oxide films deposited on indium tin oxide and CVD-graphene electrodes by RF magnetron sputtering  
Journal of Ceramic Processing Research 15(4), 273-276 (2014)
9. Kim, M.H., Choi, H.W., Kim, K.H.  
Properties of WO<sub>3-x</sub> electrochromic thin film prepared by reactive sputtering with various post annealing temperatures  
Japanese Journal of Applied Physics 52(11) PART 2 Art. No. 11NB09 DOI: 10.7567/JJAP.52.11NB09 (2013)
8. Kim, M.H., Kang, T.Y., Jung, Y.S., Kim, K.H.  
Electrochromic properties of tungsten oxide films prepared by reactive sputtering  
Japanese Journal of Applied Physics 52 (5 PART 3), art. no. 05EC03, 2013

7. Zhao, X.-M., Chen, W.-J., Zhang, X.-H., Liu, W.-B., Zhang, Y.-F., Huang, X.  
Electronic Properties and Chemical Bonding of O-Rich Clusters  $MM'O_7$  - (M, M' = V, Nb, Ta)  
Journal of Cluster Science 22 (3), pp. 397-404, 2011.
6. Lee, Y.J., Seo, Y.I., Kim, S.-H., Kim, D.-G., Kim, Y.D.  
Optical properties of molybdenum oxide thin films deposited by chemical vapor transport of  $MoO_3(OH)_2$   
Applied Physics A: Materials Science and Processing 97 (1), pp. 237-241 (2009).
5. Deki, S., Béléké, A.B., Kotani, Y., Mizuhata, M.  
Liquid phase deposition synthesis of hexagonal molybdenum trioxide thin films  
Journal of Solid State Chemistry 182 (9), pp. 2362-2367 (2009).
4. Rothgeb, D.W., Hossain, E., Kuo, A.T., Troyer, J.L., Jarrold, C.C.  
Structures of  $MoxW(3-x)O_6$  ( $x=0-3$ ) anion and neutral clusters determined by anion photoelectron spectroscopy and density functional theory calculations  
Journal of Chemical Physics 131 (4), art. no. 044310 (2009).
3. Mayhall, N.J., Rothgeb, D.W., Hossain, E., Raghavachari, K., Jarrold, C.C.  
Electronic structures of  $MoWO_y$  - and  $MoWO_y$  determined by anion photoelectron spectroscopy and DFT calculations  
Journal of Chemical Physics 130 (12), art. no. 124313 (2009).
2. Niklasson, G.A., Granqvist, C.G.  
Electrochromics for smart windows: Thin films of tungsten oxide and nickel oxide, and devices based on these  
Journal of Materials Chemistry 17 (2), pp. 127-156 (2007)
1. Avendano E, Berggren L, Niklasson GA, et al.  
Electrochromic materials and devices: Brief survey and new data on optical absorption in tungsten oxide and nickel oxide films  
THIN SOLID FILMS 496 (1): 30-36 FEB 1 2006
50. “Comparative Raman studies of  $Sr_2RuO_4$ ,  $Sr_3Ru_2O_7$  and  $Sr_4Ru_3O_{10}$ ”  
M. N. Iliev, V. N. Popov, A. P. Litvinchuk, M. V. Abrashev, J. Backstrom, Y. Y. Sun, R. L. Meng, and C. W. Chu  
Physica B 358, 138 – 152 (2005)
28. Ye, F., Morgan, Z., Zhang, Y., Ni, Y., Cao, G.  
Stabilization of collinear ferromagnetic order in Ir-doped triple-layer ruthenate  $Sr_4Ru_3O_{10}$   
Physical Review B 108(24),L241109 (2023)
27. Saini, N., Jindal, R., Tripathi, A., Garg, A.  
Study of Optical Phonons of Monolayered Ruddlesden-Popper Compounds  $A_2ZrO_4$  (A = Sr, Ba)  
Journal of Inorganic and Organometallic Polymers and Materials (Article in Press) DOI: 10.1007/s10904-023-02892-6 (2023)
26. Zhang, Y., Arpino, K.E., Yang, Q., (...), Felser, C., Li, G.  
Observation of a robust and active catalyst for hydrogen evolution under high current densities  
Nature Communications 13(1),7784 (2022)
25. Saini, N., Jindal, R., Tripathi, A.  
Study of lattice dynamics of Ruddlesden-Popper compounds  $Sr_2RuO_4$  and  $Sr_2TcO_4$   
Indian Journal of Physics 96(11), pp. 3143-3149 (2022)
24. Tarasova, N., Galisheva, A., Animitsa, I., (...), Abakumova, E., Medvedev, D.  
Layered Perovskites  $BaM_2In_2O_7$  (M = La, Nd): From the Structure to the Ionic ( $O_2^-$ ,  $H^+$ ) Conductivity  
Materials 15(10),3488 (2022)
23. Xia, W., Zhao, Y., Zhao, F., (...), Zhao, Y., Sun, X.  
Antiperovskite Electrolytes for Solid-State Batteries  
Chemical Reviews 122(3), pp. 3763-3819 (2022)
22. Tarasova, N.A.  
Local structure and ionic transport in acceptor-doped layered perovskite  $BaLa_2In_2O_7$   
Chimica Techno Acta 9(4),20229415 (2022)
21. Philippe, J.-C., Baptiste, B., Sow, C., (...), Sacuto, A., Gallais, Y.  
Orbital dichotomy of Fermi liquid properties in  $Sr_2RuO_4$  revealed by Raman spectroscopy  
Physical Review B 103(23),235147 (2021)
20. Facile fabrication of exsolved nanoparticle-decorated hollow ferrite fibers as active electrocatalyst for oxygen evolution reaction  
Fu, L., Zhou, J., Zhou, L., (...), Wang, J., Wu, K.  
Chemical Engineering Journal 418,129422 (2021)
19. Spectroscopic and transport properties of Ba- and Ti-doped  $BaLaInO_4$   
Tarasova, N.; Galisheva, A.; Animitsa, I  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 5 Pages: 980-987 Published: MAY 2021

18. Fermi surface and kink structures in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub> revealed by synchrotron-based ARPES  
Ngabonziza, Prosper; Carleschi, Emanuela; Zabolotnyy, Volodymyr; et al.  
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 21062 Published: DEC 3 2020
17. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>  
Tarasova, N.; Animitsa, I.; Galisheva, A.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020
16. Electronic and vibrational signatures of ruthenium vacancies in Sr<sub>2</sub>RuO<sub>4</sub> thin films  
Kim, Gideok; Suyolcu, Y. Eren; Herrero-Martin, J.; et al.  
PHYSICAL REVIEW MATERIALS Volume: 3 Issue: 9 Article Number: 094802 Published: SEP 27 2019
15. Barman, Nabadyuti; Singh, Priyank; Narayana, Chandrabhas; et al.  
Incipient ferroelectric to a possible ferroelectric transition in Te<sup>4+</sup> doped calcium copper titanate (CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>) ceramics at low temperature as evidenced by Raman and dielectric spectroscopy  
AIP ADVANCES Volume: 7 Issue: 3 Article Number: 035105 Published: MAR 2017
14. Chen, C., Kim, J., Nascimento, V.B., Diao, Z., Teng, J., Hu, B., Li, G., Liu, F., Zhang, J., Jin, R., Plummer, E.W.  
Hidden phases revealed at the surface of double-layered Sr-3(Ru<sub>1-x</sub>Mnx)(<sub>2</sub>)O-7  
PHYSICAL REVIEW B Volume: 94 Issue: 8 Article Number: 085420 DOI: 10.1103/PhysRevB.94.085420 Published: AUG 22 2016
13. Behera, P.S., Bhoje, P.A., Sathe, V.G., Nigam, A.K.  
Local lattice distortions and magnetic properties of CdCr<sub>2</sub>Se<sub>4-x</sub>S<sub>x</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 4 Article Number: 045107 DOI: 10.1063/1.4959878 Published: JUL 28 2016
12. Granata, V., Capogna, L., Forte, F., Lepetit, M.-B., Fittipaldi, R., Stunault, A., Cuoco, M., Vecchione, A.  
Spin-orbital nature of the high-field magnetic state in the Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
PHYSICAL REVIEW B Volume: 93 Issue: 11 Article Number: 115128 DOI: 10.1103/PhysRevB.93.115128 Published: MAR 17 2016
11. Gu, X  
Magnetism and optical properties of Co doped Sr<sub>2</sub>RuO<sub>4</sub>  
2015 IEEE MAGNETICS CONFERENCE (INTERMAG) Meeting Abstract: GS-11 Published: 2015
10. Jiang, Ning; Woodley, Scott M.; Catlow, C. Richard A.; et al.  
Applying a new interatomic potential for the modelling of hexagonal and orthorhombic YMnO<sub>3</sub>  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 18 Pages: 4787-4793 Published: 2015
9. Carleschi, E.; Doyle, B. P.; Fittipaldi, R.; et al.  
Double metamagnetic transition in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
PHYSICAL REVIEW B Volume: 90 Issue: 20 Article Number: 205120 Published: NOV 13 2014
8. Cooper, S.L.  
Exploring the magnetostructural phases of the layered ruthenates with Raman scattering  
FRONTIERS OF 4D- AND 5D- TRANSITION METAL OXIDES Pages: 99-162 DOI: 10.1142/9789814374866\_0004 Published: 2013
7. Pandey, P.K., Choudhary, R.J., Mishra, D.K., Sathe, V.G., Phase, D.M.  
Signature of spin-phonon coupling in Sr<sub>2</sub>CoO<sub>4</sub> thin film: A Raman spectroscopic study  
Applied Physics Letters 102 (14), art. no. 142401, 2013
6. Ngabonziza, P, Carleschi, E, Doyle, BP  
Signature of Electron-Phonon Correlation in the Band Structure of Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
PROCEEDINGS OF SAIP2012: THE 57TH ANNUAL CONFERENCE OF THE SOUTH AFRICAN INSTITUTE OF PHYSICS Pages: 153-157 Published: 2012
5. Mirri, C., Vitucci, F.M., Di Pietro, P., Lupi, S., Fittipaldi, R., Granata, V., Vecchione, A., (...), Calvani, P.  
Anisotropic optical conductivity of Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>  
Physical Review B - Condensed Matter and Materials Physics 85 (23) , art. no. 235124, 2012.
4. Puetter Christoph M.; Rau Jeffrey G.; Kee Hae-Young  
Microscopic route to nematicity in Sr(3)Ru(2)O(7)  
PHYSICAL REVIEW B 81 (8) Article Number: 081105, FEB 2010 .
3. Davidson, G  
Vibrational spectra of transition element compounds  
SPECTROSCOPIC PROPERTIES OF INORGANIC AND ORGANOMETALLIC COMPOUNDS, VOL 39 Book Series: Specialist  
Periodical Reports Spectroscopic Properties of Inorganic and Organometallic Compounds Volume: 39 Pages: 259-300 DOI:  
10.1039/b614705b Published: 2007
2. Gupta R, Kim M, Barath H, et al.  
Field- and pressure-induced phases in Sr<sub>4</sub>Ru<sub>3</sub>O<sub>10</sub>: A spectroscopic investigation  
PHYSICAL REVIEW LETTERS 96 (6): Art. No. 067004 FEB 17 2006
1. Laverdiere J, Jandl S, Mukhin AA, et al.  
Spin-phonon coupling in orthorhombic RMnO<sub>3</sub> (R=Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Y): A Raman study  
PHYSICAL REVIEW B 73 (21), 214301 (2006).



51. “*Optical and electrochromic characterization of multilayered mixed metal oxide thin films*”  
Hamelmann F, Gesheva K, Ivanova T, Szekeres A, Abrashev M, Heinzmann U  
J. Optoelectr. and Adv. Mater. 7 (1): 393-396 (2005).

29. Lábadi, Z., Takács, D., Zolnai, Z., Petrik, P., Fried, M.  
Compositional Optimization of Sputtered WO<sub>3</sub>/MoO<sub>3</sub> Films for High Coloration Efficiency  
Materials 17(5),1000 (2024)
28. Lin, T.-C., Jheng, B.-J., Yen, H.-M., Huang, W.-C.  
Thermal Annealing Effects of V<sub>2</sub>O<sub>5</sub> Thin Film as an Ionic Storage Layer for Electrochromic Application  
Materials 15(13),4598 (2022)
27. Tungsten doping effect on V<sub>2</sub>O<sub>5</sub> thin film electrochromic performance  
Panagopoulou, Marianthi; Vernardou, Dimitra; Koudoumas, Emmanuel; et al.  
ELECTROCHIMICA ACTA Volume: 321 Article Number: 134743 Published: OCT 20 2019
26. Mechanical Milling Influence on Lattice Vibrational Behaviour of MoO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> Composite Nanopowders  
Sundeeep, Dola; Kumar, T. Vijaya; Kumar, M. Kiran; et al.  
SILICON Volume: 11 Issue: 3 Pages: 1517-1524 Published: JUN 2019
25. Physical Investigations on (MoO<sub>3</sub>)<sub>x</sub>-(WO<sub>3</sub>)<sub>(1-x)</sub> Composite Thin Films  
Srinivasarao, K.; Prameela, Ch  
JOURNAL OF SURFACE SCIENCE AND TECHNOLOGY Volume: 35 Issue: 1-2 Pages: 26-35 Published: JUN 2019
24. Enhanced photo catalytic activity of graphene oxide /MoO<sub>3</sub> nanocomposites in the degradation of Victoria Blue Dye under visible light irradiation  
Kamalam, M. Beaula Ruby; Inbanathan, S. S. R.; Sethuraman, K.  
APPLIED SURFACE SCIENCE Volume: 449 Special Issue: SI Pages: 685-696 Published: AUG 15 2018
23. Sundeeep, Dola; Krishna, A. Gopala; Ravikumar, R. V. S. S. N.; et al.  
Spectral characterization of mechanically synthesized MoO<sub>3</sub>-CuO nanocomposite  
INTERNATIONAL NANO LETTERS Volume: 6 Issue: 2 Pages: 119-128 Published: JUN 2016
22. Gopala Krishna, A., Ravikumar, R.V.S.S.N, Vijaya Kumar, T., Daniel Ephraim, S., Ranjith, B., Pranoy, M., Dola, S.  
Investigation and comparison of optical and Raman bands of mechanically synthesised MoO<sub>3</sub> nano powders  
Materials Today: Proceedings 3(1), 54-63 DOI: 10.1016/j.matpr.2016.01.121 (2016)
21. Meenakshi, M., Sivakumar, R., Perumal, P., Sanjeeviraja, C.  
Studies on electrochromic properties of RF sputtered Vanadium Oxide: Tungsten Oxide thin films  
MATERIALS TODAY-PROCEEDINGS Volume: 3 Pages: S30-S39 DOI: 10.1016/j.matpr.2016.01.005 Supplement: 1 Published: 2016
20. Prameela, C., Srinivasarao, K.  
Characterization of (MoO<sub>3</sub>)<sub>x</sub>/(WO<sub>3</sub>)<sub>1-x</sub> composites  
International Journal of Applied Engineering Research 10(4), 9865-9875 (2015)
19. Manivel, Arumugam; Lee, Gang-Juan; Chen, Chin-Yi; et al.  
Synthesis of MoO<sub>3</sub> nanoparticles for azo dye degradation by catalytic ozonation  
MATERIALS RESEARCH BULLETIN Volume: 62 Pages: 184-191 Published: FEB 2015
18. Pal, Jaya; Ganguly, Mainak; Mondal, Chanchal; et al.  
Precursor salt assisted syntheses of high-index faceted concave hexagon and nanorod-like polyoxometalates  
NANOSCALE Volume: 7 Issue: 2 Pages: 708-719 Published: 2015
17. Kharade, Rohini R.; Mali, S. S.; Mohite, S. S.; et al.  
Hybrid Physicochemical Synthesis and Electrochromic Performance of WO<sub>3</sub>/MoO<sub>3</sub> Thin Films  
ELECTROANALYSIS Volume: 26 Issue: 11 Special Issue: SI Pages: 2388-2397 Published: NOV 2014
16. Chandrasekhar, Prasanna; Zay, Brian J.; Cai, Chunming; et al.  
Matched-Dual-Polymer Electrochromic Lenses, Using New Cathodically Coloring Conducting Polymers, with Exceptional Performance and Incorporated Into Automated Sunglasses  
JOURNAL OF APPLIED POLYMER SCIENCE 131 (22), Art. No. 41043 NOV 15 2014
15. Lupan, O.; Trofim, V.; Cretu, V.; et al.  
Investigation of optical properties and electronic transitions in bulk and nano-microribbons of molybdenum trioxide  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 47 (8), Art. No. 085302 FEB 26 2014
14. Chen, Hsi-Chao; Jan, Der-Jun; Luo, Yu-Siang; et al.  
Electrochromic and optical properties of tungsten oxide films deposited with DC sputtering by introducing hydrogen  
APPLIED OPTICS 53 (4), pp. A321-A329 FEB 1 2014
13. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T.  
Bond and electrochromic properties of WO<sub>3</sub> films deposited with horizontal DC, pulsed DC, and RF sputtering  
Electrochimica Acta 93, pp. 307-313, 2013

12. Galindo, RE, Benito, N.; Duday, D.; Fuentes, GG, Valle, N, Herrero, P, Vergara, L, Joco, V, Sanchez, O.; Arranz, A, Palacio  
In-depth multi-technique characterization of chromium-silicon mixed oxides produced by reactive ion beam mixing of the Cr/Si interface  
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY Volume: 27 Issue: 3 Pages: 390-400 DOI: 10.1039/c2ja10296j Published:  
2012

11. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T., Luo, Y.-S., Chen, J.-M.  
Investigation of the optical and structural properties of WO<sub>3</sub> thin films with different sputtering power supplies  
Proceedings of SPIE - The International Society for Optical Engineering 8486, art. no. 84861F, 2012

10. Chen Hsi-Chao; Jan Der-Jun; Chen Chien-Han  
Investigation of Optical and Electrochromic Properties of Tungsten Oxide Deposited with Horizontal DC and DC Pulse Magnetron  
Sputtering  
JAPANESE JOURNAL OF APPLIED PHYSICS 51 (4) Article Number: 045503, APR 2012.

9. Escobar Galindo R.; Benito N.; Duday D.; et al.  
In-depth multi-technique characterization of chromium-silicon mixed oxides produced by reactive ion beam mixing of the Cr/Si interface  
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY 27 (3), 390-400, 2012.

8. Chen, H.-C., Jan, D.-J., Chen, C.-H., Huang, K.-T., Lo, Y.-M., Chen, S.-H.  
Investigation of the optical property and structure of WO<sub>3</sub> thin films with different sputtering depositions  
Proceedings of SPIE - The International Society for Optical Engineering 8168 , art. no. 1, 2011.

7. Liu, P., Liang, Y., Lin, X., Wang, C., Yang, G.  
A General Strategy To Fabricate Simple Polyoxometalate Nanostructures: Electrochemistry-Assisted Laser Ablation in Liquid  
ACS NANO 5 (6) Pages: 4748-4755, JUN 2011.

6. Pan, W., Tian, R., Jin, H., Guo, Y., Zhang, L., Wu, X., Zhang, L., (...), Chu, W.  
Structure, Optical, and Catalytic Properties of Novel Hexagonal Metastable h-MoO(3) Nano- and Microrods Synthesized with Modified  
Liquid-Phase Processes  
CHEMISTRY OF MATERIALS 22 (22) Pages: 6202-6208, NOV 23 2010.

5. Chu, W.G., Wang, H.F., Guo, Y.J., Zhang, L.N., Han, Z.H., Li, Q.Q., Fan, S.S.  
Catalyst-free growth of quasi-aligned nanorods of single crystal Cu<sub>3</sub>Mo<sub>2</sub>O<sub>9</sub> and their catalytic properties  
Inorganic Chemistry 48 (3), pp. 1243-1249 (2009).

4. Granqvist, C.G  
Transparent conductors as solar energy materials: A panoramic review  
Solar Energy Materials and Solar Cells 91 (17), pp. 1529-1598 (2007)

3. Chu, W.G., Zhang, L.N., Wang, H.F., Han, Z.H., Han, D., Li, Q.Q., Fan, S.S  
Direct thermal oxidation evaporation growth, structure, and optical properties of single-crystalline nanobelts of molybdenum trioxide  
Journal of Materials Research 22 (6), pp. 1609-1617 (2007)

2. Niklasson GA, Granqvist CG  
Electrochromics for smart windows: thin films of tungsten oxide and nickel oxide, and devices based on these  
JOURNAL OF MATERIALS CHEMISTRY 17 (2): 127-156 (2007).

1. Saad, E.A.-F.I.  
Dielectric properties of molybdenum oxide thin films  
Journal of Optoelectronics and Advanced Materials 7 (5), pp. 2743-2752 (2005)

## 52. "Resonant Raman scattering in ion-beam-synthesized Mg<sub>2</sub>Si in a silicon matrix"

M. Baleva, G. Zlateva, A. Atanassov, M. Abrashev, and E. Goranova  
Phys. Rev. B 72, 115330 (2005)

54. Sekino, K., Shimura, Y., Takahashi, N., Tatsuoka, H.  
Synthesis of Mg<sub>2</sub>Si<sub>1-x</sub>Ge<sub>x</sub> solid-solution nanostructures by thermal annealing of CaSi<sub>2</sub> crystal powders with Ge and MgCl<sub>2</sub>/Mg  
Japanese Journal of Applied Physics 62(SD),SD1022 (2023)

53. Yu, H., Deng, R., Mo, Z., Ji, S., Xie, Q.  
Fabrication and Characterization of Visible to Near-Infrared Photodetector Based on Multilayer Graphene/Mg<sub>2</sub>Si/Si Heterojunction  
Nanomaterials 12(18),3230 (2022)

52. Assahsahi, I., Popescu, B., Enculescu, M., (...), Zejli, D., Galatanu, A.  
Influence of the synthesis parameters on the transport properties of Mg<sub>2</sub>Si<sub>0.4</sub>Sn<sub>0.6</sub> solid solutions produced by melting and spark plasma  
sintering  
Journal of Physics and Chemistry of Solids 163,110561 (2022)

51. Zhu, Q., Ye, P., Tang, Y., (...), Xu, J., Xu, M.  
High-performance broadband photoresponse of self-powered Mg<sub>2</sub>Si/Si photodetectors  
Nanotechnology 33(11),115202 (2022)

50. Liao, Y., Xie, Q.  
Investigation of XRD and Raman Spectroscopy of Mg<sub>2</sub>Si Thin Film Grown on Si(111) Substrate

- Guti Dianzixue Yanjiu Yu Jinzhan/Research and Progress of Solid State Electronics 41(5), pp. 376-381 (2021)
49. Liao, Y., Xie, Q.  
Effects of Sputtering Power and Sputtering Time on the Structure and Resistivity of Mg<sub>2</sub>Si Nanocrystalline Thin Films  
Rengong Jingti Xuebao/Journal of Synthetic Crystals 50(9), pp. 1675-1680 (2021)
48. Fine structural and photoluminescence properties of Mg<sub>2</sub>Si nanosheet bundles rooted on Si substrates  
Koga, Tomoya; Tamaki, Ryo; Meng, Xiang; et al.  
JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 60 Issue: SB Supplement: B Article Number: SBBK07 Published: MAY 1 2021
47. Improving Interface Stability of Si Anodes by Mg Coating in Li-Ion Batteries  
Li, Zhifei; Stetson, Caleb; Teeter, Glenn; et al.  
ACS APPLIED ENERGY MATERIALS Volume: 3 Issue: 12 Pages: 11534-11539 Published: DEC 28 2020
46. Highly Porous Magnesium Silicide Honeycombs Prepared by Magnesium Vapor Annealing of Silica-Coated Polymer Honeycomb Films toward Ultralightweight Thermoelectric Materials  
Yabu, Hiroshi; Matsuo, Yasutaka; Yamada, Takahiro; et al.  
CHEMISTRY OF MATERIALS Volume: 32 Issue: 23 Pages: 10176-10183 Published: DEC 8 2020
45. Research on Mg<sub>2</sub>Si films prepared using thermal evaporation with Al doping  
Yu, H., Zheng, L., Ji, S.T., (...), Gao, C.G., Wu, X.P.  
Proceedings of SPIE - The International Society for Optical Engineering 11606,1160618 (2020)
44. Formation of Crystallographically Oriented Metastable Mg<sub>1.8</sub>Si in Mg Ion-Implanted Si  
Kobayashi, Yuki; Naito, Muneyuki; Sudoh, Koichi; et al.  
CRYSTAL GROWTH & DESIGN Volume: 19 Issue: 12 Pages: 7138-7142 Published: DEC 2019
43. Influences of Nd doping on preparing Mg<sub>2</sub>Si semiconductor thin films by thermal evaporation  
Yu, Hong; Luo, Yuee; Wang, Xuewen; et al.  
MICRO & NANO LETTERS Volume: 14 Issue: 7 Pages: 737-739 Published: JUN 26 2019
42. Effects of La doping on Mg<sub>2</sub>Si semiconductor thin films prepared by thermal evaporation  
Yu, Hong; Luo, Yuee; Wang, Xuewen; et al.  
MATERIALS RESEARCH EXPRESS Volume: 6 Issue: 2 Article Number: 026301 Published: FEB 2019
41. First-principles study of pressure-induced phase transformations in thermoelectric Mg<sub>2</sub>Si  
Ji, Depeng; Chong, Xiao Yu; Ge, Zhen-Hua; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 773 Pages: 988-996 Published: JAN 30 2019
40. Titanium-based thin films for protective coatings prepared by TVA (Thermionic Vacuum Arc) technology  
Vladoiu, R., Mandes, A., Dinca, V., Prodan, G.  
MATEC Web of Conferences 249,01005 (2018)
39. Defect-induced room-temperature visible light luminescence in Mg<sub>2</sub>Si:Al films  
Liao, Yangfang; Fan, Menghui; Xie, Quan; et al.  
APPLIED SURFACE SCIENCE Volume: 458 Pages: 360-368 Published: NOV 15 2018
38. Amorphous magnesium silicide  
Durandurdu, Murat  
JOURNAL OF NON-CRYSTALLINE SOLIDS Volume: 498 Pages: 118-124 Published: OCT 15 2018
37. Growth of (111)-oriented epitaxial magnesium silicide (Mg<sub>2</sub>Si) films on (001) Al<sub>2</sub>O<sub>3</sub> substrates by RF magnetron sputtering and their properties  
Katagiri, Atsuo; Ogawa, Shota; Uehara, Mutsuo; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 53 Issue: 7 Pages: 5151-5158 Published: APR 2018
36. Fabrication and Electrical Properties of Mg<sub>2</sub>Si Films on Soda Lime Glass  
Fang, D., Xiao, Q., Liao, Y., (...), Wang, S., Wu, H.  
Cailiao Daobao/Materials Review 31(2), pp. 9-13 (2017)
35. Wang, J. L.; Zhang, S. J.; Liu, Y.; et al.  
Pressure-induced metallization in Mg<sub>2</sub>Si  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 50 Issue: 23 Article Number: 235304 Published: JUN 14 2017
34. Liao, Yang-Fang; Xie, Quan; Xiao, Qing-Quan; et al.  
Photoluminescence of Mg<sub>2</sub>Si films fabricated by magnetron sputtering  
APPLIED SURFACE SCIENCE Volume: 403 Pages: 302-307 Published: MAY 1 2017
33. Luniakov, Y.V.  
Mg<sub>2</sub>si under pressure: Dft evolutionary search results  
Solid State Phenomena 249, 9-16 DOI: 10.4028/www.scientific.net/SSP.249.9 (2016)
32. Stefanaki, E.-C., Hatzikraniotis, E., Vourlias, G., Chrissafis, K., Kitis, G., Paraskevopoulos, K.M., Polymeris, G.S.  
Thermal Stability Study from Room Temperature to 1273 K (1000 A degrees C) in Magnesium Silicide

31. Chernev, IM, Shevlyagin, AV, Galkin, KN, Stuchlik, J, Remes, Z, Fajgar, R, Galkin  
On the way to enhance the optical absorption of a-Si in NIR by embedding Mg<sub>2</sub>Si thin film  
APPLIED PHYSICS LETTERS Volume: 109 Issue: 4 Article Number: 043902 DOI: 10.1063/1.4960011 Published: JUL 25 2016
30. Schmuelling, G., Winter, M., Placke, T.  
Investigating the Mg-Si Binary System via Combinatorial Sputter Deposition As High Energy Density Anodes for Lithium-Ion Batteries  
ACS APPLIED MATERIALS & INTERFACES Volume: 7 Issue: 36 Pages: 20124-20133 DOI: 10.1021/acsami.5b05382 Published: SEP 16 2015
29. Katagiri, Atsuo; Ogawa, Shota; Oikawa, Takahiro; et al.  
Structural characterization of epitaxial Mg<sub>2</sub>Si films grown on MgO and MgO-buffered Al<sub>2</sub>O<sub>3</sub> substrates  
JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 54 Issue: 7 Special Issue: 2 Article Number: 07JC01 Published: JUL 2015
28. Balout, H.; Boulet, P.; Record, M. -C.  
Polycrystalline Mg<sub>2</sub>Si thin films: A theoretical investigation of their electronic transport properties  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 225 Pages: 174-180 Published: MAY 2015
27. Yang, M., Wang, C., Shen, Q.  
Growth and microstructures characterization of pulsed laser deposited Mg<sub>2</sub>Si thin film on Si(111) substrate  
Zhenkong Kexue yu Jishu Xuebao/Journal of Vacuum Science and Technology 34(10), 1112-1117 DOI: 10.13922/j.cnki.cjovst.2014.10.20 (2014)
26. Katagiri, A., Ogawa, S., Shimizu, T., Matsushima, M., Akiyama, K., Funakubo, H.  
High temperature reproducible preparation of Mg<sub>2</sub>Si films on (001)Al<sub>2</sub>O<sub>3</sub> substrates using RF magnetron sputtering method  
Materials Research Society Symposium Proceedings 1642 January, 36-41 DOI: 10.1557/opl.2014.44 (2014)
25. Xie, Zheng; Liu, Xiangxuan; Wang, Weipeng; et al.  
Enhanced photoelectrochemical properties of TiO<sub>2</sub> nanorod arrays decorated with CdS nanoparticles  
SCIENCE AND TECHNOLOGY OF ADVANCED MATERIALS Volume: 15 Issue: 5 Article Number: 055006 Published: OCT 2014
24. Polymeris, G. S.; Theodorakakos, A.; Mars, K.; et al.  
Comparing Doping Methodologies in Mg<sub>2</sub>Si/AgMg System  
JOURNAL OF ELECTRONIC MATERIALS 43 (10), pp. 3876-3883 OCT 2014
23. Morozova, Natalia V.; Ovsyannikov, Sergey V.; Korobeinikov, Igor V.; et al.  
Significant enhancement of thermoelectric properties and metallization of Al-doped Mg<sub>2</sub>Si under pressure  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 213705 JUN 7 2014
22. Balout, Hilal; Boulet, Pascal; Record, Marie-Christine  
Effect of Biaxial Strain on Electronic and Thermoelectric Properties of Mg<sub>2</sub>Si  
JOURNAL OF ELECTRONIC MATERIALS 42 (12), pp. 3458-3466 DEC 2013
21. Stathokostopoulos, D.; Chaliampalias, D.; Stefanaki, E. C.; et al.  
Structure, morphology and electrical properties of Mg<sub>2</sub>Si layers deposited by pack cementation  
APPLIED SURFACE SCIENCE 285, pp. 417-424 Part: B NOV 15 2013
20. Akiyama, Kensuke; Katagiri, Atsuo; Ogawa, Shota; et al.  
Epitaxial growth of Mg<sub>2</sub>Si films on strontium titanate single crystals  
Physica Status Solidi C-Current Topics in Solid State Physics 10 (12), pp. 1688-1691 2013
19. Yu, H.; Xie, Q.; Chen, Q.  
Effects of annealing on the formation of Mg<sub>2</sub>Si film prepared by resistive thermal evaporation method  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (10), 3768-3775, OCT 2013
18. Udono, Haruhiko; Yamanaka, Yusuke; Uchikoshi, Masahito; et al.  
Infrared photoresponse from pn-junction Mg<sub>2</sub>Si diodes fabricated by thermal diffusion  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 74 (2), 311-314, FEB 2013
17. Yu, Z., Xie, Q.  
Effects of sputtering power on preferred orientation of semiconductor optoelectronics Mg<sub>2</sub>Si films  
Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 35 (3), pp. 438-440, 2013
16. Yu, H., Xie, Q., Xiao, Q.-Q., Chen, Q.  
Thermal evaporation method of semiconducting Mg<sub>2</sub>Si films  
Gongneng Cailiao/Journal of Functional Materials 44 (8), pp. 1204-1207, 2013
15. Xiao, Q.-Q., Xie, Q., Shen, X.-Q., Zhang, J.-M., Chen, Q.  
Preparation of single phase semiconducting Mg<sub>2</sub>Si film on Si substrate by low vacuum heat treatment  
Gongneng Cailiao/Journal of Functional Materials 44 (4), pp. 585-589, 2013
14. Zhu, Feng; Wu, Xiang; Qin, Shan; et al.

A re-investigation on pressure-induced phase transition of Mg<sub>2</sub>Si  
SOLID STATE COMMUNICATIONS 152 (24), 2160-2164, DEC 2012

13. Zhang, C., Yu, Z.

Effects of sputtering power on the fabrication of Mg<sub>2</sub>Si films

Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 34 (2) , pp. 273-275, 2012.

12. Yu, R., Zhai, P., Li, G., Liu, L.

Molecular dynamics simulation of the mechanical properties of single-crystal bulk Mg<sub>2</sub>Si

Journal of Electronic Materials 41 (6) , pp. 1465-1469, 2012.

11. Ren Wanbin; Han Yonghao; Liu Cailong; et al.

Pressure-induced semiconductor-metal phase transition in Mg<sub>2</sub>Si

SOLID STATE COMMUNICATIONS 152 (5), 440-442, MAR 2012.

10. Zhong, J., Yu, Z., Zhang, C., Yang, Q.

Study on epitaxial growth of Mg<sub>2</sub>Si film on Si (100) substrate

Yadian Yu Shengguang/Piezoelectrics and Acoustooptics 34 (1), 133-135, 2012.

9. Loannou M.; Hatzikranielis E.; Lioutas Ch.; et al.

Fabrication of nanocrystalline Mg<sub>2</sub>Si via ball milling process: Structural studies

POWDER TECHNOLOGY 217, 523-532, FEB 2012.

8. Kato, T., Sago, Y., Fujiwara, H.

Optoelectronic properties of Mg<sub>2</sub>Si semiconducting layers with high absorption coefficients

Journal of Applied Physics 110 (6) , art. no. 063723, 2011.

7. Zhang, C., Yua, Z.

Effects of sputtering power on the microstructure of Mg<sub>2</sub>Si films by magnetron sputtering

Advanced Materials Research 287-290, 2298-2301, 2011.

6. Yu Ben-Hai; Liu Mo-Lin; Chen Dong

First principles study of structural, electronic and elastic properties of Mg(2)Si polymorphs

ACTA PHYSICA SINICA 60 (8) Article Number: 087105, AUG 2011.

5. Yu Ben-Hai; Peng Feng; Chen Dong; et al.

Periodic DFT calculation of the pressure-induced phase transition and thermodynamical properties of magnesium silicide polymorphs

PHYSICA B-CONDENSED MATTER 406 (11) Pages: 2070-2076, MAY 15 2011.

4. Yu Ben-Hai; Chen Dong

Phase transition, structural and thermodynamic properties of Mg(2)Si polymorphs

CHINESE PHYSICS B 20 (3) Article Number: 030508, MAR 2011.

3. Hao Jun-Hua; Guo Zhi-Guang; Jin Qing-Hua

First principles calculation of structural phase transformation in Mg(2)Si at high pressure

SOLID STATE COMMUNICATIONS 150 (47-48) Pages: 2299-2302. DEC 2010.

2. Yu Benhai; Chen Dong; Tang Qingbin; et al.

Structural, electronic, elastic and thermal properties of Mg(2)Si

JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 71 (5) Pages: 758-763, MAY 2010.

1. Hao Jian; Zou Bo; Zhu Pinwen; et al.

In situ X-ray observation of phase transitions in Mg(2)Si under high pressure

SOLID STATE COMMUNICATIONS 149 (17-18), 689-692, MAY 2009.

53. “*Low-temperature CVD-process for growing of electrochromic chromium oxide thin films*”

T. Ivanova, K. A. Gesheva, E. Steinman, and M. Abrashev

Proceedings – Electrochemical Society PV 2005-09, 928-935 (2005).

54. “*Distortion-dependent Raman spectra and mode mixing in RMnO<sub>3</sub> perovskites (R=La,Pr,Nd,Sm,Eu,Gd,Tb,Dy,Ho,Y)*”

M. N. Iliev, M. V. Abrashev, J. Laverdière, S. Jandl, M. M. Gospodinov, Y.-Q. Wang, and Y.-Y. Sun  
Phys. Rev. B 73, 064302 (2006).

219. Zheng, R., Zhou, Y., Liu, L., (...), Chang, A., Zhao, P.

Crystallographic dependence of the electrical transport mechanism in La-Mn-O thermosensitive thin films

Journal of Alloys and Compounds 973,172933 (2024)

218. Feng, M., Lin, J., Li, J., Chen, X., Zheng, Y.

Magnesium-enhanced redox property and surface acidity-basicity of LaMnO<sub>3</sub> perovskites for efficient methane purification

Separation and Purification Technology 330,125391 (2024)

217. Lakhani, P., Solanki, P., Vala, M., (...), Markna, J.H., Kataria, B.

- Complex dielectric and impedance analysis in Dy<sub>1-x</sub>Pr<sub>x</sub>MnO<sub>3</sub> compounds: Partial substitution effects  
Ceramics International 50(2), pp. 3351-3365 (2024)
216. Achour, A., Abba, M., Zelikha, N., (...), Hayet, M., Hamadi, K.  
Synthesis and characterization of mixed oxides derived from lanthanum orthoferrite perovskite: exploring morphological, spectroscopic, and photocatalytic properties  
Journal of Coordination Chemistry (Article in Press) DOI: 10.1080/00958972.2024.2330098 (2024)
215. Sediva, E., Rupp, J.L.M.  
Raman spectra and defect chemical characteristics of Sr(Ti,Fe)O<sub>3-y</sub> solid solution of bulk pellets vs. thin films  
Journal of Materials Chemistry A 11(48), pp. 26752-26763 (2023)
214. Gu, X., Wu, K., Zhao, L., (...), Chen, Q., Liu, X.  
Optimized electrical transport properties of La<sub>0.7</sub>Ca<sub>0.18</sub>Sr<sub>0.12</sub>MnO<sub>3</sub> film by adjusting sintering temperature  
Ceramics International 49(20), pp. 32936-32945 (2023)
213. Kovaleva, N.N.  
Lattice-dynamics study of Raman-active modes in LaTiO<sub>3</sub>  
Physics Letters, Section A: General, Atomic and Solid State Physics 479,128942 (2023)
212. Romaguera-Barcelay, Y., Figueiras, F.G., Govea-Alcaide, E., (...), Tavares, P.B., de la Cruz, J.P.  
Effects of Substitution and Substrate Strain on the Structure and Properties of Orthorhombic Eu<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 0.5) Thin Films  
Materials 16(13),4553 (2023)
211. Maneesha, P., Chandra Baral, S., Rini, E.G., Sen, S.  
An overview of the recent developments in the structural correlation of magnetic and electrical properties of Pr<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
Progress in Solid State Chemistry 70,100402 (2023)
210. Kozlenko, D.P., Lukin, E.V., Kichanov, S.E., (...), Golosova, N.O., Savenko, B.N.  
High-pressure evolution of the magnetic order in LaMnO<sub>3</sub>  
Physical Review B 107(14),144426 (2023)
209. Maia, A., Vilarinho, R., Kadlec, C., (...), Moreira, J.A., Kamba, S.  
Modifying the magnetoelectric coupling in TbMnO<sub>3</sub> by low-level Fe<sup>3+</sup> substitution  
Physical Review B 107(10),104410 (2023)
208. Manchón-Gordón, A.F., Sánchez-Jiménez, P.E., Blázquez, J.S., Perejón, A., Pérez-Maqueda, L.A.  
Structural, Vibrational, and Magnetic Characterization of Orthoferrite LaFeO<sub>3</sub> Ceramic Prepared by Reaction Flash Sintering  
Materials 16(3),1019 (2023)
207. Wei, H., Chen, X., Wu, Y., Cao, B.  
Controlling the electronic and magnetic properties in epitaxial LaMnO<sub>3</sub>/LaScO<sub>3</sub> superlattices  
Journal of Physics D: Applied Physics 55(49),495112 (2022)
206. Sedykh, V., Rybchenko, O., Rusakov, V., (...), Pchelina, D., Kulakov, V.  
Role of Fe atom valence states and oxygen vacancies in substituted lanthanum ferrite La<sub>0.67</sub>Sr<sub>0.33</sub>FeO<sub>3-γ</sub>  
Journal of Physics and Chemistry of Solids 171,111001 (2022)
205. Guan, X., Li, H., Yu, Z., (...), Gu, X., Liu, X.  
Tuning room-temperature TCR of La<sub>0.7</sub>K<sub>0.32</sub>xSrxMnO<sub>3</sub> (0.00 ≤ x ≤ 0.3) films by K and Sr co-occupying A-site  
Applied Physics Letters 121(20),202203 (2022)
204. Pant, P., Agarwal, H., Bharadwaj, S., Shaz, M.A.  
Effects of Cr and Fe substitution at Mn-sites of GdMn<sub>1-x</sub>TxO<sub>3</sub> (x = 0, 0.10) on its structural and complex dielectric properties  
Materials Chemistry and Physics 290,126518 (2022)
203. Safarina, G.A., Kim, Y.-J., Yang, C.-H.  
Possible absence of a Jahn-Teller distortion critical thickness in geometrically designed LaMnO<sub>3</sub> films  
Physical Review B 106(13),134310 (2022)
202. Li, J.-H., Sun, G.-H., Zhang, Q.-L., (...), Chen, Z., Yin, S.-T.  
Effect of annealing atmosphere on the structure and spectral properties of GdScO<sub>3</sub> and Yb:GdScO<sub>3</sub> crystals  
Wuli Xuebao/Acta Physica Sinica 71(16),164206 (2022)
201. Chen, H., Zheng, D., Wang, Y., (...), Li, Z., Bai, H.  
Secondary insulator-to-metal transition and magnetic properties in epitaxial La<sub>0.92</sub>Sr<sub>0.08</sub>MnO<sub>3</sub> films  
Physical Review B 106(6),064103 (2022)
200. Pant, P., Agarwal, H., Bharadwaj, S., Shaz, M.A.  
Low-temperature investigation of conduction mechanism and dielectric properties in polycrystalline Gd<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub>  
Journal of Materials Science: Materials in Electronics 33(23), pp. 18871-18883 (2022)
199. Yang, J., Liu, H., Wang, L., (...), Zheng, K., Huo, J.  
Visible-light photoelectric performance of RMnO<sub>3</sub> (R = La, Pr and Nd) epitaxial films with structural distortion  
Ceramics International 48(14), pp. 20555-20562 (2022)

198. Zhang, A.M., Cao, H.F., Pan, X.X., Zhu, J.J., Wu, X.S.  
Strain-modulated structure distortion and magnetic properties of orthorhombic LuMnO<sub>3</sub> thin films  
Thin Solid Films 750,139186 (2022)
197. Tarasova, N., Galisheva, A., Animitsa, I., Korona, D., Davletbaev, K.  
Novel proton-conducting layered perovskite based on BaLaInO<sub>4</sub> with two different cations in B-sublattice: Synthesis, hydration, ionic (O<sup>2-</sup>, H<sup>+</sup>) conductivity  
International Journal of Hydrogen Energy 47(44), pp. 18972-18982 (2022)
196. Graham, P.J., Rovillain, P., Bartkowiak, M., (...), Kenzelmann, M., Ulrich, C.  
Spin-phonon and magnetoelectric coupling in oxygen-isotope substituted TbMnO<sub>3</sub> investigated by Raman scattering  
Physical Review B 105(17),174438 (2022)
195. Kumar, R., Singh, K.D., Kumar, R.  
Effect of Sr substitution on structural properties of LaCrO<sub>3</sub> perovskite  
Journal of Materials Science: Materials in Electronics 33(15), pp. 12039-12052 (2022)
194. Guan, X., Li, H., Gu, X., (...), Yu, X., Liu, X.  
A-site Ca/Sr co-doping to optimize room-temperature TCR of La<sub>0.7</sub>Ca<sub>0.3-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> films  
Ceramics International 48(8), pp. 11094-11102 (2022)
193. Das, S., Tanguturi, R.G., Ghosh, S., (...), Rawat, R.S., Thota, S.  
Substrate orientation dependent characteristics of half-metallic and metallic superlattices [La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>/LaNiO<sub>3</sub>]<sub>10</sub>  
Journal of Applied Physics 131(12),125305 (2022)
192. Chen, X., Wang, B., Ge, T., Wei, H., Cao, B.  
Modifying Jahn-Teller distortion by epitaxial stress in LaMnO<sub>3</sub>films for tuning electron localization  
Journal of Physics Condensed Matter 34(10),105401 (2022)
191. Lakshmi, R.V., Bera, P., Hiremath, M., (...), Kundu, A.K., Barshilia, H.C.  
Structural, magnetic, and dielectric properties of solution combustion synthesized LaFeO<sub>3</sub>, LaFe<sub>0.9</sub>Mn<sub>0.1</sub>O<sub>3</sub>, and LaMnO<sub>3</sub> perovskites  
Physical Chemistry Chemical Physics 24(9), pp. 5462-5478 (2022)
190. Guan, X., Li, H., Yu, Z., (...), Gu, X., Liu, X.  
High-performance La<sub>0.75</sub>K<sub>0.25</sub>MnO<sub>3</sub>:xAg<sub>2</sub>O composites based on electron-lattice and electron-magnetic coupling mechanism  
Journal of Alloys and Compounds 895,162555 (2022)
189. Kim, Y.-J., Lee, C., Park, H.-S., (...), Shim, J.H., Yang, C.-H.  
Orbital Order Melting at Reduced Dimensions  
Nano Letters 22(3), pp. 1059-1066 (2022)
188. Zhang, H., Wang, Y., Wang, H., Huo, D., Tan, W.  
Room-temperature magnetoresistive and magnetocaloric effect in La<sub>1-x</sub>Ba<sub>x</sub>MnO<sub>3</sub>compounds: Role of Griffiths phase with ferromagnetic metal cluster above Curie temperature  
Journal of Applied Physics 131(4),043901 (2022)
187. Tozri, A., Alhalafi, S., Alrowaili, Z.A., (...), Costa, B.F.O., Ildiz, G.O.  
Investigation of the magnetocaloric effect and the critical behavior of the interacting superparamagnetic nanoparticles of La<sub>0.8</sub>Sr<sub>0.15</sub>Na<sub>0.05</sub>MnO<sub>3</sub>  
Journal of Alloys and Compounds 890,161739 (2022)
186. Ravichandran, H., Irusan, B., Balaraman, S., (...), Krishnamoorthy, S., Elayaperumal, M.  
Microwave assisted synthesis and characterization of Fe<sup>3+</sup>-O-Fe<sup>3+</sup> sublattice magnetic moment influencing ferromagnetism exhibited erbium orthoferrite sublattice (ErFeO<sub>3</sub>) perovskite nanopowders  
Journal of Alloys and Compounds 890,161825 (2022)
185. Safarina, G.A., Kim, Y.-J., Park, H.-S., Yang, C.-H.  
Raman spectroscopy of the Jahn-Teller phonons in a magnetic LaMnO<sub>3</sub>thin film grown on KTaO<sub>3</sub>  
Journal of Applied Physics 131(2),025302 (2022)
184. Liu, B., Liu, C., Zou, X., (...), Li, J., Jia, L.  
Proton uptake and proton distribution in perovskite materials for protonic ceramic fuel cell applications  
Russian Chemical Reviews 91(11),RCR5063 (2022)
183. Liu, X., Mi, J., Shi, L., (...), Chen, J., Li, J.  
In Situ Modulation of A-Site Vacancies in LaMnO<sub>3.15</sub> Perovskite for Surface Lattice Oxygen Activation and Boosted Redox Reactions  
Angewandte Chemie - International Edition 60(51), pp. 26747-26754 (2021)
182. Kim, Y.-J., Park, H.-S., Yang, C.-H.  
Raman imaging of ferroelastically configurable Jahn-Teller domains in LaMnO<sub>3</sub>  
npj Quantum Materials 6(1),62 (2021)
181. Wang, M., Dai, H., Li, T., (...), Ping, T., He, J.  
The evolution of structure and properties in GdMn(1-x)Ti<sub>x</sub>O<sub>3</sub> ceramics  
Journal of Materials Science: Materials in Electronics 32(23), pp. 27348-27361 (2021)

180. Ghosh, S., Rana, D., Pradhan, B., (...), Hofkens, J., Materny, A.  
Vibrational study of lead bromide perovskite materials with variable cations based on Raman spectroscopy and density functional theory  
Journal of Raman Spectroscopy 52(12), pp. 2338-2347 (2021)
179. Karoblis, D., Zarkov, A., Garskaite, E., (...), Beganskiene, A., Kareiva, A.  
Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
Scientific Reports 11(1),2875 (2021)
178. Prusty, A., Mahana, S., Gloskovskii, A., Topwal, D., Manju, U.  
Gd induced modifications in the magnetocaloric properties of dysprosium manganites  
Journal of Alloys and Compounds 883,160862 (2021)
177. Bhadram, V.S., Joseph, B., Delmonte, D., (...), Lobo, R.P., Gauzzi, A.  
Pressure-induced structural phase transition and suppression of Jahn-Teller distortion in the quadruple perovskite structure  
Physical Review Materials 5(10),104411 (2021)
176. Bhadram, V.S., Sen, A., Sunil, J., (...), Sundaresan, A., Narayana, C.  
Pressure-driven evolution of structural distortions in RCrO<sub>3</sub> perovskites: The curious case of LaCrO<sub>3</sub>  
Solid State Sciences 119,106708 (2021)
175. Maity, R., Dutta, A., Halder, S., (...), Mandal, K., Sinha, T.P.  
Enhanced photocatalytic activity, transport properties and electronic structure of Mn doped GdFeO<sub>3</sub> synthesized using the sol-gel process  
Physical Chemistry Chemical Physics 23(30), pp. 16060-16076 (2021)
174. Electrochemical and magnetic properties of perovskite type RMnO<sub>3</sub> (R = La, Nd, Sm, Eu) nanofibers  
Hu, Q., Yue, B., Yang, F., (...), Wang, Y., Liu, J.  
Journal of Alloys and Compounds 872,159727 (2021)
173. Spin-phonon coupling in the incommensurate magnetic ordered phase of orthorhombic TmMnO<sub>3</sub>  
Araújo, B.S., Arévalo-López, A.M., Santos, C.C., (...), Paschoal, C.W.A., Ayala, A.P.  
Journal of Physics and Chemistry of Solids 154,110044 (2021)
172. Exploiting novel optical thermometry near room temperature with a combination of phase-change host and luminescent Pr<sup>3+</sup> ion  
Wang, S., Zhang, J., Ye, Z., Yu, H., Zhang, H.  
Chemical Engineering Journal 414,128884 (2021)
171. Tuning Jahn-Teller distortion and electron localization of LaMnO<sub>3</sub> epitaxial films via substrate temperature  
Chen, Xin; Wang, Baohua; Chen, Yang; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 23 Article Number: 235302 Published: JUN 10 2021
170. Epitaxial LaMnO<sub>3</sub> films with remarkably fast oxygen transport properties at low temperature  
Rodriguez-Lamas, Raquel; Pirovano, Caroline; Stangl, Alexander; et al.  
JOURNAL OF MATERIALS CHEMISTRY A Early Access: MAY 2021
169. Vibrational study of lead bromide perovskite materials with variable cations based on Raman spectroscopy and density functional theory  
Ghosh, Supriya; Rana, Debkumar; Pradhan, Bapi; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Early Access: MAY 2021
168. Structure-property correlations and scaling in the magnetic and magnetocaloric properties of GdCrO<sub>3</sub> particles  
Shi, Jianhang; Sauyet, Theodore; Dang, Yanliu; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 33 Issue: 20 Article Number: 205801 Published: MAY 19 2021
167. A comparative study of the structural, optical, magnetic and magnetocaloric properties of HoCrO<sub>3</sub> and HoCr<sub>0.85</sub>Mn<sub>0.15</sub>O<sub>3</sub> orthochromites  
Kanwar, Komal; Coondoo, Indrani; Anas, M.; et al.  
CERAMICS INTERNATIONAL Volume: 47 Issue: 6 Pages: 7386-7397 Published: MAR 15 2021
166. Constructing Electron Levers in Perovskite Nanocrystals to Regulate the Local Electron Density for Intensive Chemodynamic Therapy  
Zhao, Peiran; Jiang, Yaqin; Tang, Zhongmin; et al.  
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION Volume: 60 Issue: 16 Pages: 8905-8912 Published: APR 12 2021
165. Spectroscopic and transport properties of Ba- and Ti-doped BaLaInO<sub>4</sub>  
Tarasova, N.; Galisheva, A.; Animitsa, I  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 5 Pages: 980-987 Published: MAY 2021
164. Study of gadolinium substitution effects in hexagonal yttrium manganite YMnO<sub>3</sub>  
Karoblis, Dovydas; Zarkov, Aleksej; Garskaite, Edita; et al.  
SCIENTIFIC REPORTS Volume: 11 Issue: 1 Article Number: 2875 Published: FEB 3 2021
163. Magnetic and Magnetocaloric Properties of Multiferroic Oxides Gd<sub>0.5</sub>Y<sub>0.5</sub>MnO<sub>3</sub> and Eu<sub>0.5</sub>Dy<sub>0.5</sub>MnO<sub>3</sub>  
Behera, P. Suchismita; Nirmala, R.  
IEEE TRANSACTIONS ON MAGNETICS Volume: 57 Issue: 2 Article Number: 2200705 Published: FEB 2021



162. Strong Impact of Cr Doping on Structural and Magnetic Properties of  $\text{Bi}_{0.5}\text{La}_{0.5}\text{Fe}_{1-x}\text{Cr}_x\text{O}_3$ -delta  
Dang, N. T.; Rutkukas, A., V.; Kichanov, S. E.; et al.  
JOURNAL OF ELECTRONIC MATERIALS Volume: 50 Issue: 3 Special Issue: SI Pages: 1340-1348 Published: MAR 2021
161. New perovskite  $\text{Ba}_{0.7}\text{La}_{0.3}\text{Ti}_{0.55}\text{Fe}_{0.45}\text{O}_{3-\delta}$  prepared by citric sol-gel method: From structure to physical properties  
Bennour, I., Mohamed, M., Kabadou, A., Abdelmouleh, M.  
Journal of Molecular Structure 1217,128347 (2020)
160. Physical study of  $\text{PrCu}_{1-x}\text{Zn}_x\text{O}_3$  perovskite for  $0.0 \leq x \leq 0.3$   
Maayoufi, A. E.; Sdiri, N.; Valente, M. A.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 849 Article Number: 156239 Published: DEC 30 2020
159. Site substitution in  $\text{GdMnO}_3$ : Effects on structural, electronic, and magnetic properties  
Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020
158. Field-driven spin reorientation in  $\text{SmMnO}_3$  polycrystalline powders  
Mantilla, John; Morales, Marco; Venceslau, Wenderson; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 845 Article Number: 156327 Published: DEC 10 2020
157. Heterometallic 3d-4f Complexes as Air-Stable Molecular Precursors in Low Temperature Syntheses of Stoichiometric Rare-Earth Orthoferrite Powders  
Alsowaygh, Marwah M.; Timco, Grigore A.; Borilovic, Ivana; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 21 Pages: 15796-15806 Published: NOV 2 2020
156. Synthesis, structural and optical properties of  $\text{LaFe}_{1-x}\text{Cr}_x\text{O}_3$  nanoparticles  
Rachid, F. Z.; Omari, L. H.; Lassri, H.; et al.  
OPTICAL MATERIALS Volume: 109 Article Number: 110332 Published: NOV 2020
155. The effect of rare-earth Gd-substitution on the structural, magnetic and specific heat properties in orthorhombic  $\text{DyMnO}_3$  ceramics  
Bhoi, Krishnamayee; Patidar, Manju Mishra; Krishnan, M.; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 40 Article Number: 405301 Published: SEP 30 2020
154. Effect of doping on the local structure of new block-layered proton conductors based on  $\text{BaLaInO}_4$   
Tarasova, N.; Animitsa, I.; Galisheva, A.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020
153. Strain healing of spin-orbit coupling: a cause for enhanced magnetic moment in epitaxial  $\text{SrRuO}_3$  thin films  
Tyagi, Shekhar; Sathé, V. G.; Sharma, Gaurav; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 30 Article Number: 305501 Published: JUL 15 2020
152. Temperature-induced crystallinity and vibrational properties in samarium orthovanadate  
Varghese, Emin; Kumar, Sourabh; Pathak, Biswarup; et al.  
PHYSICAL REVIEW B Volume: 101 Issue: 17 Article Number: 174112 Published: MAY 21 2020
151. Spin-phonon coupling in monoclinic  $\text{BiCrO}_3$   
Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
150. X-ray diffraction and Raman spectroscopy for lead halide perovskites (Book Chapter)  
Rahman, M.Z., Edvinsson, T.  
Characterization Techniques for Perovskite Solar Cell Materials pp. 23-47 (2019)
149. Anomalous magnetic behavior and complex magnetic structure of proximate  $\text{LaCrO}_3$ - $\text{LaFeO}_3$  system  
Tiwari, Brajesh; Dixit, Ambesh; Rao, M. S. Ramachandra  
MATERIALS RESEARCH EXPRESS Volume: 6 Issue: 12 Article Number: 126119 Published: DEC 2019
148. A Griffiths-like phase and variable range hopping of polarons in orthorhombic perovskite  $\text{Pr}_2\text{CrMnO}_6$   
Aswathi, Kaipamangalath; Palakkal, Jasnamol P.; Lekshmi, P. Neenu; et al.  
NEW JOURNAL OF CHEMISTRY Volume: 43 Issue: 44 Pages: 17351-17357 Published: NOV 28 2019
147. Structure of nanocrystalline  $\text{Nd}_{0.5}\text{R}_{0.5}\text{FeO}_3$  (R=La, Pr, and Sm) intercorrelated with optical, magnetic and thermal properties  
Somvanshi, Anand; Husain, Shahid; Manzoor, Samiya; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 806 Pages: 1250-1259 Published: OCT 25 2019
146. Magnetic field-dependent low-energy magnon dynamics in  $\alpha$ - $\text{RuCl}_3$   
Ozel, Ilkem Ozge; Belvin, Carina A.; Baldini, Edoardo; et al.  
PHYSICAL REVIEW B Volume: 100 Issue: 8 Article Number: 085108 Published: AUG 2 2019
145. Fast preparation of  $\text{Ce}^{3+}$ -activated scandate for high-color-rendering warm white-light illumination by cation exchange  
Ma, Shuwei; Liu, Shuxin; Wang, Shuxian; et al.  
JOURNAL OF LUMINESCENCE Volume: 212 Pages: 361-367 Published: AUG 2019
144. Structural and magnetic phase transitions along with optical properties in  $\text{GdMn}_{1-x}\text{Fe}_x\text{O}_3$  perovskite  
Tiwari, Priyanka; Kumar, Sandeep; Rath, Chandana  
JOURNAL OF APPLIED PHYSICS Volume: 126 Issue: 4 Article Number: 045102 Published: JUL 28 2019

143. Structural and electrochemical properties of B-site Ru-doped  $(\text{La}_{0.8}\text{Sr}_{0.2})_{0.9}\text{Sc}_{0.2}\text{Mn}_{0.8}\text{O}_{3-\delta}$  as symmetrical electrodes for reversible solid oxide cells  
Zhou, Jun; Wang, Ning; Cui, Jiajia; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 792 Pages: 1132-1140 Published: JUL 5 2019
142. Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy  
Merten, S.; Bruchmann-Bamberg, V.; Damaschke, B.; et al.  
PHYSICAL REVIEW MATERIALS Volume: 3 Issue: 6 Article Number: 060401 Published: JUN 28 2019
141. Magnetic phase transition and multiferroic phase separation in  $\text{Ho}_{1-x}\text{Gd}_x\text{MnO}_3$   
Zhang, N.; Wang, Y. P.; Li, X.; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 8325-8332 Part: A Published: MAY 2019
140. Intrinsic structural distortion and magnetic interaction in  $\text{Lu}_x\text{Sm}_{1-x}\text{CrO}_3$  compounds  
Xiang, Zhongcheng; Ge, Shuaipeng; Huang, Yunxia; et al.  
SOLID STATE SCIENCES Volume: 89 Pages: 100-105 Published: MAR 2019
139. Phase separation and local lattice distortions analysis of charge-ordered manganese films  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_{3-\delta}$  by Raman spectroscopy  
Trotsenko, V. G.; Lahmar, A.; Lyanguzov, N. V.; et al.  
SUPERLATTICES AND MICROSTRUCTURES Volume: 127 Pages: 100-108 Published: MAR 2019
138. Crossover in the pressure evolution of elementary distortions in  $\text{RFeO}_3$  perovskites and its impact on their phase transition  
Vilarinho, R.; Bouvier, P.; Guennou, M.; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 6 Article Number: 064109 Published: FEB 25 2019
137. Magnetic-Field-Induced Suppression of Jahn-Teller Phonon Bands in  $(\text{La}_{0.6}\text{Pr}_{0.4})_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ : the Mechanism of Colossal Magnetoresistance shown by Raman Spectroscopy  
Merten, S.; Shapoval, O.; Damaschke, B.; et al.  
SCIENTIFIC REPORTS Volume: 9 Article Number: 2387 Published: FEB 20 2019
136. Study of crystal-field excitations and infrared active phonons in  $\text{TbMnO}_3$   
Mansouri, S., Jandl, S., Balli, M., (...), Balbashov, A., Orlita, M.  
Journal of Physics Condensed Matter 30(17),175602 (2018)
135. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates;  $\text{RCrO}_3$  (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi  
SOLID STATE SCIENCES Volume: 85 Pages: 70-75 Published: NOV 2018
134. Handling magnetic and structural properties of  $\text{EuMnO}_3$  thin films by the combined effect of Lu doping and substrate strain  
Romaguera-Barcelay, Y.; Figueiras, F. G.; Agostinho Moreira, J.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 762 Pages: 319-325 Published: SEP 25 2018
133. A Novel Wet-Chemical Route for Synthesis of Multiferroic  $\text{AMnO}_3$  (A = Gd, Tb, Dy) Particles and Its Structural, Optical and Magnetic Properties  
Qu, Nianrui; Li, Zhiping  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 31 Issue: 9 Pages: 2869-2877 Published: SEP 2018
132. Analysis of Zn substitution on structure, optical absorption, magnetization, and high temperature specific heat anomaly of the nano-crystalline  $\text{LaFeO}_3$   
Manzoor, Samiya; Husain, Shahid  
JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 6 Article Number: 065110 Published: AUG 14 2018
131. Observation of transient lattice disorder at the onset of multiferroic ordering in  $\text{Eu}_{1-x}\text{Ho}_x\text{MnO}_3$  by Raman spectroscopy  
Elsaesser, S.; Mukhin, A. A.; Balbashov, A. M.; et al.  
PHYSICAL REVIEW B Volume: 97 Issue: 22 Article Number: 224307 Published: JUN 25 2018
130. Rare earth indates (RE: La-Yb): influence of the synthesis route and heat treatment on the crystal structure  
Shukla, Rakesh; Grover, Vinita; Srinivasu, Kancharlapalli; et al.  
DALTON TRANSACTIONS Volume: 47 Issue: 19 Pages: 6787-6799 Published: MAY 21 2018
129. An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes  
Chen, Yu; Yoo, Seonyoung; Li, Xiayi; et al.  
NANO ENERGY Volume: 47 Pages: 474-480 Published: MAY 2018
128. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of  $\text{TbMn}_{1-x}\text{Fe}_x\text{O}_3$   
Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
PHYSICAL REVIEW B Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
127. Spin-phonon coupling in  $\text{HoCr}_{1-x}\text{Fe}_x\text{O}_3$  ( $x=0$  and  $0.5$ ) compounds  
Kotnana, Ganesh; Sathe, Vasant. G.; Jammalamadaka, S. Narayana  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 4 Pages: 764-770 Published: APR 2018

126. Lattice-mediated magnetic order melting in TbMnO<sub>3</sub>  
Baldini, Edoardo; Kubacka, Teresa; Mallett, Benjamin P. P.; et al.  
PHYSICAL REVIEW B Volume: 97 Issue: 12 Article Number: 125149 Published: MAR 27 2018
125. An In Situ Formed, Dual-Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells  
Chen, Yu; Yoo, Seonyoung; Pei, Kai; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 28 Issue: 5 Article Number: 1704907 Published: JAN 31 2018
124. Exchange bias effect in hybrid improper ferroelectricity Ca<sub>2.94</sub>Na<sub>0.06</sub>Mn<sub>2</sub>O<sub>7</sub>  
Li, Songyang; Wang, Shouyu; Lu, Yangong; et al.  
AIP ADVANCES Volume: 8 Issue: 1 Article Number: 015009 Published: JAN 2018
123. Structural and spectroscopic studies on HoCr<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> (x=0 and 0.5) Compounds  
Kotnana, Ganesh; Sathe, V. G.; Jammalamadaka, S. Narayana  
AIP Conference Proceedings Volume: 1942 Article Number: 090040 Published: 2018
122. Ac Conductivity And Raman Spectroscopic Studies Of PrMnO<sub>3</sub> Nanostructure  
Saha, Sujoy; Maity, Ritwik; Sakhya, Anup Pradhan; et al.  
MATERIALS TODAY-PROCEEDINGS Volume: 5 Issue: 3 Pages: 9981-9988 Part: 3 Published: 2018
121. Intrinsic structural distortion and exchange interactions in SmFe<sub>x</sub>Cr<sub>1-x</sub>O<sub>3</sub> compounds  
Xiang, Zhongcheng; Li, Wenping; Cui, Yimin  
RSC ADVANCES Volume: 8 Issue: 16 Pages: 8842-8848 Published: 2018
120. Structural, microstructural and dielectric behavior of sol-gel grown nanostructured Y<sub>0.95</sub>Zr<sub>0.05</sub>MnO<sub>3</sub>  
Rathod, K.N., Thakrar, K., Gadani, K., (...), Solanki, P.S., Shah, N.A.  
Materials Chemistry and Physics 198, pp. 200-208 (2017)
119. Polarized Raman scattering on single crystals of rare earth orthochromite RCrO<sub>3</sub> (R=La, Pr, Nd, and Sm)  
Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 12 Pages: 1839-1851 Published: DEC 2017
118. A comparative Raman study between PrMnO<sub>3</sub>, NdMnO<sub>3</sub>, TbMnO<sub>3</sub> and DyMnO<sub>3</sub>  
Mansouri, Sabour; Jandl, Serge; Mukhin, Alexander; et al.  
SCIENTIFIC REPORTS Volume: 7 Article Number: 13796 Published: OCT 23 2017
117. Shimamoto, Kenta; Mukherjee, Saumya; Bingham, Nicholas S.; et al.  
Single-axis-dependent structural and multiferroic properties of orthorhombic RMnO<sub>3</sub> (R = Gd-Lu)  
PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184105 Published: MAY 8 2017
116. Singh, Deepa; Gupta, Rashmi; Bamzai, K. K.  
Electrical and magnetic properties of GdCr<sub>x</sub>Mn<sub>1-x</sub>O<sub>3</sub> (x=0.0, 0.1) multiferroic nanoparticles  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 7 Pages: 5295-5307 Published: APR 2017
115. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
114. Aliabad, H. A. Rahnamaye; Barzanuni, Z.; Sani, S. Ramezani; et al.  
Thermoelectric and phononic properties of (Gd, Tb) MnO<sub>3</sub> compounds: DFT calculations  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 942-952 Published: JAN 5 2017
113. Meyer, Christoph; Huehn, Sebastian; Jungbauer, Markus; et al.  
Tip-enhanced Raman spectroscopy (TERS) on double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films: field enhancement and depolarization effects  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 1 Pages: 46-52 Published: JAN 2017
112. Rahnamaye Aliabad, H.A., Barzanuni, Z., Sani, S.R., Ahmad, I., Jalali-Asadabadi, S., Vaezi, H., Dastras, M.  
Thermoelectric and phononic properties of (Gd, Tb) MnO<sub>3</sub> compounds: DFT calculations  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 942-952 DOI: 10.1016/j.jallcom.2016.08.167 Published: JAN 5 2017
111. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.  
Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)  
PHYSICAL REVIEW B Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016
110. Praveena, K., Bharathi, P., Liu, H.-L., Varma, K.B.R.  
Structural, multiferroic properties and enhanced magnetoelectric coupling in Sm<sub>1-x</sub>CaxFeO<sub>3</sub>  
Ceramics International 42(12), 13572-13585 DOI: 10.1016/j.ceramint.2016.05.150 (2016)
109. Jin, X., Li, H., Li, D., Zhang, Q., Li, F., Sun, W., Chen, Z., Li, Q.  
Role of ytterbium-erbium co-doped gadolinium molybdate (Gd-2(MoO<sub>4</sub>))(3):Yb/Er) nanophosphors in solar cells  
OPTICS EXPRESS Volume: 24 Issue: 18 Pages: A1276-A1287 DOI: 10.1364/OE.24.0A1276 Published: SEP 5 2016
108. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016

107. Weber, M.C., Guennou, M., Dix, N., Pesquera, D., Sánchez, F., Herranz, G., Fontcuberta, J., López-Conesa, L., Estradé, S., Peiró, F., Iñiguez, J., Kreisel, J.  
Multiple strain-induced phase transitions in LaNiO<sub>3</sub> thin films  
PHYSICAL REVIEW B Volume: 94 Issue: 1 Article Number: 014118 DOI: 10.1103/PhysRevB.94.014118 Published: JUL 29 2016
106. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
Published: JUL 2016
105. Mishra, S.K., Gupta, M.K., Mittal, R., Kolesnikov, A.I., Chaplot, S.L.  
Spin-phonon coupling and high-pressure phase transitions of RMnO<sub>3</sub> (R = Ca and Pr): An inelastic neutron scattering and first-principles study  
PHYSICAL REVIEW B Volume: 93 Issue: 21 Article Number: 214306 DOI: 10.1103/PhysRevB.93.214306 Published: JUN 22 2016
104. Shukla, R., Chakraborty, KR, Mandal, BP, Kaushik, SD, Mukadam, MD, Lawes, G, Naik, R.; Kumarasiri, A, Siruguri, V, Yusuf, SM, Tyagi, AK  
Synthesis, Characterization and Exploration of Multiferroic Properties in Nano-Crystalline Tb<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 0.4)  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume: 16 Issue: 4 Pages: 4094-4099 DOI: 10.1166/jnn.2016.11102  
Published: APR 2016
103. Kováčik, R., Murthy, S.S., Quiroga, C.E., Ederer, C., Franchini, C.  
Combined first-principles and model Hamiltonian study of the perovskite series RMnO<sub>3</sub> (R = La, Pr, Nd, Sm, Eu, and Gd)  
PHYSICAL REVIEW B Volume: 93 Issue: 7 Article Number: 075139 DOI: 10.1103/PhysRevB.93.075139 Published: FEB 19 2016
102. Elsässer, S., Geurts, J., Mukhin, A.A., Balbashov, A.M.  
Lattice dynamics and spin-phonon coupling in orthorhombic Eu<sub>1-x</sub>HoxMnO<sub>3</sub> (x ≤ 0.3) studied by Raman spectroscopy  
PHYSICAL REVIEW B Volume: 93 Issue: 5 Article Number: 054301 DOI: 10.1103/PhysRevB.93.054301 Published: FEB 4 2016
101. Wahab, H.  
Effect of A - Site disorder on the bonding mechanism and optical properties of Sm-x(Al<sub>2</sub>O<sub>3</sub>)(1-x) system  
PHYSICA B-CONDENSED MATTER Volume: 481 Pages: 24-31 DOI: 10.1016/j.physb.2015.10.020 Published: JAN 15 2016
100. Yadagiri, K., Nithya, R.  
Structural and micro-Raman studies of DyMnO<sub>3</sub> with potassium substitution at the Dy site  
RSC ADVANCES Volume: 6 Issue: 98 Pages: 95417-95424 DOI: 10.1039/c6ra13808j Published: 2016
99. Romaguera-Barcelay, Y., Moreira, J.A., Almeida, A., Tavares, P.B., Fernandes, L., Pérez de la Cruz, J.  
Persistence of the orthorhombic phase in YMnO<sub>3</sub> hexagonal thin films  
FERROELECTRICS Volume: 498 Issue: 1 Special Issue: SI Pages: 80-84 DOI: 10.1080/00150193.2016.1168211 Part: 2 Published: 2016
98. Lahmar, A., Es-Souni, M.  
Sequence of structural transitions in BiFeO<sub>3</sub>-RMnO<sub>3</sub> thin films (R=Rare earth)  
Ceramics International 41(4), 5721-5726 DOI: 10.1016/j.ceramint.2014.12.157 (2015)
97. Zhang, AM (Zhang An-Min); Liu, K (Liu Kai); Ji, JT (Ji Jian-Ting); He, CZ (He Chang-Zhen); Tian, Y (Tian Yong); Jin, F (Jin Feng); Zhang, QM (Zhang Qing-Ming)  
Raman phonons in multiferroic FeVO<sub>4</sub> crystals  
CHINESE PHYSICS B Volume: 24 Issue: 12 Article Number: 126301 DOI: 10.1088/1674-1056/24/12/126301 Published: DEC 2015
96. Chanda, S., Saha, S., Dutta, A., Irfan, B., Chatterjee, R., Sinha, T.P.  
Magnetic and dielectric properties of orthoferrites La<sub>1-x</sub>Pr<sub>x</sub>FeO<sub>3</sub> (x=0, 0.1, 0.2, 0.3, 0.4 and 0.5)  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 649 Pages: 1260-1266 DOI: 10.1016/j.jallcom.2015.07.215 Published: NOV 15 2015
95. Li, D., Sun, W., Shao, L., Wu, S., Huang, Z., Jin, X., Zhang, Q., Li, Q.  
Tailoring solar energy spectrum for efficient organic/inorganic hybrid solar cells by up-conversion luminescence nanophosphors  
ELECTROCHIMICA ACTA Volume: 182 Pages: 416-423 DOI: 10.1016/j.electacta.2015.09.023 Published: NOV 10 2015
94. Zhang, X., Zhang, A.M., Xie, W.M., Lin, J.G., Wu, X.S.  
Effect of strain-modulated lattice distortion on the magnetic properties of LaMnO<sub>3</sub> films  
PHYSICA B-CONDENSED MATTER Volume: 476 Pages: 114-117 DOI: 10.1016/j.physb.2015.04.038 Published: NOV 1 2015
93. Xie, Changzheng; Shi, Lei; Zhao, Jiyin; et al.  
The influence of substrate orientation and annealing condition on the properties of LaMnO<sub>3</sub> thin films grown by polymer-assisted deposition  
APPLIED SURFACE SCIENCE Volume: 351 Pages: 188-192 Published: OCT 1 2015
92. Vilarinho, R.; Queiros, E. C.; Almeida, A.; et al.  
Scaling spin-phonon and spin-spin interactions in magnetoelectric Gd<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub>  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 228 Pages: 76-81 Published: AUG 2015
91. McDannald, A.; Kuna, L.; Seehra, M. S.; et al.  
Magnetic exchange interactions of rare-earth-substituted DyCrO<sub>3</sub> bulk powders  
PHYSICAL REVIEW B Volume: 91 Issue: 22 Article Number: 224415 Published: JUN 11 2015

90. Mishra, Dileep K.; Sathe, V. G.; Rawat, R.; et al.  
Controlling phase separation in  $\text{La}_{5/8-y}\text{Pr}_y\text{Ca}_{3/8}\text{MnO}_3$  ( $y=0.45$ ) epitaxial thin films by strain disorder  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 7 Article Number: 072401 Published: FEB 16 2015
89. Tang, Ping; Kuang, Daihong; Yang, Shenghong; et al.  
The structural, optical and enhanced magnetic properties of  $\text{Bi}_{1-x}\text{GdxFe}_1\text{-yMnyO}_3$  nanoparticles synthesized by sol-gel  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 622 Pages: 194-199 Published: FEB 15 2015
88. Lazurova, J.; Mihalik, M.; Mihalik, M., Jr.; et al.  
Magnetic Properties and Mossbauer spectroscopy of  $\text{NdFe}_{(1-x)}\text{MnxO}_3$   
Journal of Physics Conference Series Volume: 592 Article Number: 012117 Published: 2015
87. Gupta, Preeti; Poddar, Pankaj  
Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in  $\text{DyCrO}_3$  nanoplatelets  
RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
86. Bhadram, V.S., Swain, D., Dhanya, R., Polentarutti, M., Sundaresan, A., Narayana, C.  
Effect of pressure on octahedral distortions in  $\text{RCrO}_3$  ( $R=\text{Lu, Tb, Gd, Eu, Sm}$ ): the role of R-ion size and its implications  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
85. Yan, N.; Zhang, Y. L.; Tang, W. L.; et al.  
The effects of Mn doping on the optical properties of chemically deposited  $\text{BiFeO}_3$  thin films  
THIN SOLID FILMS Volume: 571 Pages: 554-557 Part: 3 Published: NOV 28 2014
84. Mota, D. A.; Almeida, A.; Rodrigues, V. H.; et al.  
Dynamic and structural properties of orthorhombic rare-earth manganites under high pressure  
PHYSICAL REVIEW B Volume: 90 Issue: 5 Article Number: 054104 Published: AUG 8 2014
83. Romaguera-Barcelay, Y.; Agostinho Moreira, J.; Almeida, A.; et al.  
Structural, electrical and magnetic properties of magnetoelectric  $\text{GdMnO}_3$  thin films prepared by a sol-gel method  
THIN SOLID FILMS 564, pp. 419-425 AUG 1 2014
82. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.  
Octahedral distortion induced magnetic anomalies in  $\text{LaMn}_{0.5}\text{Co}_{0.5}\text{O}_3$  single crystals  
JOURNAL OF APPLIED PHYSICS 116 (4), Art. No. 043903 JUL 28 2014
81. Romero, M.; Gomez, R. W.; Marquina, V.; et al.  
Synthesis by molten salt method of the  $\text{AFeO}_3$  system ( $A=\text{La, Gd}$ ) and its structural, vibrational and internal hyperfine magnetic field characterization  
PHYSICA B-CONDENSED MATTER 443, pp. 90-94 JUN 15 2014
80. Guennou, Mael; Bouvier, Pierre; Toulemonde, Pierre; et al.  
Jahn-Teller, Polarity, and Insulator-to-Metal Transition in  $\text{BiMnO}_3$  at High Pressure  
PHYSICAL REVIEW LETTERS 112 (7), Art. No. 075501 FEB 19 2014
79. Kozlenko, D. P.; Dang, N. T.; Jabarov, S. H.; et al.  
Structural polymorphism in multiferroic  $\text{BiMnO}_3$  at high pressures and temperatures  
JOURNAL OF ALLOYS AND COMPOUNDS 585, pp. 741-747 FEB 5 2014
78. Staruch, M.; Jain, M.  
Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk  $\text{TbMn}_{1-x}\text{Cr}_x\text{O}_3$   
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (4), Art. No. 046005 JAN 29 2014
77. Das, Raja; Poddar, Pankaj  
Observation of exchange bias below incommensurate antiferromagnetic (ICAFM) to canted A-type antiferromagnetic (cAAFM) transition in nanocrystalline orthorhombic  $\text{EuMnO}_3$   
RSC ADVANCES 4 (21), pp. 10614-10618 2014
76. Zhu, L. P.; Deng, H. M.; Sun, L.; et al.  
Optical properties of multiferroic  $\text{LuFeO}_3$  ceramics  
CERAMICS INTERNATIONAL 40 (1), pp. 1171-1175 Part: A JAN 2014
75. Do, D., Kim, J.W., Song, T.K., Kim, S.S.  
Effects of transition metal (Ni, Mn, Cu) doping on ferroelectric properties of  $\text{Bi}_{0.9}\text{Nd}_{0.1}\text{FeO}_3$  thin films prepared by chemical solution deposition method  
Journal of Electroceramics 30, 55-59 DOI: 10.1007/s10832-012-9715-6 (2013)
74. Chaturvedi, Aditi; Sathe, Vasant  
Thickness dependent Raman study of epitaxial  $\text{LaMnO}_3$  thin films  
THIN SOLID FILMS 548, pp. 75-80 DEC 2 2013
73. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hyejung; et al.  
The effect of Ca substitution on the structural and electrical properties of  $\text{La}_{0.7}\text{Sr}_{0.3-x}\text{Ca}_x\text{MnO}_3$  perovskite manganite films  
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (42), Art. No. 425102 OCT 23 2013

72. Chaturvedi, Aditi; Sathe, V. G.  
Raman spectroscopy and X-ray diffraction study of PrMnO<sub>3</sub> oriented thin films deposited on LaAlO<sub>3</sub> and SrTiO<sub>3</sub> substrates  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234, OCT 2013
71. Dang, N. T.; Kozlenko, D. P.; Kichanov, S. E.; et al.  
Structural and magnetic phase transitions occurring in Pr<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> manganite at high pressures  
JETP LETTERS 97 (9), 540-545, JUL 2013
70. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.  
Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO<sub>3</sub>  
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), 064708, JUN 2013
69. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.  
Investigation of the Properties of Ba-Substituted La<sub>0.7</sub>Sr<sub>0.3-x</sub> Ba (x) MnO<sub>3</sub> Perovskite Manganite Films for Resistive Switching Applications  
JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201, JUN 2013
68. Staruch, M.; Violette, D.; Jain, M.  
Structural and magnetic properties of multiferroic bulk TbMnO<sub>3</sub>  
MATERIALS CHEMISTRY AND PHYSICS 139 (2-3), 897-900, MAY 15 2013
67. Pandey, Pankaj K.; Choudhary, R. J.; Mishra, Dileep K.; et al.  
Signature of spin-phonon coupling in Sr<sub>2</sub>CoO<sub>4</sub> thin film: A Raman spectroscopic study  
APPLIED PHYSICS LETTERS 102 (14), 142401, APR 8 2013
66. Staruch, M.; Lawes, G.; Kumarasiri, A.; et al.  
Effects of holmium substitution on multiferroic properties in Tb<sub>0.67</sub>Ho<sub>0.33</sub>MnO<sub>3</sub>  
APPLIED PHYSICS LETTERS 102 (6), 062908, FEB 11 2013
65. Hu, Y., Stender, D., Medarde, M., Lippert, T., Wokaun, A., Schneider, C.W.  
Lattice distortion and strain relaxation in epitaxial thin films of multiferroic TbMnO<sub>3</sub> probed by X-ray diffractometry and micro-Raman spectroscopy  
Applied Surface Science 278, pp. 92-95, 2013
64. Mota, D.A., Romaguera Barcelay, Y., Tavares, P.B., Chaves, M.R., Almeida, A., Oliveira, J., Ferreira, W.S., Agostinho Moreira, J.  
Competing exchanges and spin-phonon coupling in Eu<sub>1-x</sub>R<sub>x</sub>MnO<sub>3</sub> (R=Y, Lu)  
Journal of Physics Condensed Matter 25 (23), art. no. 235602, 2013
63. Caviezel, A., Mariager, S.O., Johnson, S.L., Möhr-Vorobeva, E., Huang, S.W., Ingold, G., Staub, U., (...), Beaud, P.  
Identification of coherent lattice modulations coupled to charge and orbital order in a manganite  
Physical Review B - Condensed Matter and Materials Physics 87 (20), art. no. 205104, 2013
62. Kumar, A., Shahi, P., Kumar, S., Shukla, K.K., Singh, R.K., Ghosh, A.K., Nigam, A.K., Chatterjee, S.  
Raman effect and magnetic properties of doped TbMnO<sub>3</sub>  
Journal of Physics D: Applied Physics 46 (12), art. no. 125001, 2013
61. Thomasson, A., Kreisel, J., Lefèvre, C., Roulland, F., Versini, G., Barre, S., Viart, N.  
Raman scattering of magnetoelectric gallium ferrite thin films  
Journal of Physics Condensed Matter 25 (4), art. no. 045401, 2013
60. Srinu Bhadram, V., Rajeswaran, B., Sundaresan, A., Narayana, C.  
Spin-phonon coupling in multiferroic RCrO<sub>3</sub> (R-Y, Lu, Gd, Eu, Sm): A Raman study  
EPL 101 (1), art. no. 17008, 2013
59. Fernández-García, M.P., Agostinho Moreira, J., Pereira, A.M., Oliveira, G.N.P., Azevedo, J., Oliveira, J., Chaves, M.R., Mota, D., Sousa, C.T., Teixeira, J.M., Lopes, A.M.L., Costa, M.M.R., Amaral, J.S., Mendonça, T.M., Khonchenko, V.A., Rodrigues, V.H., Tavares, P.B., Mendes, A., Correia, J.G., Amaral, V.S., Almeida, A., Sousa, J.B., Araújo, J.P.  
Synchrotron radiation experiments on multiferroic, magnetocaloric and magnetic nanostructured materials  
Ciencia e Tecnologia dos Materiais 24, 128-133 (2012)
58. Do, Dalhyun; Kim, Jin Won; Kim, Sang Su; et al.  
Electrical properties in lanthanides substituted (Bi<sub>1-0.9</sub>A<sub>0.1</sub>)(Fe<sub>0.975</sub>Co<sub>0.025</sub>)O<sub>3-δ</sub> (A = La, Eu, Gd) thin films  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 61 (9), 1409-1412, NOV 2012
57. Agostinho Moreira, J., Almeida, A., Chaves, M.R., Kreisel, J., Oliveira, J., Carpinteiro, F., Tavares, P.B.  
Magnetically-induced lattice distortions and ferroelectricity in magnetoelectric GdMnO<sub>3</sub>  
Journal of Physics Condensed Matter 24 (43), art. no. 436002, 2012
56. Kim, J.W., Raghavan, C.M., Kim, H.J., Kim, Y.J., Jang, K.W., Kim, S.S., Lee, Y.I., (...), Shin, D.S.  
Electrical properties of Dy, Mn Co-doped BiFeO<sub>3</sub> thin films prepared by using chemical solution deposition  
Journal of the Korean Physical Society 61 (6), pp. 903-907, 2012
55. Raghavan, C.M., Kim, J.W., Do, D., Kim, S.S., Kim, M.H., Song, T.K.  
Enhancement of ferroelectricity in rare earth and manganese ions Co-doped BiFeO<sub>3</sub> thin films via chemical solution deposition method  
Integrated Ferroelectrics 132 (1), pp. 45-52, 2012

54. Do, D., Kim, J.W., Kim, S.S., Kim, W.-J., Lee, M.H., Cho, H.J., Cho, J.H., (...), Kim, M.H.  
Reduced leakage current and improved ferroelectric properties of Eu and Mn codoped BiFeO<sub>3</sub> thin films  
Journal of the Korean Physical Society 60 (2), pp. 203-206, 2012
53. Lazarević, N., Radonjić, M.M., Tanasković, D., Hu, R., Petrovic, C., Popović, Z.V.  
Lattice dynamics of FeSb<sub>2</sub>  
Journal of Physics Condensed Matter 24 (25), art. no. 255402, 2012.
52. Rovillain, P.; Liu, J.; Cazayous, M.; et al.  
Electromagnon and phonon excitations in multiferroic TbMnO<sub>3</sub>  
PHYSICAL REVIEW B 86 (1) Article Number: 014437, JUL 30 2012.
51. Romaguera-Barcelay Y.; Agostinho Moreira J.; Almeida A.; et al.  
Dimensional effects on the structure and magnetic properties of GdMnO<sub>3</sub> thin films  
MATERIALS LETTERS 70, 167-170, MAR 1 2012.
50. Hu, L., Sheng, Z., Hu, X., Zhang, R., Wang, B., Song, W., Sun, Y.  
Control of the charge/orbital ordering transition in epitaxial La<sub>7/8</sub>Sr<sub>1/8</sub>MnO<sub>3</sub> thin films through compressive strain  
Journal of Physics D: Applied Physics 45 (17), art. no. 175002, 2012.
49. Oliveira, J., Agostinho Moreira, J., Almeida, A., Rodrigues, V.H., Costa, M.M.R., Tavares, P.B., Bouvier, P., (...), Kreisel, J.  
Structural and insulator-to-metal phase transition at 50 GPa in GdMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 052101, 2012.
48. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
47. Himcinschi, C., Vrejoiu, I., Weibach, T., Vijayanandhini, K., Talkenberger, A., Rder, C., Bahmann, S., (...), Kortus, J.  
Raman spectra and dielectric function of BiCrO<sub>3</sub>: Experimental and first-principles studies  
Journal of Applied Physics 110 (7), art. no. 073501, 2011.
46. Hien, N.T.M., Oh, S.-Y., Chen, X.-B., Lee, D., Jang, S.-Y., Noh, T.W., Yang, I.-S.  
Raman scattering studies of hexagonal rare-earth RMnO<sub>3</sub> (R = Tb, Dy, Ho, Er) thin films  
Journal of Raman Spectroscopy 42 (9), 1774-1779, 2011.
45. Do, D., Kim, J.W., Kim, G.H., Bae, Y.R., Kim, E.S., Kim, S.S., Lee, M.H., (...), Song, T.K.  
EuMnO<sub>3</sub> effects on structure and electrical properties of chemical solution deposited BiFeO<sub>3</sub> thin films  
2011 International Symposium on Applications of Ferroelectrics and 2011 International Symposium on Piezoresponse Force Microscopy and Nanoscale Phenomena in Polar Materials, ISAF/PFM 2011 , art. no. 6014145, (2011).
44. Do Dalhyun; Kim Jin Won; Kim Sang Su  
Effects of Dy and Mn Codoping on Ferroelectric Properties of BiFeO<sub>3</sub> Thin Films  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 94 (9) Pages: 2792-2795, SEP 2011.
43. Do Dalhyun; Bae Yu Ri; Kim Jin Won; et al.  
Multiferroic (Bi<sub>0.9</sub>Dy<sub>0.1</sub>)(Fe<sub>0.9</sub>Mn<sub>0.1</sub>)O<sub>3</sub> Thin Film  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 59 (3) Pages: 2462-2465, SEP 2011.
42. Rovillain P.; Cazayous M.; Gallais Y.; et al.  
Magnetic Field Induced Dehybridization of the Electromagnons in Multiferroic TbMnO<sub>3</sub>  
PHYSICAL REVIEW LETTERS 107 (1) Article Number: 027202, JUL 5 2011.
41. Romaguera-Barcelay Y.; Moreira J. Agostinho; Gonzalez-Aguilar G.; et al.  
Synthesis of orthorhombic rare-earth manganite thin films by a novel chemical solution route  
JOURNAL OF ELECTRO CERAMICS 26 (1-4) Pages: 44-55, JUN 2011.
40. Choithrani Renu; Rao Mala N.; Chaplot S. L.; et al.  
Structural and phonon dynamical properties of perovskite manganites: (Tb, Dy, Ho)MnO<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (12) Pages: 1627-1635, JUN 2011.
39. Kaur Nupinderjeet; Mohan Rajneesh; Gaur N. K.; et al.  
Influence of La doping on elastic and thermodynamic properties of SrMoO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS 509 (20) Pages: 6077-6082, MAY 19 2011.
38. Das Raja; Jaiswal Adhish; Adyanthaya Suguna; et al.  
Effect of particle size and annealing on spin and phonon behavior in TbMnO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 109 (6) Article Number: 064309, MAR 15 2011.
37. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al.  
Strain induced phase separation on La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.
36. Chaix-Pluchery O.; Kreisel J.  
Raman scattering of perovskite SmScO<sub>3</sub> and NdScO<sub>3</sub> single crystals

35. Chou, T.L., Lee, J.M., Chen, S.A., Ishii, H., Hiraoka, N., Lin, C.M., Chen, T.H., Haw, S.C., Chen, S.W., Lu, K.T., Chen, J.M.  
Modifications of MnO<sub>6</sub> Octahedra in DyMnO<sub>3</sub> under High Pressure  
Journal of Physics Conference Series Volume: 215 Article Number: 012030 DOI: 10.1088/1742-6596/215/1/012030 Published: 2010
34. Gao, P., Chen, H.Y., Tyson, T.A., Liu, Z.X., Bai, J.M., Wang, L.P., Choi, Y.J., Cheong, S.-W.  
Observation of anomalous phonons in orthorhombic rare-earth manganites  
APPLIED PHYSICS LETTERS 97 (26) Article Number: 262905, DEC 27 2010.
33. Issing, S., Pimenov, A., Ivanov, Y.Vu., Mukhin, A.A., Geurts, J.  
Spin-phonon coupling in multiferroic manganites RMnO(3): comparison of pure (R = Eu, Gd, Tb) and substituted (R = Eu(1-x)Y(x))  
compounds  
EUROPEAN PHYSICAL JOURNAL B 78 (3) Pages: 367-372, DEC 2010.
32. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.  
High-pressure investigation of CaTiO(3) up to 60 GPa using x-ray diffraction and Raman spectroscopy  
PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.
31. Chaban N.; Weber M.; Pignard S.; et al.  
Phonon Raman scattering of perovskite LaNiO(3) thin films  
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010.
30. Chaix-Pluchery O.; Sauer D.; Kreisel J.  
Temperature-dependent Raman scattering of DyScO(3) and GdScO(3) single crystals  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (16) Article Number: 165901, APR 28 2010.
29. Lazarevic N.; Popovic Z. V.; Hu Rongwei; et al.  
Evidence for electron-phonon interaction in Fe(1-x)M(x)Sb(2) (M=Co and Cr; 0 <= x <= 0.5) single crystals  
PHYSICAL REVIEW B 81 (14) Article Number: 144302, APR 1 2010.
28. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al.  
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO(3)  
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (11) Article Number: 115403, MAR 24 2010.
27. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al.  
Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO(3)  
PHYSICAL REVIEW B 81(5) Article Number: 054447, FEB 2010.
26. Kumar Pradeep; Saha Surajit; Serrao C. R.; et al.  
Temperature-dependent infrared reflectivity studies of multiferroic TbMnO(3): Evidence for spin-phonon coupling  
PRAMANA-JOURNAL OF PHYSICS 74 (2) Pages: 281-291, FEB 2010.
25. Issing S.; Pimenov A.; Ivanov V. Yu.; et al.  
Composition-dependent spin-phonon coupling in mixed crystals of the multiferroic manganite Eu(1-x)Y(x)MnO(3) (0 <= x <= 0.5)  
studied by Raman spectroscopy  
PHYSICAL REVIEW B 81 (2) Article Number: 024304, JAN 2010.
24. Sopracase Rodolphe; Gruener Gisele; Olive Enrick; et al.  
Infrared study of the phonon modes in PrMnO(3) and CaMnO(3)  
PHYSICA B-CONDENSED MATTER 405 (1) Pages: 45-52, JAN 1 2010.
23. Issing, S., Fuchs, F., Ziereis, C., Batke, E., Pimenov, A., Ivanov, Y.V., Mukhin, A.A., Geurts, J.  
Lattice dynamics of Eu<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> (0 ≤ x ≤ 0.5)  
European Physical Journal B 73 (3), pp. 353-360 (2010).
22. Rao, M.N., Kaur, N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of orthorhombic perovskite yttrium manganite, YMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 21 Issue: 35 Article Number: 355402 DOI: 10.1088/0953-8984/21/35/355402 Published: SEP 2 2009
21. Choithrani, R., Rao, M.N., Chaplot, S.L., Gaur, N.K., Singh, R.K.  
Lattice dynamics of manganites RMnO<sub>3</sub> (R = Sm, Eu or Gd): instabilities and coexistence of orthorhombic and hexagonal phases  
NEW JOURNAL OF PHYSICS Volume: 11 Article Number: 073041 DOI: 10.1088/1367-2630/11/7/073041 Published: JUL 23 2009
20. Matsuzaki, H., Uemura, H., Matsubara, M., Kimura, T., Tokura, Y., Okamoto, H.  
Detecting charge and lattice dynamics in photoinduced charge-order melting in perovskite-type manganites using a 30-femtosecond time  
resolution  
PHYSICAL REVIEW B Volume: 79 Issue: 23 Article Number: 235131 DOI: 10.1103/PhysRevB.79.235131 Published: JUN 2009
19. Antonakos, A., Filippi, M., Auban-Senzier, P., Lampakis, D., Pasquier, C.R., Prellier, W., Liarokapis, E.  
Pressure and magnetic field effects on Pr<sub>1-x</sub>CaxMnO<sub>3</sub> thin films  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume: 246 Issue: 3 Pages: 622-625 DOI: 10.1002/pssb.200880539  
Published: MAR 2009
18. Antonakos, A., Filippi, M., Aydogdu, G.H., Prellier, W., Habermeier, H.-U., Liarokapis, E.



17. Chaix-Pluchery, O., Kreisel, J.  
Raman scattering of perovskite DyScO<sub>3</sub> and GdScO<sub>3</sub> single crystals  
Journal of Physics Condensed Matter 21 (17), art. no. 175901 (2009).
16. Sathe, V.G., Rawat, R., Dubey, A., Narlikar, A.V., Prabhakaran, D.  
Photo-induced insulator-metal transition probed by Raman spectroscopy  
Journal of Physics Condensed Matter 21 (7), art. no. 075603 (2009).
15. Antonakos, A, Lampakis, D, Liarokapis, E, Filippi, M, Prellier, W, Aydogdu, GH, Habermeier, HU  
Phase separation in manganite thin films  
Phase separation in manganite thin films JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 20 Issue: 43 Article Number: 434232 DOI: 10.1088/0953-8984/20/43/434232 Published: OCT 29 2008
14. Lampakis, D., Antonakos, A., Liarokapis, E., Filippi, M., Prellier, W., Auban-Senzier, P., Pasquier, C.  
Pressure effects on the phase separation of Pr<sub>0.6</sub>Ca<sub>0.4</sub>MnO<sub>3</sub> thin films  
Journal of Physics Condensed Matter 20 (48), art. no. 485202 (2008).
13. Dubey, A., Sathe, V.G., Rawat, R.  
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO<sub>3+δ</sub> thin films  
Journal of Applied Physics 104 (11), art. no. 113530 (2008).
12. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
11. Choithrani, R., Gaur, N.K., Singh, R.K.  
Thermodynamic properties of SmMnO<sub>3</sub>, Sm<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> and Ca<sub>0.85</sub>Sm<sub>0.15</sub>MnO<sub>3</sub>  
Journal of Physics Condensed Matter 20 (41), art. no. 415201 (2008).
10. Barath, H., Kim, M., Cooper, S.L., Abbamonte, P., Fradkin, E., Mahns, I., Rübhausen, M., (...), Argyriou, D.N.  
Domain fluctuations near the field-induced incommensurate-commensurate phase transition of TbMnO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 78 (13), art. no. 134407 (2008).
9. Antonakos, A., Palles, D., Liarokapis, E., Filippi, M., Prellier, W.  
Evaluation of the strains in charge-ordered Pr<sub>1-x</sub>Ca<sub>x</sub>MnO<sub>3</sub> thin films using Raman spectroscopy  
Journal of Applied Physics 104 (6), art. no. 063508 (2008).
8. Choithrani, R., Gaur, N.K., Singh, R.K.  
Specific heat and transport properties of La<sub>1-x</sub>GdxMnO<sub>3</sub> at 15 K ≤ T ≤ 300 K  
Solid State Communications 147 (3-4), pp. 103-106 (2008).
7. Choithrani, R., Gaur, N.K.  
Heat capacity of EuMnO<sub>3</sub> and Eu<sub>0.7</sub>A<sub>0.3</sub>MnO<sub>3</sub> (A=Ca, Sr) compounds  
Journal of Magnetism and Magnetic Materials 320 (5), pp. 612-616 (2008).
6. Truong, K.D., Laverdière, J., Singh, M.P., Jandl, S., Fournier, P.  
Impact of Co/Mn cation ordering on phonon anomalies in La(2)CoMnO(6) double perovskites: Raman spectroscopy  
PHYSICAL REVIEW B Volume: 76 Issue: 13 Article Number: 132413 DOI: 10.1103/PhysRevB.76.132413 Published: OCT 2007
5. Dubey, A., Sathe, V.G.  
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 19 Issue: 34 Article Number: 346232 DOI: 10.1088/0953-8984/19/34/346232 Published: AUG 29 2007
4. Gupta, R.K., Whang, C.M.  
Structural study of a sol-gel derived novel solid oxide fuel cell perovskite: (La<sub>1-x</sub>Sr<sub>x</sub>)(Cr<sub>0.85</sub>Fe<sub>0.05</sub>Co<sub>0.05</sub>Ni<sub>0.05</sub>)O<sub>3-δ</sub>  
Journal of Physics Condensed Matter 19 (19), art. no. 196209 (2007).
3. Wesselinowa JM, St Kovachev  
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO<sub>3</sub> compounds  
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (17), 176211 (2007).
2. Rini EG, Rao MN, Chaplot SL, et al.  
Phonon dynamics of lanthanum manganite LaMnO<sub>3</sub> using an interatomic shell model potential  
PHYSICAL REVIEW B 75 (21), 214301 (2007).
1. Han JT, Huang YH, Huang W, et al.  
Selective synthesis of TbMn<sub>2</sub>O<sub>5</sub> nanorods and TbMnO<sub>3</sub> micron crystals  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 128 (45): 14454-14455 NOV 15 2006

55. "Gold catalysts supported on ceria and ceria-alumina for water-gas shift reaction"

Andreeva, D., Ivanov, I., Ilieva, L., Abrashev, M.V.

Applied Catalysis A: General 302 (1), pp. 127-132 (2006).

73. Liu, D., Hu, F., Yan, Y., (...), Feng, G., Zhang, R.  
Promotion of oxygen vacancies and metal-support interaction over 3DOM Au/CeO<sub>2</sub> catalyst for CO oxidation  
Applied Surface Science 629,157438 (2023)
72. Alvarado-González, V., Escobar-Barrios, V.A., Pereira-Almao, P., Vitale-Rojas, G., Hassan, A.  
Thermal-structural characterization and H<sub>2</sub> generation capability of novel CeO<sub>2</sub>/graphene catalyst  
Journal of Environmental Chemical Engineering 10(3),107680 (2022)
71. Ceria-Based Catalysts for Selective Hydrogenation Reactions: A Critical Review  
Razmgar, Kourosh; Altarawneh, Mohammednoor; Oluwoye, Ibukun; et al.  
CATALYSIS SURVEYS FROM ASIA Volume: 25 Issue: 1 Pages: 27-47 Published: MAR 2021
70. Divergent influence of {111} vs. {100} crystal planes and Yb<sup>3+</sup> dopant on CO oxidation paths in mixed nano-sized oxide Au/Ce<sub>1-x</sub>Yb<sub>x</sub>O<sub>2-x/2</sub> (x=0 or 0.1) systems  
Wozniak, Piotr; Kraszkiewicz, Piotr; Malecka, Malgorzata A.  
CRYSTENGCOMM Volume: 22 Issue: 35 Pages: 5828-5840 Published: SEP 21 2020
69. Recent Advances in Design of Gold-Based Catalysts for H-2 Clean-Up Reactions  
Tabakova, Tatyana  
FRONTIERS IN CHEMISTRY Volume: 7 Article Number: 517 Published: AUG 7 2019
68. Recent Advances in the Gold-Catalysed Low-Temperature Water-Gas Shift Reaction  
Carter, James H.; Hutchings, Graham J.  
CATALYSTS Volume: 8 Issue: 12 Article Number: 627 Published: DEC 2018
67. Gonzalez-Castano, M.; Ivanova, S.; Ioannides, T.; et al.  
Deep insight into Zr/Fe combination for successful Pt/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> WGS catalyst doping  
CATALYSIS SCIENCE & TECHNOLOGY Volume: 7 Issue: 7 Pages: 1556-1564 Published: APR 7 2017
66. Magadzu, T.; Scurrell, M. S.  
Stability of gold particles in NaY-type zeolites: Promotional effects of co-exchanged metal cations  
MICROPOROUS AND MESOPOROUS MATERIALS Volume: 241 Pages: 52-57 Published: MAR 15 2017
65. Menegazzo, Federica; Signoretto, Michela; Ghedini, Elena; et al.  
Effects of zirconia precursor on gold based samples for low temperature WGS  
BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY Volume: 6 Issue: 6 Pages: 1828-1832 Published: DEC 15 2016
64. Gurram, Venkata Ramesh Babu; Enumula, Siva Sankar; Mutyala, Suresh; et al.  
The advantage of ceria loading over V<sub>2</sub>O<sub>5</sub>/Al<sub>2</sub>O<sub>3</sub> catalyst for vapor phase oxidative dehydrogenation of ethylbenzene to styrene using CO<sub>2</sub> as a soft oxidant  
APPLIED PETROCHEMICAL RESEARCH Volume: 6 Issue: 4 Pages: 427-437 Published: DEC 2016
63. Gomes, S.R., Bion, N., Duprez, D., Epron, F.  
Hydrogen production from hydrocarbons over Rh supported on Ce-based oxides for automotive applications  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 197 Special Issue: SI Pages: 138-145 DOI: 10.1016/j.apcatb.2016.01.022  
Published: NOV 15 2016
62. Villa, A., Dimitratos, N., Chan-Thaw, C.E., Hammond, C., Veith, G.M., Wang, D., Manzoli, M., Prati, L., Hutchings, G.J.  
Characterisation of gold catalysts  
CHEMICAL SOCIETY REVIEWS Volume: 45 Issue: 18 Pages: 4953-4994 DOI: 10.1039/c5cs00350d Published: SEP 21 2016
61. Montini, T., Melchionna, M., Monai, M., Fornasiero, P.  
Fundamentals and Catalytic Applications of CeO<sub>2</sub>-Based Materials  
CHEMICAL REVIEWS Volume: 116 Issue: 10 Pages: 5987-6041 DOI: 10.1021/acs.chemrev.5b00603 Published: MAY 25 2016
60. Pérez, P., Soria, M.A., Carabineiro, S.A.C., Maldonado-Hódar, F.J., Mendes, A., Madeira, L.M.  
Application of Au/TiO<sub>2</sub> catalysts in the low-temperature water-gas shift reaction  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 41 Issue: 8 Pages: 4670-4681 DOI: 10.1016/j.ijhydene.2016.01.037  
Published: MAR 2 2016
59. Reddy, G.K., Smirniotis, P.G.  
Water Gas Shift Reaction: Research Developments and Applications  
Water Gas Shift Reaction: Research Developments and Applications 1-261 (2015)
58. Ma, Z (Ma, Zhen); Tao, F (Tao, Franklin (Feng)); Gu, XL (Gu, Xiaoli)  
DEVELOPMENT OF NEW GOLD CATALYSTS FOR REMOVING CO FROM H-2  
HETEROGENEOUS CATALYSIS AT NANOSCALE FOR ENERGY APPLICATIONS Pages: 217-238 Published: 2015
57. Zhou, Zhiwei; Dai, Songshan; Qin, Juan; et al.  
Preparation of nano-Ni/meso-Ce-TiO<sub>2</sub> by one-step in a sol-gel system and its catalytic performance for hydrogenolysis of xylitol

- RSC ADVANCES Volume: 5 Issue: 86 Pages: 70410-70416 Published: 2015
56. Li, Changshun; Sun, Yufeng; Zhang, Aimin  
Binary Ce-Mn oxides confined in carbon nanotubes as efficient catalysts for ethylbenzene dehydrogenation in the presence of carbon dioxide  
RSC ADVANCES Volume: 5 Issue: 46 Pages: 36394-36403 Published: 2015
55. Correia Carabineiro, S.A.  
Synthesis and applications of gold nanoparticles  
Advances in Nanotechnology 12, 95-122 (2014)
54. Raju, G., Reddy, B.M., Park, S.-E.  
CO<sub>2</sub> promoted oxidative dehydrogenation of n-butane over VO<sub>x</sub>/MO<sub>2</sub>ZrO<sub>2</sub> (M = Ce or Ti) catalysts  
JOURNAL OF CO<sub>2</sub> UTILIZATION Volume: 5 Pages: 41-46 DOI: 10.1016/j.jcou.2013.12.003 Published: MAR 2014
53. Kustov, Leonid M.; Tarasov, Andrei L.  
Hydrogenation of carbon dioxide: a comparison of different types of active catalysts  
MENDELEEV COMMUNICATIONS Volume: 24 Issue: 6 Pages: 349-350 Published: NOV-DEC 2014
52. Ang, M. L.; Oemar, U.; Saw, E. T.; et al.  
Highly Active Ni/xNa/CeO<sub>2</sub> Catalyst for the Water Gas Shift Reaction: Effect of Sodium on Methane Suppression  
ACS CATALYSIS 4 (9), pp. 3237-3248 SEP 2014
51. Gonzalez Castano, M.; Reina, T. R.; Ivanova, S.; et al.  
Pt vs. Au in water-gas shift reaction  
JOURNAL OF CATALYSIS 314, pp. 1-9 MAY 2014
50. Ramirez Reina, Tomas; Ivanova, Svetlana; Jose Delgado, Juan; et al.  
Viability of Au/CeO<sub>2</sub>-ZnO/Al<sub>2</sub>O<sub>3</sub> Catalysts for Pure Hydrogen Production by the Water-Gas Shift Reaction  
CHEMCATCHEM 6 (5), pp. 1401-1409 MAY 2014
49. Soria, M. A.; Perez, P.; Carabineiro, S. A. C.; et al.  
Effect of the preparation method on the catalytic activity and stability of Au/Fe<sub>2</sub>O<sub>3</sub> catalysts in the low-temperature water-gas shift reaction  
APPLIED CATALYSIS A-GENERAL 470, pp. 45-55 JAN 30 2014
48. Marin, Raimon P.; Kondrat, Simon A.; Davies, Thomas E.; et al.  
Novel cobalt zinc oxide Fischer-Tropsch catalysts synthesised using supercritical anti-solvent precipitation  
CATALYSIS SCIENCE & TECHNOLOGY 4 (7), pp. 1970-1978 2014
47. Li, Yong; Shen, Wenjie  
Morphology-dependent nanocatalysts: Rod-shaped oxides  
CHEMICAL SOCIETY REVIEWS 43 (5), pp. 1543-1574 2014
46. Deshpande, P.A., Madras, G.  
Catalytic Synthesis of CO Free Hydrogen  
New and Future Developments in Catalysis 223-252 DOI: 10.1016/B978-0-444-53882-6.00009-7 (2013)
45. Carabineiro, S.A.C.  
Synthesis and applications of gold nanoparticles  
Gold Nanoparticles: Synthesis, Optical Properties and Applications for Cancer Treatment 1-37 (2013)
44. Signoretto, Michela; Menegazzo, Federica; Trevisan, Valentina; et al.  
Investigation on the Stability of Supported Gold Nanoparticles  
CATALYSTS 3 (3), pp. 656-670 SEP 2013
43. Gnanakumar, Edwin S.; John, Jino C.; Raja, Thirumalaiswamy; et al.  
Functional and Disordered Meso-Macroporous gamma-Al<sub>2</sub>-xMxO<sub>3</sub> +/- y (M = Cu and/or Ce)  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 13 (4) SI, 2682-2688, APR 2013
42. Liu, Z., Tan, X., Lv, C.  
Sucrose-assisted synthesis of three-dimensionally ordered macroporous CeO<sub>2</sub> and its use as a support for promotional catalytic performance of CO oxidation  
Applied Surface Science 283, pp. 290-296, 2013
41. Tao, F., Ma, Z.  
Water-gas shift on gold catalysts: Catalyst systems and fundamental studies  
Physical Chemistry Chemical Physics 15 (37), pp. 15260-15270, 2013
40. Wang, N., Shen, K., Huang, L., Yu, X., Qian, W., Chu, W.  
Facile route for synthesizing ordered mesoporous Ni-Ce-Al oxide materials and their catalytic performance for methane dry reforming to hydrogen and syngas  
ACS Catalysis 3 (7), pp. 1638-1651, 2013
39. Mandal, S., Santra, C., Bando, K.K., James, O.O., Maity, S., Mehta, D., Chowdhury, B.  
Aerobic oxidation of benzyl alcohol over mesoporous Mn-doped ceria supported Au nanoparticle catalyst

38. Ta, N., Liu, J., Shen, W.  
Tuning the shape of ceria nanomaterials for catalytic applications  
Cuihua Xuebao/Chinese Journal of Catalysis 34 (5), pp. 838-850, 2013
37. Reina, T.R., Xu, W., Ivanova, S., Centeno, M.Á., Hanson, J., Rodríguez, J.A., Odriozola, J.A.  
In situ characterization of iron-promoted ceria-alumina gold catalysts during the water-gas shift reaction  
Catalysis Today 205, pp. 41-48, 2013
36. Reina, T.R., Ivanova, S., Idakiev, V., Delgado, J.J., Ivanov, I., Tabakova, T., Centeno, M.A., Odriozola, J.A.  
Impact of Ce-Fe synergism on the catalytic behaviour of Au/CeO<sub>2</sub>-FeO<sub>x</sub>/Al<sub>2</sub>O<sub>3</sub> for pure H<sub>2</sub> production  
Catalysis Science and Technology 3 (3), pp. 779-787, 2013
35. Mandal, S., Bando, K.K., Santra, C., Maity, S., James, O.O., Mehta, D., Chowdhury, B.  
Sm-CeO<sub>2</sub> supported gold nanoparticle catalyst for benzyl alcohol oxidation using molecular O<sub>2</sub>  
Applied Catalysis A: General 452, pp. 94-104, 2013
34. Yazid, H., Adnan, R., Farrukh, M.A.  
Gold nanoparticles supported on titania for the reduction of p-nitrophenol  
Indian Journal of Chemistry - Section A Inorganic, Physical, Theoretical and Analytical Chemistry 52 (2), pp. 184-191, 2013
33. Hutchings, G.J., Edwards, J.K.  
Application of gold nanoparticles in catalysis  
Frontiers of Nanoscience 3 (1), pp. 249-293, 2012
32. Fonseca, J., Royer, S., Bion, N., Pirault-Roy, L., Rangel, M.C., Duprez, D., Epron, F.  
Preferential CO oxidation over nanosized gold catalysts supported on ceria and amorphous ceria-alumina  
Applied Catalysis B: Environmental 128, pp. 10-20, 2012
31. Reddy, E.L., Prabhakarn, A., Karuppiah, J., Rameshbabu, N., Subrahmanyam, C.H.  
Gold supported calcium deficient hydroxyapatite for room temperature CO oxidation  
International Journal of Nanoscience 11 (3), art. no. 1240004, 2012.
30. Alhumaimess, M., Lin, Z., Weng, W., Dimitratos, N., Dummer, N.F., Taylor, S.H., Bartley, J.K., (...), Hutchings, G.J.  
Oxidation of benzyl alcohol by using gold nanoparticles supported on ceria foam  
ChemSusChem 5 (1), pp. 125-131, 2012.
29. Xu, J., Xue, B., Liu, Y.-M., Li, Y.-X., Cao, Y., Fan, K.-N.  
Mesoporous Ni-doped ceria as an efficient catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene  
Applied Catalysis A: General 405 (1-2), pp. 142-148, 2011.
28. Kugai Junichiro; Miller Jeffrey T.; Guo Neng; et al.  
Role of metal components in Pd-Cu bimetallic catalysts supported on CeO<sub>2</sub> for the oxygen-enhanced water gas shift  
APPLIED CATALYSIS B-ENVIRONMENTAL 105 (3-4) Pages: 306-316, JUN 22 2011.
27. Ousmane M.; Liotta L. F.; Di Carlo G.; et al.  
Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (3-4) Pages: 629-637, JAN 14 2011.
26. Sun Y.; Hla S. S.; Duffy G. J.; et al.  
High temperature water-gas shift Cu catalysts supported on Ce-Al containing materials for the production of hydrogen using simulated coal-derived syngas  
CATALYSIS COMMUNICATIONS 12 (4) Pages: 304-309, DEC 15 2010.
25. Ma Zhen; Yin Hongfeng; Dai Sheng  
Performance of Au/M(x)O(y)/TiO<sub>2</sub> Catalysts in Water-Gas Shift Reaction  
CATALYSIS LETTERS 136 (1-2) Pages: 83-91, MAY 2010.
24. Ma, Z., Yin, H., Dai, S.  
Performance of Au/M<sub>x</sub>O<sub>y</sub>/TiO<sub>2</sub> Catalysts in water-gas shift reaction  
Catalysis Letters 136 (1-2), pp. 83-91 (2010).
23. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 38 (2), pp. 223-229 (2010).
22. González, I.D., Navarro, R.M., Wen, W., Marinkovic, N., Rodríguez, J.A., Rosa, F., Fierro, J.L.G.  
A comparative study of the water gas shift reaction over platinum catalysts supported on CeO<sub>2</sub>, TiO<sub>2</sub> and Ce-modified TiO<sub>2</sub>  
Catalysis Today 149 (3-4), pp. 372-379 (2010).
21. Carmen Blanco Ortiz, M.D.  
Catalysis  
Modern Supramolecular Gold Chemistry: Gold-Metal Interactions and Applications 429-490 DOI: 10.1002/9783527623778.ch8 (2009)
20. Xu, J., Wang, L.-C., Liu, Y.-M., Cao, Y., He, H.-Y., Fan, K.-N.

- Mesostructured CeO<sub>2</sub> as an effective catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene  
Catalysis Letters 133 (3-4), pp. 307-313 (2009).
19. Miedziak, P.J., Tang, Z., Davies, T.E., Enache, D.I., Bartley, J.K., Carley, A.F., Herzing, A.A., (...), Hutchings, G.J.  
Ceia prepared using supercritical antisolvent precipitation: A green support for gold-palladium nanoparticles for the selective catalytic oxidation of alcohols  
Journal of Materials Chemistry 19 (45), pp. 8619-8627 (2009).
18. Yen, C.-W., Lin, M.-L., Wang, A., Chen, S.-A., Chen, J.-M., Mou, C.-Y.  
CO oxidation catalyzed by Au-Ag bimetallic nanoparticles supported in mesoporous silica  
Journal of Physical Chemistry C 113 (41), pp. 17831-17839 (2009).
17. She, Y., Zheng, Q., Li, L., Zhan, Y., Chen, C., Zheng, Y., Lin, X.  
Rare earth oxide modified CuO/CeO<sub>2</sub> catalysts for the water-gas shift reaction  
International Journal of Hydrogen Energy 34 (21), pp. 8929-8936 (2009).
16. Zane, F., Trevisan, V., Pinna, F., Signoreto, M., Menegazzo, F.  
Investigation on gold dispersion of Au/ZrO<sub>2</sub> catalysts and activity in the low-temperature WGS reaction  
Applied Catalysis B: Environmental 89 (1-2), pp. 303-308 (2009).
15. Yang, S., Zhan, Y., Chen, C., Cao, Y., Lin, X., Zheng, Q.  
Effect of rare earth oxide on the catalytic performance of Au/CeO<sub>2</sub> catalyst for water-gas shift reaction  
Cuihua Xuebao / Chinese Journal of Catalysis 30 (7), pp. 666-672 (2009).
14. Chen, Y.-C., Chen, K.-B., Lee, C.-S., Lin, M.C.  
Direct synthesis of Zr-doped ceria nanotubes  
Journal of Physical Chemistry C 113 (13), pp. 5031-5034 (2009).
13. Skála, T., Šutara, F., Prince, K.C., Matolín, V.  
Cerium oxide stoichiometry alteration via Sn deposition: Influence of temperature  
Journal of Electron Spectroscopy and Related Phenomena 169 (1), pp. 20-25 (2009).
12. Menegazzo, F., Pinna, F., Signoreto, M., Trevisan, V., Bocuzzi, F., Chiorino, A., Manzoli, M.  
Highly dispersed gold on zirconia: Characterization and activity in low-temperature water gas shift tests  
CHEMSUSCHEM Volume: 1 Issue: 4 Pages: 320-326 DOI: 10.1002/cssc.200700152 Published: 2008
11. Romero-Sarria, F., Penkova, A., Martinez T., L.M., Centeno, M.A., Hadjiivanov, K., Odriozola, J.A.  
Role of water in the CO oxidation reaction on Au/CeO<sub>2</sub>: Modification of the surface properties  
Applied Catalysis B: Environmental 84 (1-2), pp. 119-124 (2008).
10. Skála, T., Šutara, F., Cabala, M., Škoda, M., Prince, K.C., Matolín, V.  
A photoemission study of the interaction of Ga with CeO<sub>2</sub>(1 1 1) thin films  
Applied Surface Science 254 (21), pp. 6860-6864 (2008).
9. Bali, S., Turpin, G.C., Ernst, R.D., Pugmire, R.J., Singh, V., Seehra, M.S., Eyring, E.M.  
Water gas shift catalysis using iron aerogels doped with palladium by the gas-phase incorporation method  
Energy and Fuels 22 (3), pp. 1439-1443 (2008).
8. Jacobs, G, Davis, BH  
Low temperature water-gas shift catalysts  
CATALYSIS, VOL 20 Book Series: SPR-Catalysis Volume: 20 Pages: 122-285 DOI: 10.1039/b601305h Published: 2007
7. Reddy BM, Rao KN, Reddy GK, et al.  
Structural characterization and oxidehydrogenation activity of CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> and V<sub>2</sub>O<sub>5</sub>/CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> catalysts  
JOURNAL OF PHYSICAL CHEMISTRY C 111 (50), pp. 18751-18758 (2007).
6. Li, L., Zhan, Y., Zheng, Q., Zheng, Y., Lin, X., Li, D., Zhu, J.  
Water-gas shift reaction over aluminum promoted Cu/CeO<sub>2</sub> nanocatalysts characterized by XRD, BET, TPR and cyclic voltammetry (CV)  
Catalysis Letters 118 (1-2), pp. 91-97 (2007)
5. Tang, Z.-R., Edwards, J.K., Bartley, J.K., Taylor, S.H., Carley, A.F., Herzing, A.A., Kiely, C.J., Hutchings, G.J.  
Nanocrystalline cerium oxide produced by supercritical antisolvent precipitation as a support for high-activity gold catalysts  
Journal of Catalysis 249 (2), pp. 208-219 (2007)
4. Hammer, N., Kvande, I., Chen, D., Rønning, M.  
Au-TiO<sub>2</sub> catalysts stabilised by carbon nanofibres  
Catalysis Today 122 (3-4), pp. 365-369 (2007)
3. Shapovalov, V., Metiu, H.  
Catalysis by doped oxides: CO oxidation by AuxCe1-xO<sub>2</sub>  
Journal of Catalysis 245 (1), pp. 205-214 (2007)
2. Cortie, M., Laguna, A., Thompson, D.  
Gold 2006. Highlights of 4th International Conference on the Science, Technology and Industrial Applications of Gold: Limerick, Ireland 3-6 September (2006).

Gold Bulletin 39 (4), pp. 226-235 (2006).

1. Hashmi, A.S.K., Hutchings, G.J.  
Gold Catalysis  
Angewandte Chemie - International Edition 45 (47), pp. 7896-7936 (2006)

56. "Raman and infrared studies of  $La_{1-y}Sr_yMn_{1-x}MxO_3$  ( $M=Cr, Co, Cu, Zn, Sc$  or  $Ga$ ): Oxygen disorder and local vibrational modes"

A. Dubroka, J. Humlíček, M. V. Abrashev, Z. V. Popovic, F. Sapiña, and A. Cantarero  
Phys. Rev. B 73, 224401 (2006).

47. Yang, H., Chen, H., Zhou, W., (...), Wang, J., Fu, J.  
Defect engineered efficient catalytic transfer hydrogenation of furfural to furfuryl alcohol in ethanol by Co-doped  $LaMnO_3$   
Fuel 354,129388 (2023)

46. Sediva, E., Rupp, J.L.M.  
Raman spectra and defect chemical characteristics of  $Sr(Ti,Fe)O_{3-y}$  solid solution of bulk pellets vs. thin films  
Journal of Materials Chemistry A 11(48), pp. 26752-26763 (2023)

45. Yin, L., Wang, C., Shen, Q.  
High room temperature magnetoresistance in  $La_{0.9}Sr_{0.1}Mn_{1-y}Zn_yO_3$  epitaxial films  
Ceramics International 49(20), pp. 33392-33400 (2023)

44. Shukur, M.A., Kumar, K.V., Rao, G.N.  
IMPACT OF CRYSTALLITE SIZE ON STRUCTURAL, OPTICAL AND MAGNETIC CHARACTERISTICS OF  $La_{0.7}Sr_{0.15}Ca_{0.15}MnO_3$  NANOCRYSTALLINE  
East European Journal of Physics 2023(3), pp. 370-379 (2023)

43. Waman, P.T., Bhatt, H., Rao, R., (...), Gonal, M.R., Padma, N.  
Influence of substrate-induced strain on exchange bias effect in YSMO/LSMO heterostructures  
Bulletin of Materials Science 46(3),116 (2023)

42. Laajimi, K., Kchaw, M., Fourati, I., (...), Gazzah, M.H., Dhahri, J.  
Large magnetocaloric effect in  $0.25(La_{0.67}Ca_{0.33}MnO_3 + La_{0.67}Ca_{0.13}Sr_{0.2}Mn_{0.98}Ni_{0.02}O_3) / 0.5 La_{0.67}Ca_{0.23}Sr_{0.1}Mn_{0.98}Ni_{0.02}O_3$  composite close to room temperature  
European Physical Journal Plus 137(8),943 (2022)

41. Shen, Q., Zhou, J., Ma, C., (...), Cao, L., Yang, J.  
Development of  $LnMnO_{3+\sigma}$  perovskite on low temperature  $Hg_0$  removal  
Journal of Environmental Sciences (China) 113, pp. 141-151 (2022)

40. Jin, S., Zhang, S., Li, H., (...), Pu, X., Liu, X.  
A-site Na-doping to enhance room-temperature TCR of  $La_{1-x}Na_xMnO_3$  polycrystalline ceramics  
Materials Today Communications 28,102496 (2021)

39. Jin, S., Zhang, S., Yu, X., (...), Gu, X., Liu, X.  
Impact of K doping on room-temperature temperature coefficient of resistivity of  $La_{0.7}(Ag_{0.3-x}K_x)MnO_3$  ( $0.160 \leq x \leq 0.180$ ) polycrystalline ceramics  
Ceramics International 47(17), pp. 24721-24731 (2021)

38. Ghanem, R., Nouira, W., Gassoumi, M., (...), Ventura, J., Khirouni, K.  
Effect of Ti doping on the structural, morphological and magnetic properties of  $La_{0.7}Ga_{0.3}Fe_{1-x}Ti_xO_3$   
Results in Physics 26,104342 (2021)

37. Enhancement of intrinsic magnetoresistance in Zn doped  $La_{0.9}Sr_{0.1}MnO_3$  epitaxial films  
Yin, Lu; Wang, Chuanbin; Shen, Qiang  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 157817 Published: APR 5 2021

36. Influence of calcination on the structural properties of earth abundant  $Cu_2ZnSnS_4$   
Ahmadi, Souha; Khemiri, Naoufel; Cantarero, Andres; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 852 Article Number: 156714 Published: JAN 25 2021

35. Short-Range Order in  $VI_3$   
Mijin, Sanja Djurdjic; Abeykoon, A. M. Milinda; Solajic, Andrijana; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 22 Pages: 16265-16271 Published: NOV 16 2020

34. PI-MOCVD technology of  $(La, Sr)(Mn, Co)O_{-3}$ : From epitaxial to nanostructured films  
Vagner, Milita; Plausinaitiene, Valentina; Lukose, Rasuole; et al.  
SURFACE & COATINGS TECHNOLOGY Volume: 385 Article Number: 125287 Published: MAR 15 2020

33. Strain-dependent structure and Raman behaviours in the heavy-ion irradiated manganite at extreme low dose  
Nam Nhat Hoang; Duc Huyen Yen Pham; The Nghia Nguyen  
SCIENTIFIC REPORTS Volume: 9 Article Number: 19204 Published: DEC 16 2019

32. In Situ Method Correlating Raman Vibrational Characteristics to Chemical Expansion via Oxygen Nonstoichiometry of Perovskite Thin Films  
Sediva, Eva; Defferriere, Thomas; Perry, Nicola H.; et al.  
ADVANCED MATERIALS Volume: 31 Issue: 33 Article Number: 1902493 Published: AUG 2019
31. Self-doped La<sub>1-x</sub>MnO<sub>3</sub>+ $\delta$  perovskites: Electron state hybridization and Raman modes  
Ulyanov, A. N.; Sidorov, A., V; Pismenova, N. E.; et al.  
SOLID STATE SCIENCES Volume: 94 Pages: 41-44 Published: AUG 2019
30. Temperature Dependent Raman Spectroscopic Study of the Fe Doped La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> Prepared Using Ball Milling Method  
Astik, Nidhi; Jha, Prafulla K.; Sathe, Vasant  
PHYSICS OF THE SOLID STATE Volume: 61 Issue: 4 Pages: 618-626 Published: APR 2019
29. Phenomenological description of doped manganites. Electron bandwidth, crystal local structure and Curie temperature  
Ulyanov, A. N.; Vasiliev, A. V.; Eremina, E. A.; et al.  
CERAMICS INTERNATIONAL Volume: 44 Issue: 18 Pages: 22297-22300 Published: DEC 15 2018
28. LaFeO<sub>3</sub> thin films as relevant models for the surface investigation of 3-way catalysts  
Nandi, Shreya; Blanck, Dimitri; Carlier, Thomas; et al.  
SURFACE AND INTERFACE ANALYSIS Volume: 50 Issue: 11 Pages: 1018-1024 Published: NOV 2018
27. Influence of Fe substitution on structure and Raman spectra of La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>: Experimental and density functional studies  
Astik, Nidhi M.; Soni, Himadri; Jha, Prafulla K.; et al.  
PHYSICA B-CONDENSED MATTER Volume: 541 Pages: 103-110 Published: JUL 15 2018
26. H<sub>2</sub>S sensing characteristics of Ni-doped CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> films synthesized by a sol-gel method  
Boontum, Arisara; Phokharatkul, Ditsayut; Hodak, Jose H.; et al.  
SENSORS AND ACTUATORS B-CHEMICAL Volume: 260 Pages: 877-887 Published: MAY 1 2018
25. Boontum, A., Phokharatkul, D., Hodak, J.H., Wisitsoraat, A., Hodak, S.K.  
H<sub>2</sub>S sensing characteristics of Ni-doped CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> films synthesized by a sol-gel method  
Sensors and Actuators, B: Chemical 260, pp. 877-887, 2018
24. Oumezzine, Marwene; Hassayoun, Oumayma; Bellouz, Ridha; et al.  
On the role of disorder produced by manganese vacancy at the B site on the structural and magnetic properties of La<sub>0.67</sub>Ba<sub>0.33</sub>Mn<sub>1-x</sub>O<sub>3</sub> nanocrystalline  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 729 Pages: 156-161 Published: DEC 30 2017
23. Ulyanov, A. N.; Savilov, S. V.; Sidorov, A. V.; et al.  
Electron structure, Raman "vacancy" modes and Griffiths-like phase of self-doped Pr<sub>1-x</sub>MnO<sub>3</sub>+ $\delta$  manganites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 722 Pages: 77-82 Published: OCT 25 2017
22. Turki, D.; Ghouri, Zafar Khan; Al-Meer, Saeed; et al.  
Synthesis and Physicochemical Studies of Perovskite Manganite La<sub>(0.8)</sub>Ca<sub>(0.2)</sub>Nn<sub>(1-x)</sub>Co<sub>(x)</sub>O<sub>(3)</sub> (0 <= x <= 0.3)  
JOURNAL OF MAGNETICS Volume: 22 Issue: 3 Pages: 353-359 Published: SEP 2017
21. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
20. Zhang, J.Z., Jiang, K., Hu, Z.G., Chu, J.H.  
A novel technique for probing phase transitions in ferroelectric functional materials: Condensed matter spectroscopy  
SCIENCE CHINA-TECHNOLOGICAL SCIENCES Volume: 59 Issue: 10 Pages: 1537-1548 DOI: 10.1007/s11431-015-0999-6  
Published: OCT 2016
19. Jiang, K., Zhang, P., Zhang, J., Xu, G., Li, W., Hu, Z., Chu, J.  
Relationship between negative thermal expansion and lattice dynamics in a tetragonal PbTiO<sub>3</sub>-Bi(Mg<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub> perovskite single crystal  
RSC ADVANCES Volume: 6 Issue: 4 Pages: 3159-3164 DOI: 10.1039/c5ra24408k Published: 2016
18. Kotnana, G (Kotnana, Ganesh); Jammalamadaka, SN (Jammalamadaka, S. Narayana)  
Band gap tuning and orbital mediated electron-phonon coupling in HoFe<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> (0 <= x <= 1)  
JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 12 Article Number: 124101 DOI: 10.1063/1.4931155 Published: SEP 28 2015
17. Zhang, Jinzhong; Tong, Wen-Yi; Zhu, Jiajun; et al.  
Temperature-dependent lattice dynamics and electronic transitions in 0.93Pb(Zn<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.07PbTiO<sub>3</sub> single crystals: Experiment and theory  
PHYSICAL REVIEW B Volume: 91 Issue: 8 Article Number: 085201 Published: FEB 4 2015
16. Duan, Z. H.; Chang, P.; Hu, Z. G.; et al.  
Temperature dependent Raman scattering and far-infrared reflectance spectra of MgO modified Pb<sub>0.99</sub>(Zr<sub>0.95</sub>Ti<sub>0.05</sub>)(0.98)Nb<sub>0.02</sub>O<sub>3</sub> ceramics: A composition effect  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 9 Article Number: 093513 Published: SEP 7 2014
15. Graziosi, P.; Gambardella, A.; Prezioso, M.; et al.

Polaron framework to account for transport properties in metallic epitaxial manganite films  
PHYSICAL REVIEW B 89 (21), Art. No. 214411 JUN 12 2014

14. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J.  
Structural, magnetic, infrared and Raman studies of  $\text{La}_{0.8}\text{Sr}_x\text{Ca}_{0.2-x}\text{MnO}_3$  ( $0 \leq x \leq 0.2$ )  
Journal of Materials Science: Materials in Electronics 24(7), 2292-2301 DOI: 10.1007/s10854-013-1092-7 (2013)

13. Dodiya, Neha; Varshney, Dinesh  
Structural properties and Raman spectroscopy of rhombohedral  $\text{La}_{1-x}\text{Na}_x\text{MnO}_3$  ( $0.075 \leq x \leq 0.15$ )  
JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013

12. Islam, M.A., Rondinelli, J.M., Spanier, J.E.  
Normal mode determination of perovskite crystal structures with octahedral rotations: Theory and applications  
Journal of Physics Condensed Matter 25 (17), art. no. 175902, 2013

11. Craus, M.-L., Anitas, E., Cornei, N., Islamov, A., Garamus, V.  
Magnetic structure of  $\text{La}_{0.54}\text{Ho}_{0.11}\text{Sr}_{0.35}\text{Mn}_{1-x}\text{Cu}_x\text{O}_3$  manganites  
Diffusion and Defect Data Pt.B: Solid State Phenomena 190, pp. 121-124, 2012

10. Eremina, R. M.; Sharipov, K. R.; Mingalieva, L. V.; et al.  
Properties of  $\text{La}_{1-x}\text{Sr}_x\text{Mn}_{0.925}\text{Zn}_{0.075}\text{O}_3$  ( $x=0.075, 0.095, 0.115$ ) ceramics  
PHYSICS OF THE SOLID STATE 54 (6) Pages: 1160-1165, JUN 2012.

9. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of  $\text{RCrO}_3$  perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.

8. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
Local symmetry breaking in  $\text{PrFeO}_3$  thin films and other similar systems after Ni doping: A brief Raman study  
VIBRATIONAL SPECTROSCOPY 55 (2) Pages: 307-310, MAR 2011.

7. Mir Feroz Ahmad; Ikram M.; Kumar Ravi  
Symmetry breaking in Ni-doped  $\text{PrFeO}_3$  thin films established by Raman study  
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.

6. Chen CZ, Cai CB, Liu ZY, et al  
Stress evolution and lattice distortion induced by thickness variation and lattice misfit in  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ -delta films  
Solid State Communications 150 (1-2), 66-69 (2010).

5. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).

4. Nucara, A., Maselli, P., Del Bufalo, M., Guidi, M.C., Garcia, J., Orgiani, P., Maritato, L., Calvani, P.  
Effect of Ga substitution on the optical properties of La-Sr manganites  
Physical Review B - Condensed Matter and Materials Physics 77 (6), art. no. 064431 (2008).

3. Rossiny, J.C.H., Fearn, S., Kilner, J.A., Zhang, Y., Chen, L., Yang, S., Evans, J., (...), Cohen, L.F.  
Characterisation of combinatorial libraries of perovskite materials for SOFC cathode applications  
ECS Transactions 7 (1 PART 1), pp. 1003-1013 (2007).

2. Andreasson J, Holmlund J, Knee CS, et al.  
Franck-Condon higher order lattice excitations in the  $\text{LaFe}_{1-x}\text{Cr}_x\text{O}_3$  ( $x=0, 0.1, 0.5, 0.9, 1.0$ ) perovskites due to Fe-Cr charge transfer effects  
PHYSICAL REVIEW B 75 (10), 103402 (2007).

1. Li WJ, Zhang B, Lu W  
Structural properties and Raman spectroscopy of  $\text{La}_{(2+4x)}\text{Sr}_{-3((1-4x))}\text{Mn}_{-3(1-x)}\text{Cu}_x\text{O}_3$  ( $0 \leq x \leq 0.2$ )  
PHYSICS LETTERS A 362 (4), pp. 327-330 (2007).

### 57. "Properties of AlN epitaxial layers on 6H-SiC substrate grown by sublimation in argon, nitrogen, and their mixtures"

M. Beshkova, Z. Zakhariyev, M.V. Abrashev, J. Birch, A. Postovit, and R. Yakimova  
Materials Science and Engineering B 129, 228–231 (2006).

3. Liu, X., Luo, J., Lin, Y., (...), Zhang, W., Guo, J.  
High-Performance Photodetectors Using a 2D  $\text{MoS}_2$ /3D-AlN Structure  
ACS Applied Electronic Materials 3(12), pp. 5415-5422 (2021)

2. Perng, Ya-Chuan; Kim, Taeseung; Chang, Jane P.  
Effect of residual H<sub>2</sub>O on epitaxial AN film growth on 4H-SiC by alternating doses of TMA and NH<sub>3</sub>  
APPLIED SURFACE SCIENCE 314, pp. 1047-1052 SEP 30 2014

1. Kangawa, Y., Wakigawa, T., Kakimoto, K.



- Possibility of AlN solution growth using Al and Li<sub>3</sub>N  
 Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers 46 (9 A), pp. 5785-5787 (2007)
58. *“Gold supported on ceria and ceria-alumina promoted by molybdena for complete benzene oxidation”*  
 Andreeva, D., Petrova, P., Sobczak, J.W., Ilieva, L., and Abrashev, M.  
 Applied Catalysis B: Environmental 67 (3-4), pp. 237-245 (2006).
39. Lee, J., Min, H., Choe, Y.-S., (...), Lee, H.-S., Lee, W.  
 Highly sensitive and selective detection of benzene, toluene, xylene, and formaldehyde using Au-coated SnO<sub>2</sub> nanorod arrays for indoor air quality monitoring  
 Sensors and Actuators B: Chemical 394,134359 (2023)
38. Yadav, V.K., Chauhan, K.Y., Das, T.  
 Spectroscopic and Kinetic Study of Cyclohexane Oxidation Reaction in Vapor Phase over the Catalyst 20FeMnO<sub>8</sub>/(3CeAl)  
 Industrial and Engineering Chemistry Research (Article in Press) DOI: 10.1021/acs.iecr.3c02635 (2023)
37. Eaimsumang, S., Chollacoop, N., Luengnaruemitchai, A., Taylor, S.H.  
 Relationship between hydrothermal temperatures and structural properties of CeO<sub>2</sub> and enhanced catalytic activity of propene/toluene/CO oxidation by Au/CeO<sub>2</sub> catalysts  
 Frontiers in Chemistry 10,959152 (2022)
36. Woźniak, P., Kraszkiewicz, P., Małecka, M.A.  
 Hierarchical Au/CeO<sub>2</sub> systems - influence of Ln<sup>3+</sup> dopants on the catalytic activity in the propane oxidation process  
 CrystEngComm 24(36), pp. 6408-6420 (2022)
35. Gaálová, J., Topka, P.  
 Gold and ceria as catalysts for voc abatement: A review  
 Catalysts 11(7),789 (2021)
34. Divergent influence of {111} vs. {100} crystal planes and Yb<sup>3+</sup> dopant on CO oxidation paths in mixed nano-sized oxide Au/Ce<sub>1-x</sub>Yb<sub>x</sub>O<sub>2-x/2</sub> (x=0 or 0.1) systems  
 Wozniak, Piotr; Kraszkiewicz, Piotr; Malecka, Malgorzata A.  
 CRYSTENGCOMM Volume: 22 Issue: 35 Pages: 5828-5840 Published: SEP 21 2020
33. Decoration of Cube-Like Ceria Crystals by Well-Dispersed Au Nanoparticles: Surface Influence  
 Malecka, Malgorzata A.; Matus, Krzysztof; Wozniak, Piotr  
 CHEMISTRYSELECT Volume: 5 Issue: 10 Pages: 2871-2877 Published: MAR 13 2020
32. Establishing high-performance Au/cobalt oxide interfaces for low-temperature benzene combustion  
 Jiang, Wu; Feng, Yina; Zeng, Yiqiang; et al.  
 JOURNAL OF CATALYSIS Volume: 375 Pages: 171-182 Published: JUL 2019
31. Recent Advances in the Catalytic Oxidation of Volatile Organic Compounds: A Review Based on Pollutant Sorts and Sources  
 He, Chi; Cheng, Jie; Zhang, Xin; et al.  
 CHEMICAL REVIEWS Volume: 119 Issue: 7 Pages: 4471-4568 Published: APR 10 2019
30. The Key Role of Nanocasting in Gold-based Fe<sub>2</sub>O<sub>3</sub> Nanocasted Catalysts for Oxygen Activation at the Metal-support Interface  
 Garcia, Tomas; Lopez, Jose M.; Solsona, Benjamin; et al.  
 CHEMCATCHEM Volume: 11 Issue: 7 Pages: 1915-1927 Published: APR 4 2019
29. Ce/Al<sub>2</sub>O<sub>3</sub> as an efficient catalyst for oxidative desulfurization of liquid fuel  
 Jatav, Shweta; Srivastava, Vimal Chandra  
 PETROLEUM SCIENCE AND TECHNOLOGY Volume: 37 Issue: 6 Pages: 633-640 Published: MAR 19 2019
28. Effect of the chemical composition of mesoporous cerium-zirconium oxides on the modification with sulfur and gold species and their application in glycerol oxidation  
 Kaminski, P.  
 ChemEngineering 1(2),18, pp. 1-24 (2017)
27. Development of Mo/γ-Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub> catalyst with high thermal stability by modified impregnation method  
 Ramli, A  
 Materials Science Forum 888 MSF, pp. 491-495 (2017)
26. Jin, Baofang; Wei, Yuechang; Zhao, Zhen; et al.  
 Three-dimensionally ordered macroporous CeO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub>-supported Au nanoparticle catalysts: Effects of CeO<sub>2</sub> nanolayers on catalytic activity in soot oxidation  
 CHINESE JOURNAL OF CATALYSIS Volume: 38 Issue: 9 Pages: 1629-1641 Published: SEP 2017
25. Centeno, M.A., Reina, T.R., Ivanova, S., Laguna, O.H., Odriozola, J.A.  
 Au/CeO<sub>2</sub> catalysts: Structure and CO oxidation activity  
 Catalysts 6(10), Art.No. 158 DOI: 10.3390/catal6100158 (2016)

24. Liberman, E.Yu., Naumkin, A.V., Mikhailichenko, A.I., Batrakova, M.K., Maslakov, K.I., Revina, A.A., Papkova, M.V., Kon'Kova, T.V., Grunskii, V.N., Gasparyan, M.D., Karpovich, A.L., Lizunova, A.A.  
Au/Ce<sub>0.72</sub>Zr<sub>0.18</sub>Pr<sub>0.10</sub>O<sub>2</sub> nanodisperse catalyst for oxidation of carbon monoxide  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A Volume: 90 Issue: 1 Pages: 166-172 DOI: 10.1134/S0036024416010167  
Published: JAN 2016
23. Tang, W.X., Li, S.D., Chen, Y.F.  
Controlled synthesis of manganese oxides with different morphologies and their performance for catalytic removal of gaseous benzene  
Energy and Environmental Engineering - Proceedings of the International Conference on Energy and Environmental Engineering, ICEEE 2014, 47-51 (2015)
22. Dongil, A.B., Pastor-Pérez, L., Sepúlveda-Escribano, A., Reyes, P.  
Promoter effect of sodium in graphene-supported Ni and Ni-CeO<sub>2</sub> catalyst for the low-temperature WGS reaction  
APPLIED CATALYSIS A-GENERAL Volume: 505 Pages: 98-104 DOI: 10.1016/j.apcata.2015.07.036 Published: SEP 25 2015
21. Fiorenza, Roberto; Crisafulli, Carmelo; Condorelli, Guglielmo G.; et al.  
Au-Ag/CeO<sub>2</sub> and Au-Cu/CeO<sub>2</sub> Catalysts for Volatile Organic Compounds Oxidation and CO Preferential Oxidation  
CATALYSIS LETTERS Volume: 145 Issue: 9 Pages: 1691-1702 Published: SEP 2015
20. Carabineiro, S. A. C.; Chen, X.; Martynyuk, O.; et al.  
Gold supported on metal oxides for volatile organic compounds total oxidation  
CATALYSIS TODAY Volume: 244 Pages: 103-114 Published: APR 15 2015
19. Lakshmanan, Pandian; Averseng, Frederic; Bion, Nicolas; et al.  
Understanding of the oxygen activation on ceria- and ceria/alumina-supported gold catalysts: a study combining O-18/O-16 isotopic exchange and EPR spectroscopy  
GOLD BULLETIN 46 (4), pp. 233-242 2013
18. Lakshmanan, Pandian; Delannoy, Laurent; Louis, Catherine; et al.  
Au/xCeO(2)/Al<sub>2</sub>O<sub>3</sub> catalysts for VOC elimination: oxidation of 2-propanol  
CATALYSIS SCIENCE & TECHNOLOGY 3 (11), pp. 2918-2925 2013
17. Kaminski, P., Sobczak, I., Decyk, P., Ziolk, M., Roth, W.J., Campo, B., Daturi, M.  
Zeolite MCM-22 modified with Au and Cu for catalytic total oxidation of methanol and carbon monoxide  
Journal of Physical Chemistry C 117 (5), pp. 2147-2159, 2013
16. Farooq, M., Ramli, A., Subbarao, D.  
Synthesis and characterization of molybdenum catalysts supported on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub> composite oxides  
AIP Conference Proceedings 1482, pp. 585-589, 2012
15. Bo, L.-L., Zhang, Y.-C., Wang, X.-H., Liu, H.-N., Zhang, H.  
Preparation and application of high-performance catalyst in microwave assisted catalytic oxidation of benzene  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 40 (7), pp. 878-885, 2012
14. Scirè, S., Liotta, L.F.  
Supported gold catalysts for the total oxidation of volatile organic compounds  
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.
13. Wu, P., Loh, P.K., Zhao, X.S.  
Supported gold catalysts for selective oxidation of organics  
Science of Advanced Materials 3 (6), pp. 970-983, 2011.
12. Bonelli R.; Lucarelli C.; Pasini T.; et al.  
Total oxidation of volatile organic compounds on Au/FeO(x) catalysts supported on mesoporous SBA-15 silica  
APPLIED CATALYSIS A-GENERAL 400 (1-2) Pages: 54-60, JUN 30 2011.
11. Bonelli R.; Albonetti S.; Morandi V.; et al.  
Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO(2) for total oxidation of VOC  
APPLIED CATALYSIS A-GENERAL 395 (1-2) Pages: 10-18, MAR 15 2011.
10. Wang Lei; Guo Guangsheng; Gu Fubo; et al.  
Preparation of three different sphere-like Au/CeO(2) catalysts and their activity for the CO oxidation  
MATERIALS SCIENCE AND ENGINEERING APPLICATIONS, PTS 1-3 Book Series: Advanced Materials Research Volume: 160-162 Pages: 428-433, 2011.
9. Musialik-Piotrowska Anna  
Activity of Perovskite-Based Platinum Doped Catalysts in Oxidation of Organic Air Pollutants  
OCHRONA SRODOWISKA 33 (1) Pages: 19-24, 2011.
8. Yu Qiangqiang; Chen Wei; Li Yang; et al.  
The action of Pt in bimetallic Au- Pt/CeO(2) catalyst for water-gas shift reaction  
CATALYSIS TODAY 158 (3-4) Pages: 324-328, DEC 22 2010.
7. Scire Salvatore; Riccobene Paolo M.; Crisafulli Carmelo  
Ceria supported group IB metal catalysts for the combustion of volatile organic compounds and the preferential oxidation of CO  
APPLIED CATALYSIS B-ENVIRONMENTAL 101 (1-2) Pages: 109-117, NOV 22 2010.

6. Yu, Q.-Q., Dong, Y.-Y., Liao, W.-P., Jin, M.-S., He, T., Suo, Z.-H.  
Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction  
*Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology* 38 (2), pp. 223-229 (2010).
5. Delannoy, L., Fajferweg, K., Lakshmanan, P., Potvin, C., Méthivier, C., Louis, C.  
Supported gold catalysts for the decomposition of VOC: Total oxidation of propene in low concentration as model reaction  
*Applied Catalysis B: Environmental* 94 (1-2), pp. 117-124 (2010).
4. Huang, S., Zhang, C., He, H.  
Complete oxidation of *o*-xylene over Pd/Al<sub>2</sub>O<sub>3</sub> catalyst at low temperature  
*Catalysis Today* 139 (1-2), pp. 15-23 (2008).
3. Manzoli, M., Avgouropoulos, G., Tabakova, T., Papavasiliou, J., Ioannides, T., Boccuzzi, F.  
Preferential CO oxidation in H<sub>2</sub>-rich gas mixtures over Au/doped ceria catalysts  
*Catalysis Today* 138 (3-4), pp. 239-243 (2008).
2. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N.  
Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on  $\beta$ -MnO<sub>2</sub> nanorods  
*Applied Catalysis A: General* 344 (1-2), pp. 150-157 (2008).
1. Gennequin, C., Lamalle, M., Cousin, R., Siffert, S., Aissi, F., Aboukais, A.  
Catalytic oxidation of VOCs on Au/Ce-Ti-O  
*Catalysis Today* 122 (3-4), pp. 301-306 (2007)
59. “*Raman spectroscopy of low-temperature (Pnma) and high-temperature (R-3c) phases of LaCrO<sub>3</sub>*”  
Iliev, M.N., Litvinchuk, A.P., Hadjiev, V.G., Wang, Y.-Q., Cmaidalka, J., Meng, R.-L., Sun, Y.-Y., Kolev N., and Abrashev, M.V.  
*Phys. Rev. B* 74 (21), 214301 (2006).
67. Gaikwad, V.M., Shirbhate, S.C., Acharya, S.A.  
Study of dielectric and electrical properties of novel lead-free double perovskite oxide  
*Ferroelectrics* 618(2), pp. 464-473 (2024)
66. Gupta, P., Pal, D.  
Interwoven spin-reorientation and exchange bias in Nd<sub>1-x</sub>Pr<sub>x</sub>CrO<sub>3</sub>  
*Journal of Alloys and Compounds* 969,172389 (2023)
65. Kumari, D., Singh, D.N., Shamim, M.K., (...), Choudhary, R.J., Sharma, S.  
Study of the synergistic role of multivalence states of 3d cations on the crystal lattice distortion and magnetic behavior of SrFeCoO<sub>6- $\delta$</sub> : A spectroscopic study  
*Journal of Alloys and Compounds* 967,171768 (2023)
64. Bull, C.L., Funnell, N.P., Ridley, C.J.  
A structural study of PrCrO<sub>3</sub> under extreme conditions: A comparison with the effects of doping  
*Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 381(2258),20220332 (2023)
63. Singh, D.N., Shamim, M.K., Panchal, G., (...), Molak, A., Mahato, D.K.  
Probing the effect of Zn<sup>2+</sup> on the local structure, dielectric and magnetic properties of La<sub>2</sub>CuMnO<sub>6</sub> by solid state synthesis  
*Journal of Alloys and Compounds* 936,168241 (2023)
62. Modem, N., Nurhayati, A., Venkata Ramana, K., Swamy, B., Reddy, C.V.  
Structural, Electrical, and Thermoelectric Properties of La and Sr Co-Doped CaMnO<sub>3</sub> Compounds  
*ECS Journal of Solid State Science and Technology* 12(3),033008 (2023)
61. Mall, A.K., Garg, N., Verma, A.K., (...), Srihari, V., Gupta, R.  
Discovery of high-pressure post-perovskite phase in HoCrO<sub>3</sub>  
*Journal of Physics and Chemistry of Solids* 172,111078 (2023)
60. Gao, M., Konysheva, E.Y., Yang, J.  
Tailoring kinetics of Cr-chemisorption over La<sub>0.6</sub>Sr<sub>0.4</sub>Fe<sub>0.8</sub>Co<sub>0.2</sub>O<sub>3</sub> cathode material through its porosity variation  
*International Journal of Hydrogen Energy* 47(97), pp. 41336-41346 (2022)
59. Xiong, Z., Zhang, X., Fang, Z., (...), Tang, B., Zhang, S.  
Characterization of structural and electrical properties of Ca<sub>0.61</sub>Nd<sub>0.26</sub>TiO<sub>3</sub> ceramic tailored by complex ions (Al<sub>0.5</sub>Nb<sub>0.5</sub>)<sup>4+</sup>  
*Journal of Alloys and Compounds* 899,163234 (2022)
58. Shinde, V.S., Kapadnis, K.H., Patil, A.P., Koli, P.B.  
Designing of LaCrO<sub>3</sub> – TiO<sub>2</sub> nanocomposites p: n heterojunction-based sensor material for the selective detection of volatile petrol vapors (PV) and CO<sub>2</sub> gas vapors  
*Journal of the Indian Chemical Society* 99(3),100367 (2022)
57. Hu, T., Xia, L., Liu, W., (...), Xiong, F., Hu, W.

- Dy<sup>3+</sup>-doped LaInO<sub>3</sub>: a host-sensitized white luminescence phosphor with exciton-mediated energy transfer  
Journal of Materials Chemistry C 9(38), pp. 13410-13419 (2021)
56. Bhadram, V.S., Joseph, B., Delmonte, D., (...), Lobo, R.P., Gauzzi, A.  
Pressure-induced structural phase transition and suppression of Jahn-Teller distortion in the quadruple perovskite structure  
Physical Review Materials 5(10),104411 (2021)
55. Bhadram, V.S., Sen, A., Sunil, J., (...), Sundaresan, A., Narayana, C.  
Pressure-driven evolution of structural distortions in RCrO<sub>3</sub> perovskites: The curious case of LaCrO<sub>3</sub>  
Solid State Sciences 119,106708 (2021)
54. Maity, R., Dutta, A., Halder, S., (...), Mandal, K., Sinha, T.P.  
Enhanced photocatalytic activity, transport properties and electronic structure of Mn doped GdFeO<sub>3</sub> synthesized using the sol-gel process  
Physical Chemistry Chemical Physics 23(30), pp. 16060-16076 (2021)
53. Fowlie, J., Mundet, B., Toulouse, C., (...), Kreisel, J., Triscone, J.-M.  
Crossover between distinct symmetries in solid solutions of rare earth nickelates  
APL Materials 9(8),081119 (2021)
52. Qahtan, A.A.A., Husain, S., Zarrin, N., (...), Fatema, M., Khan, W.  
Raman scattering, electronic transport and dielectric features of Co-doped DyCrO<sub>3</sub>  
Journal of Materials Science: Materials in Electronics 32(11), pp. 15108-15133 (2021)
51. Raman spectroscopy of the Al-doping induced structural phase transition in LaCrO<sub>3</sub> perovskite  
Silva, R.S., Cunha, F., Barrozo, P.  
Solid State Communications 333,114346 (2021)
50. Characterization of structure and properties in CaO-Nd<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> microwave dielectric ceramic modified by Al<sub>2</sub>O<sub>3</sub>  
Xiong, Z., Zhang, X., Tang, B., (...), Fang, Z., Zhang, S.  
Materials Characterization 176,111108 (2021)
49. Structural and morphological characterization of the perovskite LaFe<sub>0.2</sub>Cr<sub>0.8-x</sub>CoxO<sub>3</sub> (x=0.0, 0.2, 0.4, 0.6, 0.8) for selective oxidation of CO  
Rativa-Parada, Wilson; Gomez-Cuaspu, Jairo A.; Schmal, Martin; et al.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY Early Access: MAR 2021
48. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties  
Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020
47. Spin-phonon coupling and thermodynamic behaviour in YCrO<sub>3</sub> and LaCrO<sub>3</sub>: inelastic neutron scattering and lattice dynamics  
Gupta, Mayanak K.; Mittal, Ranjan; Mishra, Sanjay K.; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 50 Article Number: 505402 Published: SEP 30 2020
46. Assignment of optical phonons at the zone center of distorted orthorhombic RCrO<sub>3</sub> (R = La, Pr, Nd, Sm, Eu) perovskites using force-field lattice model  
Jana, Y. M.; Saha, Jyoti; Nandi, Saikat  
VIBRATIONAL SPECTROSCOPY Volume: 109 Article Number: 103086 Published: JUL 2020
45. Orbital facilitated charge transfer originated phonon mode in Cr-substituted PrFeO<sub>3</sub>: A brief Raman study  
Kumar, Anil; Umrao, Sima; Sagdeo, Pankaj R.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 7 Pages: 1210-1218 Published: JUL 2020
44. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>  
Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
43. Anomalous magnetic behavior and complex magnetic structure of proximate LaCrO<sub>3</sub>-LaFeO<sub>3</sub> system  
Tiwari, B., Dixit, A., Ramachandra Rao, M.S.  
Materials Research Express 6(12),126119 (2019)
42. Impedance spectroscopy study on Ca<sup>2+</sup> doped YCrO<sub>3</sub> ceramics  
Mall, Ashish Kumar; Pramanik, A. K.  
AIP Conference Proceedings Volume: 2220 Article Number: 110005 Published: 2019
41. Study of structural and dielectric properties of La<sub>0.9</sub>Na<sub>0.1</sub>CrO<sub>3</sub>- and Ni<sub>0.5</sub>Cu<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>-based composites  
Saleem, M.; Chouhan, Shivani; Mishra, A.  
JOURNAL OF ADVANCED DIELECTRICS Volume: 9 Issue: 6 Article Number: 1950044 Published: DEC 2019
40. Modifying La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Perovskites with Cr Incorporation for Fast Isothermal CO<sub>2</sub>-Splitting Kinetics in Solar-Driven Thermochemical Cycles  
Carrillo, Alfonso J.; Bork, Alexander H.; Moser, Thierry; et al.  
ADVANCED ENERGY MATERIALS Volume: 9 Issue: 28 Article Number: 1803886 Published: JUL 2019
39. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties

- Wang, Shan; Wu, Xiaofeng; Wang, Tiesheng; et al.  
INORGANIC CHEMISTRY Volume: 58 Issue: 4 Pages: 2315-2329 Published: FEB 18 2019
38. Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO<sub>3</sub>  
Muneeswaran, M., Lee, S.H., Kim, D.H., (...), Giridharan, N.V., Venkateswaran, C.  
Journal of Alloys and Compounds 750, pp. 276-285 (2018)
37. Continuous Hydrothermal Flow Synthesis of LaCrO<sub>3</sub> in Supercritical Water and Its Application in Dual-Phase Oxygen Transport Membranes  
Xu, Y., Pirou, S., Zielke, P., (...), Hendriksen, P.V., Kiebach, R.  
Industrial and Engineering Chemistry Research 57(6), pp. 2123-2130 (2018)
36. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi  
SOLID STATE SCIENCES Volume: 85 Pages: 70-75 Published: NOV 2018
35. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>FexO<sub>3</sub>  
Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
PHYSICAL REVIEW B Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
34. Study of Structural and Magnetic Characterization of Polycrystalline Y<sub>0.5</sub>Ho<sub>0.5</sub>CrO<sub>3</sub>  
Mall, Ashish Kumar; Garg, Ashish; Gupta, Rajeev  
AIP Conference Proceedings Volume: 1953 Article Number: 120009 Published: 2018
33. Study of structural, dielectric, optical properties and electronic structure of Cr-doped LaInO<sub>3</sub> perovskite nanoparticles  
Kumar, S., Dwivedi, G.D., Joshi, A.G., Chatterjee, S., Ghosh, A.K.  
Materials Characterization 131, pp. 108-115 (2017)
32. Ac Conductivity And Raman Spectroscopic Studies Of PrMnO<sub>3</sub> Nanostructure  
Saha, Sujoy; Maity, Ritwik; Sakhya, Anup Pradhan; et al.  
MATERIALS TODAY-PROCEEDINGS Volume: 5 Issue: 3 Pages: 9981-9988 Part: 3 Published: 2017
31. Polarized Raman scattering on single crystals of rare earth orthochromite RCrO<sub>3</sub> (R=La, Pr, Nd, and Sm)  
Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 12 Pages: 1839-1851 Published: DEC 2017
30. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
29. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.  
Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)  
PHYSICAL REVIEW B Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016
28. Shportko, K.V., Rueckamp, R., Shoukavaya, T.V., Trukhan, V.M., El-Nasser, H.M., Venger, E.F.  
Effect of the low temperatures on the Raman active vibrational modes in ZnP<sub>2</sub> and CdP<sub>2</sub>  
Vibrational Spectroscopy 87, 173-181 DOI: 10.1016/j.vibspec.2016.09.02 (2016)
27. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016
26. Taheri, M., Razavi, F.S., Yamani, Z., Flacau, R., Reuvekamp, P.G., Schulz, A., Kremer, R.K.  
Magnetic structure, magnetoelastic coupling, and thermal properties of EuCrO<sub>3</sub> nanopowders  
PHYSICAL REVIEW B Volume: 93 Issue: 10 Article Number: 104414 DOI: 10.1103/PhysRevB.93.104414 Published: MAR 16 2016
25. Shi, J., Zong, S., Hu, Y., Guan, X., Luo, J., Shang, Y., Li, G., Liu, D., Wang, X., Guo, P.  
Continuous solid solutions of Na<sub>0.5</sub>La<sub>0.5</sub>TiO<sub>3</sub>-LaCrO<sub>3</sub> for photocatalytic H<sub>2</sub> evolution under visible-light irradiation  
RSC ADVANCES Volume: 6 Issue: 57 Pages: 51801-51806 DOI: 10.1039/c6ra07891e Published: 2016
24. Mall, A.K., Garg, A., Gupta, R.  
High Temperature X-ray Diffraction, Raman Spectroscopy and Dielectric Studies on Yttrium Orthochromites  
AIP Conference Proceedings Volume: 1728 Article Number: 020239 DOI: 10.1063/1.4946290 Published: 2016
23. Wang, S., Huang, K., Hou, C., Yuan, L., Wu, X., Lu, D.  
Low temperature hydrothermal synthesis, structure and magnetic properties of RECrO<sub>3</sub> (RE = La, Pr, Nd, Sm)  
DALTON TRANSACTIONS Volume: 44 Issue: 39 Pages: 17201-17208 DOI: 10.1039/c5dt02342d Published: 2015
22. Gupta, Preeti; Bhargava, Richa; Poddar, Pankaj  
Colossal increase in negative magnetization, exchange bias and coercivity in samarium chromite due to a strong coupling between Sm<sup>3+</sup>-Cr<sup>3+</sup> spins sublattices  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 48 Issue: 2 Article Number: 025004 Published: JAN 21 2015
21. Gupta, Preeti; Poddar, Pankaj

- Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
20. Sood, Kamil; Singh, K.; Pandey, O. P.  
Co-existence of cubic and orthorhombic phases in Ba-doped LaInO<sub>3</sub> and their effect on conductivity  
PHYSICA B-CONDENSED MATTER Volume: 456 Pages: 250-257 Published: JAN 1 2015
19. Mandal, P.R., Sahoo, R.C., Nath, T.K.  
A comparative study of structural, magnetic, dielectric behaviors and impedance spectroscopy for bulk and nanometric double perovskite Sm<sub>2</sub>CoMnO<sub>6</sub>  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 4 Article Number: 046108 DOI: 10.1088/2053-1591/1/4/046108 Published: DEC 2014
18. Bhadram, V.S., Swain, D., Dhanya, R., Polentarutti, M., Sundaresan, A., Narayana, C.  
Effect of pressure on octahedral distortions in RCrO<sub>3</sub> (R=Lu, Tb, Gd, Eu, Sm): the role of R-ion size and its implications  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 2 Article Number: 026111 DOI: 10.1088/2053-1591/1/2/026111 Published: JUN 2014
17. Muneeswaran, M.; Giridharan, N. V.  
Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO<sub>3</sub> nanoparticles  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014
16. El Amrani, M.; Zaghrioui, M.; Ta Phuoc, V.; et al.  
Local symmetry breaking and spin-phonon coupling in SmCrO<sub>3</sub> orthochromite  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp.1-6 JUN 2014
15. Saha, Sujoy; Chanda, Sadhan; Dutta, Alo; et al.  
Dielectric relaxation and phonon modes of NdCrO<sub>3</sub> nanostructure  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 69 (3), pp. 553-563 MAR 2014
14. Tiwari, B., Dixit, A., Naik, R., Lawes, G., Ramachandra Rao, M.S.  
Dielectric and optical phonon anomalies near antiferromagnetic ordering in LaCrO<sub>3</sub>: A possible near room temperature magnetodielectric system  
Applied Physics Letters 103(15), 152906 DOI: 10.1063/1.4824919 (2013)
13. Daniels, Luke M.; Weber, Mads C.; Lees, Martin R.; et al.  
Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution La<sub>x</sub>Sm<sub>1-x</sub>CrO<sub>3</sub>  
INORGANIC CHEMISTRY 52 (20), pp. 12161-12169 OCT 21 2013
12. Jacob, Kallarackel Thomas; Gupta, Sapna; Singh, Prabhakar  
Electrochemical Determination of Gibbs Energy of Formation of LaCrO<sub>3</sub> Using a Composition-Graded Bielectrolyte  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (10), pp. 3272-3278 OCT 2013
11. Bielecki, J., Svedlindh, P., Tibebu, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012
10. Runka, T.; Berkowski, M.  
Perovskite La<sub>1-x</sub>Sr<sub>x</sub>Ga<sub>1-y</sub>Mn<sub>1-y</sub>O<sub>3</sub> solid solution crystals: Raman spectroscopy characterization  
JOURNAL OF MATERIALS SCIENCE 47 (14) Pages: 5393-5401, JUL 2012.
9. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5) , art. no. 054303, 2012.
8. Martinelli, A., Ferretti, M., Cimberle, M.R., Ritter, C.  
The crystal and magnetic structure of Ti-substituted LaCrO<sub>3</sub>  
Materials Research Bulletin 46 (2), pp. 190-193 (2011).
7. Du Yi; Cheng Zhen Xiang; Wang Xiao-Lin; et al.  
Structure, magnetic, and thermal properties of Nd(1-x)La(x)CrO<sub>3</sub> (0 <= x <= 1.0)  
JOURNAL OF APPLIED PHYSICS 108 (9) Article Number: 093914, NOV 1 2010.
6. Shen Y, Liu MN, He TM, et al  
A potential interconnect material for solid oxide fuel cells: Nd<sub>0.75</sub>Ca<sub>0.25</sub>Cr<sub>0.98</sub>O<sub>3-δ</sub>  
Journal of Power Sources 157 (3), B441-B448 (2010).
5. Sharma, V.I., Yildiz, B.  
Degradation mechanism in La<sub>0.8</sub>Sr<sub>0.2</sub>CoO<sub>3</sub> as contact layer on the solid oxide electrolysis cell anode  
Journal of the Electrochemical Society 157 (3), pp. B441-B448 (2010).
4. Shen, Y., Liu, M., He, T., Jiang, S.P.  
Preparation, electrical conductivity, and thermal expansion behavior of dense Nd<sub>1-x</sub>CaxCrO<sub>3</sub> solid solutions  
Journal of the American Ceramic Society 92 (10), pp. 2259-2264 (2009).
3. Povoden, E., Chen, M., Grundy, A.N., Ivas, T., Gauckler, L.J.

- Thermodynamic assessment of the La-Cr-O system  
Journal of Phase Equilibria and Diffusion 30 (1), pp. 12-27 (2009).
2. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
1. Ong, K.P., Blaha, P., Wu, P.  
Origin of the light green color and electronic ground state of LaCrO<sub>3</sub>  
Physical Review B - Condensed Matter and Materials Physics 77 (7), art. no. 073102 (2008).
60. “*Sublimation Epitaxy of AlN layers grown by different conditions on 4H-SiC substrates*”  
M. Beshkova, K. G. Grigorov, Z. Zakhariyev, M. Abrashev, M. Massi, R. Yakimova  
J. Optoelectr. and Adv. Mater. 9, 213 (2007).
61. “*Polarized micro-Raman scattering characterization of Mg<sub>2</sub>Si nanolayers in (001) Si matrix*”  
G. Zlateva, A. Atanassov, M. Baleva, L Nikolova and M. V. Abrashev  
J. Phys.: Condens. Matter 19, 086220 (2007). (9 pages)
6. Balasubramanian, P., Battabyal, M., Gopalan, R.  
Improving the oxidation resistance of thermoelectric Mg<sub>2</sub>Si leg with silica coating  
Materials Letters 312,131599 (2022)
5. First-Principle Simulation of Ferromagnetism in Gd-Doped Mg<sub>2</sub>X (X = Si, Ge and Sn)  
El Ahmar, Y.; Hallouche, A.; Dahani, A.; et al.  
SPIN Volume: 9 Issue: 3 Article Number: 1950010 Published: SEP 2019
4. AZ91 magnesium matrix foam composites with fly ash cenospheres fabricated by negative pressure infiltration technique  
Braszczyńska-Malik, K.N., Kamieniak, J.  
Materials Characterization 128, pp. 209-216 (2017)
3. Morozova, Natalia V.; Ovsyannikov, Sergey V.; Korobeinikov, Igor V.; et al.  
Significant enhancement of thermoelectric properties and metallization of Al-doped Mg<sub>2</sub>Si under pressure  
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 213705 JUN 7 2014
2. Fan, T.-W., Ke, J.-L., Fu, L., Tang, B.-Y., Peng, L.-M., Ding, W.-J.  
Ideal strength of Mg<sub>2</sub>X (X = Si, Ge, Sn and Pb) from first-principles  
Journal of Magnesium and Alloys 1(2), 163-168 DOI: 10.1016/j.jma.2013.06.002 (2013)
- 1.Kang, Y., Brockway, L., Vaddiraju, S.  
A simple phase transformation strategy for converting silicon nanowires into metal silicide nanowires: Magnesium silicide  
Materials Letters 100, pp. 106-110, 2013
62. “*Raman spectroscopy of ordered double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films*”  
M. N. Iliev, M. V. Abrashev, A. P. Litvinchuk, V. G. Hadjiev, H. Guo, and A. Gupta  
Phys. Rev. B 75, 104118 (2007). (6 pages)
178. Zhang, H., Wang, M., Wang, S., (...), Li, L., Li, Y.  
Structural phase transition and tunable exchange bias effect in La<sub>1-5</sub> Sr<sub>0-5</sub> CoMnO<sub>6</sub> nanoparticles with particle size  
Journal of Solid State Chemistry 334,124687 (2024)
177. Manna, P., Kanthal, S., Das, A., Banerjee, A., Bandyopadhyay, S.  
Low temperature Raman spectroscopic study of anharmonic and spin-phonon coupled quasi-two dimensional rare earth based francisites  
Journal of Physics Condensed Matter 36(21),215704 (2024)
176. Verma, A.K., Singh, D.N., Mahato, D.K.  
B-site multivalent cations induced effects on structural and magnetic characteristics of double perovskite La<sub>2</sub>CoMnO<sub>6</sub>  
Physica B: Condensed Matter 676,415649 (2024)
175. Kumar, G.J., Bharathi, K.K.  
Near-room-temperature magnetocaloric properties at 1.5 T coupled with relaxor dielectric properties in La<sub>2</sub>CoMnO<sub>6</sub> nanoparticles  
Journal of Physics and Chemistry of Solids 186,111829 (2024)
174. Kim, D., Jeong, I., Ahn, S., (...), Jung, W., Lee, K.T.  
On the Role of Bimetal-Doped BaCoO<sub>3-δ</sub> Perovskites as Highly Active Oxygen Electrodes of Protonic Ceramic Electrochemical Cells  
Advanced Energy Materials (Article in Press) DOI: 10.1002/aenm.202304059 (2024)
173. Das, A., Neogi, S.K., Banerjee, A., Tayal, A., Bandyopadhyay, S.  
Highly correlated structural, local structural, Raman spectroscopic and magnetic properties of Mn-substituted Cu<sub>2</sub>V<sub>2</sub>O<sub>7</sub>  
Journal of Physics Condensed Matter 35(50),505802 (2023)

172. Baral, S.C., Maneesha, P., Rini, E.G., Sen, S.  
Recent advances in La<sub>2</sub>NiMnO<sub>6</sub> double perovskites for various applications; challenges and opportunities  
*Progress in Solid State Chemistry* 72,100429 (2023)
171. Jharwal, S., Gupta, A., Kar, M., Kumar, A.  
Low temperature magnetic and structural properties of Sr-doped La<sub>2</sub>CoMnO<sub>6</sub> (La<sub>2-x</sub>Sr<sub>x</sub>CoMnO<sub>6</sub>: 0 ≤ x ≤ 0.08) double perovskite nanoparticles  
*Journal of Magnetism and Magnetic Materials* 587,171308 (2023)
170. Sediva, E., Rupp, J.L.M.  
Raman spectra and defect chemical characteristics of Sr(Ti,Fe)O<sub>3-y</sub> solid solution of bulk pellets vs. thin films  
*Journal of Materials Chemistry A* 11(48), pp. 26752-26763 (2023)
169. Zhou, L., Yin, P., Tan, C., (...), Liu, R., Yun, J.  
Controlled double perovskites for the efficient catalytic combustion of Cl containing VOCs  
*Applied Catalysis A: General* 666,119439 (2023)
168. Kumar, A., Meena, R., Miryala, M., Ueno, K., Dhaka, R.S.  
Effect of the growth orientation on the physical properties of Sr<sub>2</sub>CoNbO<sub>6</sub> thin films  
*Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films* 41(5),053409 (2023)
167. Huang, C., Zhao, W., Wang, H., (...), Zhu, N., Bai, Y.  
Mild nitridation of perovskite manganite: Synthesis, structure and magnetism  
*Journal of Solid State Chemistry* 323,124044 (2023)
166. Wang, C., Shi, J., Gan, H., Wang, X., Hu, M.  
Substitutional effect of Mg<sup>2+</sup> on structural and magnetic properties of La<sub>2</sub>Mg<sub>x</sub>Ni<sub>1-x</sub>MnO<sub>6</sub> double-perovskite thin films  
*Journal of the American Ceramic Society* 106(7), pp. 4294-4303 (2023)
165. Hosen, M.J., Basith, M.A., Syed, I.M.  
Structural, magnetic and optical properties of disordered double perovskite Gd<sub>2</sub>CoCrO<sub>6</sub> nanoparticles  
*RSC Advances* 13(26), pp. 17545-17555 (2023)
164. Alam, M., Chatterjee, S.  
B-site order/disorder in A<sub>2</sub>BB'O<sub>6</sub> and its correlation with their magnetic property  
*Journal of Physics Condensed Matter* 35(22),223001 (2023)
163. Dakshinamurthy, A.C., Sudakar, C.  
Influence of the octahedral cation on the evolution of lattice phonons in metal halide double perovskites: Raman spectroscopic investigation of Cs<sub>2</sub>B'B''Cl<sub>6</sub> (B'=Ag<sub>1-x</sub>Na<sub>x</sub>; B''=Bi<sub>1-x</sub>In<sub>x</sub>)  
*Physical Review Materials* 7(6),065401 (2023)
162. Liu, X., Tu, J., Li, H., Tian, J., Zhang, L.  
Research progress of double perovskite ferroelectric thin films  
*Applied Physics Reviews* 10(2),021315 (2023)
161. Maneesha, P., Chandra Baral, S., Rini, E.G., Sen, S.  
An overview of the recent developments in the structural correlation of magnetic and electrical properties of Pr<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
*Progress in Solid State Chemistry* 70,100402 (2023)
160. Pang, Y.H., He, C.Y., Qin, N.L., Yan, J.L.  
Structural, magnetic and thermoelectric properties of double perovskite Nd<sub>2</sub>Co<sub>1-x</sub>Cr<sub>x</sub>MnO<sub>6</sub>  
*Materials Today Communications* 35,105530 (2023)
159. Manna, P., Kanthal, S., Ahmed, M.A., (...), Bhattacharyya, D., Bandyopadhyay, S.  
Effect of Co doping on structural and magnetic properties of kagome like La based cuprate francisite Cu<sub>3</sub>La(SeO<sub>3</sub>)<sub>2</sub>O<sub>2</sub>Cl  
*Journal of Applied Physics* 133(19),193902 (2023)
158. Das, S., Sahoo, R.C., Shit, S., Nath, T.K.  
B-antisite disorder driven exchange bias effect and Griffiths-like phase in 25% Sr-doped Sm<sub>2</sub>CoMnO<sub>6</sub>  
*Journal of Magnetism and Magnetic Materials* 572,170592 (2023)
157. Sun, S., Peng, B., Song, Y., (...), Song, H., Lin, W.  
Engineering Z-Scheme FeOOH/PCN with Fast Photoelectron Transfer and Surface Redox Kinetics for Efficient Solar-Driven CO<sub>2</sub> Reduction  
*ACS Applied Materials and Interfaces* 15(10), pp. 12957-12966 (2023)
156. Zhang, B., Klarbring, J., Ji, F., (...), Chen, W.M., Buyanova, I.A.  
Lattice Dynamics and Electron-Phonon Coupling in Double Perovskite Cs<sub>2</sub>NaFeCl<sub>6</sub>  
*Journal of Physical Chemistry C* 127(4), pp. 1908-1916 (2023)
155. Nissar, U., Ahmad, J.  
Influence of the A-site cation on structural, morphological, magnetic, optical and transport properties of R<sub>2</sub>CoMnO<sub>6</sub> (R = Nd, Y, Ho and Er) double perovskite oxides  
*Physica Scripta* 98(2),025819 (2023)



154. Yadav, E., Prajapati, G.L., Rajput, P., Mavani, K.R.  
X-ray absorption near-edge, terahertz and Raman spectroscopies evidence growth-orientation dependent cation order, phase transitions and spin-phonon coupling in half-metallic Ca<sub>2</sub>FeMoO<sub>6</sub> thin films  
New Journal of Physics 25(12),123044 (2023)
153. Parida, S.K., Satapathy, T., Mishra, S., Choudhary, R.N.P.  
A double perovskite BiLaCoMnO<sub>6</sub>: synthesis, microstructural, dielectric and optical properties  
Phase Transitions 96(3-4), pp. 258-273 (2023)
152. Parida, S.K., Meher, S.  
A double perovskite BaCaZrMnO<sub>6</sub>: synthesis, microstructural dielectric, transport and optical properties  
EPJ Applied Physics 98,9 (2023)
151. Pal, A., Anand, K., Patel, N., (...), Ghosh, A.K., Chatterjee, S.  
Interplay of spin, phonon, and lattice degrees in a hole-doped double perovskite: Observation of spin-phonon coupling and magnetostriction effect  
Journal of Applied Physics 132(22),223906 (2022)
150. Das, S., Sahoo, R.C., Shit, S., Nath, T.K.  
Improved ferromagnetism and transport behaviour in La<sub>2</sub>CoMnO<sub>6</sub> double perovskite by Ni doping at the Co site  
Applied Physics A: Materials Science and Processing 128(12),1101 (2022)
149. Khan, J.A., Ahmad, J., Bukhari, S.H., Nissar, U.  
Effect of A-site Gd<sup>3+</sup> substitution on structural, optical and electrical properties of La<sub>2-x</sub>GdxCrMnO<sub>6</sub> double perovskites  
Physica Scripta 97(12),125810 (2022)
148. Pal, A., Anand, K., Kumar, D., (...), Ghosh, A.K., Chatterjee, S.  
Observation of structural change-driven Griffiths to non-Griffiths-like phase transformation in Pr<sub>2-x</sub>SrxCoFeO<sub>6</sub> (x = 0 to 1)  
Journal of Magnetism and Magnetic Materials 562,169764 (2022)
147. Kush, L., Srivastava, S., Sasikumar, C., (...), Madkhli, A. Y., Faiz Norraahim, M.N.  
Effect of A-site doping on electrical properties of La<sub>2-x</sub>PrxFeCoO<sub>6</sub> double perovskite prepared by sol-gel technique  
Journal of Solid State Chemistry 315,123539 (2022)
146. Silva, R.X., Santos, C.C., Reichlova, H., (...), Paniago, R., Paschoal, C.W.A.  
Short-range antiferromagnetic interaction and spin-phonon coupling in La<sub>2</sub>CoMnO<sub>6</sub> double perovskite  
Vibrational Spectroscopy 123,103426 (2022)
145. Mohanty, S., Sharma, R., Rout, S.K., Mukherjee, S.  
Evidence of structural and two magnetic phase transitions in Cu doped La<sub>2</sub>FeMnO<sub>6</sub> double perovskites  
Journal of Alloys and Compounds 918,165694 (2022)
144. Kundu, S., Pal, A., Chauhan, A., (...), Nanda, B.R.K., Khuntia, P.  
Electronic structure and magnetic properties of 3d-4f double perovskite material  
Physical Review Materials 6(10),104401 (2022)
143. Datta, R., Pradhan, S.K., Masanta, S., Majumdar, S., De, S.K.  
Short range spin-spin correlation, spin-phonon coupling and isostructural phase transition in hetero-tri-spin 3d-5d-4f double perovskite Sm<sub>2</sub>CoIrO<sub>6</sub>  
Journal of Solid State Chemistry 314,123391 (2022)
142. Sharma, P., Fan, J., Kumar, A., (...), Sathe, V.G., Yang, H.  
Magnetism, spin-phonon coupling and Kitaev interaction in Mott insulator La<sub>2</sub>ZnIrO<sub>6</sub> single crystal oxide  
Ceramics International 48(19), pp. 29190-29196 (2022)
141. Anand, K., Pal, A., Joshi, A.G., (...), Mohan, A., Chatterjee, S.  
Giant exchange bias in antiferromagnetic Pr<sub>2</sub>CoFe<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>6</sub>: a structural and magnetic properties study  
Journal of Physics D: Applied Physics 55(36),365004 (2022)
140. Dani, S., Arya, A., Sharma, H., (...), Kumar, R., Pandit, R.  
Structural and electronic properties of double perovskite ruthenates; A<sub>2</sub>GdRuO<sub>6</sub> (where A = Ba, Sr)  
Journal of Alloys and Compounds 913,165177 (2022)
139. Ghosh, A., Palanichamy, G., Trujillo, D.P., Shaikh, M., Ghosh, S.  
Insights into Cation Ordering of Double Perovskite Oxides from Machine Learning and Causal Relations  
Chemistry of Materials 34(16), pp. 7563-7578 (2022)
138. Kush, L., Srivastava, S., Sasikumar, C., (...), Srivastava, Y., Jaiswal, Y.  
Composition-dependent tunability of thermoelectric properties at low temperature for Pr-doped LPFCO double perovskite  
Journal of Materials Science: Materials in Electronics 33(22), pp. 17535-17550 (2022)
137. Harbi, A., Azouaoui, A., Benmokhtar, S., Moutaabbid, M.  
Synthesis, Characterization, and DFT Investigation of the Role of Oxygen Vacancy on the Structural, Magnetic, and Electronic Properties of La<sub>2</sub>CoMnO<sub>6</sub>  
Journal of Superconductivity and Novel Magnetism 35(6), pp. 1405-1412 (2022)

136. Oka, R., Hayakawa, T.  
Raman Spectroscopic Investigation and Electronic State Calculation for  $\text{Ca}_2(\text{Mn,Ti})\text{O}_4$  Black Pigments with High Near-Infrared (NIR) Reflectivity  
*Inorganic Chemistry* 61(17), pp. 6500-6507 (2022)
135. Selmi, R., Cherif, W., Sarabando, A.R., Ferreira, N.M., Ktari, L.  
Crystal Structure and Magnetic Properties in B-Site-Disordered  $\text{La}_{1.75}\text{Ca}_{0.25}\text{MnMO}_6$  (with  $\text{M} = \text{Ti}$  and  $\text{Fe}$ ) Double Perovskites  
*Journal of Superconductivity and Novel Magnetism* 35(5), pp. 1195-1206 (2022)
134. Dhilip, M., Punitha, J.S., Rameshkumar, R., (...), Anbarasu, V., Elangovan, K.  
A novel double perovskite oxide  $\text{Sm}_2\text{CoFeO}_6$  phosphor for orange LEDs: structural, magnetic and luminescence properties  
*Applied Physics A: Materials Science and Processing* 128(4),324 (2022)
133. Shirazi Moghadam, Y., Dinda, S., El Kharbachi, A., (...), Kübel, C., Fichtner, M.  
Structural and Electrochemical Insights from the Fluorination of Disordered Mn-Based Rock Salt Cathode Materials  
*Chemistry of Materials* 34(5), pp. 2268-2281 (2022)
132. Mohanty, S., Mukherjee, S.  
Effect of Jahn-Teller distortion on microstructural and dielectric properties of La based double perovskites  
*Journal of Alloys and Compounds* 892,162204 (2022)
131. Stojadinović, B., Djokić, D.M., Paunović, N., (...), Kusigerski, V., Dohčević-Mitrović, Z.  
Unveiling the spin-phonon coupling in nanocrystalline  $\text{BiFeO}_3$  by resonant two-phonon Raman active modes  
*Materials Science and Engineering: B* 274,115444 (2021)
130. Bhuyan, M.D.I., Das, S., Basith, M.A.  
Sol-gel synthesized double perovskite  $\text{Gd}_2\text{FeCrO}_6$  nanoparticles: Structural, magnetic and optical properties  
*Journal of Alloys and Compounds* 878,160389 (2021)
129. Gan, H., Shi, J., Wang, C., Shen, Q.  
The role of Co substitution in the structural characteristics and magnetic properties of  $\text{La}_2\text{Co}_x\text{Ni}_{1-x}\text{MnO}_6$  epitaxial film  
*Applied Surface Science* 561,150102 (2021)
128. Das, R.R., Lekshmi, P.N., Santhosh, P.N.  
Strong spin-phonon coupling and large dielectric constant observed in quasi-two-dimensional layered perovskite  $\text{SrLaCo}_0.5\text{Mn}_0.5\text{O}_4$   
*Journal of Alloys and Compounds* 874,159736 (2021)
127. Bajpai, N., Saleem, M., Mishra, A.  
Effect of samarium ( $\text{Sm}^{3+}$ ) doping on structural, optical, dielectric and magnetic nature of  $\text{La}_{1.95}\text{Y}_{0.05}\text{NiMnO}_6$  double perovskite  
*Applied Physics A: Materials Science and Processing* 127(9),723 (2021)
126. Meyer, C., Ksoll, P., Roddatis, V., Moshnyaga, V.  
Spin-phonon coupling in  $\text{a}_2\text{bmno}_6$  ( $\text{A} = \text{la, pr, nd, sm, gd}$ ;  $\text{b} = \text{co, ni}$ ) double-perovskite thin films: Impact of the a-site cation radius  
*Crystals* 11(7),747 (2021)
125. Ksoll, P., Meyer, C., Schüller, L., Roddatis, V., Moshnyaga, V.  
B-site cation ordering in films, superlattices, and layer-by-layer-grown double perovskites  
*Crystals* 11(7),734 (2021)
124. Ksoll, P., Mandal, R., Meyer, C., (...), Roddatis, V., Moshnyaga, V.  
Emergent double perovskite phase at  $\text{LaMnO}_3/\text{LaNiO}_3$  interfaces: Coupled charge transfer and structural reconstruction  
*Physical Review B* 103(19),195120 (2021)
123. Verseils, M., Litvinchuk, A.P., Brubach, J.-B., (...), Simonet, V., De Brion, S.  
Infrared phonon spectroscopy on the Cairo pentagonal antiferromagnet  $\text{Bi}_2\text{Fe}_4\text{O}_9$ : A study through the pressure-induced structural transition  
*Physical Review B* 103(17),174403 (2021)
122. Bajpai, N., Saleem, M., Mishra, A.  
Effect of bismuth ( $\text{Bi}^{3+}$ ) substitution on structural, optical, dielectric and magnetic nature of  $\text{La}_2\text{CoMnO}_6$  double perovskite  
*Journal of Materials Science: Materials in Electronics* 32(10), pp. 12890-12902 (2021)
121. Strong spin-phonon coupling and large dielectric constant observed in quasi-two-dimensional layered perovskite  $\text{SrLaCo}_0.5\text{Mn}_0.5\text{O}_4$   
Das, R.R., Lekshmi, P.N., Santhosh, P.N.  
*Journal of Alloys and Compounds* 874,159736 (2021)
120. Tuning of multi-magnetic phase and exchange bias effect by antisite disorder in Ca-doped  $\text{La}_2\text{CoMnO}_6$  double perovskites  
Sahoo, R.C., Das, S., Daw, D., (...), Das, A., Nath, T.K.  
*Journal of Physics Condensed Matter* 33(21),215804 (2021)
119. Unraveling the impact of nonmagnetic Sc substitution on the magnetic properties of  $\text{La}_2\text{NiMnO}_6$  double perovskite  
Nasir, Mohammad; Khan, Mahmud; Bhatt, Subhash; et al.  
*PHYSICA SCRIPTA* Volume: 96 Issue: 4 Article Number: 045805 Published: APR 2021
118. Bandgap engineering and sublattice distortion driven bandgap bowing in  $\text{Cs}_2\text{Ag}_{1-x}\text{Na}_x\text{BiCl}_6$  double perovskites

- Dakshinamurthy, Athrey C.; Sudakar, C.  
APPLIED PHYSICS LETTERS Volume: 118 Issue: 13 Article Number: 131902 Published: MAR 29 2021
117. Structural, dielectric, and magnetic properties of LaCo<sub>0.2</sub>Mn<sub>0.8</sub>O<sub>3</sub> and La<sub>2</sub>CoMnO<sub>6</sub> perovskite materials  
Yousif, N. M.; Makram, N.; Wahab, L. A.  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY Volume: 98 Issue: 1 Pages: 238-251 Published: APR 2021
116. Atomically dispersed nonmagnetic electron traps improve oxygen reduction activity of perovskite oxides  
Zhuang, Zechao; Li, Yong; Li, Yihang; et al.  
ENERGY & ENVIRONMENTAL SCIENCE Volume: 14 Issue: 2 Pages: 1016-1028 Published: FEB 1 2021
115. Preparation and characterization of R<sub>2</sub>CoMnO<sub>6</sub> (R=La, Nd) via PVA sol-gel route  
Xu, Zhibo; Feng, Zhongshuai; Xu, Yebin  
JOURNAL OF ASIAN CERAMIC SOCIETIES Volume: 9 Issue: 1 Pages: 119-127 Published: JAN 2 2021
114. Improved magnetic performance of Co-doped La<sub>2</sub>NiMnO<sub>6</sub> ceramics prepared at low temperature  
Gan, H., Wang, C., Shen, Q.  
Journal of the European Ceramic Society 40(5), pp. 1909-1916 (2020)
113. Physical properties in nano-crystalline Ho<sub>2</sub>CoMnO<sub>6</sub>  
Bhatti, I.N., Bhatti, I.N., Mahato, R.N., Ahsan, M.A.H.  
Ceramics International 46(1), pp. 46-55 (2020)
112. Anomalous magnetism in Al doped La<sub>2</sub>CoMnO<sub>6</sub> ceramics  
Xin, Y., Shi, L., Zhao, J., (...), Hou, L., Tong, R.  
Journal of Magnetism and Magnetic Materials 510, 166950 (2020)
111. Structure, magnetism and dielectric study of nano-crystalline Gd<sub>2</sub>CoMnO<sub>6</sub>  
Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
SOLID STATE SCIENCES Volume: 108 Article Number: 106384 Published: OCT 2020
110. Evidence of cluster-glass and Griffiths-like phases in partially ordered La(2)FeMnO(6) double perovskite  
Nasir, Mohammad; Khan, Mahmud; Agbo, Sunday Arome; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 37 Article Number: 375003 Published: SEP 9 2020
109. Effect of bismuth (Bi<sup>3+</sup>) substitution on structural, optical, dielectric and magnetic nature of La(2)CoMnO(6) double perovskite  
Bajpai, Niketa; Saleem, M.; Mishra, Ashutosh  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Early Access: SEP 2020
108. High-temperature structural phase transition and infrared dielectric features of La<sub>2</sub>CoMnO<sub>6</sub>  
Silva, R. X.; Silva, A.; Moreira, R. L.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 129 Article Number: 110878 Published: SEP 2020
107. Structural, Dielectric, and Energy Storage Properties of Citric Acid and Ethylene Glycol Assisted Hydrothermally Synthesized Y<sub>2</sub>FeCoO<sub>6</sub>  
Devi, Manju; Kumar, Ashavani; Kumar, Ashok  
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE Volume: 217 Issue: 20 Article Number: 2000324  
Published: OCT 2020
106. Extraordinary magnetic properties of double perovskite Eu(2)CoMnO(6) wide band gap semiconductor  
Alam, Mohd; Singh, Prajyoti; Anand, Khyati; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 36 Article Number: 365802 Published: AUG 26 2020
105. Effect of structural and magnetic disorder on the 3d-5d exchange interactions in La<sub>2-x</sub>CaxCoIrO<sub>6</sub>  
Bufaical, L.; Sadrollahi, E.; Litterst, F. J.; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 2 Article Number: 024436 Published: JUL 22 2020
104. Structural, transport, optical, and electronic properties of Sr<sub>2</sub>CoNbO<sub>6</sub> thin films  
Kumar, Ajay; Shukla, Rishabh; Pandey, Akhilesh; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 128 Issue: 2 Article Number: 025303 Published: JUL 14 2020
103. Antisite disorder driven magnetodielectric and magnetocaloric effect in double perovskite La<sub>2-x</sub>SrxCoMnO<sub>6</sub> (x=0.0, 0.5, 1.0)  
Mandal, P. R.; Khan, Anasua; Nath, T. K.  
JOURNAL OF APPLIED PHYSICS Volume: 128 Issue: 2 Article Number: 024104 Published: JUL 14 2020
102. Investigation of structural, morphological and electrochemical properties of mesoporous La(2)CuCoO(6) rods fabricated by facile hydrothermal route  
Singh, Jashandeep; Kumar, Ashok  
INTERNATIONAL JOURNAL OF MINERALS METALLURGY AND MATERIALS Volume: 27 Issue: 7 Pages: 987-995  
Published: JUL 2020
101. Raman and photoluminescence spectral studies in double perovskite epitaxial Nd<sub>2</sub>CoMnO<sub>6</sub> thin films deposited by pulse laser deposition  
Anshul, Avneesh; Kumar, Manish; Raj, Abhishek  
OPTIK Volume: 212 Article Number: 164749 Published: JUN 2020

100. Structure, magnetic and dielectric properties in nano-crystalline Yb<sub>2</sub>CoMnO<sub>6</sub>  
Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 244 Article Number: 122709 Published: APR 1 2020
99. Physical properties of nano-crystalline Sm<sub>2</sub>CoMnO<sub>6</sub>: Structure, magnetism, spin-phonon coupling and dielectric study  
Bhatti, Ilyas Noor; Bhatti, Imtiaz Noor; Mahato, Rabindra Nath; et al.  
PHYSICA B-CONDENSED MATTER Volume: 582 Article Number: 411975 Published: APR 1 2020
98. Unraveling magnetic interactions and the spin state in insulating Sr<sub>2-x</sub>La<sub>x</sub>CoNbO<sub>6</sub>  
Kumar, Ajay; Dhaka, R. S.  
PHYSICAL REVIEW B Volume: 101 Issue: 9 Article Number: 094434 Published: MAR 31 2020
97. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>  
Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
96. Wet chemical synthesis and electrochemical performance of novel double perovskite Y<sub>2</sub>CuMnO<sub>6</sub> nanocrystallites  
Mansoorie, Farha Naaz; Singh, Jashandeep; Kumar, Ashok  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING Volume: 107 Article Number: 104826 Published: MAR 1 2020
95. Bismuth Doped La<sub>2</sub>CoMnO<sub>6</sub>: A Study of Williamson-Hall Analysis And Four-Probe Resistivity Measurement  
Bajpai, N.; Saleem, M.; Tiwari, S.; et al.  
AIP Conference Proceedings Volume: 2220 Article Number: 040029 Published: 2020
94. Structural and transport study of disordered double perovskite Pr<sub>2</sub>FeMnO<sub>6</sub>  
Rana, Sumesh; Dwij, Vivek; Sharma, Gaurav; et al.  
AIP Conference Proceedings Volume: 2220 Article Number: 040005 Published: 2020
93. Facile wet chemical synthesis and electrochemical behavior of La<sub>2</sub>FeCoO<sub>6</sub> nano-crystallites  
Singh, J., Kumar, A.  
Materials Science in Semiconductor Processing 99, pp. 8-13 (2019)
92. Optical Study of the Electronic Structure and Lattice Dynamics of NdBaMn<sub>2</sub>O<sub>6</sub> Single Crystals  
Mero, Rea Divina; Ogawa, Kirari; Yamada, Shigeki; et al.  
SCIENTIFIC REPORTS Volume: 9 Article Number: 18164 Published: DEC 3 2019
91. Influence of Cation Order and Valence States on Magnetic Ordering in La<sub>2</sub>Ni<sub>1-x</sub>Mn<sub>1+x</sub>O<sub>6</sub>  
Nasir, Mohd.; Khan, Mahmud; Bhatt, Subhash; et al.  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS Volume: 256 Issue: 11 Article Number: 1900019 Published: NOV 2019
90. Lattice Dynamics, Phonon Chirality, and Spin-Phonon Coupling in 2D Itinerant Ferromagnet Fe<sub>3</sub>GeTe<sub>2</sub>  
Du, LuoJun; Tang, Jian; Zhao, Yanchong; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 29 Issue: 48 Article Number: 1904734 Published: NOV 2019
89. Zero-field-cooled exchange bias effect in phase-segregated La<sub>2-x</sub>A<sub>x</sub>CoMnO<sub>6</sub> (A = Ba, Ca, Sr; x=0, 0.5)  
Coutrim, L. T.; Rigitano, D.; Macchiutti, C.; et al.  
PHYSICAL REVIEW B Volume: 100 Issue: 5 Article Number: 054428 Published: AUG 21 2019
88. The effect of high temperature annealing on the antisite defects in ferromagnetic La<sub>2</sub>NiMnO<sub>6</sub> double perovskite  
Nasir, Mohd; Khan, Mahmud; Kumar, Sunil; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 483 Pages: 114-123 Published: AUG 1 2019
87. Magnetoelastic coupling behavior at the ferromagnetic transition in the partially disordered double perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
Yang, Dexin; Lampronti, Giulio, I; Haines, C. R. Sebastian; et al.  
PHYSICAL REVIEW B Volume: 100 Issue: 1 Article Number: 014304 Published: JUL 23 2019
86. High-Pressure Study of the Elpasolite Perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
Ridley, Christopher J.; Daisenberger, Dominik; Wilson, Craig W.; et al.  
INORGANIC CHEMISTRY Volume: 58 Issue: 14 Pages: 9016-9027 Published: JUL 15 2019
85. Investigation of multi-mode spin-phonon coupling and local B-site disorder in Pr<sub>2</sub>CoFeO<sub>6</sub> by Raman spectroscopy and correlation with its electronic structure by XPS and XAS studies  
Pal, Arkadeb; Ghosh, Surajit; Joshi, Amish G.; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 31 Issue: 27 Article Number: 275802 Published: JUL 10 2019
84. SYNTHESIS, X-RAY DIFFRACTION, AND RAMAN SPECTROSCOPY OF AgSnBiSe<sub>3</sub> AND AgSnBiSe<sub>2</sub>S SYSTEMS  
Moris, S.; Barahona, P.; Valencia-Galvez, P.; et al.  
CHALCOGENIDE LETTERS Volume: 16 Issue: 6 Pages: 303-307 Published: JUN 2019
83. Dielectric and Raman spectroscopy study of structural phase transformation of Sr-doped La<sub>2</sub>CoMnO<sub>6</sub> double perovskite  
Magray, Mushtaq Ahmad; Ikram, M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 30 Issue: 9 Pages: 8655-8666 Published: MAY 2019

82. Strain coupling and acoustic attenuation associated with glassy magnetic phase transitions in the disordered double perovskite La<sub>2</sub>FeMnO<sub>6</sub>  
 Yang, Dexin; Yang, Tao; Mukherjee, Paromita; et al.  
 PHYSICAL REVIEW B Volume: 99 Issue: 9 Article Number: 094314 Published: MAR 28 2019
81. Vibrational properties and infrared dielectric features of Gd<sub>2</sub>CoMnO<sub>6</sub> and Y<sub>2</sub>CoMnO<sub>6</sub> double perovskites  
 Silva, R. X.; Almeida, R. M.; Moreira, R. L.; et al.  
 CERAMICS INTERNATIONAL Volume: 45 Issue: 4 Pages: 4756-4762 Published: MAR 2019
80. Connection between Unusual Lattice Thermal Expansion and Cooperative Jahn-Teller Effect in Double Perovskites LaPbMSbO<sub>6</sub> (M = Mn, Co, Ni)  
 Bai, Yijia; Han, Lin; Meng, Jian; et al.  
 INORGANIC CHEMISTRY Volume: 58 Issue: 4 Pages: 2888-2898 Published: FEB 18 2019
79. Competing short-range magnetic correlations, metamagnetic behavior and spin-phonon coupling in Nd<sub>2</sub>CoMnO<sub>6</sub> double perovskite  
 Das, Ranjana R.; Lekshmi, R. Neenu; Das, S. C.; et al.  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 773 Pages: 770-777 Published: JAN 30 2019
78. Structural and Magnetic Properties of Fe, Mn based Double Perovskite La<sub>2</sub>FeMnO<sub>6</sub> Compound  
 Punitha, J. Stella; Dhilip, M.; Anbarasu, V.; et al.  
 AIP Conference Proceedings Volume: 2115 Article Number: 030468 Published: 2019
77. Role of Antisite Disorder, Rare-Earth Size, and Superexchange Angle on Band Gap, Curie Temperature, and Magnetization of R<sub>2</sub>NiMnO<sub>6</sub> Double Perovskites  
 Nasir, Mohd; Kumar, Sunil; Patra, Nirmalendu; et al.  
 ACS APPLIED ELECTRONIC MATERIALS Volume: 1 Issue: 1 Pages: 141-153 Published: JAN 2019
76. Spin-phonon coupling in melanothallite Cu<sub>2</sub>OCl<sub>2</sub>  
 Araujo, B. S.; Arevalo-Lopez, A. M.; Attfield, J. P.; et al.  
 APPLIED PHYSICS LETTERS Volume: 113 Issue: 22 Article Number: 222901 Published: NOV 26 2018
75. Electrochemical and Operando Spectroscopic Studies of Sr<sub>2</sub>Fe<sub>1.5</sub>Mo<sub>0.5</sub>O<sub>6-δ</sub> Anode Catalysts in Solid Oxide Fuel Cells Operating with Direct Alcohol Fuels  
 Bode, Gregory L.; McIntyre, Melissa D.; Neuberger, Daniel M.; et al.  
 CHEMELECTROCHEM Volume: 5 Issue: 21 Pages: 3162-3168 Published: NOV 2 2018
74. Structure, magnetism, and spin-phonon coupling in heteroepitaxial La<sub>2</sub>CoMnO<sub>6</sub>/Al<sub>2</sub>O<sub>3</sub>(0001) films  
 Meyer, Ch; Roddatis, V; Ksoell, P.; et al.  
 PHYSICAL REVIEW B Volume: 98 Issue: 13 Article Number: 134433 Published: OCT 18 2018
73. Quantum well structure of a double perovskite superlattice and formation of a spin-polarized two-dimensional electron gas  
 Samanta, S.; Mishra, S. B.; Nanda, B. R. K.  
 PHYSICAL REVIEW B Volume: 98 Issue: 11 Article Number: 115155 Published: SEP 26 2018
72. Effect of rare earth site substitution on magnetic and transport properties of Ln<sub>2</sub>CoMnO<sub>6</sub> (Ln = La, Sm and Gd) double perovskites  
 Sahoo, R. C.; Das, Sananda; Nath, T. K.  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 460 Pages: 409-417 Published: AUG 15 2018
71. Revisiting La<sub>2</sub>MMnO<sub>6</sub> (M = Co, Ni, Cu, Zn) perovskites in view of 3d-electron configuration  
 Guo, Lin; Bai, Yijia; Huang, Chunming; et al.  
 JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 6 Article Number: 065103 Published: AUG 14 2018
70. Role of spontaneous strains on the biphasic nature of partial B-site disorder double perovskite La<sub>2</sub>NiMnO<sub>6</sub>  
 Yang, Dexin; Wang, Wei; Yang, Tao; et al.  
 APL MATERIALS Volume: 6 Issue: 6 Article Number: 066102 Published: JUN 2018
69. Strain-induced changes of the electronic properties of B-site ordered double-perovskite Sr<sub>2</sub>CoIrO<sub>6</sub> thin films  
 Esser, S.; Chang, C. F.; Kuo, C-Y; et al.  
 PHYSICAL REVIEW B Volume: 97 Issue: 20 Article Number: 205121 Published: MAY 15 2018
68. Grain boundary-dominated electrical conduction and anomalous optical-phonon behaviour near the Neel temperature in YFeO<sub>3</sub> ceramics  
 Raut, Subhajit; Babu, P. D.; Sharma, R. K.; et al.  
 JOURNAL OF APPLIED PHYSICS Volume: 123 Issue: 17 Article Number: 174101 Published: MAY 7 2018
67. Spin-phonon coupling in HoCr<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> (x=0 and 0.5) compounds  
 Kotnana, Ganesh; Sathe, Vasant. G.; Jammalamadaka, S. Narayana  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 4 Pages: 764-770 Published: APR 2018
66. Barbosa, D. A. B.; Paschoal, C. W. A.  
 Raman evidence for presence of high-temperature ferromagnetic clusters in magnetodielectric compound Ba-doped La<sub>2</sub>NiMnO<sub>6</sub>  
 SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY Volume: 185 Pages: 125-129  
 Published: OCT 5 2017
65. Yadav, Rashmi; Para, Touseef Ahmad; Reshi, Hilal Ahmad; et al.  
 Easy synthesis and electric, magneto-transport and magnetic properties of double perovskite La<sub>2</sub>CoMnO<sub>6</sub> compound

64. Meyer, Christoph; Huehn, Sebastian; Jungbauer, Markus; et al  
Tip-enhanced Raman spectroscopy (TERS) on double perovskite La<sub>2</sub>CoMnO<sub>6</sub> thin films: field enhancement and depolarization effects  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 1 Pages: 46-52 Published: JAN 2017
63. Silva, R.X., Castro Júnior, M.C., Yáñez-Vilar, S., Andújar, M.S., Mira, J., Señaris-Rodríguez, M.A., Paschoal, C.W.A.  
Spin-phonon coupling in multiferroic Y<sub>2</sub>CoMnO<sub>6</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 690 Pages: 909-915 DOI: 10.1016/j.jallcom.2016.07.010 Published: JAN 5 2017
62. Opacic, M, Lazarevic, N, Radonjic, MM,; Scepanovic, M, Ryu, H, Wang, AF,; Tanaskovic, D, Petrovic, C, Popovic, ZV  
Raman spectroscopy of K<sub>x</sub>Co<sub>2-y</sub>Se<sub>2</sub> single crystals near the ferromagnet-paramagnet transition  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 48 Article Number: 485401 DOI: 10.1088/0953-8984/28/48/485401 Published: DEC 7 2016
61. Krishna Murthy, J., Devi Chandrasekhar, K., Venimadhav, A.  
Observation of Griffiths-like phase and its tunability in La<sub>2</sub>Ni<sub>1-x</sub>CoxCo<sub>x</sub>O<sub>6</sub> (0 ≤ x ≤ 1) nanoparticles  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 418 Pages: 2-8 DOI: 10.1016/j.jmmm.2016.02.074 Published: NOV 15 2016
60. Xie, CZ (Xie, Changzheng); Shi, L (Shi, Lei); Zhao, JY (Zhao, Jiyin); Zhou, SM (Zhou, Shiming); Li, Y (Li, Yang); Yuan, XY (Yuan, Xueyou)  
Spin-phonon coupling in R<sub>2</sub>CoMnO<sub>6</sub> (R=Pr, Nd, Sm) thin films under biaxial compressive strain  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 15 Article Number: 155302 DOI: 10.1063/1.4964940 Published: OCT 21 2016
59. Ren, Yaoyu; Liu, Ting; Shen, Yang; et al.  
Chemical compatibility between garnet-like solid state electrolyte Li<sub>6.75</sub>La<sub>3</sub>Zr<sub>1.75</sub>Ta<sub>0.25</sub>O<sub>12</sub> and major commercial lithium battery cathode materials  
JOURNAL OF MATERIMICS Volume: 2 Issue: 3 Pages: 256-264 Published: SEP 2016
58. Reddy, MP (Reddy, M. Penchal); Shakoor, RA (Shakoor, R. A.); Mohamed, AMA (Mohamed, A. M. A.)  
Structural and magnetic studies of La<sub>2</sub>BMnO<sub>6</sub> (B=Ni and Co) nanoparticles prepared by microwave sintering approach  
MATERIALS CHEMISTRY AND PHYSICS Volume: 177 Pages: 346-352 DOI: 10.1016/j.matchemphys.2016.04.038 Published: JUL 1 2016
57. Silva, R.X., De Menezes, A.S., Almeida, R.M., Moreira, R.L., Paniago, R., Marti, X., Reichlova, H., Maryško, M., Rezende, M.V.D.S., Paschoal, C.W.A.  
Structural order, magnetic and intrinsic dielectric properties of magnetoelectric La<sub>2</sub>CoMnO<sub>6</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 661 Pages: 541-552 DOI: 10.1016/j.jallcom.2015.11.097 Published: MAR 15 2016
56. Neenu Lekshmi, P., Raama Varma, M.  
Colossal magneto-dielectricity in La<sub>2</sub>NiMnO<sub>6</sub> probed by Raman spectroscopy  
Materials Science Forum 830-831, 513-517 DOI: 10.4028/www.scientific.net/MSF.830-831.513 (2015)
55. Kumar, D., Sathe, V.G.  
Raman spectroscopic study of structural transformation in ordered double perovskites La<sub>2</sub>CoMnO<sub>6</sub> bulk and epitaxial film  
SOLID STATE COMMUNICATIONS Volume: 224 Pages: 10-14 DOI: 10.1016/j.ssc.2015.09.014 Published: DEC 2015
54. Masud, MG (Masud, Md G.); Sakata, H (Sakata, H.); Biswal, AK (Biswal, A. K.); Vishwakarma, PN (Vishwakarma, P. N.); Chaudhuri, BK (Chaudhuri, B. K.)  
Structural, ac conductivity scaling and magnetodielectric behaviour of a partially disordered insulating ferromagnetic double perovskite Eu<sub>2</sub>NiMnO<sub>6</sub>  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 48 Issue: 37 Article Number: 375504 DOI: 10.1088/0022-3727/48/37/375504 Published: SEP 23 2015
53. Xie, C., Shi, L., Zhou, S., Zhao, J., Liu, H., Li, Y., Yao, D.  
Structural characteristics, magnetic properties of Re<sub>2</sub>NiMnO<sub>6</sub> (Re = La, Pr, Nd, Sm, Y) thin films on (001) LaAlO<sub>3</sub> by simple polymer assisted deposition  
SURFACE & COATINGS TECHNOLOGY Volume: 277 Pages: 222-226 DOI: 10.1016/j.surfcoat.2015.07.056 Published: SEP 15 2015
52. Macedo Filho, R.B., Barbosa, D.A.B., Reichlova, H., Marti, X., De Menezes, A.S., Ayala, A.P., Paschoal, C.W.A.  
Role of rare-earth ionic radii on the spin-phonon coupling in multiferroic ordered double perovskites  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 075201 DOI: 10.1088/2053-1591/2/7/075201 Published: JUL 2015
51. Shi, L., Liu, W., Zhao, J., Li, Y., Zhou, S., Guo, Y., Wang, Y.  
The magnetic properties and spin-phonon coupling of Pr<sub>2</sub>CoMnO<sub>6</sub> particles  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 7 Article Number: 076104 DOI: 10.1088/2053-1591/2/7/076104 Published: JUL 2015
50. Kumar, D (Kumar, Dharendra); Kumar, S (Kumar, Satish); Sathe, VG (Sathe, V. G.)  
Raman Studies of Ordered Double Perovskite Thin Film at High Temperatures  
PROCEEDINGS OF THE 59TH DAE SOLID STATE PHYSICS SYMPOSIUM 2014 (SOLID STATE PHYSICS) Book Series: AIP Conference Proceedings Volume: 1665 Article Number: 140030 DOI: 10.1063/1.4918239 Published: 2015

49. Silva, R. X.; Moreira, R. L.; Almeida, R. M.; et al.  
Intrinsic dielectric properties of magnetodielectric La<sub>2</sub>CoMnO<sub>6</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 21 Article Number: 214105 Published: JUN 7 2015
48. Takahashi, R.; Ohkubo, I.; Yamauchi, K.; et al.  
A-site-driven ferroelectricity in strained ferromagnetic La<sub>2</sub>NiMnO<sub>6</sub> thin films  
PHYSICAL REVIEW B Volume: 91 Issue: 13 Article Number: 134107 Published: APR 20 2015
47. Murthy, J. Krishna; Chandrasekhar, K. Devi; Murugavel, S.; et al.  
Investigation of the intrinsic magnetodielectric effect in La<sub>2</sub>CoMnO<sub>6</sub>: role of magnetic disorder  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 3 Issue: 4 Pages: 836-843 Published: 2015
46. Mandal, PR (Mandal, P. R.); Sahoo, RC (Sahoo, R. C.); Nath, TK (Nath, T. K.)  
A comparative study of structural, magnetic, dielectric behaviors and impedance spectroscopy for bulk and nanometric double perovskite Sm<sub>2</sub>CoMnO<sub>6</sub>  
MATERIALS RESEARCH EXPRESS Volume: 1 Issue: 4 Article Number: 046108 DOI: 10.1088/2053-1591/1/4/046108 Published: DEC 2014
45. Liu, Wenjie; Shi, Lei; Zhou, Shiming; et al.  
Griffiths phase, spin-phonon coupling, and exchange bias effect in double perovskite Pr<sub>2</sub>CoMnO<sub>6</sub>  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 19 Article Number: 193901 Published: NOV 21 2014
44. Han, Lin; Bai, Yijia; Liu, Xiaojuan; et al.  
Synthesis, structure and dielectric properties of new ordering perovskites LnPbMgSbO<sub>6</sub> (Ln = La, Pr, Nd)  
SOLID STATE SCIENCES Volume: 36 Pages: 8-15 Published: OCT 2014
43. Kumar, Dhirendra; Kumar, Satish; Sathe, Vasant G.  
Spin-phonon coupling in ordered double perovskites A<sub>2</sub>(CoMnO<sub>6</sub>) (A=La, Pr, Nd) probed by micro-Raman spectroscopy  
SOLID STATE COMMUNICATIONS 194, pp. 59-64 SEP 2014
42. Ghosh, Binita; Halder, Saswata; Sinha, Tripurari Prasad  
Dielectric Relaxation and Collective Vibrational Modes of Double-Perovskites A<sub>2</sub>SmTaO<sub>6</sub> (A = Ba, Sr and Ca)  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (8), pp. 2564-2572 AUG 2014
41. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.  
Octahedral distortion induced magnetic anomalies in LaMn<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> single crystals  
JOURNAL OF APPLIED PHYSICS 116 (4), Art. No. 043903 JUL 28 2014
40. Basistyy, R.; Stanislavchuk, T. N.; Sirenko, A. A.; et al.  
Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO<sub>3</sub> (R = Ho, Er, Tm, Yb, and Lu)  
PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014
39. Apostolov, A. T.; Apostolova, I. N.; Wesselinowa, J. M.  
The magnetoelectric effect in thin films of ferromagnetic semiconductor La<sub>2</sub>NiMnO<sub>6</sub>  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 251 (6), pp. 1219-1224 JUN 2014
38. El Amrani, M.; Zaghrioui, M.; Ta Phuoc, V.; et al.  
Local symmetry breaking and spin-phonon coupling in SmCrO<sub>3</sub> orthochromite  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp. 1-6 JUN 2014
37. Kumar, Pradeep; Ghara, Somnath; Rajeswaran, B.; et al.  
Temperature dependent magnetic, dielectric and Raman studies of partially disordered La<sub>2</sub>NiMnO<sub>6</sub>  
SOLID STATE COMMUNICATIONS 184, pp. 47-51 APR 2014
36. Garcia-Flores, A. F.; Terashita, H.; Bittar, E. M.; et al.  
Raman scattering in the magnetically frustrated double perovskite Sr<sub>2</sub>YRuO<sub>6</sub>  
JOURNAL OF RAMAN SPECTROSCOPY 45 (2), pp. 193-196 FEB 2014
35. Ghosh, Binita; Dutta, Alo; Shannigrahi, Santiranjan; et al.  
Combined XPS and first principles study of double-perovskite Ca<sub>2</sub>GdTaO<sub>6</sub>  
JOURNAL OF MATERIALS SCIENCE 49 (2), pp. 819-826 JAN 2014
34. Ghosh, Binita; Dutta, Alo; Sinha, T. P.  
Vibrational modes and electrical transport in Sr<sub>2</sub>GdTaO<sub>6</sub>  
MATERIALS CHEMISTRY AND PHYSICS 143 (1), 26-33 DEC 16 2013
33. Silva, R. X.; Reichlova, H.; Marti, X.; et al.  
Spin-phonon coupling in Gd(Co<sub>1/2</sub>Mn<sub>1/2</sub>)O<sub>3</sub> perovskite  
JOURNAL OF APPLIED PHYSICS 114 (19), Art. No. 194102 NOV 21 2013
32. Macedo Filho, Raimundo Bezerra; Ayala, Alejandro Pedro; de Araujo Paschoal, Carlos William  
Spin-phonon coupling in Y<sub>2</sub>NiMnO<sub>6</sub> double perovskite probed by Raman spectroscopy  
APPLIED PHYSICS LETTERS 102 (19), 192902, MAY 13 2013
31. Milenov, T. I.; Rafailov, P. M.; Urcelay-Olabarria, I.; et al.  
Magnetic behavior of La<sub>2</sub>CoMnO<sub>6</sub>-delta crystal doped with Pb and Pt

30. Bai, YJ, Xia, YJ.; Li, HP, Han, L, Wang, ZC, Wu, X, Lv, SH, Liu, XJ, Meng, J  
A-Site-Doping Enhanced B-Site Ordering and Correlated Magnetic Property in  $\text{La}_{2-x}\text{Bi}_x\text{CoMnO}_6$   
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 116 Issue: 32 Pages: 16841-16847 DOI: 10.1021/jp302735x Published: AUG 16 2012
29. Mishra, Dileep K.; Sathe, V. G.  
Evidence of the Fano resonance in a temperature dependent Raman study of  $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$  and  $\text{SrCu}_3\text{Ti}_4\text{O}_{12}$   
JOURNAL OF PHYSICS-CONDENSED MATTER 24 (25) Article Number: 252202, JUN 27 2012.
28. Bai, Yijia; Liu, Xiaojuan; Xia, Yanjie; et al.  
B-site ordering induced suppression of magnetic cluster glass and dielectric anomaly in  $\text{La}_{2-x}\text{Bi}_x\text{CoMnO}_6$   
APPLIED PHYSICS LETTERS 100 (22) Article Number: 222907, MAY 28 2012.
27. Garcia-Flores, A. F.; Moreira, A. F. L.; Kaneko, U. F.; et al.  
Spin-Electron-Phonon Excitation in Re-based Half-Metallic Double Perovskites  
PHYSICAL REVIEW LETTERS 108 (17) Article Number: 177202, APR 25 2012.
26. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
Structure and current-induced effect on the resistivity of  $\text{La}_2\text{CoMnO}_6$  thin films  
MATERIALS CHEMISTRY AND PHYSICS 132 (2-3), 466-470, FEB 15 2012.
25. Zhu Min; Lin Yong; Lo Edward W. C.; et al.  
Electronic and magnetic properties of  $\text{La}_2\text{NiMnO}_6$  and  $\text{La}_2\text{CoMnO}_6$  with cationic ordering  
APPLIED PHYSICS LETTERS 100 (6) Article Number: 062406, FEB 6 2012.
24. Zhang Zhiqing; Jian Hongbin; Tang Xianwu; et al.  
Structural, magnetic and dielectric properties of  $\text{La}_2\text{NiMnO}_6$  thin film by chemical solution deposition method  
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 61 (1), 224-228, JAN 2012.
23. Nair Harikrishnan S.; Swain Diptikanta; Hariharan N.; et al.  
Griffiths phase-like behavior and spin-phonon coupling in double perovskite  $\text{Tb}_2\text{NiMnO}_6$   
JOURNAL OF APPLIED PHYSICS 110 (12) Article Number: 123919, DEC 15 2011.
22. Gu Yijing; Wang Yunfeng; Wang Tao; et al.  
Synthesis, structural and magnetic study of polycrystalline  $\text{LaNi}_{1-x}\text{Mn}_x\text{O}_3$  films  
PHYSICA B-CONDENSED MATTER 406 (14) Pages: 2876-2879, JUL 15 2011.
21. Singh M. P.; Truong K. D.; Jandl S.; et al.  
Magnetic properties and phonon behavior of  $\text{Pr}_2\text{NiMnO}_6$  thin films  
APPLIED PHYSICS LETTERS 98 (16) Article Number: 162506, APR 18 2011.
20. Viswanathan M.; Hsieh H. H.; Lin H. -J.; et al.  
Investigation on the Magnetic Anomaly and the Role of Orbital Moment on the Magnetic Properties of  $\text{LaMn}_{0.5}\text{Co}_{0.5}\text{O}_3$   
JOURNAL OF PHYSICAL CHEMISTRY C 115 (11) Pages: 4851-4855, MAR 24 2011.
19. Truong K. D.; Singh M. P.; Jandl S.; et al.  
Investigation of phonon behavior in  $\text{Pr}_2\text{NiMnO}_6$  by micro-Raman spectroscopy  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (5) Article Number: 052202, FEB 9 2011.
18. Moreira, A.F.L., Garcia-Flores, A.F., Granada, E., Massa, N.E., Pinacca, R.M., Pedregosa, J.C., Carbonio, R.E., (...), Echegut, P.  
Raman and infrared spectroscopy of  $\text{Sr}_2\text{B}'\text{UO}_6$  ( $\text{B}' = \text{Ni}; \text{Co}$ ) double perovskites  
VIBRATIONAL SPECTROSCOPY 54 (2) Pages: 142-147, NOV 18 2010.
17. Zhao, H., Kimura, H., Cheng, Z., Wang, X., Ozawa, K., Nishida, T.  
Magnetic properties of La doped  $\text{Bi}_2\text{FeMnO}_6$  ceramic and film  
JOURNAL OF APPLIED PHYSICS 108 (9) Article Number: 093903, NOV 1 2010.
16. Viswanathan, M., Anil Kumar, P.S., Bhadram, V.S., Narayana, C., Bera, A.K., Yusuf, S.M.  
Influence of lattice distortion on the Curie temperature and spin-phonon coupling in  $\text{LaMn}_{0.5}\text{Co}_{0.5}\text{O}_3$   
Journal of Physics Condensed Matter 22 (34), art. no. 346006, SEP 1 2010.
15. Singh M. P.; Truong K. D.; Jandl S.; et al.  
Phase formation, phonon behavior, and magnetic properties of novel ferromagnetic  $\text{La}_3\text{BAlMnO}_9$  ( $\text{B} = \text{Co}$  or  $\text{Ni}$ ) triple perovskites  
JOURNAL OF APPLIED PHYSICS 107 (9) Article Number: 09D916, MAY 1 2010.
14. Wang, T., Shi, W., Fang, X., Dong, W., Tao, R.  
Fabrication of polycrystalline  $\text{La}_2\text{NiMnO}_6$  thin films on  $\text{Si}(1\ 0\ 0)$  substrates by chemical solution deposition  
Journal of Sol-Gel Science and Technology 53 (3), pp. 655-659, MAR 2010.
13. Singh, M.K., Prellier, W., Jang, H.M., Katiyar, R.S.  
Anomalous magnetic ordering induced spin-phonon coupling in  $\text{BiFeO}_3$  thin films  
SOLID STATE COMMUNICATIONS Volume: 149 Issue: 43-44 Pages: 1971-1973 DOI: 10.1016/j.ssc.2009.07.036 Published: NOV 2009



12. Truong, K.D., Singh, M.P., Jandl, S., Fournier, P.  
Influence of Ni/Mn cation order on the spin-phonon coupling in multifunctional La<sub>2</sub>NiMnO<sub>6</sub> epitaxial films by polarized Raman spectroscopy  
PHYSICAL REVIEW B Volume: 80 Issue: 13 Article Number: 134424 DOI: 10.1103/PhysRevB.80.134424 Published: OCT 2009
11. Singh, M.P., Truong, K.D., Jandl, S., Fournier, P.  
Long-range Ni/Mn structural order in epitaxial double perovskite La<sub>2</sub>NiMnO<sub>6</sub> thin films  
PHYSICAL REVIEW B Volume: 79 Issue: 22 Article Number: 224421 DOI: 10.1103/PhysRevB.79.224421 Published: JUN 2009
10. Singh, M.P., Truong, K.D., Fournier, P., Rauwel, P., Rauwel, E., Carignan, L.P., Ménard, D.  
A radical approach to promote multiferroic coupling in double perovskites  
Journal of Magnetism and Magnetic Materials 321 (11), pp. 1743-1747 (2009).
9. Tong, W., Yoon, W.-S., Hagh, N.M., Amatucci, G.G.  
A novel silver molybdenum oxyfluoride perovskite as a cathode material for lithium batteries  
Chemistry of Materials 21 (10), pp. 2139-2148 (2009).
8. Singh, M.P., Truong, K.D., Jandl, S., Fournier, P.  
Stabilization and functional properties of La<sub>3</sub>NiAlMnO<sub>9</sub> and La<sub>3</sub>CoAlMnO<sub>9</sub> magnetoelectric triple perovskites  
Applied Physics Letters 94 (17), art. no. 171908 (2009).
7. Wang, T., Xu, W., Fang, X., Dong, W., Tao, R., Li, D., Zhao, Y., Zhu, X.  
Chemical solution deposition preparation of double-perovskite La<sub>2</sub>NiMnO<sub>6</sub> film on LaAlO<sub>3</sub> (0 0 1) substrate  
Journal of Alloys and Compounds 475 (1-2), pp. 9-12 (2009).
6. Sheets, W.C., Smith, A.E., Subramanian, M.A., Prellier, W.  
Effect of oxygen concentration on the structural and magnetic properties of LaRh<sub>1/2</sub>Mn<sub>1/2</sub>O<sub>3</sub> thin films  
Journal of Applied Physics 105 (2), art. no. 023915 (2009).
5. Andreasson, J., Holmlund, J., Rauer, R., Käll, M., Börjesson, L., Knee, C.S., Eriksson, A.K., (...), Chaudhury, R.P.  
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution  
Physical Review B - Condensed Matter and Materials Physics 78 (23), art. no. 235103 (2008).
4. Wang, T., Fang, X., Dong, W., Tao, R., Deng, Z., Li, D., Zhao, Y., (...), Zhu, X.  
Fabrication of polycrystalline La<sub>2</sub>NiMnO<sub>6</sub> thin films on LaAlO<sub>3</sub> (1 0 0) substrates by chemical solution deposition  
Journal of Crystal Growth 310 (14), pp. 3386-3390 (2008).
3. Singh, M.P., Truong, K.D., Laverdière, J., Charpentier, S., Jandl, S., Fournier, P.  
Cationic ordering and role of A -site ion in manganese-based double perovskites  
Journal of Applied Physics 103 (7), art. no. 07E315 (2008).
2. Ranjith, R., Kundu, A.K., Filippi, M., Kundys, B., Prellier, W., Raveau, B., Laverdière, J., (...), Jandl, S.  
Ferromagnetism and magnetodielectric effect in insulating LaBiMn<sub>4</sub>Co<sub>2</sub>O<sub>6</sub> thin films  
Applied Physics Letters 92 (6), art. no. 062909 (2008).
1. Truong KD, Laverdiere J, Singh MP, et al.  
Impact of Co/Mn cation ordering on phonon anomalies in La<sub>2</sub>CoMnO<sub>6</sub> double perovskites: Raman spectroscopy  
PHYSICAL REVIEW B 76 (13), 132413 (2007).
63. *“Design of new gold catalysts supported on mechanochemically activated ceria-alumina, promoted by molybdena for complete benzene oxidation”*  
D. Andreeva, P. Petrova, L. Ilieva, J.W. Sobczak and M.V. Abrashev  
Applied Catalysis B: Environmental 77 (3-4), 364-372 (2008).
17. Doroftei, C.  
Nanocrystalline FeMnO<sub>3</sub> Powder as Catalyst for Combustion of Volatile Organic Compounds  
Nanomaterials 14(6),521 (2024)
16. Centeno, M.A., Reina, T.R., Ivanova, S., Laguna, O.H., Odriozola, J.A.  
Au/CeO<sub>2</sub> catalysts: Structure and CO oxidation activity  
Catalysts 6(10), Art.No. A15 DOI: 10.3390/catal6100158 (2016)
15. Mitran, G., Pavel, O.D., Mieritz, D.G., Seo, D.-K., Florea, M.  
Effect of Mo/Ce ratio in Mo-Ce-Al catalysts on the hydrogen production by steam reforming of glycerol  
Catalysis Science and Technology 6(21), 7902-7912 DOI: 10.1039/c6cy00999a (2016)
14. Kaminski, P., Ziolk, M.  
Mobility of gold, copper and cerium species in Au, Cu/Ce, Zr-oxides and its impact on total oxidation of methanol  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 187 Pages: 328-341 DOI: 10.1016/j.apcatb.2016.01.040 Published: JUN 15 2016
13. Jiang, F., Chen, H., Zheng, S.  
Catalytic combustion of ethyl acetate on Al<sub>2</sub>O<sub>3</sub> supported chromia catalysts

12. Laguna, O.H., Domínguez, M.I., Romero-Sarria, F., Odriozola, J.A., Centeno, M.A.  
Role of oxygen vacancies in gold oxidation catalysis  
RSC Catalysis Series 2014-January(18), 489-511 (2014)
11. Gao Lin-Xin; Jiang Xin; Guo Sen  
MnOx/CeO2/SiO2 Catalysts Prepared by Adsorption Phase Reaction Technique for Selective Catalytic Reduction of NOx at Low-Temperature  
ACTA PHYSICO-CHEMICA SINICA 30 (7), pp. 1303-1308 JUL 2014
10. Xing, T., Wan, H., Shao, Y., Han, Y., Xu, Z., Zheng, S.  
Catalytic combustion of benzene over  $\gamma$ -alumina supported chromium oxide catalysts  
Applied Catalysis A: General 468, pp. 269-275, 2013
9. Long, Baihua; Huang, Jianhui; Wang, Xinchun  
Photocatalytic degradation of benzene in gas phase by nanostructured BiPO4 catalysts  
PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL 22 (6), 645-654, DEC 2012
8. Bazin, P., Marie, O., Daturi, M.  
Operando IR spectroscopy study of catalytic materials for pollution treatment of vehicle cockpits: Evidence of the active sites, intermediate/spectator species and reaction mechanisms  
Materiaux et Techniques 100 (3), pp. 201-210, 2012.
7. Jiang, X., Deng, H.  
Synthesis of Au-CeO2/SiO2 catalyst via adsorbed-layer reactor technique combined with alcohol-thermal treatment  
Applied Surface Science 257 (24), pp. 10883-10887, 2011.
6. Bonelli R.; Albonetti S.; Morandi V.; et al.  
Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO(2) for total oxidation of VOC  
APPLIED CATALYSIS A-GENERAL 395 (1-2) Pages: 10-18, MAR 15 2011.
5. Carolina Gomez-Carrillo Sandra; Guillermo Bolcatto Pablo  
Coexistence of root 3 x root 3 and quasi-linear phases of sulfur adsorbed ( $\Theta=1/3$ ) on a gold (111) substrate  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (2) Pages: 461-466, 2011.
4. Rousseau Severine; Marie Olivier; Bazin Philippe; et al.  
Investigation of Methanol Oxidation over Au/Catalysts Using Operando IR Spectroscopy: Determination of the Active Sites, Intermediate/Spectator Species, and Reaction Mechanism  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 132 (31) Pages: 10832-10841, AUG 11 2010.
3. Hu, C., Zhu, Q., Chen, L., Wu, R.  
CuO-CeO2 binary oxide nanoplates: Synthesis, characterization, and catalytic performance for benzene oxidation  
Materials Research Bulletin 44 (12), pp. 2174-2180 (2009).
2. Naknam, P., Luengnaruemitchai, A., Wongkasemjit, S.  
Preferential CO oxidation over Au/ZnO and Au/ZnO-Fe2O3 catalysts prepared by photodeposition  
International Journal of Hydrogen Energy 34 (24), pp. 9838-9846 (2009).
1. Jianhui, H., Kaining, D., Xinchun, W., Xianzhi, F.  
Nanostructuring cadmium germanate catalysts for photocatalytic oxidation of benzene at ambient conditions  
Langmuir 25 (14), pp. 8313-8319 (2009).
64. *“Gold catalysts on doped by lanthanides ceria for pure hydrogen production”*  
D. Andreeva, I. Ivanov, J. W. Sobczak, W. Lisowski, P. Petrova, M. V. Abrashev, and L. Ilieva  
Current Topics in Catalysis 7, 33-41 (2008).
65. *“Gold catalysts supported on ceria doped by rare earth metals for water gas shift reaction: Influence of the preparation method”*  
Andreeva, D., Ivanov, I., Ilieva, L., Abrashev, M.V., Zanella, R., Sobczak, J.W., Lisowski, W., Kantcheva M., Avdeev G., and Petrov, K.  
Applied Catalysis A: General 357(2) 159–169 (2009).
60. Mirza, S.H., Abbas, Z., Azam, S., Muhammad, S.  
A first-principles quantum analysis: Tailoring optoelectronic and thermophysical performance of oxygen deficient ceria ( $\text{Ce}_{1-x}\text{Tm}_x\text{O}_{2-\delta}$  (Tm= Co, Ni)) for ReRAM and solar cell advancements  
Materials Today Communications 38,108223 (2024)
59. Gorlova, A.M., Pakharukova, V.P., Stonkus, O.A., (...), Snytnikov, P.V., Potemkin, D.I.  
Cerium-Zirconia Supported Platinum Catalysts for the Water-Gas Shift Reaction: The Influence of Support Composition  
Kinetics and Catalysis 64(4), pp. 449-457 (2023)
58. Ma, L., Ding, C., Wang, J., Xu, H., Zhang, K.  
Lanthanide modified Pt/CeO2-based catalysts for methane partial oxidation: Relationship between catalytic activity and structure

- International Journal of Hydrogen Energy 48(50), pp. 19074-19086 (2023)
57. Garcia-Escobar, F., Nishimura, S., Takahashi, K.  
Data-Driven Design and Understanding of Noble Metal-Based Water-Gas Shift Catalysts from Literature Data  
Journal of Physical Chemistry C 127(13), pp. 6152-6166 (2023)
56. Chattoraj, J., Hamadicharef, B., Kong, J.F., (...), Gao, F., Tan, T.L.  
Theory-Guided Machine Learning to Predict the Performance of Noble Metal Catalysts in the Water-Gas Shift Reaction  
ChemCatChem 14(16),e202200355 (2022)
55. El-Habib, A., Addou, M., Aouni, A., (...), Rossi, Z., Jbilou, M.  
Oxygen vacancies and defects tailored microstructural, optical and electrochemical properties of Gd doped CeO<sub>2</sub> nanocrystalline thin films  
Materials Science in Semiconductor Processing 145,106631 (2022)
54. Yuan, K., Sun, X.-C., Yin, H.-J., (...), Yan, C.-H., Zhang, Y.-W.  
Boosting the water gas shift reaction on Pt/CeO<sub>2</sub>-based nanocatalysts by compositional modification: Support doping versus bimetallic alloying  
Journal of Energy Chemistry 67, pp. 241-249 (2022)
53. Methanol reforming by nanostructured Pd/Sm-doped ceria catalysts  
Kosinski, M. R.; Vizcaino, A. J.; Gomez-Sainero, L. M.; et al.  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 286 Article Number: 119935 Published: JUN 5 2021
52. A review of recent advances in water-gas shift catalysis for hydrogen production  
Ebrahimi, Parisa; Kumar, Anand; Khraisheh, Majeda  
EMERGENT MATERIALS Volume: 3 Issue: 6 Pages: 881-917 Published: DEC 2020
51. Nontraditional Catalyst Supports in Surface Organometallic Chemistry  
Witzke, Ryan J.; Chapovetsky, Alon; Conley, Matthew P.; et al.  
ACS CATALYSIS Volume: 10 Issue: 20 Pages: 11822-11840 Published: OCT 16 2020
50. Defect Chemistry of Ceria Nanostructures and Their Applications in Heterogeneous Catalysis  
Yuan, K., Zhang, Y.  
Zhongguo Xitu Xuebao/Journal of the Chinese Rare Earth Society 38(3), pp. 326-344 (2020)
49. Alshammari, A.S.  
Heterogeneous gold catalysis: From discovery to applications  
Catalysts 9(5),402 (2019)
48. Carabineiro, S.A.C.  
FACTS, UNIQUE PROPERTIES AND USES OF GOLD IN OXIDATION REACTIONS ( Book Chapter)  
Gold Nanoparticles: Advances in Research and Applications pp. 87-234 (2019)
47. Heterogeneous Gold Catalysis: From Discovery to Applications  
Alshammari, Ahmad S.  
CATALYSTS Volume: 9 Issue: 5 Article Number: 402 Published: MAY 2019
46. Recent Advances in the Gold-Catalysed Low-Temperature Water-Gas Shift Reaction  
Carter, James H.; Hutchings, Graham J.  
CATALYSTS Volume: 8 Issue: 12 Article Number: 627 Published: DEC 2018
45. Ambient temperature aqueous synthesis of ultrasmall copper doped ceria nanocrystals for the water gas shift and carbon monoxide oxidation reactions  
Curran, Christopher D.; Lu, Li; Kiely, Christopher J.; et al.  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 6 Issue: 1 Pages: 244-255 Published: JAN 7 2018
44. Temperature-programmed reduction of lightly yttrium-doped Au/CeO<sub>2</sub> catalysts Correlation between oxygen mobility and WGS activity  
Munteanu, G.; Petrova, P.; Ivanov, I.; et al.  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 131 Issue: 1 Pages: 145-154 Published: JAN 2018
43. Preparation and characterization of Ce<sub>1-x</sub>Pr<sub>x</sub>O<sub>2</sub> supports and their catalytic activities  
Chanapaththarapol, Kingkaew Chayakul; Krachumram, Somkiat; Makdee, Ammarika; et al.  
JOURNAL OF RARE EARTHS Volume: 35 Issue: 12 Pages: 1197-1205 Published: DEC 2017
42. Oh, Jiwoo; Do Yoo, Jeong; Kim, Keunsoo; et al.  
Negative Effects of Dopants on Copper-Ceria Catalysts for CO Preferential Oxidation Under the Presence of CO<sub>2</sub> and H<sub>2</sub>O  
CATALYSIS LETTERS Volume: 147 Issue: 12 Pages: 2987-3003 Published: DEC 2017
41. Genty, Eric; Jacobs, Luc; de Bocarme, Thierry Visart; et al.  
Dynamic Processes on Gold-Based Catalysts Followed by Environmental Microscopies  
CATALYSTS Volume: 7 Issue: 5 Article Number: 134 Published: MAY 2017
40. Yang, Nan; Orgiani, Pasquale; Di Bartolomeo, Elisabetta; et al.  
Effects of Dopant Ionic Radius on Cerium Reduction in Epitaxial Cerium Oxide Thin Films

39. Izquierdo, U.; Neuberger, S.; Pecov, S.; et al.  
Hydrogen production with a microchannel heat-exchanger reactor by single stage water-gas shift; catalyst development  
CHEMICAL ENGINEERING JOURNAL Volume: 313 Pages: 1494-1508 Published: APR 1 2017
38. He, RX (He Runxia); Wang, DD (Wang Dandan); Zhi, KD (Zhi Keduan); Wang, B (Wang Bin); Zhong, HC (Zhong Huacong); Jiang, HQ (Jiang Haoqiang); Li, N (Li Na); Liu, QS (Liu Quansheng)  
Cu-Mn catalysts modified by rare earth lanthanum for low temperature water-gas shift reaction  
JOURNAL OF RARE EARTHS Volume: 34 Issue: 10 Pages: 994-1003 DOI: 10.1016/S1002-0721(16)60126-6 Published: OCT 2016
37. Bilkova, I., Sobczak, I., Decyk, P., Ziolk, M., Whitten, J.E.  
The effect of zinc and copper in gold catalysts supported on MCF cellular foams on surface properties and catalytic activity in methanol oxidation  
MICROPOROUS AND MESOPOROUS MATERIALS Volume: 232 Pages: 97-108 DOI: 10.1016/j.micromeso.2016.06.008 Published: SEP 15 2016
36. Jaoude, MA.; Polychronopoulou, K., Hinder, SJ, Katsiotis, MS, Baker, MA, Greish, YE, Alhassan, SM  
Synthesis and properties of 1D Sm-doped CeO<sub>2</sub> composite nanofibers fabricated using a coupled electrospinning and sol-gel methodology  
CERAMICS INTERNATIONAL Volume: 42 Issue: 9 Pages: 10734-10744 DOI: 10.1016/j.ceramint.2016.03.197 Published: JUL 2016
35. Montini, T., Melchionna, M., Monai, M., Fornasiero, P.  
Fundamentals and Catalytic Applications of CeO<sub>2</sub>-Based Materials  
CHEMICAL REVIEWS Volume: 116 Issue: 10 Pages: 5987-6041 DOI: 10.1021/acs.chemrev.5b00603 Published: MAY 25 2016
34. Liberman, E.Yu., Naumkin, A.V., Mikhailichenko, A.I., Batrakova, M.K., Maslakov, K.I., Revina, A.A., Papkova, M.V., Kon'Kova, T.V., Grunskii, V.N., Gasparyan, M.D., Karpovich, A.L., Lizunova, A.A.  
Au/Ce<sub>0.72</sub>Zr<sub>0.18</sub>Pr<sub>0.10</sub>O<sub>2</sub> nanodisperse catalyst for oxidation of carbon monoxide  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A Volume: 90 Issue: 1 Pages: 166-172 DOI: 10.1134/S0036024416010167  
Published: JAN 2016
33. Liao, W., Lv, H., Suo, Z.  
The action of VO<sub>x</sub> doping on Au/CeO<sub>2</sub> catalysts for CO oxidation and water-gas shift reaction  
REACTION KINETICS MECHANISMS AND CATALYSIS Volume: 116 Issue: 2 Pages: 491-506 DOI: 10.1007/s11144-015-0921-5  
Published: DEC 2015
32. Sultana, S.S.P., Kishore, D.H.V., Kuniyil, M., Khan, M., Alwarthan, A., Prasad, K.R.S., Labis, J.P., Adil, S.F.  
Cerium doped mixed metal oxide nanoparticles as oxidation catalysts: Synthesis and their characterization  
ARABIAN JOURNAL OF CHEMISTRY Volume: 8 Issue: 6 Pages: 766-770 DOI: 10.1016/j.arabjc.2015.05.008 Published: NOV 2015
31. Ma, Z (Ma, Zhen); Tao, F (Tao, Franklin (Feng)); Gu, XL (Gu, Xiaoli)  
DEVELOPMENT OF NEW GOLD CATALYSTS FOR REMOVING CO FROM H<sub>2</sub>  
HETEROGENEOUS CATALYSIS AT NANOSCALE FOR ENERGY APPLICATIONS Pages: 217-238 Published: 2015
30. Gradisher, Logan; Dutcher, Bryce; Fan, Maohong  
Catalytic hydrogen production from fossil fuels via the water gas shift reaction  
APPLIED ENERGY Volume: 139 Pages: 335-349 Published: FEB 1 2015
29. Deng, Changshun; Li, Bin; Dong, Lihui; et al.  
NO reduction by CO over CuO supported on CeO<sub>2</sub>-doped TiO<sub>2</sub>: the effect of the amount of a few CeO<sub>2</sub>  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 17 Issue: 24 Pages: 16092-16109 Published: 2015
28. Zhang, Yashan; Jin, Lei; Sterling, Kevin; et al.  
Potassium modified layered Ln<sub>2</sub>O<sub>3</sub>CO<sub>3</sub> (Ln: La, Nd, Sm, Eu) materials: efficient and stable heterogeneous catalysts for biofuel production  
GREEN CHEMISTRY Volume: 17 Issue: 6 Pages: 3600-3608 Published: 2015
27. Correia Carabineiro, S.A.  
Synthesis and applications of gold nanoparticles  
Advances in Nanotechnology 12, 95-122 (2014)
26. He, Geping; Fan, Huiqing; Wang, Zhiwei  
Enhanced optical properties of heterostructured ZnO/CeO<sub>2</sub> nanocomposite fabricated by one-pot hydrothermal method: Fluorescence and ultraviolet absorption and visible light transparency  
OPTICAL MATERIALS Volume: 38 Pages: 145-153 Published: DEC 2014
25. Odabasi, Cagla; Gunay, M. Erdem; Yildirim, Ramazan  
Knowledge extraction for water gas shift reaction over noble metal catalysts from publications in the literature between 2002 and 2012  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 39 (11), pp. 5733-5746 APR 4 2014
24. Chen, Guangliang; Xue, Fei; Chen, Zhili; et al.  
FABRICATING WELL-DISPERSED NANOSIZED GOLD CATALYST ON TITANATE NANOWIRES SURFACE FOR 4-NITROPHENOL REDUCTION  
NANO 9 (3), Art. No. 1450039 APR 2014
23. He Runxia; Jiang Haoqiang; Wu Fang; et al.

- Effect of doping rare earth oxide on performance of copper-manganese catalysts for water-gas shift reaction  
 JOURNAL OF RARE EARTHS 32 (4), pp. 298-305 APR 2014
22. Deshpande, P.A., Madras, G.  
 Catalytic Synthesis of CO Free Hydrogen  
 New and Future Developments in Catalysis 223-252 DOI: 10.1016/B978-0-444-53882-6.00009-7 (2013)
21. Carabineiro, S.A.C.  
 Synthesis and applications of gold nanoparticles  
 Gold Nanoparticles: Synthesis, Optical Properties and Applications for Cancer Treatment 1-37 (2013)
20. Delgado, JJ, del Rio, E, Chen, XW.,; Blanco, G.; Pintado, JM, Bernal, S, Calvino, JJ  
 UNDERSTANDING CERIA-BASED CATALYTIC MATERIALS: AN OVERVIEW OF RECENT PROGRESS  
 CATALYSIS BY CERIA AND RELATED MATERIALS, 2ND EDITION Book Series: Catalytic Science Series Volume: 12 Pages: 47-138 Published: 2013
19. Tao, F., Ma, Z.  
 Water-gas shift on gold catalysts: Catalyst systems and fundamental studies  
 Physical Chemistry Chemical Physics 15 (37), pp. 15260-15270, 2013
18. Ivanov, I., Petrova, P., Georgiev, V., Batakliiev, T., Karakirova, Y., Serga, V., Kulikova, L., (...), Rakovsky, S.  
 Comparative study of ceria supported nano-sized platinum catalysts synthesized by extractive-pyrolytic method for Low-Temperature WGS reaction  
 Catalysis Letters 143 (9), pp. 942-949, 2013
17. He, G., Fan, H., Wang, K., Yin, H., Wu, J.  
 The heterostructured AAO/CeO<sub>2</sub> nanosystem fabricated by electrodeposition for charge storage and hydrophobicity  
 Materials Science and Engineering B: Solid-State Materials for Advanced Technology 178 (17), pp. 1140-1146, 2013
16. Del Río, E., López-Haro, M., Cies, J.M., Delgado, J.J., Calvino, J.J., Trasobares, S., Blanco, G., (...), Bernal, S.  
 Dramatic effect of redox pre-treatments on the CO oxidation activity of Au/Ce<sub>0.50</sub>Tb<sub>0.12</sub>Zr<sub>0.38</sub>O<sub>2-x</sub> catalysts prepared by deposition-precipitation with urea: A nano-analytical and nano-structural study  
 Chemical Communications 49 (60), pp. 6722-6724, 2013
15. Liu, X., Guo, P., Wang, B., Jiang, Z., Pei, Y., Fan, K., Qiao, M.  
 A comparative study of the deactivation mechanisms of the Au/CeO<sub>2</sub> catalyst for water-gas shift under steady-state and shutdown/start-up conditions in realistic reformate  
 Journal of Catalysis 300, pp. 152-162, 2013
14. Alijani, A., Irankhah, A.  
 Effect of Nickel Addition on Ceria-Supported Platinum Catalysts for Medium-Temperature Shift Reaction in Fuel Processors  
 Chemical Engineering and Technology 36 (4), pp. 552-558, 2013
13. Alijani, A., Irankhah, A.  
 Medium-Temperature Shift Catalysts for Hydrogen Purification in a Single-Stage Reactor  
 Chemical Engineering and Technology 36 (2), pp. 209-219, 2013
12. Reddy, E.L., Prabhakam, A., Karuppiiah, J., Rameshbabu, N., Subrahmanyam, C.H.  
 Gold supported calcium deficient hydroxyapatite for room temperature co oxidation  
 International Journal of Nanoscience 11 (3), art. no. 1240004, 2012.
11. Spivey, J.J.  
 Gasification Deactivation of Reforming Catalysts  
 FUEL CELLS: TECHNOLOGIES FOR FUEL PROCESSING Pages: 285-315 DOI: 10.1016/B978-0-444-53563-4.10011-2 Published: 2011
10. Pinto, F., André, R., Costa, P., Carolino, C., Lopes, H., Gulyurtlu, I.  
 Gasification Technology and Its Contribution to Deal with Global Warming  
 SOLID BIOFUELS FOR ENERGY: A LOWER GREENHOUSE GAS ALTERNATIVE Book Series: Green Energy and Technology  
 Pages: 151-175 DOI: 10.1007/978-1-84996-393-0\_7 Published: 2011
9. Caglayan Burcu Selen; Aksoylu A. Erhan  
 Water-gas shift activity of ceria supported Au-Re catalysts  
 CATALYSIS COMMUNICATIONS 12 (13) Pages: 1206-1211, JUL 26 2011.
8. Lenite Brenno A.; Galletti Camilla; Specchia Stefania  
 Studies on Au catalysts for water gas shift reaction  
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 36 (13) Pages: 7750-7758, JUL 2011.
7. Yu Qiangqiang; Li Yang; Zou Xuhua; et al.  
 Effect of Alkali Metal Promoters on Water-Gas Shift Activity over Au-Pt/CeO<sub>2</sub> Catalyst  
 CHINESE JOURNAL OF CATALYSIS 31 (6) Pages: 671-676, JUN 2010.
6. Hernández, W.Y., Romero-Sarria, F., Centeno, M.A., Odriozola, J.A.  
 In situ characterization of the dynamic gold-support interaction over ceria modified Eu<sup>3+</sup>. Influence of the oxygen vacancies on the co oxidation reaction

- Journal of Physical Chemistry C 114 (24), pp. 10857-10865 (2010).
5. Ma, Z., Yin, H., Dai, S.  
Performance of Au/MxOy/TiO2 Catalysts in water-gas shift reaction  
Catalysis Letters 136 (1-2), pp. 83-91 (2010).
4. Bali, S., Huggins, F.E., Ernst, R.D., Pugmire, R.J., Huffman, G.P., Eyring, E.M.  
Iron-ceria aerogels doped with palladium as water-gas shift catalysts for the production of hydrogen  
Industrial and Engineering Chemistry Research 49 (4), pp. 1652-1657 (2010).
3. Delannoy, L., Fajerweg, K., Lakshmanan, P., Potvin, C., Méthivier, C., Louis, C.  
Supported gold catalysts for the decomposition of VOC: Total oxidation of propene in low concentration as model reaction  
Applied Catalysis B: Environmental 94 (1-2), pp. 117-124 (2010).
2. Duarte de Farias, A.M., Nguyen-Thanh, D., Fraga, M.A.  
Discussing the use of modified ceria as support for Pt catalysts on water-gas shift reaction  
Applied Catalysis B: Environmental 93 (3-4), pp. 250-258 (2010).
1. Yang, S., Zhan, Y., Chen, C., Cao, Y., Lin, X., Zheng, Q.  
Effect of rare earth oxide on the catalytic performance of Au/CeO2 catalyst for water-gas shift reaction  
Cuihua Xuebao / Chinese Journal of Catalysis 30 (7), pp. 666-672 (2009).
66. “*Growth and characterization of large La<sub>1-x</sub>Pb<sub>x</sub>MnO<sub>3+δ</sub> (x=0.32-0.35) crystals*”  
Milenov, T.I., Rafailov, P.M., Abrashev, M.V., Nikolova, R.P., Titorenkova, R., Gospodinov, M.M.  
Crystal Research and Technology 44 (11), pp. 1192-1196 (2009).
2. Ewas, Ashraf M.; Hamad, Mahmoud A  
Large magnetocaloric effect of La<sub>0.67</sub>Pb<sub>0.33</sub>Mn<sub>1-x</sub>CoxO<sub>3</sub> in small magnetic field variation  
CERAMICS INTERNATIONAL Volume: 43 Issue: 10 Pages: 7660-7662 Published: JUL 2017
1. Blagoev, B.S., Terzieva, S.D., Nurgaliev, T.K., Shivachev, B.L., Zaleski, A.J., Mikli, V., Staneva, A.D., Stoyanova-Ivanova, A.K.  
Magnetic and transport characteristics of oxygenated polycrystalline La<sub>0.6</sub>Pb<sub>0.4</sub>MnO<sub>3</sub>  
Journal of Magnetism and Magnetic Materials 329, pp. 34-38, 2013
67. “*Optical phonons of NdBaCo<sub>2</sub>O<sub>5+x</sub>: Lattice dynamics calculations*”  
Todorov, N.D., Abrashev, M.V., Ivanov, V.G., Vlahov, E.  
AIP Conference Proceedings 1203, pp. 1003-1006 (2009).
68. “*Raman spectroscopy investigation of magnetite nanoparticles in ferrofluids*”  
Slavov, L., Abrashev, M.V., Merodiiska, T., Gelev, Ch., Vandenberghe, R.E., Markova-Deneva, I., Nedkov, I.  
Journal of Magnetism and Magnetic Materials 322 (14), pp. 1904-1911 (2010).
204. Stiufiuc, GF and Stiufiuc, RI  
Magnetic Nanoparticles: Synthesis, Characterization, and Their Use in Biomedical Field  
Applied Sciences - Basel 14 (4) Feb 2024
203. Goodarzi, M., Arjmand, M., Eskicioglu, C.  
Insight into anaerobic digestion mechanisms by fine-tuning structural properties of nanomaterial supplements  
Chemical Engineering Journal 483, 149256 (2024)
202. Devi, A.P., Mishra, P.M., Pothal, J.K., Ramasamy, B., Pradhan, N.  
Sustainable synthesis of emerging bio-based magnetite nanoparticles for efficient removal of Cr(VI) from groundwater  
Biomass Conversion and Biorefinery 14(5), pp. 6407-6419 (2024)
201. Senthilmurugan, B., Okla, M.K., Abdel-Maksoud, M.A., (...), Abdelgawad, H., Sudheer Khan, S.  
Interface engineered Ag-r-GO-CuFe<sub>2</sub>O<sub>4</sub>-Fe<sub>3</sub>O<sub>4</sub> heterojunction an efficient photocatalyst for water treatment and toxicity study in Trifolium plants  
Journal of Industrial and Engineering Chemistry (Article in Press) DOI: 10.1016/j.jiec.2024.01.046 (2024)
200. Chen, Y.-C., Cheng, Y.-C., Ke, W.-E., (...), Lin, J.-Y., Chu, Y.-H.  
Creation of novel composite: Flexible magnetic and conductive muscovite  
Materials Today Advances 20, 100423 (2023)
199. Othi, N.A., Hanan, A., Solangi, M.Y., (...), Abro, M.I., Aftab, U.  
Facile preparation of amino acid-assisted Fe<sub>3</sub>O<sub>4</sub> nanoparticles for low-density lipoprotein cholesterol removal  
Chemical Papers 77(12), pp. 7749-7759 (2023)
198. Cervera-Gabalda, L., Gómez-Polo, C.  
Magnetic carbon Fe<sub>3</sub>O<sub>4</sub> nanocomposites synthesized via Magnetic Induction Heating  
Scientific Reports 13(1), 7244 (2023)
197. Wence Xu, Cao, Z., Ma, R., (...), Wu, N., Ouyang, S.

- Migration Mechanism and Magnetic Properties of Fe Ions in Glass–Ceramics of an Iron-Rich CMAS System  
Glass Physics and Chemistry 49(5), pp. 463-477 (2023)
196. Volkova, A.V., Lopatina, E.S., Solovyeva, E.V., Ermakova, L.E.  
Effect of Magnetite Content and Specificity of Nickel(II) Ions on Electrokinetic Properties of Composites Based on Porous Silica Particles  
Colloid Journal 85(4), pp. 486-499 (2023)
195. Hajareh Haghghi, F., Binaymotlagh, R., Chronopoulou, L., (...), Palocci, C., Fratoddi, I.  
Self-Assembling Peptide-Based Magnetogels for the Removal of Heavy Metals from Water  
Gels 9(8),621 (2023)
194. Ha, J., Kim, M., Kim, Y.-T., Choi, J.  
Lithiation-Regulated Iron Oxide Heterostructure for Hydrogen Evolution Reaction: Optimized Degree of Crystallinity for Enhanced Electrochemical Activity  
ACS Sustainable Chemistry and Engineering 11(15), pp. 5918-5925 (2023)
193. Moyano-Arocutipá, M.F., Zarría-Romero, J.Y., Huertas-Chambilla, M.Y., (...), Arencibia, A., Ramos-Guivar, J.A.  
In Situ and after Synthesis of Magnetic Nanoarchitectures Grown onto Zeolite Type 5A/CTAB Frameworks and Their Ecotoxicological Properties  
Crystal Growth and Design 23(4), pp. 2951-2970 (2023)
192. Calderón Bedoya, P.A., Botta, P.M., Bercoff, P.G., Fanovich, M.A.  
Influence of the milling materials on the mechanochemical synthesis of magnetic iron oxide nanoparticles  
Journal of Alloys and Compounds 939,168720 (2023)
191. Mureseanu, M., Cioatera, N., Carja, G.  
Fe-Ce/Layered Double Hydroxide Heterostructures and Their Derived Oxides: Electrochemical Characterization and Light-Driven Catalysis for the Degradation of Phenol from Water  
Nanomaterials 13(6),981 (2023)
190. García, D.G., Garzón-Romero, C., Salazar, M.A., (...), Benitez, M.J., Romero, M.P.  
Bioinspired Synthesis of Magnetic Nanoparticles Based on Iron Oxides Using Orange Waste and Their Application as Photo-Activated Antibacterial Agents  
International Journal of Molecular Sciences 24(5),4770 (2023)
189. Renukadevi, C.R., Ayyanaar, S., Kesavan, M.P., (...), Bhaskar, R., Kandasamy, K.  
Reactive oxygen species responsive magnetic poly(lactic co-glycolic acid) microspheres: In vitro drug release studies  
Materials Today Communications 34,105474 (2023)
188. Kesavan, M.P., Ravi, L., Balachandran, C., (...), Webster, T.J., Rajesh, J.  
Promising anticancer activity with high selectivity of DNA/plasma protein targeting new phthalazin-1(2H)-one heterocyclic scaffolds  
Journal of Molecular Structure 1274,134423 (2023)
187. Ding, X., Zhu, M., Han, Y.-F., Yang, Z.  
Revisiting the syngas conversion to olefins over Fe-Mn bimetallic catalysts: Insights from the proximity effects  
Journal of Catalysis 417, pp. 213-225 (2023)
186. Świątek, M., Gunár, K., Kołodziej, A., (...), Šebestová Janoušková, O., Horák, D.  
Surface Effect of Iron Oxide Nanoparticles on the Suppression of Oxidative Burst in Cells  
Journal of Cluster Science 34(1), pp. 323-334 (2023)
185. Hajiali, S., Daneshjou, S., Daneshjoo, S.  
Biomimetic synthesis of iron oxide nanoparticles from Bacillus megaterium to be used in hyperthermia therapy  
AMB Express 12(1),145 (2022)
184. de Andrade Silva, T., Keijok, W.J., Guimarães, M.C.C., Cassini, S.T.A., de Oliveira, J.P.  
Impact of immobilization strategies on the activity and recyclability of lipases in nanomagnetic supports  
Scientific Reports 12(1),6815 (2022)
183. Ghosh, A., Srinivas, V., Kavita, S., Sundara, R.  
Evolution of microstructure and magnetic properties from amorphous Fe<sub>3</sub>O<sub>4</sub>/SiO<sub>2</sub> nanocomposite  
Journal of Magnetism and Magnetic Materials 561,169687 (2022)
182. Nayeri, S., Akhoundian, M., Alizadeh, T.  
Selective and ultrasensitive citric acid assay in urine samples using a MWCNT/Fe<sub>3</sub>O<sub>4</sub> nanoparticle-modified carbon paste electrode  
Analytical Methods 14(43), pp. 4309-4320 (2022)
181. Khan, A., Kumar Sahu, N.  
Folate - Conjugated Magnetite Nanoparticles for Targeted Drug Delivery and Hyperthermia Applications  
ChemistrySelect 7(37),e202202012 (2022)
180. Kumari, K., Kumar, S., Huh, S.-H., (...), Devi, N., Koo, B.-H.  
Effect of PVP Assisted Growth of  $\alpha$ -Mn<sub>2</sub>O<sub>3</sub> Nanoparticles on the Structural, Microstructural, Magnetic and Optical Properties  
Journal of Electronic Materials 51(10), pp. 5842-5856 (2022)
179. Rigby, J.C., Dixon, D.R., Cutforth, D.A., (...), Bell, A.M.T., Bingham, P.A.

- Melting behaviour of simulated radioactive waste as functions of different redox iron-bearing raw materials  
Journal of Nuclear Materials 569,153946 (2022)
178. Bruckmann, F.S., Rossato Viana, A., Tonel, M.Z., (...), Silva, I.Z., Rhoden, C.R.B.  
Influence of magnetite incorporation into chitosan on the adsorption of the methotrexate and in vitro cytotoxicity  
Environmental Science and Pollution Research 29(46), pp. 70413-70434 (2022)
177. Flores-Cano, D.A., Checca-Huaman, N.-R., Castro-Merino, I.-L., (...), Litterst, F.J., Ramos-Guivar, J.A.  
Progress toward Room-Temperature Synthesis and Functionalization of Iron-Oxide Nanoparticles  
International Journal of Molecular Sciences 23(15),8279 (2022)
176. Masindi, V., Fosso-Kankeu, E., Mamakoa, E., (...), Naushad, M., Pandey, S.  
Emerging remediation potentiality of struvite developed from municipal wastewater for the treatment of acid mine drainage  
Environmental Research 210,112944 (2022)
175. Selzer, S.M., Vico, R.V., Ferreyra, N.F.  
Immobilization of Concanavalin A on iron oxide magnetic nanoparticles. Effect of Bovine Serum Albumin in the recognition interactions of the lectin  
Surfaces and Interfaces 30,101908 (2022)
174. Paris, E.C., Malafatti, J.O.D., Moreira, A.J., (...), Mastelaro, V.R., Joya, M.R.  
CuO nanoparticles decorated on hydroxyapatite/ferrite magnetic support: photocatalysis, cytotoxicity, and antimicrobial response  
Environmental Science and Pollution Research 29(27), pp. 41505-41519 (2022)
173. Tran, H.V., Thi Kim Do, O., Nguyen, N.D., Huynh, C.D.  
Synthesis of amorphous carbon functionalized Fe<sub>3</sub>O<sub>4</sub> nanoparticles as a smart nanosorbent for organic dyes removal  
New Journal of Chemistry 46(22), pp. 10644-10651 (2022)
172. Mazzaglia, A., Di Natale, G., Tosto, R., (...), Micali, N., Pappalardo, G.  
Journal of Colloid and Interface Science 613, pp. 814-826 (2022)  
KLVFF oligopeptide-decorated amphiphilic cyclodextrin nanomagnets for selective amyloid beta recognition and fishing
171. Biacchi, A.J., Johnson, L.M., Sweet, A.B., (...), Hight Walker, A.R., Buck, M.R.  
Polyoxovanadates as Precursors for the Synthesis of Colloidal Multi-Metal Oxide Nanocrystals  
Chemistry of Materials 34(7), pp. 2907-2918 (2022)
170. Zhang, C., Tian, B., Chong, C.T., (...), Chang, X., Hochgreb, S.  
Experimental study of thiophene and ferrocene in synthesis of single-walled carbon nanotubes in rich premixed hydrogen/air flames  
Combustion and Flame 238,111939 (2022)
169. Lacerda Fernandes, Í., Pereira Barbosa, D., Botelho de Oliveira, S., (...), Montero-Muñoz, M., A. H. Coaquira, J.  
Synthesis and characterization of the MNP@SiO<sub>2</sub>@TiO<sub>2</sub> nanocomposite showing strong photocatalytic activity against methylene blue dye  
Applied Surface Science 580,152195 (2022)
168. Ashraf, H., Batoool, T., Anjum, T., (...), Naseem, S., Riaz, S.  
Antifungal Potential of Green Synthesized Magnetite Nanoparticles Black Coffee–Magnetite Nanoparticles Against Wilt Infection by Ameliorating Enzymatic Activity and Gene Expression in Solanum lycopersicum L.  
Frontiers in Microbiology 13,754292 (2022)
167. Sandoval-Cárdenas, D.I., Feregrino-Pérez, A.A., Favela-Camacho, S.E., (...), Regalado, C., Amaro-Reyes, A.  
Potential antioxidant activity of multienzymatically hydrolyzed corn cob  
Biologia 77(3), pp. 803-813 (2022)
166. Asiri, A.M., Ren, D., Zhang, H., (...), Zakeeruddin, S.M., Grätzel, M.  
Solar Water Splitting Using Earth-Abundant Electrocatalysts Driven by High-Efficiency Perovskite Solar Cells  
ChemSusChem 15(4),e202102471 (2022)
165. Tran, H.V., Nguyen, H.V., Vu, D.V., (...), Nguyen, B.T., Le, D.H.  
Carbon coated MFe<sub>2</sub>O<sub>4</sub> (M=Fe, Co, Ni) magnetite nanoparticles: A smart adsorbent for direct yellow and moderacid red dyes  
Korean Journal of Chemical Engineering 39(2), pp. 431-439 (2022)
164. Chang, T.-W., Ko, H., Huang, W.-S., (...), Tsai, P.-J., Huang, C.-C.  
Tannic acid-induced interfacial ligand-to-metal charge transfer and the phase transformation of Fe<sub>3</sub>O<sub>4</sub> nanoparticles for the photothermal bacteria destruction  
Chemical Engineering Journal 428,131237 (2022)
163. Sujin Jeba Kumar, T., Arumugam, M.  
Optical Properties of Magnetic Nanoalloys and Nanocomposites (Book Chapter)  
Handbook of Magnetic Hybrid Nanoalloys and their Nanocomposites pp. 547-573 (2022)
162. Weber, D., Rui, N., Zhang, F., (...), Lu, P., Zhang, C.  
Carbon Nanosphere-Encapsulated Fe Core-Shell Structures for Catalytic CO<sub>2</sub> Hydrogenation  
ACS Applied Nano Materials DOI: 10.1021/acsnm.2c02602 (Article in Press) (2022)
161. Maaoui, H., Leblanc, V., Gueuné, H., Guhel, Y., Boudart, B.



- Evolution over time of mackinawite generated on carbon steel by the SRB metabolic activity: an in-operando Raman study  
*Biofouling* 38(3), pp. 271-285 (2022)
160. Alklaibi, A.M., Sundar, L.S., Chandra Mouli, K.V.V.  
 Experimental investigation on the performance of hybrid Fe<sub>3</sub>O<sub>4</sub> coated MWCNT/Water nanofluid as a coolant of a Plate heat exchanger  
*International Journal of Thermal Sciences* 171,107249 (2022)
159. Kloster, G.A., Moscoso Londoño, O., Pirota, K.R., Mosiewicki, M.A., Marcovich, N.E.  
 Design of super-paramagnetic bilayer films based on chitosan and sodium alginate  
*Carbohydrate Polymer Technologies and Applications* 2,100083 (2021)
158. Khan, A., Sahu, N.K.  
 Hydrazone conjugated and DOX loaded PEGylated-Fe<sub>3</sub>O<sub>4</sub> mesoporous magnetic nanoclusters (MNCs): Hyperthermia and: In vitro chemotherapy  
*New Journal of Chemistry* 45(46), pp. 21646-21656 (2021)
157. Medina-Espinosa, T., Asimbaya, C., Galeas, S., (...), Debut, A., Guerrero, V.H.  
 Adsorptive removal of chromium (VI) from synthetic waters using magnetic lignocellulosic composites  
*IOP Conference Series: Earth and Environmental Science* 897(1),012020 (2021)
156. Hussin, N.H., Wahab, R.A., Elias, N., (...), Sulaiman, N.J., Misson, M.  
 Electrospun magnetic nanocellulose–polyethersulfone-conjugated aspergillus oryzae lipase for synthesis of ethyl valerate  
*Membranes* 11(12),972 (2021)
155. Wang, Y., Mu, X., Chen, Z., (...), Qi, J., Ke, W.  
 Understanding the role of alloyed Cu and P in the initial rust composition of weathering steel formed in a simulated coastal-industrial atmosphere  
*Corrosion Science* 193,109912 (2021)
154. Lukashuk, L., van de Water, L.G.A., van Dijk, H.A.J., (...), Hyde, T.I., Watson, M.J.  
 A new application of the commercial high temperature water gas shift catalyst for reduction of CO<sub>2</sub> emissions in the iron and steel industry: Lab-scale catalyst evaluation  
*International Journal of Hydrogen Energy* 46(79), pp. 39023-39035 (2021)
153. Zhang, W., Kuang, C., Chen, X., Yang, X., Guan, H.  
 Enhanced photoelectron transfer from light-harvesting antenna of phycocyanin to Fe<sub>3</sub>O<sub>4</sub> hierarchical structure  
*Applied Surface Science* 566,150652 (2021)
152. Said, Z., Sharma, P., Syam Sundar, L., Afzal, A., Li, C.  
 Synthesis, stability, thermophysical properties and AI approach for predictive modelling of Fe<sub>3</sub>O<sub>4</sub> coated MWCNT hybrid nanofluids  
*Journal of Molecular Liquids* 340,117291 (2021)
151. Xu, Y., Gao, Y., Liu, R., Li, J., Zhu, X.  
 Crystal Growth and Design 21(10), pp. 5508-5514 (2021)  
 Robots Built Robots: Nanorobots Customized by Intelligent Robot
150. Gareev, K.G., Grouzdev, D.S., Kharitonskii, P.V., (...), Trushlyakova, V.V., Shevtsov, M.  
 Magnetic properties of bacterial magnetosomes produced by magnetospirillum caucaseum so-1  
*Microorganisms* 9(9),1854 (2021)
149. Vargas-Ortiz, J.R., Böhnelt, H.N., Gonzalez, C., Esquivel, K.  
 Magnetic nanoparticle behavior evaluation on cardiac tissue contractility through Langendorff rat heart technique as a nanotoxicology parameter  
*Applied Nanoscience (Switzerland)* 11(9), pp. 2383-2396 (2021)
148. Nemr, A.E., Hassaan, M.A., Elkatory, M.R., Ragab, S., Pantaleo, A.  
 Efficiency of Fe<sub>3</sub>O<sub>4</sub> nanoparticles with different pretreatments for enhancing biogas yield of macroalgae *Ulva intestinalis* Linnaeus  
*Molecules* 26(16),5105 (2021)
147. Lau, Z.Y., Tan, K.S., Khe, C.S., (...), You, K.Y., Tan, W.K.  
 Synthesis of MRGO nanocomposites as a potential photocatalytic demulsifier for crude oil-in-water emulsion  
*Journal of Composites Science* 5(7),174 (2021)
146. Ramanaidou, E., Wells, M., Lau, I., Laukamp, C.  
 Characterization of iron ore by visible and infrared reflectance and Raman spectroscopies ( Book Chapter)  
*Iron Ore: Mineralogy, Processing and Environmental Sustainability* pp. 209-246 (2021)
145. Salvador, M., Martínez-García, J.C., Fernández-García, M.P., Blanco-López, M.C., Rivas, M.  
 Biological and Medical Applications of Magnetic Nanoparticles ( Book Chapter)  
*Magnetic Measurement Techniques for Materials Characterization* pp. 771-804 (2021)
144. Magnetic-core-based silibinin nanopolymeric carriers for the treatment of renal cell cancer  
 Takke, Anjali; Shende, Pravin  
 LIFE SCIENCES Volume: 275 Article Number: 119377 Published: JUN 15 2021
143. Photocatalytic and antibacterial performance of iron oxide nanoparticles formed by the combustion method

- Tharani, K.; Christy, A. Jegatha; Sagadevan, Suresh; et al.  
CHEMICAL PHYSICS LETTERS Volume: 771 Article Number: 138524 Published: MAY 16 2021
142. Study of the surface properties and particle-particle interactions in oleic acid-coated Fe<sub>3</sub>O<sub>4</sub> nanoparticles  
Urian, Y. A.; Atoche-Medrano, J. J.; Quispe, Luis T.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 525 Article Number: 167686 Published: MAY 1 2021
141. Synthesis and characterization of magnetic wrinkled mesoporous silica nanocomposites containing Fe<sub>3</sub>O<sub>4</sub> or CoFe<sub>2</sub>O<sub>4</sub> nanoparticles for potential biomedical applications  
Flood-Garibay, Jessica Andrea; Mendez-Rojas, Miguel A.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS Volume: 615 Article Number: 126236  
Published: APR 20 2021
140. Magnetic iron oxides nanoparticles obtained by mechanochemical reactions from different solid precursors  
Bedoya, Pedro A. Calderon; Botta, Pablo M.; Bercoff, Paula G.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 860 Article Number: 157892 Published: APR 15 2021
139. Rietveld Refinement, mu-Raman, X-ray Photoelectron, and Mossbauer Studies of Metal Oxide-Nanoparticles Growth on Multiwall Carbon Nanotubes and Graphene Oxide  
Ramos-Guivar, Juan A.; Gonzalez-Gonzalez, J. C.; Litterst, F. Jochen; et al.  
CRYSTAL GROWTH & DESIGN Volume: 21 Issue: 4 Pages: 2128-2141 Published: APR 7 2021
138. Numerical simulation of ferrofluid-lubricated rough elliptical contact with start-up motion  
Huang, Xingbao; Zhang, Xiao; Wang, Youqiang  
APPLIED MATHEMATICAL MODELLING Volume: 91 Pages: 232-260 Published: MAR 2021
137. Effect of surface functionalization on the heating efficiency of magnetite nanoclusters for hyperthermia application  
Jamir, Molongnenla; Islam, Riyajul; Pandey, Lalit M.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 854 Article Number: 157248 Published: FEB 15 2021
136. Role of Magnetite Nanoparticles Size and Concentration on Hyperthermia under Various Field Frequencies and Strengths  
Narayanaswamy, Venkatesha; Sambasivam, Sangaraju; Saj, Alam; et al.  
MOLECULES Volume: 26 Issue: 4 Article Number: 796 Published: FEB 2021
135. A Full Set of In Vitro Assays in Chitosan/Tween 80 Microspheres Loaded with Magnetite Nanoparticles  
Rocho-Perez, Jorge A.; Rodriguez-Aguillon, Cassandra O.; Gallardo-Blanco, Hugo L.; et al.  
POLYMERS Volume: 13 Issue: 3 Article Number: 400 Published: FEB 2021
134. Correlation between structural evolution and oxidative desulfurization activity for magnetically-recoverable gamma-Fe<sub>2</sub>O<sub>3</sub>@SiO<sub>2</sub> core-shell-Supported WO<sub>x</sub> nanostructure  
Piva, Diogenes H.; Piva, Roger H.; Picinini, Monize; et al.  
CATALYSIS COMMUNICATIONS Volume: 148 Article Number: 106182 Published: JAN 5 2021
133. A simple in-situ flame synthesis of nanocomposite (MWCNTs-Fe<sub>2</sub>O<sub>3</sub>) for electrochemical sensing of proguanil in pharmaceutical formulation  
Nate, Zondi; Gill, Atal A. S.; Shinde, Suraj; et al.  
DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108178 Published: JAN 2021
132. Removal of azo dyes in aqueous solutions using magnetized and chemically modified chitosan beads  
Muedas-Taípe, Golfer; Maza Mejia, Ily M.; Santillan, Fatima A.; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 256 Article Number: 123595 Published: DEC 1 2020
131. Optimized and scalable synthesis of magnetic nanoparticles for RNA extraction in response to developing countries' needs in the detection and control of SARS-CoV-2  
Chacon-Torres, Julio C.; Reinoso, C.; Navas-Leon, Daniela G.; et al.  
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 19004 Published: NOV 4 2020
130. Synthesis of single-walled carbon nanotubes in rich hydrogen/air flames  
Zhang, Cen; Tian, Bo; Chong, Cheng Tung; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 254 Article Number: 123479 Published: NOV 1 2020
129. A sustainable two-layer lignin-anodized composite coating for the corrosion protection of high-strength low-alloy steel  
Dastpak, Arman; Hannula, Pyry-Mikko; Lundstrom, Mari; et al.  
PROGRESS IN ORGANIC COATINGS Volume: 148 Article Number: 105866 Published: NOV 2020
128. Impact of the pulling rate on the redox state and magnetic domains of Fe-Si-O glass ceramic processed by LFZ method  
Salehizadeh, S. A.; Ferreira, N. M.; Ivanov, M. S.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 131 Article Number: 110972 Published: NOV 2020
127. Synthesis, characterization and catalytic activity of Fe<sub>3</sub>O<sub>4</sub>@WO<sub>3</sub>/SBA-15 on photodegradation of the acid dichlorophenoxyacetic (2,4-D) under UV irradiation  
Lima, Maciel S.; Cruz-Filho, Joao F.; Noleto, Luis F. G.; et al.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 8 Issue: 5 Article Number: 104145 Published: OCT 2020

126. Thermosensitive Betulinic Acid-Loaded Magnetoliposomes: A Promising Antitumor Potential for Highly Aggressive Human Breast Adenocarcinoma Cells Under Hyperthermic Conditions  
Farcas, Claudia Geanina; Dehelean, Cristina; Pinzaru, Iulia Andreea; et al.  
INTERNATIONAL JOURNAL OF NANOMEDICINE Volume: 15 Pages: 8175-8200 Published: 2020
125. Recent Advances in Water Treatment Using Graphene-Based Materials  
Khaligh, Nader Ghaffari; Johan, Mohd Rafie  
MINI-REVIEWS IN ORGANIC CHEMISTRY Volume: 17 Issue: 1 Pages: 74-90 Published: 2020
124. Effects of pulsed laser and plasma interaction on Fe, Ni, Ti, and their oxides for LIBS Raman analysis in extraterrestrial environments  
Schroeder, Susanne; Rammelkamp, Kristin; Hanke, Franziska; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 9 Special Issue: SI Pages: 1667-1681 Published: SEP 2020
123. Investigation of the stability of NiFe-(oxy)hydroxide anodes in alkaline water electrolysis under industrially relevant conditions  
Pascuzzi, Marco Etzi Coller; Man, Alex J. W.; Goryachev, Andrey; et al.  
CATALYSIS SCIENCE & TECHNOLOGY Volume: 10 Issue: 16 Pages: 5593-5601 Published: AUG 21 2020
122. Use of polyethylenimine functionalised magnetic nanoparticles for gold thiosulfate recovery  
Ilankoon, N. D.; Aldrich, C.; Oraby, E. A.; et al.  
HYDROMETALLURGY Volume: 195 Article Number: 105375 Published: AUG 2020
121. Engineering nanostructured spinel ferrites by co-substitution for total water electrolysis by preferential exposure of metal cations on the surface  
Archana, V. N.; Rastogi, Pankaj Kumar; Thoufeeq, S.; et al.  
SUSTAINABLE ENERGY & FUELS Volume: 4 Issue: 8 Pages: 3915-3925 Published: AUG 1 2020
120. Sonosynthesis and characterization of a fluorescent Trojan Horse based on magnetic nanoparticles  
Reyman, Dolores; Perez-Ramos, Marina; Diaz-Oliva, Cristina  
JOURNAL OF NANOSTRUCTURE IN CHEMISTRY Volume: 10 Issue: 2 Pages: 105-113 Published: JUN 2020
119. Cytotoxic effect of thermosensitive magnetoliposomes loaded with gemcitabine and paclitaxel on human primary breast cancer cells (MGSO-3 line)  
Ribeiro, Rita F. L.; Ferreira, Roberta, V; Pedersoli, Davyston C.; et al.  
JOURNAL OF NANOPARTICLE RESEARCH Volume: 22 Issue: 7 Article Number: 172 Published: JUN 17 2020
118. Impact of the magnetic field on 3T3-E1 preosteoblasts inside SMART silk fibroin-based scaffolds decorated with magnetic nanoparticles  
Tanasa, Eugenia; Zaharia, Catalin; Hudita, Ariana; et al.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS Volume: 110 Article Number: 110714 Published: MAY 2020
117. Long-Term Sour Corrosion of Carbon Steel in Anoxic Conditions  
Goldman, M.; Noel, J. J.; Shoesmith, D. W.  
CORROSION Volume: 76 Issue: 3 Pages: 324-331 Published: MAR 2020
116. Low-cost sugarcane bagasse and peanut shell magnetic-composites applied in the removal of carbofuran and iprodione pesticides  
Paola Toledo-Jaldin, Helen; Sanchez-Mendieta, Victor; Blanco-Flores, Alien; et al.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Volume: 27 Issue: 8 Pages: 7872-7885 Published: MAR 2020
115. Microstructure and chemical stability analysis of magnetic core coated with SILICA and functionalized with silane OTS  
Candian Lobato, Natalia Cristina; Ferreira, Angela de Mello; Weidler, Peter Georg; et al.  
APPLIED SURFACE SCIENCE Volume: 505 Article Number: 144565 Published: MAR 1 2020
114. Iron oxide nanoparticle core-shell magnetic microspheres: Applications toward targeted drug delivery  
Ayyanaar, Srinivasan; Kesavan, Mookkandi Palsamy; Balachandran, Chandrasekar; et al.  
NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE Volume: 24 Article Number: 102134 Published: FEB 2020
113. Photo-electrochemical ability of iron oxide nanoflowers fabricated via electrochemical anodization  
Mir, Jaffar Farooq; Rubab, S.; Shah, M. A.  
CHEMICAL PHYSICS LETTERS Volume: 741 Article Number: 137088 Published: FEB 16 2020
112. Graphene nanoribbons and iron oxide nanoparticles composite as a potential candidate in DNA sensing applications  
Rodriguez, B. A. G.; Perez-Caro, M.; Alencar, R. S.; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 4 Article Number: 044901 Published: JAN 31 2020
111. Magnetic Graphene Oxide Composite for the Microextraction and Determination of Benzophenones in Water Samples  
Medina, Alejandro; Antonio Casado-Carmona, Francisco; Lopez-Lorente, Angela I.; et al.  
NANOMATERIALS Volume: 10 Issue: 1 Article Number: 168 Published: JAN 2020
110. Microstrain analyses of Fe(3)O(4)NPs greenly synthesized using Gardenia jasminoides flower extract, during the photocatalytic removal of a commercial dye  
Espinoza-Gomez, Heriberto; Flores-Lopez, Lucia Z.; Alejandra Espinoza, Karla; et al.  
APPLIED NANOSCIENCE Volume: 10 Issue: 1 Pages: 127-140 Published: JAN 2020
109. Spin plasmonics and surface enhanced raman spectroscopy in label free biomolecular sensing

- Grigorescu, C.E.A., Iordache, A.-M., Rusu, M.L., (...), Tonetto, A., Notonier, R.  
International Conference on Transparent Optical Networks 2019-July, 8840169 (2019)
108. Improvement of magnetic solvent extraction using functionalized silica coated Fe<sub>3</sub>O<sub>4</sub> nanoparticles  
Candian Lobato, Natalia Cristina; Ferreira, Angela de Mello; Weidler, Peter Georg; et al.  
SEPARATION AND PURIFICATION TECHNOLOGY Volume: 229 Article Number: 115839 Published: DEC 15 2019
107. Simple continuous flow synthesis of linoleic and palmitic acid-coated magnetite nanoparticles  
Sawisai, Rotcharin; Wanchanthuek, Ratchaneeorn; Radchatawedchakoon, Widchaya; et al.  
SURFACES AND INTERFACES Volume: 17 Article Number: 100344 Published: DEC 2019
106. Photo-Fenton Degradation of RB5 Dye in Aqueous Solution Using Fe Supported on Mexican Natural Zeolite  
Domenzain-Gonzalez, Jose; Castro-Arellano, Jose J.; Galicia-Luna, Luis A.; et al.  
INTERNATIONAL JOURNAL OF PHOTOENERGY Volume: 2019 Article Number: 4981631 Published: NOV 21 2019
105. In Vitro and In Vivo Antioxidant Activity of the New Magnetic-Cerium Oxide Nanoconjugates  
Turin-Moleavin, Ioana-Andreea; Fifere, Adrian; Lungoci, Ana-Lacramioara; et al.  
NANOMATERIALS Volume: 9 Issue: 11 Article Number: 1565 Published: NOV 2019
104. Hydrothermal synthesis of Fe<sub>3</sub>O<sub>4</sub>/TiO<sub>2</sub>/g-C<sub>3</sub>N<sub>4</sub>: Advanced photocatalytic application  
Raza, Adil; Shen, Honglie; Haidry, Azhar Ali; et al.  
APPLIED SURFACE SCIENCE Volume: 488 Pages: 887-895 Published: SEP 15 2019
103. Synthesis and Characterization of Hydrophilic gamma-Fe<sub>2</sub>O<sub>3</sub> Nanoparticles for Biomedical Applications  
Malaeru, Teodora; Enescu, Elena; Georgescu, Gabriela; et al.  
REVISTA DE CHIMIE Volume: 70 Issue: 6 Pages: 2026-2031 Published: JUN 2019
102. Raman spectroscopy to unravel the magnetic properties of iron oxide nanocrystals for bio-related applications  
Testa-Anta, Martin; Ramos-Docampo, Miguel A.; Comesana-Hermo, Miguel; et al.  
NANOSCALE ADVANCES Volume: 1 Issue: 6 Pages: 2086-2103 Published: JUN 1 2019
101. Clove and cinnamon: Novel anti-oxidant fuels for preparing magnetic iron oxide particles by the sol-gel auto-ignition method  
Bena-Arfa, Basam A. E.; Miranda Salvado, Isabel M.; Ferreira, Jose M. F.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 786 Pages: 71-76 Published: MAY 25 2019
100. Kinetics and mechanism of selenite reduction by zero valent iron under anaerobic condition activated and enhanced by dissolved Fe(II)  
Xu, Lin; Huang, Yongheng  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 664 Pages: 698-706 Published: MAY 10 2019
99. Structure, thermal, magnetic and magneto-optical properties of core/shell Fe<sub>3</sub>O<sub>4</sub>@MoS<sub>2</sub> doped diamagnetic glasses  
Chen, Qiuling; Su, Kai; Zhang, Meng  
JOURNAL OF NON-CRYSTALLINE SOLIDS Volume: 511 Pages: 166-176 Published: MAY 1 2019
98. Effects of polyethylene glycol (PEG) on the corrosion inhibition of mild steel by cerium nitrate in chloride solution  
Boudellioua, H.; Hamlaoui, Y.; Tifouti, L.; et al.  
APPLIED SURFACE SCIENCE Volume: 473 Pages: 449-460 Published: APR 15 2019
97. Biomimetic Mineralization of Magnetic Iron Oxide Nanoparticles Mediated by Bi-Functional Copolypeptides  
Liu, Liu; Pu, Ximing; Yin, Guangfu; et al.  
MOLECULES Volume: 24 Issue: 7 Article Number: 1401 Published: APR 10 2019
96. Controlling the transverse proton relaxivity of magnetic graphene oxide  
Thapa, Bibek; Diaz-Diestra, Daysi; Badillo-Diaz, Dayra; et al.  
SCIENTIFIC REPORTS Volume: 9 Article Number: 5633 Published: APR 4 2019
95. Effects of Nanoscale Structures on Photothermal Heating Behaviors of Surface-Modified Fe<sub>3</sub>O<sub>4</sub> Nanoparticles  
Sadat, M. E.; Mast, David B.; Sookoor, Jason; et al.  
NANO LIFE Volume: 9 Issue: 1-2 Special Issue: SI Article Number: UNSP 1950001 Published: MAR-JUN 2019
94. A novel route to the formation of 3D nanoflower-like hierarchical iron oxide nanostructure  
Ali, Ghafar; Park, Yang Jeong; Hussain, Arif; et al.  
NANOTECHNOLOGY Volume: 30 Issue: 9 Article Number: 095601 Published: MAR 1 2019
93. Fe<sub>3</sub>O<sub>4</sub>/BaTiO<sub>3</sub> COMPOSITES WITH CORE-SHELL STRUCTURE  
Tanasa, Eugenia; Andronescu, Ecaterina; Cernea, Marin; et al.  
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE  
Volume: 81 Issue: 2 Pages: 171-180 Published: 2019
92. ATR-FTIR VERSUS RAMAN SPECTROSCOPY USED FOR STRUCTURAL ANALYSES OF THE IRON OXIDE NANOPARTICLES  
Racuciu, M.; Oancea, S.  
ROMANIAN REPORTS IN PHYSICS Volume: 71 Issue: 3 Article Number: 507 Published: 2019
91. Remediation of selected heavy metals (Pb, Cd) from fly ash using magnetite nanoparticles  
Yadav, Virendra Kumar; Fulekar, M. H.

90. Adsorption of Methylene Blue on Titanate Nanotubes Synthesized with Ultra-Small Fe<sub>3</sub>O<sub>4</sub> Nanoparticles  
Marc, Maciej; Dudek, Mirosław R.; Koziol, Jacek J.; et al.  
NANO Volume: 13 Issue: 12 Article Number: 1850142 Published: DEC 2018
89. Surface micro-structuring of type 304 stainless steel by femtosecond pulsed laser: effect on surface wettability and corrosion resistance  
Singh, A. K.; Kumar, B. Sunil; Jha, P.; et al.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 124 Issue: 12 Article Number: 846 Published: DEC 2018
88. Magnetite originating from bonfires in a Brazilian prehistoric Anthrosol: A micro-Raman approach  
de Sousa, Daniel Vieira; Ker, Joao Carlos; Schaefer, Carlos Ernesto R.; et al.  
CATENA Volume: 171 Pages: 552-564 Published: DEC 2018
87. Composite photocatalysts containing MIL-53(Fe) as a heterogeneous photo-Fenton catalyst for the decolorization of rhodamine B under visible light irradiation  
Vinh Huu Nguyen; Long Giang Bach; Quynh Thi Phuong Bui; et al.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 6 Issue: 6 Pages: 7434-7441 Published: DEC 2018
86. Extraction of nanosilica from oil palm leaves and its application as support for lipase immobilization  
Onoja, Emmanuel; Chandren, Sheela; Razak, Fazira Ilyana Abdul; et al.  
JOURNAL OF BIOTECHNOLOGY Volume: 283 Pages: 81-96 Published: OCT 10 2018
85. Fe/Fe<sub>2</sub>O<sub>3</sub> nanoparticles as anode catalyst for exclusive power generation and degradation of organic compounds using microbial fuel cell  
Mohamed, Hend Omar; Obaid, M.; Poo, Kyung-Min; et al.  
CHEMICAL ENGINEERING JOURNAL Volume: 349 Pages: 800-807 Published: OCT 1 2018
84. Recent Application of the Various Nanomaterials and Nanocatalysts for the Heavy Metals' Removal from Wastewater  
Khaligh, Nader Ghaffari; Johan, Mohd Rafie  
NANO Volume: 13 Issue: 9 Article Number: 1830006 Published: SEP 2018
83. A theranostic nanocomposite system based on iron oxide-drug nanocages for targeted magnetic field responsive chemotherapy  
Kesavan, Mookkandi Palsamy; Kotla, Niranjan G.; Ayyanaar, Srinivasan; et al.  
NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE Volume: 14 Issue: 5 Pages: 1643-1654 Published: JUL 2018
82. Immobilization of PMIDA on Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles surface: Mechanism of bonding  
Demin, Alexander M.; Mekhaev, Alexander V.; Esin, Alexander A.; et al.  
APPLIED SURFACE SCIENCE Volume: 440 Pages: 1196-1203 Published: MAY 15 2018
81. Effective reduction of p-nitrophenol by silver nanoparticle loaded on magnetic Fe<sub>3</sub>O<sub>4</sub>/ATO nano-composite  
Karki, Hem Prakash; Ojha, Devi Prasad; Joshi, Mahesh Kumar; et al.  
APPLIED SURFACE SCIENCE Volume: 435 Pages: 599-608 Published: MAR 30 2018
80. Heavy-metal detectors based on modified ferrite nanoparticles  
Klekotka, Urszula; Winska, Ewelina; Zambrzycka-Szelewa, Elzbieta; et al.  
BEILSTEIN JOURNAL OF NANOTECHNOLOGY Volume: 9 Pages: 762-770 Published: FEB 28 2018
79. Synthesis of magnetite by coprecipitation and sintering and its characterization  
Dubey, Vivekanand; Kain, Vivekanand  
MATERIALS AND MANUFACTURING PROCESSES Volume: 33 Issue: 8 Pages: 835-839 Published: 2018
78. Nanopatterning of steel by one-step anodization for anti-adhesion of bacteria  
Chen, S., Li, Y., Cheng, Y.F.  
Scientific Reports 7(1),5326 (2017)
77. Iskenderoglu, Demet; Guney, Harun  
Synthesis and characterization of ZnO:Ni thin films grown by spray-deposition  
CERAMICS INTERNATIONAL Volume: 43 Issue: 18 Pages: 16593-16599 Published: DEC 15 2017
76. Bharasi, N. Sivai; Pujar, M. G.; Mallika, C.; et al.  
Corrosion and Passive Film Formation Studies on Modified 9Cr-1Mo Steel in Different Sodium Hydroxide Concentrations at Room Temperature and in Boiling Condition  
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS Volume: 70 Issue: 8 Pages: 1953-1963 Published: OCT 2017
75. Guo, Juanjuan; Zheng, Zhichang; Chen, Chi; et al.  
Enhanced Production of kappa-Carrageenase and kappa-Carrageenan Oligosaccharides through Immobilization of Thalassospira sp Fjfst-332 with Magnetic Fe<sub>3</sub>O<sub>4</sub>-Chitosan Microspheres  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY Volume: 65 Issue: 36 Pages: 7934-7943 Published: SEP 13 2017
74. Puente-Urbina, Allen; Montero-Campos, Virginia  
Porous Materials Modified with Fe<sub>3</sub>O<sub>4</sub> Nanoparticles for Arsenic Removal in Drinking Water  
WATER AIR AND SOIL POLLUTION Volume: 228 Issue: 9 Article Number: 374 Published: SEP 2017

73. Zou, Peng; Tyner, Katherine; Raw, Andre; et al.  
Physicochemical Characterization of Iron Carbohydrate Colloid Drug Products  
AAPS JOURNAL Volume: 19 Issue: 5 Pages: 1359-1376 Published: SEP 2017
72. Ragavan, K. V.; Rastogi, Navin K.  
beta-Cyclodextrin capped graphene-magnetite nanocomposite for selective adsorption of Bisphenol-A  
CARBOHYDRATE POLYMERS Volume: 168 Pages: 129-137 Published: JUL 15 2017
71. Singh, K. K.; Senapati, K. K.; Sarma, K. C.  
Synthesis of superparamagnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles coated with green tea polyphenols and their use for removal of dye pollutant from aqueous solution  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING Volume: 5 Issue: 3 Pages: 2214-2221 Published: JUN 2017
70. Candian Lobato, Natalia Cristina; Mansur, Marcelo Borges; Ferreira, Angela de Mello  
Characterization and Chemical Stability of Hydrophilic and Hydrophobic Magnetic Nanoparticles  
MATERIALS RESEARCH-IBERO-AMERICAN JOURNAL OF MATERIALS Volume: 20 Issue: 3 Pages: 736-746 Published: MAY-JUN 2017
69. Taufik, Ardiansyah; Saleh, Rosari  
Synergistic effect between ternary iron-zinc-copper mixed oxides and graphene for photocatalytic water decontamination  
CERAMICS INTERNATIONAL Volume: 43 Issue: 4 Pages: 3510-3520 Published: MAR 2017
68. Badhe, Ravindra V.; Kumar, Pradeep; Choonara, Yahya E.; et al.  
Induction of creep crack morphology in iron oxide microparticles: An outcome of the common-ion effect  
MATERIALS LETTERS Volume: 188 Pages: 417-422 Published: FEB 1 2017
67. Joseph, Delina; Rodriguez, Raul D.; Verma, Akash; et al.  
Electrochemistry and surface-enhanced Raman spectroscopy of CTAB modulated interactions of magnetic nanoparticles with biomolecules  
RSC ADVANCES Volume: 7 Issue: 7 Pages: 3628-3634 Published: 2017
66. Singh, K.K., Sarma, K.C.  
A simple and feasible approach to decorating MWCNT with Fe<sub>3</sub>O<sub>4</sub> and ZnS and their use as a magnetically separable photocatalyst in the degradation of Cr(VI) in wastewater  
Environmental Nanotechnology, Monitoring and Management 6, 206-213 DOI: 10.1016/j.enmm.2016.11.003 (2016)
65. Prakash, T., Williams, G.V.M., Kennedy, J., Rubanov, S.  
High spin-dependent tunneling magnetoresistance in magnetite powders made by arc-discharge  
JOURNAL OF APPLIED PHYSICS Volume: 120 Issue: 12 Article Number: 123905 DOI: 10.1063/1.4963293 Published: SEP 28 2016
64. Lobato, N.C.C., Ferreira, A.D.M., Mansur, M.B.  
Evaluation of magnetic nanoparticles coated by oleic acid applied to solvent extraction processes  
SEPARATION AND PURIFICATION TECHNOLOGY Volume: 168 Pages: 93-100 DOI: 10.1016/j.seppur.2016.05.027 Published: AUG 10 2016
63. Ivashchenko, O., Jurga-Stopa, J., Coy, E., Peplinska, B., Pietralik, Z., Jurga, S.  
Fourier transform infrared and Raman spectroscopy studies on magnetite/Ag/antibiotic nanocomposites  
APPLIED SURFACE SCIENCE Volume: 364 Pages: 400-409 DOI: 10.1016/j.apsusc.2015.12.149 Published: FEB 28 2016
62. Williams, M.J., Sánchez, E., Aluri, E.R., Douglas, F.J., Maclaren, D.A., Collins, O.M., Cussen, E.J., Budge, J.D., Sanders, L.C., Michaelis, M., Smales, C.M., Cinatl, J., Lorrio, S., Krueger, D., De Rosales, R.T.M., Corr, S.A.  
Microwave-assisted synthesis of highly crystalline, multifunctional iron oxide nanocomposites for imaging applications  
RSC ADVANCES Volume: 6 Issue: 87 Pages: 83520-83528 DOI: 10.1039/c6ra11819d Published: 2016
61. Ramanaidou, E., Wells, M., Lau, I., Laukamp, C.  
Characterization of iron ore by visible and infrared reflectance and, Raman spectroscopies  
Iron Ore: Mineralogy, Processing and Environmental Sustainability 191-228 DOI: 10.1016/B978-1-78242-156-6.00006-X (2015)
60. Barot, B.S., Parejiya, P.B., Shelat, P.K., Shah, G.B., Mehta, D.M., Pathak, T.V.  
Physicochemical and toxicological characterization of sucrose-bound polynuclear iron oxyhydroxide formulations  
Journal of Pharmaceutical Investigation 45(1), 35-49 DOI: 10.1007/s40005-014-0143-2 (2015)
59. Lu, J.F., Tsai, C.J.  
Reduction kinetics of hematite to magnetite under hydrothermal treatments  
RSC Advances 5(22), 17236-17244 DOI: 10.1039/c4ra12389a (2015)
58. Singh, P.N., Tiwary, D., Sinha, I.  
Chromium removal from aqueous media by superparamagnetic starch functionalized maghemite nanoparticles  
JOURNAL OF CHEMICAL SCIENCES Volume: 127 Issue: 11 Pages: 1967-1976 DOI: 10.1007/s12039-015-0957-0 Published: NOV 2015
57. Ibarra, J., Melendres, J., Almada, M., Burboa, M.G., Taboada, P., Juárez, J., Valdez, M.A.  
Synthesis and characterization of magnetite/PLGA/chitosan nanoparticles  
MATERIALS RESEARCH EXPRESS Volume: 2 Issue: 9 Article Number: 095010 DOI: 10.1088/2053-1591/2/9/095010 Published: SEP 2015

56. Herrera, W.T., Ramos Guivar, J.A., González, J.C., Baggio-Saitovitch, E.M.  
Structural and vibrational studies of fatty acids-functionalized iron oxide nanoparticles via alkaline co-precipitation route  
NANOCON 2015: 7TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION Pages: 511-519  
Published: 2015
55. Venkateswarlu, S., Yoon, M.  
Surfactant-free green synthesis of Fe<sub>3</sub>O<sub>4</sub> nanoparticles capped with 3,4-dihydroxy-phenethylcarbamide dithioate: stable recyclable magnetic nanoparticles for the rapid and efficient removal of Hg(II) ions from water  
DALTON TRANSACTIONS Volume: 44 Issue: 42 Pages: 18427-18437 DOI: 10.1039/c5dt03155a Published: 2015
54. Ong, Hun Tiar; Julkapli, Nurhidayatullaili Muhd; Abd Hamid, Sharifah Bee; et al.  
Effect of magnetic and thermal properties of iron oxide nanoparticles (IONs) in nitrile butadiene rubber (NBR) latex  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 395 Pages: 173-179 Published: DEC 1 2015
53. Joshi, Mahesh Kumar; Pant, Hem Raj; Liao, Nina; et al.  
In-situ deposition of silver-iron oxide nanoparticles on the surface of fly ash for water purification  
JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 453 Pages: 159-168 Published: SEP 1 2015
52. Andrade, Luiza N.; Amorim, Camila C.; Santos, Sara V.; et al.  
Efficient demulsification of wastewater by steel furnace dust. with amphiphilic and surface charge properties  
CHEMICAL ENGINEERING JOURNAL Volume: 271 Pages: 281-286 Published: JUL 1 2015
51. Tavengwa, Nikita Tawanda; Cukrowska, Ewa; Chimuka, Luke  
Sequestration of U(VI) from aqueous solutions using precipitate ion imprinted polymers endowed with oleic acid functionalized magnetite  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY Volume: 304 Issue: 2 Pages: 933-943 Published: MAY 2015
50. Altan, Cem L.; Lenders, Jos J. M.; Bomans, Paul H. H.; et al.  
Partial Oxidation as a Rational Approach to Kinetic Control in Bioinspired Magnetite Synthesis  
CHEMISTRY-A EUROPEAN JOURNAL Volume: 21 Issue: 16 Pages: 6150-6156 Published: APR 13 2015
49. Yusoff, N.; Kumar, S. Vijay; Pandikumar, A.; et al.  
Core-shell Fe<sub>3</sub>O<sub>4</sub>-ZnO nanoparticles decorated on reduced graphene oxide for enhanced photoelectrochemical water splitting  
CERAMICS INTERNATIONAL Volume: 41 Issue: 3 Pages: 5117-5128 Part: B Published: APR 2015
48. Dolores, Reyman; Raquel, Serrano; Adianez, Garcia-Leis  
Sonochemical synthesis of iron oxide nanoparticles loaded with folate and cisplatin: Effect of ultrasonic frequency  
ULTRASONICS SONOCHEMISTRY Volume: 23 Pages: 391-398 Published: MAR 2015
47. Asfaram, Arash; Ghaedi, Mehrorang; Goudarzi, Alireza; et al.  
Response surface methodology approach for optimization of simultaneous dye and metal ion ultrasound-assisted adsorption onto Mn doped Fe<sub>3</sub>O<sub>4</sub>-NPs loaded on AC: kinetic and isothermal studies  
DALTON TRANSACTIONS Volume: 44 Issue: 33 Pages: 14707-14723 Published: 2015
46. Singh, Mahander Pratap; Raghupathy, Y.; Natarajan, K. A.; et al.  
Synthesis, electron microscopy and anti-microbial properties of Fe<sub>3</sub>O<sub>4</sub>-Ag nanotubes  
RSC ADVANCES Volume: 5 Issue: 48 Pages: 38164-38169 Published: 2015
45. Baibarac, M., Sima, M., Matei, E., Pasuk, I., Mihut, L.  
Synthesis and Raman scattering of multiferroic Fe-Pb(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub> core-shell wire arrays  
Physica Status Solidi (A) Applications and Materials Science 211(1), 200-205 DOI: 10.1002/pssa.201330062 (2014)
44. Modh, N., Mehta, D., Parejiya, P., Popat, A., Barot, B.  
An overview of recent patents on nanosuspension  
Recent Patents on Drug Delivery and Formulation 8(2), 144-154 (2014)
43. Tai, M. F.; Lai, C. W.; Hamid, S. B. A.; et al.  
Facile synthesis of magnetite iron oxide nanoparticles via precipitation method at different reaction temperatures  
MATERIALS RESEARCH INNOVATIONS Volume: 18 Supplement: S6 Pages: 470-473 Published: DEC 2014
42. Gao, Yanyan; Zhong, Daobo; Zhang, Dafeng; et al.  
Thermal regeneration of recyclable reduced graphene oxide/Fe<sub>3</sub>O<sub>4</sub> composites with improved adsorption properties  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY Volume: 89 Issue: 12 Pages: 1859-1865 Published: DEC 2014
41. Chowdhury, Anirban; Iyyappan, Ramasamy; Majumdar, Dipanwita; et al.  
Structural and spectroscopic characterisations of the surface oxide scales and inclusions present on edge-burst hot-rolled steel coils  
MATERIALS CHEMISTRY AND PHYSICS Volume: 148 Issue: 1-2 Pages: 276-283 Published: NOV 14 2014
40. Al'myashev, V. I.; Gareev, K. G.; Ionin, S. A.; et al.  
Investigation of the structure, elemental and phase compositions of Fe<sub>3</sub>O<sub>4</sub>-SiO<sub>2</sub> composite layers by scanning electron microscopy, X-ray spectroscopy, and thermal nitrogen desorption methods  
PHYSICS OF THE SOLID STATE Volume: 56 Issue: 11 Pages: 2155-2159 Published: NOV 2014
39. Lenders, Jos J. M.; Altan, Cem L.; Bomans, Paul H. H.; et al.  
A Bioinspired Coprecipitation Method for the Controlled Synthesis of Magnetite Nanoparticles

38. Kumar, Pawan; No-Lee, Heung; Kumar, Rajesh  
Synthesis of phase pure iron oxide polymorphs thin films and their enhanced magnetic properties  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 25 (10), pp. 4553-4561 OCT 2014
37. Venkateswarlu, Sada; Kumar, B. Natesh; Prasad, C. H.; et al.  
Bio-inspired green synthesis of Fe<sub>3</sub>O<sub>4</sub> spherical magnetic nanoparticles using *Syzygium cumini* seed extract  
PHYSICA B-CONDENSED MATTER 449, pp. 67-71 SEP 15 2014
36. Dudek, Gabriela; Gnus, Malgorzata; Turczyn, Roman; et al.  
Pervaporation with chitosan membranes containing iron oxide nanoparticles  
SEPARATION AND PURIFICATION TECHNOLOGY 133, pp. 8-15 SEP 8 2014
35. Prozorov, Tanya; Perez-Gonzalez, Teresa; Valverde-Tercedor, Carmen; et al.  
Manganese incorporation into the magnetosome magnetite: magnetic signature of doping  
EUROPEAN JOURNAL OF MINERALOGY 26 (4), pp. 457-471 AUG 2014
34. Surendra, M. Krishna; De, Subhra Kanti; Rao, M. S. Ramachandra  
Application Worthy SPIONS: Coated Magnetic Nanoparticles  
IEEE TRANSACTIONS ON MAGNETICS Volume: 50 Issue: 7 Article Number: 5200306 Part: 2 Published: JUL 2014
33. Ortiz-Morales, M.; Frausto-Reyes, C.; Soto-Bernal, J. J.; et al.  
Infrared nanosecond pulsed laser irradiation of stainless steel: Micro iron-oxide zones generation  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 128, pp. 681-685 JUL 15 2014
32. Wang, Xiang; Pu, Shengli; Ji, Hongzhu; et al.  
Optical transmittance of ferronematic materials in the visible range  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 16 (7-8), pp. 771-775 JUL-AUG 2014
31. Liang, Liping; Guan, Xiaohong; Shi, Zhong; et al.  
Coupled Effects of Aging and Weak Magnetic Fields on Sequestration of Selenite by Zero-Valent Iron  
ENVIRONMENTAL SCIENCE & TECHNOLOGY 48 (11), pp. 6326-6334 JUN 3 2014
30. Urquijo, Jeaneth Patricia; Casanova, Herley; Morales, Alvaro L; et al.  
Engineering iron oxide nanoparticles for biomedicine and bioengineering applications  
Revista Facultad de Ingeniería Universidad de Antioquia Issue: 71 Pages: 230-243 Published: 2014-06
29. Lu, Jie-feng; Tsai, Cho-Jen  
Hydrothermal phase transformation of hematite to magnetite  
NANOSCALE RESEARCH LETTERS Volume: 9 Article Number: 230 Published: MAY 13 2014
28. Chakraborty, Gopa; Kumar, N.; Das, C. R.; et al.  
Study on microstructure and wear properties of different nickel base hardfacing alloys deposited on austenitic stainless steel  
SURFACE & COATINGS TECHNOLOGY 244, pp.180-188 APR 15 2014
27. Joshi, Mahesh Kumar; Pant, Hem Raj; Kim, Han Joo; et al.  
One-pot synthesis of Ag-iron oxide/reduced graphene oxide nanocomposite via hydrothermal treatment  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 446, pp. 102-108 APR 5 2014
26. Yardley, James T.; Hagadorn, Alexis  
Characterization of the Chemical Nature of the Black Ink in the Manuscript of The Gospel of Jesus 's Wife through Micro-Raman Spectroscopy  
HARVARD THEOLOGICAL REVIEW 107 (2), pp. 162-164 APR 2014
25. Piquer, C.; Laguna-Marco, M. A.; Roca, A. G.; et al.  
Fe K-Edge X-ray Absorption Spectroscopy Study of Nanosized Nominal Magnetite  
JOURNAL OF PHYSICAL CHEMISTRY C 118 (2), pp.1332-1346 JAN 16 2014
24. Gareev, K. G.; Kononova, I. E.; Levitckii, V. S.; et al.  
Influence of constant magnetic field on aggregation processes in magnetite colloids  
Journal of Physics Conference Series Volume: 572 Article Number: 012027 Published: 2014
23. Biswal, Mandakini; Suryawanshi, Anil; Thakare, Vishal; et al.  
Mesoscopic magnetic iron oxide spheres for high performance Li-ion battery anode: a new pulsed laser induced reactive micro-bubble synthesis process  
JOURNAL OF MATERIALS CHEMISTRY A 1 (44), pp. 13932-13940 2013
22. Miyazaki, Celina M.; Riul, Antonio, Jr.; Dos Santos, David S., Jr.; et al.  
Bending of Layer-by-Layer Films Driven by an External Magnetic Field  
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 14 (7), 12953-12969, JUL 2013
21. Ribeiro, V.G.P., Barreto, A.C.H., Denardin, J.C., Mele, G., Carbone, L., Mazzetto, S.E., Sousa, E.M.B., Fechine, P.B.A.  
Magnetic nanoparticles coated with anacardic acid derived from cashew nut shell liquid  
Journal of Materials Science 48 (22), pp. 7875-7882, 2013



20. Ming, H., Ming, J., Li, X., Zhou, Q., Jin, L., Fu, Y., Adkins, J., (...), Zheng, J.  
Synthesis of N-doped carbon coated metal oxide nanoparticles for enhanced Li-ion storage ability  
*RSC Advances* 3 (36), pp. 15613-15617, 2013
19. Barreto, A.C.H., Santiago, V.R., Freire, R.M., Mazzetto, S.E., Denardin, J.C., Mele, G., Cavalcante, I.M., (...), Fechine, P.B.A.  
Magnetic nanosystem for cancer therapy using oncocalyxone A, an antitumor secondary metabolite isolated from a Brazilian plant  
*International Journal of Molecular Sciences* 14 (9), pp. 18269-18283, 2013
18. Kartsonakis, I., Papadopoulos, N., Tserotas, Ph., Svec, P.  
Low-temperature synthesis of maghemite nanoparticles  
*Key Engineering Materials* 543, pp. 468-47, 2013
17. Nowicka, A.M., Kowalczyk, A., Jarzebinska, A., Donten, M., Krysinski, P., Stojek, Z., Augustin, E., Mazerska, Z.  
Progress in targeting tumor cells by using drug-magnetic nanoparticles conjugate  
*Biomacromolecules* 14 (3), pp. 828-833, 2013
16. Ibupoto, Z.H., Khun, K., Lu, J., Liu, X., Alsalhi, M.S., Atif, M., Ansari, A.A., Willander, M.  
Well aligned ZnO nanorods growth on the gold coated glass substrate by aqueous chemical growth method using seed layer of Fe<sub>3</sub>O<sub>4</sub> and Co<sub>3</sub>O<sub>4</sub> nanoparticles  
*Journal of Crystal Growth* 368, pp. 39-46, 2013
15. Bourgeois, F., Gergaud, P., Renevier, H., Leclere, C., Feuillet, G.  
Low temperature oxidation mechanisms of nanocrystalline magnetite thin film  
*Journal of Applied Physics* 113 (1), art. no. 013510, 2013
14. Zhang, Q., Su, H., Luo, J., Wei, Y.  
"Click" magnetic nanoparticle-supported palladium catalyst: A phosphine-free, highly efficient and magnetically recoverable catalyst for Suzuki-Miyaura coupling reactions  
*Catalysis Science and Technology* 3 (1), pp. 235-243, 2013
13. Soler, M.A.G., Qu, F.  
Raman spectroscopy of iron oxide nanoparticles  
*Raman Spectroscopy for Nanomaterials Characterization* 379-416 DOI: 10.1007/978-3-642-20620-7\_14 (2012)
12. Costa, A.L., Ballarin, B., Spegni, A., Casoli, F., Gardini, D.  
Synthesis of nanostructured magnetic photocatalyst by colloidal approach and spray-drying technique  
*Journal of Colloid and Interface Science* 388 (1), pp. 31-39, 2012
11. Yuan, Y., Rende, D., Altan, C.L., Bucak, S., Ozisik, R., Borca-Tasciuc, D.-A.  
Effect of surface modification on magnetization of iron oxide nanoparticle colloids  
*Langmuir* 28 (36), pp. 13051-13059, 2012
10. Pola, J., Gondal, M.A., Urbanová, M., Pokorná, D., Masoudi, H.M., Bakardjieva, S., Bastl, Z., (...), Siddiqui, M.N.  
Laser photochemical deposition of magnetite nanograins in a-Fe/C/O composite: High-pressure metal oxide polymorph surviving ambient conditions  
*Journal of Photochemistry and Photobiology A: Chemistry* 243, pp. 33-40, 2012
9. Dincer, I., Tozkoparan, O., German, S.V., Markin, A.V., Yildirim, O., Khomutov, G.B., Gorin, D.A., (...), Elerman, Y.  
Effect of the number of iron oxide nanoparticle layers on the magnetic properties of nanocomposite LbL assemblies  
*Journal of Magnetism and Magnetic Materials* 324 (19), pp. 2958-2963, 2012.
8. Li, Y.-S., Church, J.S., Woodhead, A.L.  
Infrared and Raman spectroscopic studies on iron oxide magnetic nano-particles and their surface modifications  
*Journal of Magnetism and Magnetic Materials* 324 (8), 1543-1550, 2012.
7. Nawara, K., Romiszewski, J., Kijewska, K., Szczytko, J., Twardowski, A., Mazur, M., Krysinski, P.  
Adsorption of doxorubicin onto citrate-stabilized magnetic nanoparticles  
*Journal of Physical Chemistry C* 116 (9), 5598-5609, 2012.
6. Barreto A. C. H.; Maia F. J. N.; Santiago V. R.; et al.  
Novel ferrofluids coated with a renewable material obtained from cashew nut shell liquid  
*MICROFLUIDICS AND NANOFUIDICS* 12 (5), 677-686, MAR 2012.
5. Tung, T.T., Feller, J.-F., Kim, T., Kim, H., Yang, W.S., Suh, K.S.  
Electromagnetic properties of Fe<sub>3</sub>O<sub>4</sub>-functionalized graphene and its composites with a conducting polymer  
*Journal of Polymer Science, Part A: Polymer Chemistry* 50 (5), pp. 927-935, 2012.
4. Barreto, A.C.H., Santiago, V.R., Mazzetto, S.E., Denardin, J.C., Lavín, R., Mele, G., Ribeiro, M.E.N.P., (...), Fechine, P.B.A.  
Magnetic nanoparticles for a new drug delivery system to control quercetin releasing for cancer chemotherapy  
*Journal of Nanoparticle Research* 13 (12), 6545-6553, 2011.
3. Pu Shengli; Bai Xuekun; Wang Lunwei  
Temperature dependence of photonic crystals based on thermoresponsive magnetic fluids  
*JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS* 323 (22) Pages: 2866-2871, NOV 2011.
2. Cheng J. P.; Ma R.; Chen X.; et al.

Effect of ferric ions on the morphology and size of magnetite nanocrystals synthesized by ultrasonic irradiation  
CRYSTAL RESEARCH AND TECHNOLOGY 46 (7) Pages: 723-730, JUL 2011.

1. Can Musa Mutlu; Ozcan Sadan; Ceylan Abdullah; et al.  
Effect of milling time on the synthesis of magnetite nanoparticles by wet milling  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 172 (1), pp.72-75, AUG 15 2010

69. “*Optical and vibrational spectra analysis of CVD - Mixed oxide films: Optimization of the films electrochromic performance*”

Ivanova, T., Gesheva, K.A., Abrashev, M., Sharlandjiev, P., Nazarova, D.  
Journal of Physics: Conference Series **223** (1), art. no. 012039 (2010). (5 pages)

3. Hanoon, M.K., Nasir, E.M.  
Gamma Irradiation Effect on Characterization of MoO<sub>3</sub> Nanostructures Films  
AIP Conference Proceedings 2922(1),240004 (2024)

2. Prameela, C., Anjaiiah, M., KrishnaMurthy, K., Srinivasarao, K.  
Optical and IR studies on (MoO<sub>3</sub>)<sub>1-x</sub>-(WO<sub>3</sub>)<sub>x</sub> mixed oxide thin films  
Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B 57(3), 139-145 DOI:  
10.13036/17533562.57.3.014 (2016)

1. Prameela, C., Srinivasarao, K.  
Characterization of (MoO<sub>3</sub>)<sub>x</sub> - (WO<sub>3</sub>)<sub>1-x</sub> composites  
International Journal of Applied Engineering Research Volume 10, Issue 4, 2015, Pages 9865-9875

70. “*Growth and characterization of La<sub>2</sub>CoMnO<sub>6</sub> crystals doped with Pb*”

Milenov, T.I., Rafailov, P.M., Abrashev, M.V., Nikolova, R.P., Nakatsuka, A., Avdeev, G.V., Veleva, M.N., Dobрева S., Yankova L, and Gospodinov, M.M.  
Materials Science and Engineering B: Solid-State Materials for Advanced Technology **172** (1), pp. 80-84 (2010).

4. Li, Qihang; Xing, Lei; Xu, Mingxiang  
Magnetic properties, resistivity and magnetoresistance effects of double perovskite La<sub>2</sub>Co<sub>1-x</sub>FexMnO<sub>6</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 710 Pages: 771-777 Published: JUL 5 2017

3. Meng, Junling; Yuan, Na; Liu, Xiaojuan; et al.  
Synergistic Effects of Intrinsic Cation Disorder and Electron-Deficient Substitution on Ion and Electron Conductivity in La<sub>1-x</sub>SrxCo<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3-δ</sub> (x=0, 0.5, and 0.75)  
INORGANIC CHEMISTRY Volume: 54 Issue: 6 Pages: 2820-2829 Published: MAR 16 2015

2. Orayech, B.; Urcelay-Olabarria, I.; Lopez, G. A.; et al.  
Synthesis, structural, magnetic and phase-transition studies of the ferromagnetic La<sub>2</sub>CoMnO<sub>6</sub> double perovskite by symmetry-adapted modes  
DALTON TRANSACTIONS Volume: 44 Issue: 31 Pages: 13867-13880 Published: 2015

1. Bai, Y., Xia, Y., Li, H., Han, L., Wang, Z., Wu, X., Lv, S., (...), Meng, J.  
A-site-doping enhanced B-site ordering and correlated magnetic property in La<sub>2-x</sub>BixCoMnO<sub>6</sub>  
Journal of Physical Chemistry C 116 (32), pp. 16841-16847, 2012

71. “*Polarized Raman spectroscopy of nearly tetragonal BiFeO<sub>3</sub> thin films*”

M. N. Iliev, M. V. Abrashev, D. Mazumdar, V. Shelke, and A. Gupta  
Physical Review B **82**, 014107 (2010). (5 pages)

69. Zahra, T., Gassoumi, A., Gouadria, S., (...), Aman, S., Farid, H.M.T.  
Facile fabrication of BiFeO<sub>3</sub>/g-C<sub>3</sub>N<sub>4</sub> nanohybrid as efficient electrode materials for supercapacitor application  
Diamond and Related Materials 144,110927 (2024)

68. Liu, Y., Zhang, J., Qin, T., Yang, B., Zhao, S.  
Carrier transport engineering in a polarization-interface-free ferroelectric PN junction for photovoltaic effect  
Optics Express 32(5), pp. 7044-7052 (2024)

67. Wang, Y., Zhu, H., Luo, H., (...), Chi, Q., Ouyang, J.  
Tunable antiferroelectric-like polarization behavior and enhanced energy storage characteristics in symmetric BaTiO<sub>3</sub>/BiFeO<sub>3</sub>/BaTiO<sub>3</sub> heterostructure  
Journal of Materiomics (Article in Press) DOI: 10.1016/j.jmat.2024.01.013 (2024)

66. Joshi, P., Modi, A., Kapoor, S.K., (...), Shukla, J., Mishra, A.  
Role of Mg doping on structural, ferroelectric, and magnetic features of Bi<sub>1-x</sub>MgxFeO<sub>3</sub> (0 ≤ x ≤ 0.1) nanoperoovskite  
Journal of Materials Science: Materials in Electronics 34(25),1783 (2023)

65. Rahimi, S., Ebrahimi-Jaberi, R., Jalali-Asadabadi, F., Mollabashi, L., Jalali-Asadabadi, S.  
Influence of (Ba,F) multidoping on structural, magnetic, optical, and electrical properties as well as performance enhancement of multiferroic BiFeO<sub>3</sub>  
Physical Review B 106(11),115205 (2022)
64. Walden, M.R., Ciobanu, C.V., Brennecka, G.L.  
First-principles indicators of ferroic parameters in epitaxial BiFeO<sub>3</sub> and BiCrO<sub>3</sub>  
Journal of Applied Physics 132(2),024102 (2022)
63. Haselmann, U., Radlinger, T., Pei, W., (...), Kothleitner, G., Zhang, Z.  
Ca Solubility in a BiFeO<sub>3</sub>-Based System with a Secondary Bi<sub>2</sub>O<sub>3</sub> Phase on a Nanoscale  
Journal of Physical Chemistry C 126(17), pp. 7696-7703 (2022)
62. Thangaraj, V., Chang, J.-H., Dash, C.S., (...), Yuvaraj, S., Arun, A.  
Study of structural, optical, antibacterial, anticancer effects on MDA-MB-231 cell line and drug delivery characteristics of novel Ce<sub>4-x</sub>Cs<sub>2</sub>(1+x)Fe<sub>5-x</sub>Zn<sub>x</sub>O<sub>14+δ</sub> [0 ≤ x ≤ 0.45] nanocomposite prepared via sol-gel synthesis technique  
Surfaces and Interfaces 29,101746 (2022)
61. Wang, P., Wang, X., Li, G., (...), Yao, X., Pan, Z.  
Interface engineering to optimize polarization and electric breakdown strength of Ba<sub>2</sub>Bi<sub>3.97</sub>Pr<sub>0.03</sub>Ti<sub>5</sub>O<sub>18</sub>/BiFeO<sub>3</sub> ferroelectric thin-film for high-performance capacitors  
Chemical Engineering Journal 433,133676 (2022)
60. Saleh, S.A.  
Opto-electro-structural properties of Ge-doped Sb<sub>65</sub>Se<sub>35</sub> alloys  
Journal of Taibah University for Science 16(1), pp. 280-287 (2022)
59. Micard, Q., Margueron, S., Bartaszyte, A., Condorelli, G.G., Malandrino, G.  
Dy-Doped BiFeO<sub>3</sub> thin films: Piezoelectric and bandgap tuning  
Materials Advances (Article in Press) DOI:10.1039/d1ma01088c (2022)
58. Aepuru, R., Kumar, V., Verma, P., Sahoo, P.K., Panda, H.S.  
Polarization Induced Multiferroic Bismuth Ferrite Nanostructures: Investigation of Dielectric and Magnetic Properties  
2021 30th International Scientific Conference Electronics, ET 2021 - Proceedings (2021)
57. Yousfi, S., El Marssi, M., Bouyanfif, H.  
Structural behaviour of BiFeO<sub>3</sub>/SrRuO<sub>3</sub> superlattices: An X-ray diffraction and Raman spectroscopy investigation  
Superlattices and Microstructures 156,106983 (2021)
56. Sol-gel synthesis, characterization, dielectric and anti-bacterial properties of soft ferromagnetic oxide system Gd<sub>4-x</sub>Sr<sub>1+x</sub>Fe<sub>5-x</sub>Zn<sub>x</sub>O<sub>14+δ</sub> [0 ≤ x ≤ 0.45]  
Thangaraj, Venkatesan; Chang, Jih-Hsing; Shkir, Mohd; et al.  
INORGANIC CHEMISTRY COMMUNICATIONS Volume: 125 Article Number: 108432 Published: MAR 2021
55. Patterning enhanced tetragonality in BiFeO<sub>3</sub> thin films with effective negative pressure by helium implantation  
Toulouse, C.; Fischer, J.; Farokhipoor, S.; et al.  
PHYSICAL REVIEW MATERIALS Volume: 5 Issue: 2 Article Number: 024404 Published: FEB 9 2021
54. Magnetoelastic distortion of multiferroic BiFeO<sub>3</sub> in the canted antiferromagnetic state  
Room, T.; Viirok, J.; Peedu, L.; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214410 Published: DEC 9 2020
53. Emergence of two-magnon modes below spin-reorientation transition and phonon-magnon coupling in bulk BiFeO<sub>3</sub>: An infrared spectroscopic study  
Das, B. K.; Ramachandran, B.; Dixit, A.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 832 Article Number: 154754 Published: AUG 15 2020
52. Built-in electric field induces polarization rotation in bilayer BiFeO<sub>3</sub>/(Ba,Sr)TiO<sub>3</sub> thin films  
Razumnaya, G.; Mikheykin, A. S.; Stryukov, D., V.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 812 Article Number: 152164 Published: JAN 5 2020
51. Enhanced magnetization in multiferroic BiFeO<sub>3</sub> through structural distortion and particle size reduction  
Bagwaiya, Toshi; Reshi, Hilal A.; Khade, Poonam; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 483 Pages: 59-64 Published: AUG 1 2019
50. Lattice dynamics of mixed-phase BiFeO<sub>3</sub> films: Insights from micro-Raman scattering  
Liang, Z. W.; Wang, Z-H; Feng, Y.; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 6 Article Number: 064304 Published: FEB 25 2019
49. Ferroelastic domain identification in BiFeO<sub>3</sub> crystals using Raman spectroscopy  
Himcinschi, Cameliu; Rix, Jan; Roeder, Christian; et al.  
SCIENTIFIC REPORTS Volume: 9 Article Number: 379 Published: JAN 23 2019
48. Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO<sub>3</sub>  
Muneeswaran, M., Lee, S.H., Kim, D.H., (...), Giridharan, N.V., Venkateswaran, C.  
Journal of Alloys and Compounds 750, pp. 276-285 (2018)

47. Investigation on gas sensing properties of Ag doped BiFeO<sub>3</sub>  
Bagwaiya, T., Khade, P., Reshi, H.A., (...), Muthe, K.P., Gadkari, S.C.  
AIP Conference Proceedings 1942, 080076 (2018)
46. Sol-Gel Synthesis of Ce<sub>4-x</sub>Sr<sub>1+x</sub>Fe<sub>5-x</sub>Zn<sub>x</sub>O<sub>14+delta</sub> [0 ≤ x ≤ 0.45] Superparamagnetic Oxide Systems and Its Magnetic, Dielectric, and Drug Delivery Properties  
Thangaraj, Venkatesan; Yogapriya, Murugesan; Thirumalai, Kuppulingam; et al.  
ACS OMEGA Volume: 3 Issue: 12 Pages: 16509-16518 Published: DEC 2018
45. Room-temperature ferrimagnetic multiferroic BiFe<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> thin films with giant piezoelectric response  
Gao, Baizhi; Lin, Lingfang; Chen, Chen; et al.  
PHYSICAL REVIEW MATERIALS Volume: 2 Issue: 8 Article Number: 084401 Published: AUG 7 2018
44. Evidence of magnetoelectric coupling in 0.9BiFeO<sub>3</sub>-0.1Ba [Ti-0.95(Yb0.5Nb0.5)(0.05)]O-3 ceramic  
Amouri, A.; Aydi, S.; Abdelmoula, N.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 739 Pages: 1065-1079 Published: MAR 30 2018
43. Qi, Ji; Zhang, Yilin; Wang, Yuhang; et al.  
Effect of Cr doping on the phase structure, surface appearance and magnetic property of BiFeO<sub>3</sub> thin films prepared via sol-gel technology  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 23 Pages: 17490-17498 Published: DEC 2017
42. Ning, Shuai; Huberman, Samuel C.; Zhang, Chen; et al.  
Dependence of the Thermal Conductivity of BiFeO<sub>3</sub> Thin Films on Polarization and Structure  
PHYSICAL REVIEW APPLIED Volume: 8 Issue: 5 Article Number: 054049 Published: NOV 29 2017
41. Lahmar, Abdelilah  
Multiferroic properties and frequency dependent coercive field in BiFeO<sub>3</sub>-LaMn<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 439 Pages: 30-37 Published: OCT 1 2017
40. Stryukov, D. V.; Razumnaya, A. G.; Golovko, Yu I.; et al.  
Lattice dynamics and structural distortions in the multiferroic (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> heterostructures  
THIN SOLID FILMS Volume: 636 Pages: 220-224 Published: AUG 31 2017
39. Huang, Yen-Chin; Liou, Yi-De; Liu, Heng-Jui; et al.  
Magnetic-coupled phase anomaly in mixed-phase BiFeO<sub>3</sub> thin films  
APL MATERIALS Volume: 5 Issue: 8 Article Number: 086112 Published: AUG 2017
38. Wu, J., Fan, Z., Xiao, D., Zhu, J., Wang, J.  
Multiferroic bismuth ferrite-based materials for multifunctional applications: Ceramic bulks, thin films and nanostructures  
Progress in Materials Science 84, 335-402 DOI: 10.1016/j.pmatsci.2016.09.001 (2016)
37. Ting, Y., Tu, C.-S., Chen, P.-Y., Chen, C.-S., Anthoniappen, J., Schmidt, V.H., Lee, J.-M., Chan, T.-S., Chen, W.-Y., Song, R.-W.  
Magnetization, phonon, and X-ray edge absorption in barium-doped BiFeO<sub>3</sub> ceramics  
JOURNAL OF MATERIALS SCIENCE Volume: 52 Issue: 1 Pages: 581-594 DOI: 10.1007/s10853-016-0355-0 Published: JAN 2017
36. Chen, C.-S., Tu, C.-S., Chen, P.-Y., Schmidt, V.H., Xu, Z.-R., Ting, Y.  
Spin-lattice coupling phase transition and phonon anomalies in bismuth ferrite BiFeO<sub>3</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 687 Pages: 442-450 DOI: 10.1016/j.jallcom.2016.06.193 Published: DEC 5 2016
35. Chiang, Y.-S., Tu, C.-S., Chen, P.-Y., Chen, C.-S., Anthoniappen, J., Ting, Y., Chan, T.-S., Schmidt, V.H.  
Magnetic and phonon transitions in B-site Co doped BiFeO<sub>3</sub> ceramics  
CERAMICS INTERNATIONAL Volume: 42 Issue: 11 Pages: 13104-13112 DOI: 10.1016/j.ceramint.2016.05.097 Published: AUG 15 2016
34. Damodaran, AR, Agar, JC, Pandya, S, Chen, ZH, Dedon, L, Xu, RJ, Apgar, B, Saremi, S, Martin, LW  
New modalities of strain-control of ferroelectric thin films  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 28 Issue: 26 Article Number: 263001 DOI: 10.1088/0953-8984/28/26/263001 Published: JUL 6 2016
33. Sando, D., Xu, B., Bellaiche, L., Nagarajan, V.  
A multiferroic on the brink: Uncovering the nuances of strain-induced transitions in BiFeO<sub>3</sub>  
APPLIED PHYSICS REVIEWS Volume: 3 Issue: 1 Article Number: 011106 DOI: 10.1063/1.4944558 Published: MAR 2016
32. Liu, Y., Wei, J., Liu, Y., Bai, X., Shi, P., Mao, S., Zhang, X., Li, C., Dkhil, B.  
Phase transition, leakage conduction mechanism evolution and enhanced ferroelectric properties in multiferroic Mn-doped BiFeO<sub>3</sub> thin films  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 27 Issue: 3 Pages: 3095-3102 DOI: 10.1007/s10854-015-4135-4 Published: MAR 2016
31. Stojadinović, B., Dohčević-Mitrović, Z., Paunović, N., Ilić, N., Tasić, N., Petronijević, I., Popović, D., Stojanović, B.  
Comparative study of structural and electrical properties of Pr and Ce doped BiFeO<sub>3</sub> ceramics synthesized by auto-combustion method  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 657 Pages: 866-872 DOI: 10.1016/j.jallcom.2015.09.235 Published: FEB 5 2016
30. Liu, YL (Liu, Yalong); Wei, J (Wei, Jie); Guo, YX (Guo, Yaxin); Yang, TT (Yang, Tiantian); Xu, Z (Xu, Zuo)

- Phase transition, interband electronic transitions and enhanced ferroelectric properties in Mn and Sm co-doped bismuth ferrite films  
RSC ADVANCES Volume: 6 Issue: 99 Pages: 96563-96572 DOI: 10.1039/c6ra20740e Published: 2016
29. Santhiya, M., Pugazhvidivu, K.S., Balakrishnan, L., Tamilarasan, K.  
Effect of RF Power on Structural and Magnetic Properties of La doped Bi<sub>2</sub>Fe<sub>4</sub>O<sub>9</sub> Thin Films  
DAE SOLID STATE PHYSICS SYMPOSIUM 2015 Book Series: AIP Conference Proceedings Volume: 1731 Article Number: 080077  
DOI: 10.1063/1.4947955 Published: 2016
28. Amrillah, T., Vandrangi, S.K., Bitla, Y., Do, T.H., Liao, S.-C., Tsai, C.-Y., Chin, Y.-Y., Liu, Y.-T., Lin, M.-L., He, Q., Lin, H.-J., Lee, H.-Y., Lai, C.-H., Arenholz, E., Juang, J.-Y., Chu, Y.-H.  
Tuning the magnetic properties of self-assembled BiFeO<sub>3</sub>-CoFe<sub>2</sub>O<sub>4</sub> heteroepitaxy by magneto-structural coupling  
NANOSCALE Volume: 8 Issue: 16 Pages: 8847-8854 DOI: 10.1039/c5nr09269h Published: 2016
27. Chen, J., Wang, Y., Deng, Y.  
Competition between compressive strain and Mn doping on tuning the structure and magnetic behavior of BiFeO<sub>3</sub> thin films  
FUNCTIONAL MATERIALS LETTERS Volume: 8 Issue: 6 Article Number: 1550066 DOI: 10.1142/S1793604715500666 Published: DEC 2015
26. Barman, R., Singh, S.K., Kaur, D.  
Structural phase transition and enhanced ferroelectricity in Bi(Fe<sub>1-x</sub>Mn<sub>x</sub>)O<sub>3</sub> thin films deposited by pulsed laser deposition  
THIN SOLID FILMS Volume: 594 Pages: 80-87 DOI: 10.1016/j.tsf.2015.10.017 Part: A Published: NOV 2 2015
25. Liu, HJ, Du, YH, Gao, P, Huang, YC.; Chen, HW, Chen, YC, Liu, HL, He, Q, Ikuhara, Y, Chu, YH  
Tetragonal BiFeO<sub>3</sub> on yttria-stabilized zirconia  
APL MATERIALS Volume: 3 Issue: 11 Article Number: 116104 DOI: 10.1063/1.4935310 Published: NOV 2015
24. Teplyakova, NA, Titov, SV, Verbenko, IA, Sidorov, NV, Reznichenko, LA  
A Raman scattering study of the structural ordering in Bi<sub>1-x</sub>La<sub>x</sub>FeO<sub>3</sub> ceramic ferroelectromagnetics  
OPTICS AND SPECTROSCOPY Volume: 119 Issue: 3 Pages: 460-466 DOI: 10.1134/S0030400X15090234 Published: SEP 2015
23. Das, SC, Maan, S, Katiyal, S, Shripathi, T, Sathe, V  
Effect of Lattice Strain and Annealing on the BiFeO<sub>3</sub> Films  
PROCEEDINGS OF THE 59TH DAE SOLID STATE PHYSICS SYMPOSIUM 2014 (SOLID STATE PHYSICS) Book Series: AIP Conference Proceedings Volume: 1665 Article Number: 140017 DOI: 10.1063/1.4918226 Published: 2015
22. Ahlawat, Anju; Satapathy, S.; Sathe, V. G.; et al.  
Modification in structure of La and Nd co-doped epitaxial BiFeO<sub>3</sub> thin films probed by micro Raman spectroscopy  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 46 Issue: 7 Pages: 636-643 Published: JUL 2015
21. Doig, K. I.; Peters, J. J. P.; Nawaz, S.; et al.  
Structural, optical and vibrational properties of self-assembled Pbn+1(Ti1-xFex)(n)O3n+1-delta Ruddlesden-Popper superstructures  
SCIENTIFIC REPORTS Volume: 5 Article Number: 7719 Published: JAN 16 2015
20. Himcinschi, Cameliu; Bhatnagar, Akash; Talkenberger, Andreas; et al.  
Optical properties of epitaxial BiFeO<sub>3</sub> thin films grown on LaAlO<sub>3</sub>  
APPLIED PHYSICS LETTERS Volume: 106 Issue: 1 Article Number: 012908 Published: JAN 5 2015
19. Khabiri, G.; Anokhin, A. S.; Razumnaya, A. G.; et al.  
Phonon and Magnon Excitations in Raman Spectra of an Epitaxial Bismuth Ferrite Film  
PHYSICS OF THE SOLID STATE Volume: 56 Issue: 12 Pages: 2507-2513 Published: DEC 2014
18. Clemens, Oliver; Kruk, Robert; Patterson, Eric A.; et al.  
Introducing a Large Polar Tetragonal Distortion into Ba-Doped BiFeO<sub>3</sub> by Low-Temperature Fluorination  
INORGANIC CHEMISTRY Volume: 53 Issue: 23 Pages: 12572-12583 Published: DEC 1 2014
17. Yan, N.; Zhang, Y. L.; Tang, W. L.; et al.  
The effects of Mn doping on the optical properties of chemically deposited BiFeO<sub>3</sub> thin films  
THIN SOLID FILMS Volume: 571 Pages: 554-557 Part: 3 Published: NOV 28 2014
16. Sando, D.; Barthelemy, A.; Bibes, M.  
BiFeO<sub>3</sub> epitaxial thin films and devices: past, present and future  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 26 Issue: 47 Article Number: 473201 Published: NOV 26 2014
15. Yang, Y.; Yao, Y. B.; Zhang, Q.; et al.  
Polarized Raman study on the lattice structure of BiFeO<sub>3</sub> films prepared by pulsed laser deposition  
VIBRATIONAL SPECTROSCOPY Volume: 75 Pages: 101-106 Published: NOV 2014
14. Ahlawat, Anju; Satapathy, S.; Maan, Satish; et al.  
Correlation of structure and spin-phonon coupling in (La, Nd) doped BiFeO<sub>3</sub> films  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 45 Issue: 10 Pages: 958-962 Published: OCT 2014
13. Huang, Chuanwei; Chen, Lang  
Effects of Interfaces on the Structure and Novel Physical Properties in Epitaxial Multiferroic BiFeO<sub>3</sub> Ultrathin Films  
MATERIALS 7 (7), pp. 5403-5426 JUL 2014
12. Zhang, Jinxing; Ke, Xiaoxing; Gou, Gaoyang; et al.

A nanoscale shape memory oxide  
NATURE COMMUNICATIONS 4, Art. No. 2768 NOV 2013

11. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al.  
Raman and X-ray diffraction study of (Ba,Sr)TiO<sub>3</sub>/(Bi,Nd)FeO<sub>3</sub> multilayer heterostructures  
THIN SOLID FILMS 545, 267-271, OCT 31 2013

10. Thomasson, A., Kreisel, J., Lefèvre, C., Roulland, F., Versini, G., Barre, S., Viart, N.  
Raman scattering of magnetoelectric gallium ferrite thin films  
Journal of Physics Condensed Matter 25 (4) , art. no. 045401, 2013

9. Bai, W.; Xu, W. F.; Wu, J.; et al.  
Investigations on electrical, magnetic and optical behaviors of five-layered Aurivillius Bi<sub>6</sub>Ti<sub>3</sub>Fe<sub>2</sub>O<sub>18</sub> polycrystalline films  
THIN SOLID FILMS 525, 195-199, DEC 15 2012

8. Zhang, J.X., Zeches, R.J., He, Q., Chu, Y.-H., Ramesh, R.  
Nanoscale phase boundaries: A new twist to novel functionalities  
Nanoscale 4 (20) , pp. 6196-6204, 2012

7. Liu Huajun; Yang Ping; Yao Kui; et al.  
Origin of a Tetragonal BiFeO<sub>3</sub> Phase with a Giant c/a Ratio on SrTiO<sub>3</sub> Substrates  
ADVANCED FUNCTIONAL MATERIALS 22 (5), 937-942, MAR 7 2012.

6. Ko, K.-T., Jung, M.H., He, Q., Lee, J.H., Woo, C.S., Chu, K., Seidel, J., (...), Yang, C.-H.  
Concurrent transition of ferroelectric and magnetic ordering near room temperature  
Nature Communications 2 (1) , art. no. 567, 2011.

5. Choi, K.-Y., Do, S.H., Lemmens, P., Wulferding, D., Woo, C.S., Lee, J.H., Chu, K., Yang, C.-H.  
Anomalous low-energy phonons in nearly tetragonal BiFeO<sub>3</sub> thin films  
Physical Review B - Condensed Matter and Materials Physics 84 (13) , art. no. 132408, 2011.

4. Kreisel J.; Jadhav P.; Chaix-Pluchery O.; et al.  
A phase transition close to room temperature in BiFeO<sub>3</sub> thin films  
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (34), Article Number: 342202, AUG 31 2011.

3. Christen, H.M., Nam, J.H., Kim, H.S., Hatt, A.J., Spaldin, N.A.  
Stress-induced R-MA-MC-T symmetry changes in BiFeO<sub>3</sub> films  
Physical Review B - Condensed Matter and Materials Physics 83 (14), art. no. 144107, APR 14 2011.

2. Zhang, J.X., He, Q., Trassin, M., Luo, W., Yi, D., Rossell, M.D., Yu, P., (...), Ramesh, R.  
Microscopic origin of the giant ferroelectric polarization in tetragonal-like BiFeO<sub>3</sub>  
Physical Review Letters 107 (14), art. no. 147602, 2011.

1. Hlinka J., Pokorny J., Karimi S.; et al.  
Angular dispersion of oblique phonon modes in BiFeO<sub>3</sub> from micro-Raman scattering  
PHYSICAL REVIEW B 83 (2) Article Number: 020101, JAN 10 2011.

## 72. "Short-range B-site ordering in the inverse spinel ferrite NiFe<sub>2</sub>O<sub>4</sub>"

V. G. Ivanov, M. V. Abrashev, M. N. Iliev, M. M. Gospodinov, J. Meen, and M. I. Aroyo  
Physical Review B **82**, 024104 (2010). (8 pages)

129. Arras, R., Sharma, K., Calmels, L.  
Interplay between oxygen vacancies and cation ordering in the NiFe<sub>2</sub>O<sub>4</sub> spinel ferrite  
Journal of Materials Chemistry C 12(2), pp. 556-561 (2023)

128. Layaida, I., Massoudi, J., Dhahri, R., (...), Khirouni, K., Omari, L.E.H.  
Characterization of LiCr<sub>2</sub>Fe<sub>3</sub>O<sub>8</sub> ferrite spinel prepared by sol gel autocombustion: insights into structural, optical, and dielectric properties  
Journal of Materials Science: Materials in Electronics 34(32),2152 (2023)

127. Ghorbani, H., Eshraghi, M., Sabouri Dodaran, A.A., Kameli, P.  
Study on the effects of cadmium and chromium substitution in hydrothermally-synthesized spinel cobalt ferrite nanoparticles  
European Physical Journal Plus 138(9),822 (2023)

126. Nandhini, G., Kavita, S., Pazhanivel, T., Shobana, M.K.  
Photocatalytic degradation of methylene blue on strontium-doped cobalt ferrite  
Journal of Materials Science: Materials in Electronics 34(18),1426 (2023)

125. Perveen, S., Hafeez, S., Rashid, S., (...), Khan, M.Z., Azad, F.  
A strategy to improve dielectric permittivity of Mg-Zn ferrite by using silver nanoparticles  
Materials Chemistry and Physics 297,127303 (2023)

124. Wang, S., Liu, X., Chen, X., (...), Zhang, Q., Zhao, C.  
Super-exchange effect induced by early 3d metal doping on NiFe<sub>2</sub>O<sub>4</sub>(0 0 1) surface for oxygen evolution reaction

- Journal of Energy Chemistry 78, pp. 21-29 (2023)
123. Hatton, P., Uberuaga, B.P.  
Short range order in disordered spinels and the impact on cation vacancy transport  
Journal of Materials Chemistry A 11(7), pp. 3471-3480 (2023)
122. Dojcinovic, M.P., Vasiljevic, Z.Z., Rakocevic, L., (...), Vujanecic, J.D., Nikolic, M.V.  
Humidity and Temperature Sensing of Mixed Nickel–Magnesium Spinel Ferrites  
Chemosensors 11(1),34 (2023)
121. Mallesh, S., Noh, J.-S., Nam, Y.-W.  
Structure and magnetic properties of (Mg<sub>1/6</sub>Zn<sub>1/6</sub>Mn<sub>1/6</sub>Co<sub>1/6</sub>Ni<sub>1/6</sub>Fe<sub>1/6</sub>)<sub>3</sub>O<sub>4</sub> nanocrystalline high-entropy oxide synthesized using a sol-gel auto combustion approach  
Journal of Magnetism and Magnetic Materials 564,170108 (2022)
120. Mallesh, S., Mondal, P., Kavita, S., Srinivas, V., Nam, Y.-W.  
Effect of Ni substitution and annealing temperature on structural and magnetic properties of MnZn-Ferrites: Cytotoxicity study of ZnO and SiO<sub>2</sub> coated core shell structures  
Applied Surface Science 605,154648 (2022)
119. Sharma, K., Calmels, L., Li, D., Barbier, A., Arras, R.  
Influence of the cation distribution, atomic substitution, and atomic vacancies on the physical properties of CoFe<sub>2</sub>O<sub>4</sub> and NiFe<sub>2</sub>O<sub>4</sub> spinel ferrites  
Physical Review Materials 6(12),124402 (2022)
118. Shanigaram, M., Kodam, U., Noh, J.-S., Nam, Y.-W.  
Cation distribution in MFe<sub>2</sub>O<sub>4</sub> (M = Ni, Co): X-ray diffraction, electron spectroscopy, Raman, and magnetization studies  
Journal of Physics and Chemistry of Solids 171,111036 (2022)
117. Fang, Y., Zhang, S., Ohodnicki, P.R., Wang, G.  
Relation between cation distribution and chemical bonds in spinel NiFe<sub>2</sub>O<sub>4</sub>  
Materials Today Communications 33,104436 (2022)
116. Hirtz, J., O'Quinn, E.C., Gussev, I.M., Neufeind, J.C., Lang, M.  
Cation Short-Range Ordering of MgAl<sub>2</sub>O<sub>4</sub> and NiAl<sub>2</sub>O<sub>4</sub> Spinel Oxides at High Temperatures via in Situ Neutron Total Scattering  
Inorganic Chemistry 61(42), pp. 16822-16830 (2022)
115. Lyu, X., Zhang, Y., Du, Z., (...), Huang, C., Kan, E.  
Magnetic Field Manipulation of Tetrahedral Units in Spinel Oxides for Boosting Water Oxidation  
Small 18(42),2204143 (2022)
114. Paunović, N., Dohčević-Mitrović, Z., Djokić, D.M., (...), Kalarikkal, N., Thomas, S.  
Revealing plasmon-phonon interaction in nanocrystalline MgFe<sub>2</sub>O<sub>4</sub> spinels by far-infrared reflection spectroscopy  
Materials Science in Semiconductor Processing 149,106889 (2022)
113. Chen, Q., Zhu, R., Wang, J., (...), Shen, J., Zhang, Q.  
In-situ etching of stainless steel: NiFe<sub>2</sub>O<sub>4</sub> octahedral nanoparticles for efficient electrocatalytic oxygen evolution reaction  
Journal of Alloys and Compounds 911,165141 (2022)
112. Zheng, Y., Hussain, G., Li, S., Batool, S., Wang, X.  
Effects of Rhenium Substitution of Co and Fe in Spinel CoFe<sub>2</sub>O<sub>4</sub> Ferrite Nanomaterials  
Nanomaterials 12(16),2839 (2022)
111. Srinivasan, V., Sumalatha, V., Prasanna, A., Govindarajan, S.  
Utilization of Sulfonated Waste Polystyrene-Based Cobalt Ferrite Magnetic Nanocomposites for Efficient Degradation of Calcon Dye  
Polymers 14(14),2909 (2022)
110. Ghorbani, H., Eshraghi, M., Sabouri Dodaran, A.A.  
Structural and magnetic properties of cobalt ferrite nanoparticles doped with cadmium  
Physica B: Condensed Matter 634,413816 (2022)
109. Bhaduri, A., Singh, S., Thapa, K.B., Yadav, B.C.  
Improved room temperature liquefied petroleum gas sensing performance of Ni<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>@Cl-doped polypyrrole nanoweb  
Materials Science and Engineering: B 279,115660 (2022)
108. Cho, J.-H., Kim, Y.J., Kim, S.H., (...), Kwak, S.K., Jo, W.  
Modulation of magnetoelectric coupling through systematically engineered spin canting in nickel–zinc ferrite  
Journal of the American Ceramic Society 105(4), pp. 2655-2662 (2022)
107. Kim, M., Kang, J., Kim, J., Kim, J.  
Corrosion Protection Oxide Scale Formed on Surface of Fe-Ni m (M = Al, Cr, Cu) Inert Anode for Molten Salt Electrolysis  
Materials 15(3),719 (2022)
106. Situmeang, R., Romiyati, R., Yuwono, S.D., (...), Firdaus, I., Sembiring, S.  
The effect of vanadium addition in Ni<sub>1-x</sub>V<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> nano photocatalysts on remazol golden yellow degradation under visible light irradiation

105. Nagesh, G.V., Rajesh Babu, B., Ramesh, K.V.  
Structural, Magnetic Evaluation of Neodymium Doped Nickel-Zinc-Iron Soft Spinel Metal Oxides for Humidity Sensor Applications  
Ferroelectrics, Letters Section 49(4-6), pp. 72-84 (2022)
104. Usharani, N.J., Sanghavi, H., Bhattacharya, S.S.  
Factors influencing phase formation and band gap studies of a novel multicomponent high entropy (Co,Cu,Mg,Ni,Zn)<sub>2</sub>TiO<sub>4</sub> orthotitanate spinel  
Journal of Alloys and Compounds 888,161390 (2021)
103. Fritsch, D., Schorr, S.  
On the ground state crystal structure of (Ag<sub>0.5</sub>Cu<sub>0.5</sub>)<sub>2</sub>ZnSnSe<sub>4</sub>  
Thin Solid Films 738,138957 (2021)
102. Mazen, S.A., Elsayed, H.M., Abu-Elsaad, N.I.  
A comparative study of different concentrations of (Co/Ni/Cu) effects on elastic properties of Li–Mn ferrite employing IR spectroscopy and ultrasonic measurement  
Ceramics International 47(19), pp. 26635-26642 (2021)
101. Subramani, T., Voskanyan, A., Jayanthi, K., Abramchuk, M., Navrotsky, A.  
A Comparison of Order-Disorder in Several Families of Cubic Oxides  
Frontiers in Chemistry 9,719169 (2021)
100. Fritsch, D.  
Crystallographic diffraction techniques and density functional theory: Two sides of the same coin? ( Book Chapter)  
Crystallography in Materials Science: From Structure-Property Relationships to Engineering pp. 317-337 (2021)
99. Jena, S., Mishra, D.K., Soam, A., Jakhar, N., Mallick, P.  
Control growth of NiFe<sub>2</sub>O<sub>4</sub> phase in thermal annealed  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> nanocomposites for the beneficial magnetic application  
Applied Physics A: Materials Science and Processing 127(7),519 (2021)
98. Datt, G., Raja, M.M., Abhyankar, A.C.  
Steering of Magnetic Interactions in Ni<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2-x</sub>(Mn)<sub>x</sub>O<sub>4</sub> Nanoferrites via Substitution-Induced Cationic Redistribution  
Journal of Physical Chemistry C 125(19), pp. 10693-10707 (2021)
97. Ramana, C.V.  
Rare-Earth Substituted Magnetostrictive Ferrites: A Case Study of Gadolinium (Gd) Substituted Cobalt Ferrite ( Book Chapter)  
Encyclopedia of Smart Materials pp. 134-159 (2021)
96. Atomic Structure and Electron Magnetic Circular Dichroism of Individual Rock Salt Structure Antiphase Boundaries in Spinel Ferrites  
Li, Zhuo; Lu, Jinlian; Jin, Lei; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 21 Article Number: 2008306 Published: MAY 2021
95. A Nano-Micro Engineering Nanofiber for Electromagnetic Absorber, Green Shielding and Sensor  
Zhang, Min; Han, Chen; Cao, Wen-Qiang; et al.  
NANO-MICRO LETTERS Volume: 13 Issue: 1 Article Number: 27 Published: MAR 23 2021
94. Role of Mg<sup>2+</sup> and In<sup>3+</sup> substitution on magnetic, magnetostrictive and dielectric properties of NiFe<sub>2</sub>O<sub>4</sub> ceramics derived from nanopowders  
Anantharamaiah, P. N.; Rao, B. Prerna; Shashanka, H. M.; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 23 Issue: 2 Pages: 1694-1705 Published: JAN 14 2021
93. Stuffed Tridymite Structures: Synthesis, Structure, Second Harmonic Generation, Optical, and Multiferroic Properties  
Bhim, Anupam; Sutter, Jean-Pascal; Gopalakrishnan, Jagannatha; et al.  
CHEMISTRY-A EUROPEAN JOURNAL Volume: 27 Issue: 6 Pages: 1995-2008 Published: JAN 26 2021
92. Structural and magnetic properties of Bi substituted nickel ferrite  
Sattibabu, Bhumireddi; Rao, T. Durga; Bhatnagar, A. K.; et al.  
MATERIALS TODAY-PROCEEDINGS Volume: 39 Pages: 1482-1486 Part: 4 Published: 2020
91. Neutron diffraction study and magnetic properties of NiFe<sub>2-x</sub>Sc<sub>x</sub>O<sub>4</sub>  
Sattibabu, Bhumireddi; Rao, T. Durga; Bhatnagar, A. K.; et al.  
MATERIALS LETTERS Volume: 277 Article Number: 128325 Published: OCT 15 2020
90. Influence of cation distribution on magnetic response of polycrystalline Co<sub>1-x</sub>Ni<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> (0 ≤ x ≤ 1) ferrites  
Bestha, Kranthi Kumar; Abraham, Joyal John; Chelvane, Jeyaramane Arout; et al.  
PHYSICA SCRIPTA Volume: 95 Issue: 8 Article Number: 085802 Published: AUG 2020
89. Raman spectra tell us so much more: Raman features and saturation magnetization for efficient analysis of manganese zinc ferrite nanoparticles  
Nekvapil, Fran; Bunge, Alexander; Radu, Teodora; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 6 Pages: 959-968 Published: JUN 2020
88. Magnetic Properties of NiFe<sub>2</sub>O<sub>4</sub> Compound: Ab Initio Calculation and Monte Carlo Simulation  
Idrissi, L.; Tahiri, N.; El Bounagui, O.; et al.



87. Effect performance of the nanomagnetic properties of Ni-Cu-Co ferrites by Al<sup>3+</sup> ions adulteration  
Suo, Nanzhaxi; Sun, Aimin; Yu, Lichao; et al.  
MODERN PHYSICS LETTERS B Volume: 34 Issue: 5 Article Number: 2050059 Published: FEB 20 2020
86. Interface-induced perpendicular magnetic anisotropy in Co<sub>2</sub>FeAl/NiFe<sub>2</sub>O<sub>4</sub> superlattice: first-principles study  
Li, Fangfang; Yang, Baishun; Zhang, Jianmin; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 2 Pages: 716-723 Published: JAN 14 2020
85. Stirring-mediated anomalous dielectric behaviour of electrodeposited and in situ oxidized FeAl<sub>2</sub>O<sub>4</sub> thin films  
Awan, Attia; Riaz, Saira; Butt, Azqa Farrukh; et al.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 31 Issue: 1 Special Issue: SI Pages: 814-831  
Published: JAN 2020
84. Disordered structure of ZnAl<sub>2</sub>O<sub>4</sub> phase and the formation of a Zn NCO complex in ZnAl mixed oxide catalysts for glycerol carbonylation with urea  
Nguyen-Phu, H., Shin, E.W.  
Journal of Catalysis 373, pp. 147-160 (2019)
83. Cationic ordering and magnetic properties of rare-earth doped NiFe<sub>2</sub>O<sub>4</sub> probed by Mossbauer and X-ray spectroscopies  
Ugendar, Kodam; Hari Babu, Vasili; Reddy, V. Raghavendra; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 484 Pages: 291-297 Published: AUG 15 2019
82. Cation distribution in nanocrystalline cobalt substituted nickel ferrites: X-ray diffraction and Raman spectroscopic investigations  
Nandan, Brajesh; Bhatnagar, M. C.; Kashyap, Subhash C.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 129 Pages: 298-306 Published: JUN 2019.
81. Nickel based oxide film formed in molten salts for efficient electrocatalytic oxygen evolution  
Liang, Xin Xin; Weng, Wei; Gu, Dong; et al.  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 7 Issue: 17 Pages: 10514-10522 Published: MAY 7 2019
80. Room-temperature multiferroic and magnetodielectric properties of SrTiO<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> composite ceramics  
Ke, Hua; Zhang, Hongjun; Zhou, Junjie; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 8238-8242 Part: A Published: MAY 2019
79. Ferroelectric order associated with ordered occupancy at the octahedral site of the inverse spinel structure of multiferroic NiFe<sub>2</sub>O<sub>4</sub>  
Dey, J. K.; Chatterjee, A.; Majumdar, S.; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 14 Article Number: 144412 Published: APR 15 2019
78. Evidence of surface spin-glass behavior in NiFe<sub>2</sub>O<sub>4</sub> nanoparticles determined using magnetic resonance technique  
Mantilla, J.; Leon Felix, L.; Martinez, M. A. R.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 476 Pages: 392-397 Published: APR 15 2019
77. Spin glass freezing, magnetocapacitance and dielectric anomalies in 0.3NiFe<sub>2</sub>(2)O(4)-0.7BiFeO(3) nanocomposite  
Sarathbavan, M.; Annamalai, K.; Parida, Tripta; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 474 Pages: 144-151 Published: MAR 15 2019
76. Cation Vacancies in NiFe<sub>2</sub>O<sub>4</sub> During Heat Treatments at High Temperatures: Structural, Morphological and Magnetic Characterization  
Salazar-Tamayo, Harrison; Garcia Tellez, Karen Edilma; Barrero Meneses, Cesar Augusto  
MATERIALS RESEARCH-IBERO-AMERICAN JOURNAL OF MATERIALS Volume: 22 Issue: 5 Article Number: e20190298  
Published: 2019
75. Magnetic Properties and Electrical Conductivity of NiFe<sub>2</sub>O<sub>4</sub>-MWNT/PVA Nanocomposite Films  
Mulyawan, A., Purwanto, S., Mashadi, M.  
Journal of Physics: Conference Series 1091(1),012001 (2018)
74. Structure and magnetism of ultrathin nickel-iron oxides grown on Ru(0001) by high-temperature oxygen-assisted molecular beam epitaxy  
Mandziak, Anna; de la Figuera, Juan; Ruiz-Gomez, Sandra; et al.  
SCIENTIFIC REPORTS Volume: 8 Article Number: 17980 Published: DEC 19 2018
73. Cation distributions and magnetism of Al-substituted CoFe<sub>2</sub>O<sub>4</sub> - NiFe<sub>2</sub>O<sub>4</sub> solid solutions synthesized by sol-gel auto-combustion method  
Kumar, R. Vijaya; Anupama, A. V.; Kumar, R.; et al.  
CERAMICS INTERNATIONAL Volume: 44 Issue: 17 Pages: 20708-20715 Published: DEC 1 2018
72. Designing Magnetic Anisotropy through Strain Doping  
Herklotz, Andreas; Gai, Zheng; Sharma, Yogesh; et al.  
ADVANCED SCIENCE Volume: 5 Issue: 11 Article Number: 1800356 Published: NOV 2018
71. In house designed magnetron sputtering source: Effect of power and annealing on structural, optical and magnetic properties of NiFe<sub>2</sub>-xLuxO<sub>4</sub> (x=0, 0.075) thin films  
Kodam, Ugendar; Baby, Anoop K. B.; Markandeyulu, G.

THIN SOLID FILMS Volume: 662 Pages: 180-186 Published: SEP 30 2018

70. Magnetic properties of multilayer BaTiO<sub>3</sub>/NiFe<sub>2</sub>O<sub>4</sub> thin films prepared by solution deposition technique  
Bajac, Branimir; Milanovic, Marija; Cvejic, Zeljka; et al.  
CERAMICS INTERNATIONAL Volume: 44 Issue: 13 Pages: 15965-15971 Published: SEP 2018

69. Transition metal cations on the move: simultaneous operando X-ray absorption spectroscopy and X-ray diffraction investigations during Li uptake and release of a NiFe<sub>2</sub>O<sub>4</sub>/CNT composite  
Permien, Stefan; Neumann, Tobias; Indris, Sylvio; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 28 Pages: 19129-19141 Published: JUL 28 2018

68. Development of magnetoelectric nanocomposite for soft technology  
Bitla, Yugandhar; Chu, Ying-Hao  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 23 Article Number: 234006 Published: JUN 13 2018

67. Nanocrystal growth, magnetic and electrochemical properties of NiZn ferrite  
Freire, R. M.; Freitas, P. G. C.; Galvao, W. S.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 738 Pages: 206-217 Published: MAR 25 2018

66. Raman spectra of Ni<sub>1-x</sub>Zn<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> nanopowders  
Aliyeva, Shahla; Babayev, Sardar; Mehdiyev, Talat  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 2 Pages: 271-278 Published: FEB 2018

65. Dielectric Anomalies and Competing Magnetic Interactions in NiFe<sub>2</sub>O<sub>4</sub>-PMN-PT Nanocomposite Materials  
Bharathi, K. Kamala; Parida, Tripta; Dara, Hanuma Kumar; et al.  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 122 Issue: 1 Pages: 880-887 Published: JAN 11 2018

64. Effect of Substrate Temperature on Some Properties of Nitrogen Incorporated Nickel Ferrite Thin Films  
Baby, K. B. Anoop; Markandeyulu, G.; Subrahmanyam, A.  
AIP Conference Proceedings Volume: 1942 Article Number: 080042 Published: 2018

63. Structural, Magnetic and Magnetoreactance Studies In NiFe<sub>2-x</sub>R<sub>x</sub>O<sub>4</sub> (x=0, 0.05; R = Y, Yb and Lu)  
Ugendar, Kodam; Chunchu, Venkatrao; Rani, G. Neeraja; et al.  
AIP Conference Proceedings Volume: 1942 Article Number: 130016 Published: 2018

62. Ushakov, M. V.; Senthilkumar, B.; Selvan, R. Kalai; et al.  
Mossbauer spectroscopy of NiFe<sub>2</sub>O<sub>4</sub> nanoparticles: The effect of Ni<sup>2+</sup> in the Fe<sup>3+</sup> local microenvironment in both tetrahedral and octahedral sites  
MATERIALS CHEMISTRY AND PHYSICS Volume: 202 Pages: 159-168 Published: DEC 1 2017

61. Jian, Gang; Xue, Fei; Zhang, Chen; et al.  
Orientation dependence of elastic and piezomagnetic properties in NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 442 Pages: 141-144 Published: NOV 15 2017

60. Baby, K. B. Anoop; Markandeyulu, G.; Subrahmanyam, A.  
Magnetic Properties of Nanocrystalline N-NFO Thin Films  
IEEE TRANSACTIONS ON MAGNETICS Volume: 53 Issue: 11 Article Number: 2002505 Published: NOV 2017

59. Baby, K. B. Anoop; George, Lijin; Jaiswal, Manu; et al.  
Structure-Property Correlations of Carbon and Nitrogen Incorporated NiFe<sub>2</sub>O<sub>4</sub>  
IEEE TRANSACTIONS ON MAGNETICS Volume: 53 Issue: 11 Article Number: 1000705 Published: NOV 2017

58. Aakash; Nordblad, Per; Mohan, Rajendra; et al.  
Structural, magnetic and hyperfine characterizations of nanocrystalline Zn-Cd doped nickel ferrites  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 441 Pages: 710-717 Published: NOV 1 2017

57. Chand, Prakash; Vaish, Swapnil; Kumar, Praveen  
Structural, optical and dielectric properties of transition metal (MFe<sub>2</sub>O<sub>4</sub>; M = Co, Ni and Zn) nanoferrites  
PHYSICA B-CONDENSED MATTER Volume: 524 Pages: 53-63 Published: NOV 2017

56. Lyubutin, Igor S.; Lin, Chun-Rong; Starchikov, Sergey S.; et al.  
Structural, Magnetic, and Electronic Properties of Mixed Spinel NiFe<sub>2-x</sub>Cr<sub>x</sub>O<sub>4</sub> Nanoparticles Synthesized by Chemical Combustion  
INORGANIC CHEMISTRY Volume: 56 Issue: 20 Pages: 12469-12475 Published: OCT 16 2017

55. Wang, Yan; Li, Liping; Zhang, Yuelan; et al.  
Growth Kinetics, Cation Occupancy, and Magnetic Properties of Multimetal Oxide Nanoparticles: A Case Study on Spinel NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 121 Issue: 35 Pages: 19467-19477 Published: SEP 7 2017

54. O'Quinn, Eric C.; Shamblin, Jacob; Perlov, Brandon; et al.  
Inversion in Mg<sub>1-x</sub>Ni<sub>x</sub>Al<sub>2</sub>O<sub>4</sub> Spinel: New Insight into Local Structure  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume: 139 Issue: 30 Pages: 10395-10402 Published: AUG 2 2017

53. Chauhan, Lalita; Singh, Nidhi; Dhar, Ajay; et al.  
Structural and electrical properties of Dy<sup>3+</sup> substituted NiFe<sub>2</sub>O<sub>4</sub> ceramics prepared from powders derived by combustion method  
CERAMICS INTERNATIONAL Volume: 43 Issue: 11 Pages: 8378-8390 Published: AUG 1 2017

52. Ugendar, Kodam; Samanta, S.; Rayaprol, Sudhindra; et al.  
Effect of frustrated exchange interactions and spin-half-impurity on the electronic structure of strongly correlated NiFe<sub>2</sub>O<sub>4</sub>  
PHYSICAL REVIEW B Volume: 96 Issue: 3 Article Number: 035138 Published: JUL 19 2017
51. Abidat, I.; Morais, C.; Comminges, C.; et al.  
Three dimensionally ordered mesoporous hydroxylated Ni<sub>x</sub>Co(3-x)O(4) spinels for the oxygen evolution reaction: on the hydroxyl-induced surface restructuring effect  
JOURNAL OF MATERIALS CHEMISTRY A Volume: 5 Issue: 15 Pages: 7173-7183 Published: APR 21 2017
50. Rani, Jyoti; Kushwaha, Varun K.; Kolte, Jayant; et al.  
Structural, dielectric and magnetoelectric studies of [0.5Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O-3-0.5(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub>]-Ni<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> multiferroic composites  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 696 Pages: 266-275 Published: MAR 5 2017
49. Liu, Heng-Jui; Wang, Chih-Kuo; Su, Dong; et al.  
Flexible Heteroepitaxy of CoFe<sub>2</sub>O<sub>4</sub>/Muscovite Bimorph with Large Magnetostriction  
ACS APPLIED MATERIALS & INTERFACES Volume: 9 Issue: 8 Pages: 7297-7304 Published: MAR 1 2017
48. Kodam, Ugendar; Bharathi, Kamala K.; Reddy, Raghavendra, V; et al.  
Onsite magnetic moment through cation distribution and magnetocrystalline anisotropy studies in NiFe<sub>2</sub>-xR<sub>x</sub>O<sub>4</sub> (R = Y and Lu; x=0, 0.05, and 0.075)  
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 5 Article Number: 055101 Published: FEB 7 2017
47. Panwar, Kalpana; Tiwari, Shailja; Bapna, Komal; et al.  
The effect of Cr substitution on the structural, electronic and magnetic properties of pulsed laser deposited NiFe<sub>2</sub>O<sub>4</sub> thin films  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 421 Pages: 25-30 Published: JAN 1 2017
46. Karimi, S (Karimi, S.); Kameli, P (Kameli, P.); Ahmadvand, H (Ahmadvand, H.); Salamati, H (Salamati, H.)  
Effects of Zn-Cr substitution on the structural and magnetic properties of Ni<sub>1-x</sub>Zn<sub>x</sub>Fe<sub>2-x</sub>Cr<sub>x</sub>O<sub>4</sub> ferrites  
CERAMICS INTERNATIONAL Volume: 42 Issue: 15 Pages: 16948-16955 DOI: 10.1016/j.ceramint.2016.07.196 Published: NOV 15 2016
45. Jong, UG (Jong, Un-Gi); Yu, CJ (Yu, Chol-Jun); Park, YS (Park, Yong-Su); Ri, CS (Ri, Chong-Suk)  
First-principles study of ferroelectricity induced by p-d hybridization in ferrimagnetic NiFe<sub>2</sub>O<sub>4</sub>  
PHYSICS LETTERS A Volume: 380 Issue: 40 Pages: 3302-3306 DOI: 10.1016/j.physleta.2016.08.006 Published: SEP 23 2016
44. Dimitrievska, M., Ivetić, T.B., Litvinchuk, A.P., Fairbrother, A., Miljević, B.B., Štrbac, G.R., Pérez Rodríguez, A., Lukić-Petrović, S.R.  
Eu<sup>3+</sup>-Doped Wide Band Gap Zn<sub>2</sub>SnO<sub>4</sub> Semiconductor Nanoparticles: Structure and Luminescence  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 120 Issue: 33 Pages: 18887-18894 DOI: 10.1021/acs.jpcc.6b05335 Published: AUG 25 2016
43. Ugendar, K., Vaithyanathan, V., Patro, L.N., Inbanathan, S.S.R., Bharathi, K.K.  
Temperature-dependent magnetization, anisotropy and conductivity of CoFe<sub>2</sub>-xSn<sub>x</sub>O<sub>4</sub> (x=0.025, 0.05, 0.075): appearance of grain boundary conductivity at high temperatures  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 49 Issue: 30 Article Number: 305001 DOI: 10.1088/0022-3727/49/30/305001 Published: AUG 3 2016
42. Chauhan, L., Shukla, A.K., Sreenivas, K.  
Properties of NiFe<sub>2</sub>O<sub>4</sub> ceramics from powders obtained by auto-combustion synthesis with different fuels  
CERAMICS INTERNATIONAL Volume: 42 Issue: 10 Pages: 12136-12147 DOI: 10.1016/j.ceramint.2016.04.146 Published: AUG 1 2016
41. Aakash, Choubey, R., Das, D., Mukherjee, S.  
Effect of doping of manganese ions on the structural and magnetic properties of nickel ferrite  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 668 Pages: 33-39 DOI: 10.1016/j.jallcom.2016.01.198 Published: MAY 25 2016
40. Otero-Lorenzo, R., Fantechi, E., Sangregorio, C., Salgueirino, V.  
Solvothermally Driven Mn Doping and Clustering of Iron Oxide Nanoparticles for Heat Delivery Applications  
CHEMISTRY-A EUROPEAN JOURNAL Volume: 22 Issue: 19 Pages: 6666-6675 DOI: 10.1002/chem.201505049 Published: MAY 4 2016
39. Shamblin, J., Feyngenson, M., Neufeind, J., Tracy, C.L., Zhang, F., Finkeldei, S., Bosbach, D., Zhou, H., Ewing, R.C., Lang, M.  
Probing disorder in isometric pyrochlore and related complex oxides  
NATURE MATERIALS Volume: 15 Issue: 5 Pages: 507-511 DOI: 10.1038/NMAT4581 Published: MAY 2016
38. Aakash, Roychowdhury, A., Das, D., Mukherjee, S.  
Effect of doping of chromium ions on the structural and magnetic properties of nickel ferrite  
CERAMICS INTERNATIONAL Volume: 42 Issue: 6 Pages: 7742-7747 DOI: 10.1016/j.ceramint.2016.01.188 Published: MAY 1 2016
37. Datt, G., Sen Bishwas, M., Manivel Raja, M., Abhyankar, A.C.  
Observation of magnetic anomalies in one-step solvothermally synthesized nickel-cobalt ferrite nanoparticles  
NANOSCALE Volume: 8 Issue: 9 Pages: 5200-5213 DOI: 10.1039/c5nr06791j Published: 2016
36. Quandt, N., Roth, R., Syrowatka, F., Steimecke, M., Ebbinghaus, S.G.  
Spin-Coating and Characterization of Multiferroic MFe<sub>2</sub>O<sub>4</sub> (M=Co, Ni) / BaTiO<sub>3</sub> Bilayers

35. Majumder, A., Ugendar, K., Anoop Baby, K.B., Chunchu, V., Mondal, R.A., Markandeyulu, G.  
Anisotropy, Magnetostriction and Converse Magnetoelectric Effect in Dy Substituted Ni Ferrite  
Physics Procedia 75, 238-244 DOI: 10.1016/j.phpro.2015.12.029 (2015)
34. Amir, M., Ünal, B., Geleri, M., Güngüneş, H., Shirsath, S.E., Baykal, A.  
Electrical properties and hyperfine interactions of boron doped Fe<sub>3</sub>O<sub>4</sub> nanoparticles  
SUPERLATTICES AND MICROSTRUCTURES Volume: 88 Pages: 450-466 DOI: 10.1016/j.spmi.2015.10.005 Published: DEC 2015
33. Cvejić, Ž., Durdić, E., Ivković Ivandekić, G., Bajac, B., Postolache, P., Mitoseriu, L., Srdić, V.V., Rakić, S.  
The effect of annealing on microstructure and cation distribution of NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 649 Pages: 1231-1238 DOI: 10.1016/j.jallcom.2015.07.238 Published: NOV 15 2015
32. Ehi-Eromosele, C.O., Ita, B.I., Iweala, Ej., Adalikwu, S.A., Anawe, P.A.L.  
Magneto-structural properties of Ni-Zn nanoferrites synthesized by the low-temperature auto-combustion method  
BULLETIN OF MATERIALS SCIENCE Volume: 38 Issue: 5 Pages: 1465-1472 Published: SEP 2015
31. Puli, Venkata Sreenivas; Adireddy, Shiva; Ramana, C. V.  
Chemical bonding and magnetic properties of gadolinium (Gd) substituted cobalt ferrite  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 644 Pages: 470-475 Published: SEP 25 2015
30. Vaithyanathan, V.; Ugendar, Kodam; Chelvane, J. Arout; et al.  
Structural and magnetic properties of Sn and Ti doped Co ferrite  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 382 Pages: 88-92 Published: MAY 15 2015
29. Lang, L. L.; Xu, J.; Li, Z. Z.; et al.  
Study of the magnetic structure and the cation distributions in MnCo spinel ferrites  
PHYSICA B-CONDENSED MATTER Volume: 462 Pages: 47-53 Published: APR 1 2015
28. Lazarevic, Zorica Z.; Milutinovic, Aleksandra N.; Jovalekic, Cedomir D.; et al.  
Spectroscopy investigation of nanostructured nickel-zinc ferrite obtained by mechanochemical synthesis  
MATERIALS RESEARCH BULLETIN Volume: 63 Pages: 239-247 Published: MAR 2015
27. Bao, Lihong; Zang, Jianfeng; Wang, Guofeng; et al.  
Atomic-Scale Imaging of Cation Ordering in Inverse Spinel Zn<sub>2</sub>SnO<sub>4</sub> Nanowires  
NANO LETTERS Volume: 14 Issue: 11 Pages: 6505-6509 Published: NOV 2014
26. Lang, L. L.; Xu, J.; Qi, W. H.; et al.  
Study of cation magnetic moment directions in Cr (Co) doped nickel ferrites  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 12 Article Number: 123901 Published: SEP 28 2014
25. Arras, R.; Calmels, L.  
Fully spin-polarized two-dimensional electron gas at the CoFe<sub>2</sub>O<sub>4</sub>/MgAl<sub>2</sub>O<sub>4</sub>(001) polar interface  
PHYSICAL REVIEW B 90 (4), Art. No. 045411 JUL 17 2014
24. Dong, Guohua; Tan, Guoqiang; Luo, Yangyang; et al.  
The superior multiferroic properties of Bi<sub>0.85</sub>Nd<sub>0.15</sub>Fe<sub>0.98</sub>Mn<sub>0.02</sub>O<sub>3</sub>/CoFe<sub>2</sub>O<sub>4</sub> heterostructure thin film at room temperature  
MATERIALS LETTERS 127, pp. 24-27 JUL 15 2014
23. Kumar, K. S. Aneesh; Bhowmik, R. N.  
Micro-structural characterization and magnetic study of Ni<sub>1.5</sub>Fe<sub>1.5</sub>O<sub>4</sub> ferrite synthesized through coprecipitation route at different pH values  
MATERIALS CHEMISTRY AND PHYSICS 146 (1-2), pp. 159-169 JUL 15 2014
22. Lekha, P. Chithra; Ramesh, G.; Revathi, V.; et al.  
Relaxor-like ferroelectric behaviour favoured by short-range B-site ordering in 10% Ba<sup>2+</sup> substituted MgFe<sub>2</sub>O<sub>4</sub>  
MATERIALS RESEARCH BULLETIN 53, pp. 240-245 MAY 2014
21. Tsai, C. Y.; Chen, H. R.; Chang, F. C.; et al.  
Anisotropic strain, magnetic properties, and lattice dynamics in self-assembled multiferroic CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> nanostructures  
JOURNAL OF APPLIED PHYSICS 115 (13), Art. No. 134317 APR 7 2014
20. Tang, G. D.; Han, Q. J.; Xu, J.; et al.  
Investigation of magnetic ordering and cation distribution in the spinel ferrites Cr<sub>x</sub>Fe<sub>3-x</sub>O<sub>4</sub> (0.0 ≤ x ≤ 1.0)  
PHYSICA B-CONDENSED MATTER 438, pp. 91-96 APR 1 2014
19. Shen, Liming; Althammer, Matthias; Pachauri, Neha; et al.  
Epitaxial growth of spinel cobalt ferrite films on MgAl<sub>2</sub>O<sub>4</sub> substrates by direct liquid injection chemical vapor deposition  
JOURNAL OF CRYSTAL GROWTH 390, pp. 61-66 MAR 15 2014
18. Cheng, Ching  
Enhanced magnetization and conductive phase in NiFe<sub>2</sub>O<sub>4</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 325, 144-146, 2013

17. Walsh, Sean R.; Rusakova, Irene; Whitmire, Kenton H.  
Rock salt vs. wurtzite phases of  $\text{Co}_{1-x}\text{Mn}_x\text{O}$ : control of crystal lattice and morphology at the nanoscale  
CRYSTENGCOMM 15 (4), 775-784, 2013
16. Zhong, H., Xiao, X., Zheng, S., Zhang, W., Ding, M., Jiang, H., Huang, L., Kang, J.  
Mass spectrometric analysis of mono- and multi-phosphopeptides by selective binding with  $\text{NiZnFe}_2\text{O}_4$  magnetic nanoparticles  
Nature Communications 4, art. no. 1656, 2013
15. Tsai, C.Y., Chen, H.R., Chang, F.C., Tsai, W.C., Cheng, H.M., Chu, Y.H., Lai, C.H., Hsieh, W.F.  
Stress-mediated magnetic anisotropy and magnetoelastic coupling in epitaxial multiferroic  $\text{PbTiO}_3$ - $\text{CoFe}_2\text{O}_4$  nanostructures  
Applied Physics Letters 102 (13), art. no. 132905, 2013
14. Himcinschi, C., Vrejoiu, I., Salvan, G., Fronk, M., Talkenberger, A., Zahn, D.R.T., Rafaja, D., Kortus, J.  
Optical and magneto-optical study of nickel and cobalt ferrite epitaxial thin films and submicron structures  
Journal of Applied Physics 113 (8), art. no. 084101, 2013
13. Caffrey, N.M., Fritsch, D., Archer, T., Sanvito, S., Ederer, C.  
Spin-filtering efficiency of ferrimagnetic spinels  $\text{CoFe}_2\text{O}_4$  and  $\text{NiFe}_2\text{O}_4$   
Physical Review B - Condensed Matter and Materials Physics 87 (2), art. no. 024419, 2013
12. Lorenz, M., Ziese, M., Wagner, G., Lenzner, J., Kranert, C., Brachwitz, K., Hochmuth, H., (...), Grundmann, M.  
Exchange bias and magnetodielectric coupling effects in  $\text{ZnFe}_2\text{O}_4$ - $\text{BaTiO}_3$  composite thin films  
CrystEngComm 14 (20), pp. 6477-6486, 2012
11. Ravindra, A.V., Padhan, P., Prellier, W.  
Electronic structure and optical band gap of  $\text{CoFe}_2\text{O}_4$  thin films  
Applied Physics Letters 101 (16), art. no. 161902, 2012
10. Gutiérrez, D., Foerster, M., Fina, I., Fontcuberta, J., Fritsch, D., Ederer, C.  
Dielectric response of epitaxially strained  $\text{CoFe}_2\text{O}_4$  spinel thin films  
Physical Review B - Condensed Matter and Materials Physics 86 (12), art. no. 125309, 2012
9. Landon, J., Demeter, E., Inoğlu, N., Keturakis, C., Wachs, I.E., Vasić, R., Frenkel, A.I., Kitchin, J.R.  
Spectroscopic characterization of mixed Fe-Ni oxide electrocatalysts for the oxygen evolution reaction in alkaline electrolytes  
ACS Catalysis 2 (8), pp. 1793-1801, 2012
8. Fritsch, D., Ederer, C.  
First-principles calculation of magnetoelastic coefficients and magnetostriction in the spinel ferrites  $\text{CoFe}_2\text{O}_4$  and  $\text{NiFe}_2\text{O}_4$   
Physical Review B - Condensed Matter and Materials Physics 86 (1), art. no. 014406, 2012
7. Benrabaa R.; Boukhlof H.; Barama S.; et al.  
Structural, Textural and Acid-Base Properties of Nano-Sized  $\text{NiFe}_2\text{O}_4$  Spinel Catalysts  
CATALYSIS LETTERS 142 (1), 42-49, JAN 2012.
6. Li, N., Wang, Y.-H.A., Iliev, M.N., Klein, T.M., Gupta, A.  
Growth of Atomically Smooth Epitaxial Nickel Ferrite Films by Direct Liquid Injection CVD  
CHEMICAL VAPOR DEPOSITION Volume: 17 Issue: 7-9 Pages: 261-269 DOI: 10.1002/cvde.201106930 Published: SEP 2011
5. Stevanovic, V (Stevanovic, Vladan); d'Avezac, M (d'Avezac, Mayeul); Zunger, A (Zunger, Alex)  
Universal Electrostatic Origin of Cation Ordering in  $\text{A}(\text{2})\text{BO}(\text{4})$  Spinel Oxides  
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume: 133 Issue: 30 Pages: 11649-11654 DOI: 10.1021/ja2034602  
Published: AUG 3 2011
4. Zhu X. F.; Chen L. F.  
First-principles study of the electronic and magnetic properties of a Nickel-Zinc ferrite:  $\text{Zn}_x\text{Ni}_{(1-x)}\text{Fe}_2\text{O}_4$   
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (23), pp.3138-3142, DEC 2011
3. Fritsch, D., Ederer, C.  
Effect of epitaxial strain on the cation distribution in spinel ferrites  $\text{CoFe}_2\text{O}_4$  and  $\text{NiFe}_2\text{O}_4$ : A density functional theory study  
Applied Physics Letters 99 (8), art. no. 081916, AUG 22 2011.
2. Haetge, J., Suchomski, C., Brezesinski, T.  
Ordered mesoporous  $\text{MFe}_2\text{O}_4$  ( $\text{M} = \text{Co}, \text{Cu}, \text{Mg}, \text{Ni}, \text{Zn}$ ) thin films with nanocrystalline walls, uniform 16 nm diameter pores and high thermal stability: Template-directed synthesis and characterization of redox active trevorite  
Inorganic Chemistry 49 (24), pp. 11619-11626, DEC 20 2010.
1. Fritsch Daniel, Ederer Claude  
Epitaxial strain effects in the spinel ferrites  $\text{CoFe}_2\text{O}_4$  and  $\text{NiFe}_2\text{O}_4$  from first principles  
Physical Review B - Condensed Matter and Materials Physics 82 (10), art. no. 104117, SEP 23 2010.
73. “*Synthesis and characterization of  $\text{R}\text{BaCo}_2\text{O}_{5+x}$  ( $\text{R} = \text{La}, \text{Nd}, \text{Gd}, \text{Y}$  and  $\text{Ho}$ )*”  
N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. V. Avdeev and S. C. Russev  
Journal of Physics: Conference Series **253** (2010) 012071 (6 pages)

1. Gomez, L.; Galeano, V.; Vallejo, E.; et al.  
On the magnetic behavior of polycrystalline  $\text{RBaCo}_2\text{O}_5+\delta$  synthesized by solid state and wet chemical routes  
Journal of Physics Conference Series 480, Art. No. 012035 2014

74. “*Lattice dynamics of the  $\alpha$  and  $\beta$  phases of  $\text{LiFe}_5\text{O}_8$ ”*”

M. N. Iliev, V. G. Ivanov, N. D. Todorov, V. Marinova, M. V. Abrashev, R. Petrova, Y.-Q. Wang, and A. P. Litvinchuk

Physical Review B **83**, 174111 (2011) (7 pages)

26. Granados-Miralles, C., Serrano, A., Prieto, P., (...), Fernández, J.F., Quesada, A.  
Quantifying Li-content for compositional tailoring of lithium ferrite ceramics  
Journal of the European Ceramic Society 43(8), pp. 3351-3359 (2023)

25. Mohapatra, P.P., Dobbidi, P.  
Thickness tuneable dielectric, optical and magnetic response of lithium ferrite thin films deposited by pulsed laser deposition  
Thin Solid Films 774,139845 (2023)

24. Udhayakumar, S., Kumar, G.J., Kumar, E.S., Navaneethan, M., Kamala Bharathi, K.  
Electrical, electronic and magnetic property correlation via oxygen vacancy filling and scaling-law analysis in  $\text{LiFe}_5\text{O}_8$  thin films prepared by pulsed laser deposition  
Journal of Materials Chemistry C 10(40), pp. 15051-15060 (2022)

23. Al-Dharob, M.H., Abdulmajeed, I.M., Taha, A.H., Al-Shakarchi, E.K., Elouadi, B.  
The magnetic properties dependence on temperature of Li-ferrite nanoparticle  
Digest Journal of Nanomaterials and Biostructures 17(1), pp. 201-208 (2022)

22. Teixeira, S.S., Gama, N., Cordeiro, T., (...), Graça, M.P.F., Costa, L.C.  
Poly(L-lactic acid)/lithium ferrite composites: Electrical properties  
Polymer 230,124100 (2021)

21. Mohapatra, P.P., Dobbidi, P.  
Magnetic, Optical, and Impedance Spectroscopy of Barium-Substituted Lithium Ferrite  
Journal of Physical Chemistry C 125(25), pp. 14014-14026 (2021)

20. Magnetodielectric response of composites based on a natural garnet and spinel ferrites for sub-GHz wireless applications  
N, Sibi., Ganesanpotti, S.  
Ceramics International (Article in Press) (2021)

19. Structural and magnetic properties of ordered inverse spinel  $\text{Li}_x\text{Fe}_5\text{O}_8$   
Kumawat, K. K.; Jain, A.; Meena, Sher Singh; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 865 Article Number: 158849 Published: JUN 5 2021

18. Magnetic anomalies, chemical and magnetic properties at wide temperature range (15-1000 K) in  $\text{LiSr}_x\text{Fe}_5-x\text{O}_8$  ( $x=0, 0.025, 0.05$ )  
Udhayakumar, S.; Kumar, G. Jagadish; Kumar, E. Senthil; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 158290 Published: APR 5 2021

17. Facile and Low-Temperature Synthesis of  $\gamma\text{-Fe}_2\text{O}_3$  Nanoparticles with Thermally Stable Ferrimagnetism for Use in Magnetic Recording Tapes  
Uyama, T., Mukai, K., Yamada, I.  
ACS Applied Nano Materials 3(11), pp. 10678-10690 (2020)

16. Transformation of Solid Solution with Spinel-Type Structure Within the Range  $\text{LiMn}_{2-x}(\text{Ni}_{0.33}\text{Co}_{0.33}\text{Fe}_{0.33})_x\text{O}_4$  ( $0 \leq x \leq 2$ )  
Nipan, G. D.; Smirnova, M. N.; Kornilov, D. Yu; et al.  
JOURNAL OF PHASE EQUILIBRIA AND DIFFUSION Volume: 41 Issue: 6 Special Issue: SI Pages: 819-826 Published: DEC 2020

15. Strain-tuned optical property in magnetoelectric  $\text{LiFe}_5\text{O}_8$  thin film  
Li, Hua; Wang, Xin; Zhou, Pengxia; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 821 Article Number: 153199 Published: APR 25 2020

14. Magnetic and broadband dielectric studies of calcium-substituted  $\text{LiFe}_5\text{O}_8$   
Mohapatra, Prajna P.; Dobbidi, Pamu  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 500 Article Number: 166354 Published: APR 15 2020

13. Self-Assembled Room Temperature Multiferroic  $\text{BiFeO}_3\text{-LiFe}_5\text{O}_8$  Nanocomposites  
Sharma, Yogesh; Agarwal, Radhe; Collins, Liam; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 30 Issue: 3 Article Number: 1906849 Published: JAN 2020

12. Influence of Ag doping on the dielectric and magnetic properties of  $\text{LiFe}_5\text{O}_8$  ceramics  
Li, Jing; Zhou, Di  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 785 Pages: 13-18 Published: MAY 15 2019

11. Magnetic Elastomeric Composites Filled by Lithium Ferrites  
Usakova, Mariana; Usak, Elemir; Dosoudil, Rastislav; et al.

10. A spinel-related solid solution ceramic 0.7LiFe<sub>5</sub>O<sub>8</sub>-0.3Li<sub>2</sub>MgTi<sub>3</sub>O<sub>8</sub> with high permeability and excellent microwave dielectric properties  
He, L., Wang, J., Zhang, C., Xie, H., Qun, L.  
Materials Letters 232, pp. 157-159 (2018)
9. Facile Synthesis of Flowerlike LiFe<sub>5</sub>O<sub>8</sub> Microspheres for Electrochemical Supercapacitors  
Lin, Ying; Dong, Jingjing; Dai, Jingjing; et al.  
INORGANIC CHEMISTRY Volume: 56 Issue: 24 Pages: 14960-14967 Published: DEC 18 2017
8. Electrical relaxation, optical and magnetic studies of nanocrystalline lithium ferrite synthesized by different chemical routes  
Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
MATERIALS RESEARCH EXPRESS Volume: 4 Issue: 12 Article Number: 125008 Published: DEC 2017
7. Reitz, C., Suchomski, C., Wang, D., Hahn, H., Brezesinski, T.  
In situ tuning of magnetization via topotactic lithium insertion in ordered mesoporous lithium ferrite thin films  
JOURNAL OF MATERIALS CHEMISTRY C Volume: 4 Issue: 38 Pages: 8889-8896 DOI: 10.1039/c6tc02731h Published: 2016
6. He, Li; Mi, Shao-Bo; Jin, Xiaowei; et al.  
Order-Disorder Phase Transition and Magneto-Dielectric Properties of (1-x)LiFe<sub>5</sub>O<sub>8</sub>-xLi<sub>2</sub>ZnTi<sub>3</sub>O<sub>8</sub> Spinel-Structured Solid Solution Ceramics  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume: 98 Issue: 7 Pages: 2122-2129 Published: JUL 2015
5. Pachauri, Neha; Khodadadi, Behrouz; Althammer, Matthias; et al.  
Study of structural and ferromagnetic resonance properties of spinel lithium ferrite (LiFe<sub>5</sub>O<sub>8</sub>) single crystals  
JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 23 Article Number: 233907 Published: JUN 21 2015
4. Soreto Teixeira, S.; Graca, M. P. F.; Dionisio, M.; et al.  
Self-standing elastomeric composites based on lithium ferrites and their dielectric behavior  
JOURNAL OF APPLIED PHYSICS Volume: 116 Issue: 22 Article Number: 224102 Published: DEC 14 2014
3. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014
2. Teixeira, S. Soreto; Graca, M. P. F.; Costa, L. C.; et al.  
Study of the influence of thermal treatment on the magnetic properties of lithium ferrite prepared by wet ball-milling using nitrates as raw material  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 186, pp. 83-88 AUG 2014
1. Teixeira, S.S., Graça, M.P.F., Costa, L.C.  
Dielectric, morphological and structural properties of lithium ferrite powders prepared by solid state method  
Journal of Non-Crystalline Solids 358 (16), pp. 1924-1929, 2012
75. *“Comparative Raman study of isostructural YCrO<sub>3</sub> and YMnO<sub>3</sub>: Effects of structural distortions and twinning”*  
N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. G. Tsutsumanova, V. Marinova, Y.-Q. Wang, and M. N. Iliev  
Physical Review B **83**, 224303 (2011) (6 pages)
56. Gupta, P., Kumar, R., Pal, D.  
Magneto-structural Imprints in Eu-Substituted NdCrO<sub>3</sub> Perovskites  
Journal of Superconductivity and Novel Magnetism 37(2), pp. 425-437 (2024)
55. Wang, J., Liu, H., Shen, Q., Dai, H.  
Impacts of Mn-deficiency on the structure and physical properties of GdMnO<sub>3</sub> ceramics  
Journal of Materials Science: Materials in Electronics 34(28),1918 (2023)
54. Dinh, D.V., Peiris, F., Lähnemann, J., Brandt, O.  
Optical properties of ScN layers grown on Al<sub>2</sub>O<sub>3</sub>(0001) by plasma-assisted molecular beam epitaxy  
Applied Physics Letters 123(11),112102 (2023)
53. Islam, M.A., Sato, T., Ara, F., Basith, M.A.  
Sol-gel based synthesis to explore structure, magnetic and optical properties of double perovskite Y<sub>2</sub>FeCrO<sub>6</sub> nanoparticles  
Journal of Alloys and Compounds 944,169066 (2023)
52. Manchón-Gordón, A.F., Sánchez-Jiménez, P.E., Blázquez, J.S., Perejón, A., Pérez-Maqueda, L.A.  
Structural, Vibrational, and Magnetic Characterization of Orthoferrite LaFeO<sub>3</sub> Ceramic Prepared by Reaction Flash Sintering  
Materials 16(3),1019 (2023)
51. Zhang, G., Wang, H., Chen, J., (...), Li, T., Dai, H.  
Effects of Ho doping on the structural, dielectric, and magnetic properties of GdMnO<sub>3</sub> ceramics

Journal of Materials Science: Materials in Electronics 34(5),366 (2023)

50. Zhu, Y., Sun, K., Wu, S., (...), Xia, J., Li, H.-F.

A comprehensive review on the ferroelectric orthochromates: Synthesis, property, and application  
Coordination Chemistry Reviews 475,214873 (2023)

49. Mall, A.K., Garg, N., Verma, A.K., (...), Srihari, V., Gupta, R.

Discovery of high-pressure post-perovskite phase in HoCrO<sub>3</sub>  
Journal of Physics and Chemistry of Solids 172,111078 (2023)

48. Safdar, M., González-Castaño, M., Penkova, A., (...), Odriozola, J.A., Arellano-García, H.

CO<sub>2</sub> methanation on Ni/YMn<sub>1-x</sub>Al<sub>x</sub>O<sub>3</sub> perovskite catalysts  
Applied Materials Today 29,101577 (2022)

47. Das, S., Dokala, R.K., Weise, B., (...), Mishra, P.K., Thota, S.

Effect of Ce substitution on the local magnetic ordering and phonon instabilities in antiferromagnetic DyCrO<sub>3</sub> perovskites  
Journal of Physics Condensed Matter 34(34),345803 (2022)

46. Zhao, Q., Zhu, Y.-H., Wu, S., (...), Sun, K.-T., Li, H.-F.

Temperature-dependent structure and magnetization of YCrO<sub>3</sub> compound  
Chinese Physics B 31(4),046101 (2022)

45. Du, Y., Chen, J., Wu, W., (...), Chu, J., Yuan, X.

Comparative Raman spectroscopy of magnetic topological material EuCd<sub>2</sub>X<sub>2</sub> (X = P, As)  
Journal of Physics Condensed Matter 34(22),224001 (2022)

44. Kumar, R., Singh, K.D., Kumar, R.

Effect of Sr substitution on structural properties of LaCrO<sub>3</sub> perovskite  
Journal of Materials Science: Materials in Electronics 33(15), pp. 12039-12052 (2022)

43. Amrillah, T., Duong, M.N., Chen, Y.-X., (...), Wu, K.-H., Juang, J.-Y.

Effects of Surface Polarity on the Structure and Magnetic Properties of Epitaxial h-YMnO<sub>3</sub> Thin Films Grown on MgO Substrates  
ACS Applied Electronic Materials 4(4), pp. 1603-1610 (2022)

42. Paudel, B., Sharma, Y., Derby, B.K., (...), Pettes, M.T., Chen, A.

Effect of lattice strain on magnetism in epitaxial YCrO<sub>3</sub> films  
Materials Research Letters 10(1), pp. 29-35 (2022)

41. Wang, M., Dai, H., Li, T., (...), Ping, T., He, J.

The evolution of structure and properties in GdMn(1-x)Ti<sub>x</sub>O<sub>3</sub> ceramics  
Journal of Materials Science: Materials in Electronics 32(23), pp. 27348-27361 (2021)

40. Qahtan, A.A.A., Husain, S., Zarrin, N., (...), Fatema, M., Khan, W.

Raman scattering, electronic transport and dielectric features of Co-doped DyCrO<sub>3</sub>  
Journal of Materials Science: Materials in Electronics 32(11), pp. 15108-15133 (2021)

39. Ni/YMnO<sub>3</sub> perovskite catalyst for CO<sub>2</sub> methanation

González-Castaño, M., de Miguel, J.C.N., Penkova, A., (...), Odriozola, J.A., Arellano-García, H.  
Applied Materials Today 23,101055 (2021)

38. Magnetoelastic coupling and spin contributions to entropy and thermal transport in biferroic yttrium orthochromite

Bajaj, Naini; Roy, Aditya Prasad; Khandelwal, Ashish; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 33 Issue: 12 Article Number: 125702 Published: MAR 23 2021

37. Physical study of PrCu<sub>1-x</sub>Zn<sub>x</sub>O<sub>3</sub> perovskite for 0.0 ≤ x ≤ 0.3

Maayoufi, A. E.; Sdiri, N.; Valente, M. A.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 849 Article Number: 156239 Published: DEC 30 2020

36. Site substitution in GdMnO<sub>3</sub>: Effects on structural, electronic, and magnetic properties

Mahana, Sudipta; Pandey, Shishir Kumar; Rakshit, Bipul; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 24 Article Number: 245120 Published: DEC 15 2020

35. Spin-phonon coupling and thermodynamic behaviour in YCrO<sub>3</sub> and LaCrO<sub>3</sub>: inelastic neutron scattering and lattice dynamics

Gupta, Mayanak K.; Mittal, Ranjan; Mishra, Sanjay K.; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 32 Issue: 50 Article Number: 505402 Published: SEP 30 2020

34. Magnetocaloric effect and spin-phonon correlations in RFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub> (R = Er and Yb) compounds

Yadav, Kavita; Kaur, Gurpreet; Sharma, Mohit K.; et al.  
PHYSICS LETTERS A Volume: 384 Issue: 26 Article Number: 126638 Published: SEP 18 2020

33. Crystalline and magnetic structures, magnetization, heat capacity, and anisotropic magnetostriction effect in a yttrium-chromium oxide

Zhu, Yinghao; Fu, Ying; Tu, Bao; et al.  
PHYSICAL REVIEW MATERIALS Volume: 4 Issue: 9 Article Number: 094409 Published: SEP 15 2020

32. Spin-phonon coupling in monoclinic BiCrO<sub>3</sub>

Araujo, B. S.; Arevalo-Lopez, A. M.; Santos, C. C.; et al.



- JOURNAL OF APPLIED PHYSICS Volume: 127 Issue: 11 Article Number: 114102 Published: MAR 21 2020
31. Temperature dependent X-ray diffraction and Raman spectroscopy studies of polycrystalline YCrO<sub>3</sub> ceramics across the T-C similar to 460 K  
Mall, Ashish Kumar; Paul, Barnita; Garg, Ashish; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 3 Pages: 537-545 Published: MAR 2020
30. Structure, Mossbauer spectroscopy and vibration phonon spectra in valence-bond force-field model approach for distorted perovskites AFeO<sub>3</sub> (A = La, Y)  
Saha, J.; Jana, Y. M.; Mukherjee, G. D.; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 240 Article Number: 122286 Published: JAN 15 2020
29. Physical properties of Nano Crystalline Ceramic Ho<sub>1-x</sub>Ba<sub>x</sub>CrO<sub>3</sub>  
Ben Youssef, R. Triki; Sdiri, Nasr; Valente, M. A.; et al.  
CERAMICS INTERNATIONAL Volume: 45 Issue: 16 Pages: 20211-20225 Published: NOV 2019
28. Intrinsic anharmonicity effect in YCrO<sub>3</sub>: Pressure and temperature dependent Raman spectra studies  
Su, Yuling; Guo, Jinjin; Cheng, Xuerui; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 805 Pages: 489-495 Published: OCT 15 2019
27. Structural electronic and magnetic properties of BaBiO<sub>3</sub> single crystals  
Foyevtsov, O.; Balandeh, S.; Chi, S.; et al.  
PHYSICA B-CONDENSED MATTER Volume: 570 Pages: 328-333 Published: OCT 1 2019
26. Mechano-synthesis of the Whole Y<sub>1-x</sub>Bi<sub>x</sub>Mn<sub>1-x</sub>FexO<sub>3</sub> Perovskite System: Structural Characterization and Study of Phase Transitions  
Angel Quintana-Cilleruelo, Jose; Veerapandiyan, Vignaswaran K.; Deluca, Marco; et al.  
MATERIALS Volume: 12 Issue: 9 Article Number: 1515 Published: MAY 1 2019
25. Phase separation and local lattice distortions analysis of charge-ordered manganese films La<sub>1-x</sub>CaxMnO<sub>3</sub>-delta by Raman spectroscopy  
Trotsenko, V. G.; Lahmar, A.; Lyanguzov, N. V.; et al.  
SUPERLATTICES AND MICROSTRUCTURES Volume: 127 Pages: 100-108 Published: MAR 2019
24. Mild Hydrothermal Crystallization of Heavy Rare-Earth Chromite RECrO<sub>3</sub> (RE = Er, Tm, Yb, Lu) Perovskites and Magnetic Properties  
Wang, Shan; Wu, Xiaofeng; Wang, Tiesheng; et al.  
INORGANIC CHEMISTRY Volume: 58 Issue: 4 Pages: 2315-2329 Published: FEB 18 2019
23. Synthesis and photocatalytic property of p-n junction YMnO<sub>3</sub>/SrTiO<sub>3</sub> composites  
Cao, Zhengheng; Wang, Caiqin; Chen, Jun  
MATERIALS RESEARCH EXPRESS Volume: 5 Issue: 11 Article Number: 115512 Published: NOV 2018
22. Effect of rare earth ions on structural and optical properties of specific perovskite orthochromates; RCrO<sub>3</sub> (R = La, Nd, Eu, Gd, Dy, and Y)  
Singh, Kapil Dev; Pandit, Rabia; Kumar, Ravi  
SOLID STATE SCIENCES Volume: 85 Pages: 70-75 Published: NOV 2018
21. Pressure induced anomalous magnetic behaviour in nanocrystalline YCrO<sub>3</sub> at room temperature  
Jana, Rajesh; Pareek, Vivek; Khatua, Pradip; et al.  
JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 30 Issue: 33 Article Number: 335401 Published: AUG 22 2018
20. Two types of B-site ordered structures of the double perovskite Y<sub>2</sub>CrMnO<sub>6</sub>: experimental identification and first-principles study  
Wang, Weipeng; Liu, Fuyang; Zhang, Xuejing; et al.  
INORGANIC CHEMISTRY FRONTIERS Volume: 5 Issue: 1 Pages: 217-224 Published: JAN 2018
19. High pressure studies on nanocrystalline YCrO<sub>3</sub>  
Jana, Rajesh; Chandra, Amreesh; Mukherjee, Goutam Dev  
AIP Conference Proceedings Volume: 1953 Article Number: 030081 Published: 2018
18. Singh, Karan; Sharma, Mohit K.; Mukherjee, K.  
Spin-phonon coupling and exchange interaction in Gd substituted YFe<sub>0.5</sub>Cr<sub>0.5</sub>O<sub>3</sub>  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 447 Pages: 26-31 Published: FEB 1 2018
17. Tailoring the bandgap and magnetic properties by bismuth substitution in neodymium chromite  
Mannepalli, Venkateswara Rao; Mohan, M. M. Saj; Ranjith, R.  
BULLETIN OF MATERIALS SCIENCE Volume: 40 Issue: 7 Pages: 1503-1511 Published: DEC 2017
16. Polarized Raman scattering on single crystals of rare earth orthochromite RCrO<sub>3</sub> (R=La, Pr, Nd, and Sm)  
Camara, Nimbo Robert; Vinh Ta Phuoc; Monot-Laffez, Isabelle; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 12 Pages: 1839-1851 Published: DEC 2017
15. Magnetic and magnetocaloric properties of HoCrO<sub>3</sub> tuned by selective rare-earth doping  
Yin, Shiqi; Seehra, Mohindar S.; Guild, Curtis J.; et al.  
PHYSICAL REVIEW B Volume: 95 Issue: 18 Article Number: 184421 Published: MAY 18 2017
14. Lazarevic, Zorica Z.; Jovalekic, Cedomir; Gilic, Martina; et al.

- Yttrium Orthoferrite Powder Obtained by the Mechanochemical Synthesis  
SCIENCE OF SINTERING Volume: 49 Issue: 3 Pages: 277-284 Published: JUL-SEP 2017
13. Mannepalli, Venkateswara Rao; Raghunathan, Rajamani; Ramadurai, Ranjith; et al.  
Local structural distortion and interrelated phonon mode studies in yttrium chromite  
JOURNAL OF MATERIALS RESEARCH Volume: 32 Issue: 8 Pages: 1541-1547 Published: APR 2017
12. Shao, Tao; Qi, Zeming; Wang, Yuyin; et al.  
Metal-insulator transition in epitaxial NdNiO<sub>3</sub> thin film: A structural, electrical and optical study  
APPLIED SURFACE SCIENCE Volume: 399 Pages: 346-350 Published: MAR 31 2017
11. Mannepalli, Venkateswara Rao; Ramadurai, Ranjith  
Studies on Local Structural Inhomogeneity and Origin of Ferroelectricity in Yttrium chromite Ceramics  
MRS ADVANCES Volume: 1 Issue: 9 Pages: 609-614 Published: 2016
10. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation of PrFeO<sub>3</sub> nanoparticles  
SOLID STATE SCIENCES Volume: 58 Pages: 55-63 DOI: 10.1016/j.solidstatesciences.2016.05.013 Published: AUG 2016
9. Mall, A.K., Garg, A., Gupta, R.  
High Temperature X-ray Diffraction, Raman Spectroscopy and Dielectric Studies on Yttrium Orthochromites  
INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND APPLIED PHYSICS (ICC 2015) Book Series: AIP Conference Proceedings Volume: 1728 Article Number: 020239 DOI: 10.1063/1.4946290 Published: 2016
8. Gupta, Preeti; Poddar, Pankaj  
Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO<sub>3</sub> nanoplatelets  
RSC ADVANCES Volume: 5 Issue: 14 Pages: 10094-10101 Published: 2015
7. Sharma, Yogesh; Sahoo, Satyaprakash; Perez, William; et al.  
Phonons and magnetic excitation correlations in weak ferromagnetic YCrO<sub>3</sub>  
JOURNAL OF APPLIED PHYSICS 115 (18), Art. No. 183907 MAY 14 2014
6. Staruch, M.; Jain, M.  
Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk TbMn<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>  
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (4), Art. No. 046005 JAN 29 2014
5. Saha, S., Chanda, S., Dutta, A., Sinha, T.P.  
Dielectric relaxation and phonon modes of NdCrO<sub>3</sub> nanostructure  
Journal of Sol-Gel Science and Technology Volume 69, Issue 3, March 2014, Pages 553-563
4. Mall, A. K.; Mukherjee, S.; Sharma, Y.; et al.  
Temperature Dependent Raman Scattering in YCrO<sub>3</sub>  
AIP Conference Proceedings 1591, pp. 1753-1754 2014
3. Singh, Inderjeet; Nigam, A. K.; Landfester, Katharina; et al.  
Anomalous magnetic behavior below 10 K in YCrO<sub>3</sub> nanoparticles obtained under droplet confinement  
APPLIED PHYSICS LETTERS 103 (18) OCT 28 2013
2. Tiwari, B., Surendra, M.K., Ramachandra Rao, M.S.  
HoCrO<sub>3</sub> and YCrO<sub>3</sub>: A comparative study  
Journal of Physics Condensed Matter 25 (21), art. no. 216004, 2013
1. Weber, M.C., Kreisel, J., Thomas, P.A., Newton, M., Sardar, K., Walton, R.I.  
Phonon Raman scattering of RCrO<sub>3</sub> perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  
Physical Review B - Condensed Matter and Materials Physics 85 (5), art. no. 054303, 2012.
76. “Infrared response of  $\alpha$ - and  $\beta$ -phases of LiFe<sub>5</sub>O<sub>8</sub>”  
V. G. Ivanov, A. P. Litvinchuk, N. D. Todorov, M. V. Abrashev, and V. Marinova  
Physical Review B **84**, 094111 (2011) (5 pages)
3. Wang, T.-H., Wang, W.-X., Chang, H.-C.  
Article pressure-dependent clustering in ionic-liquid-poly (Vinylidene fluoride) mixtures: An infrared spectroscopic study  
Nanomaterials 11(8),2099 (2021)
2. Electrical relaxation, optical and magnetic studies of nanocrystalline lithium ferrite synthesized by different chemical routes  
Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
MATERIALS RESEARCH EXPRESS Volume: 4 Issue: 12 Article Number: 125008 Published: DEC 2017
1. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014

77. “*Electrochromic and Optical Study of Atmospheric Pressure Chemical Vapour Deposition MoO<sub>3</sub>–Cr<sub>2</sub>O<sub>3</sub> Films*”

T. Ivanova, K. A. Gesheva, M. Kozlov, and M. Abrashev

Journal of Nanoscience and Nanotechnology **11**(9), 8017–8023 (2011) (7 pages)

2. Corro, G., Cruz-Mérida, J., Montalvo, D., Pal, U.

Performance of Pt/Cr<sub>2</sub>O<sub>3</sub>, Pt/ZrO<sub>2</sub>, and, Pt/γ-Al<sub>2</sub>O<sub>3</sub> Catalysts in Total Oxidation of Methane: Effect of Metal–Support Interaction  
Industrial and Engineering Chemistry Research 60(51), pp. 18841–18852 (2021)

1. Gomes, Adriano S. O.; Yaghini, Negin; Martinelli, Anna; et al.

A micro-Raman spectroscopic study of Cr(OH)(3) and Cr<sub>2</sub>O<sub>3</sub> nanoparticles obtained by the hydrothermal method  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 48 Issue: 10 Pages: 1256–1263 Published: OCT 2017

78. “*Frequency dependence of the quasi-soft Raman-active modes in rotationally distorted R<sub>3</sub>+B<sub>3</sub>+O<sub>3</sub> perovskites (R<sub>3</sub>+—rare earth, B<sub>3</sub>+ D Al, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Ga)*”

N. D. Todorov, M. V. Abrashev and V. G. Ivanov

J. Phys.: Condens. Matter **24**, 175404 (2012) (8 pages)

31. Chahal, J., Shukla, R., Srinivasu, K., (...), Roy, A., Grover, V.

Cationic substitution engineering in GdInO<sub>3</sub> at A-site: Insights into phase evolution and search for compositionally tailored relaxors  
Materials Chemistry and Physics 317,129182 (2024)

30. Massa, N.E., Del Campo, L., Ta Phuoc, V., Kayser, P., Alonso, J.A.

Low-temperature terahertz spectroscopy of LaFeO<sub>3</sub>, PrFeO<sub>3</sub>, ErFeO<sub>3</sub>, and LuFeO<sub>3</sub>: Quasimagnon resonances and ground-state multiplet transitions  
Physical Review B 108(11),115116 (2023)

29. Tao, J., Zheng, X., Xu, J., (...), Cao, S., Gao, T.

Pressure induced isostructural phase transition with volume expansion in DyFeO<sub>3</sub> orthoferrite  
Applied Physics Letters 122(11),111601 (2023)

28. Bhat, M.A., Rana, P., Mir, F.A., (...), ullah, F., Rather, M.H.

Growth, characterization and DNA sensing properties of PrFe<sub>0.6</sub>Ni<sub>0.4</sub>O<sub>3</sub> thin film  
Journal of Materials Science: Materials in Electronics 34(9),814 (2023)

27. Rodrigues, J.E., Rosa, A.D., López-Sánchez, J., (...), Alonso, J.A., Mathon, O.

EXAFS evidence for the spin-phonon coupling in the monoclinic PrNiO<sub>3</sub> nickelate perovskite  
Journal of Materials Chemistry C 11(2), pp. 462–471 (2022)

26. Tarasova, N., Galisheva, A., Animitsa, I., Korona, D., Davletbaev, K.

Novel proton-conducting layered perovskite based on BaLaInO<sub>4</sub> with two different cations in B-sublattice: Synthesis, hydration, ionic (O<sup>2-</sup>, H<sup>+</sup>) conductivity  
International Journal of Hydrogen Energy 47(44), pp. 18972–18982 (2022)

25. Pakalniškis, A., Skaudžius, R., Zhaludkevich, D.V., (...), Karpinsky, D.V., Kareiva, A.

Pressure induced phase transitions in Sm-doped BiFeO<sub>3</sub> in the morphotropic phase boundary  
Materials Chemistry and Physics 277,125458 (2022)

24. Vignesh, D., Rout, E.

Analysis of symmetry variation as a function of rare earth dopant concentration in proton conducting solid oxide fuel cells  
Materials Today: Proceedings 66, pp. 3416–3421 (2022)

23. Leelashree, S., Kaul, S.N., Srinath, S.

Effect of progressive substitution of Lu by Ho on the structural and dielectric properties of nanocrystalline LuFeO<sub>3</sub> orthoferrite  
Materials Research Bulletin 145,111570 (2022)

22. Bhadram, V.S., Sen, A., Sunil, J., (...), Sundaresan, A., Narayana, C.

Pressure-driven evolution of structural distortions in RCrO<sub>3</sub> perovskites: The curious case of LaCrO<sub>3</sub>  
Solid State Sciences 119,106708 (2021)

21. Fowlie, J., Mundet, B., Toulouse, C., (...), Kreisel, J., Triscone, J.-M.

Crossover between distinct symmetries in solid solutions of rare earth nickelates  
APL Materials 9(8),081119 (2021)

20. Ghanem, R., Nouira, W., Gassoumi, M., (...), Ventura, J., Khirouni, K.

Effect of Ti doping on the structural, morphological and magnetic properties of La<sub>0.7</sub>Ga<sub>0.3</sub>Fe<sub>1-x</sub>Ti<sub>x</sub>O<sub>3</sub>  
Results in Physics 26,104342 (2021)

19. Spectroscopic and transport properties of Ba- and Ti-doped BaLaInO<sub>4</sub>

Tarasova, N.; Galisheva, A.; Animitsa, I

JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 5 Pages: 980–987 Published: MAY 2021

18. Effect of doping on the local structure of new block-layered proton conductors based on BaLaInO<sub>4</sub>

- Tarasova, N.; Animitsa, I.; Galisheva, A.  
 JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 11 Pages: 2290-2297 Published: NOV 2020
17. Modified Benign approach for probing the structural, optical and antibacterial activity of Sm<sup>3+</sup>-doped Bi<sup>3+</sup>-co-doped LaAlO<sub>3</sub> nanoparticles  
 Pratibha, S.; Dhananjaya, N.; Begum, J. P. Shabaaz; et al.  
 EUROPEAN PHYSICAL JOURNAL PLUS Volume: 135 Issue: 8 Article Number: 651 Published: AUG 12 2020
16. Temperature and pressure manipulation of magnetic ordering and phonon dynamics with phase transition in multiferroic GdFeO<sub>3</sub>: Evidence from Raman scattering  
 Ye, Yan; Cui, Anyang; Bian, Mengyun; et al.  
 PHYSICAL REVIEW B Volume: 102 Issue: 2 Article Number: 024103 Published: JUL 7 2020
15. Magnetic phase transition and multiferroic phase separation in Ho<sub>1-x</sub>Gd<sub>x</sub>MnO<sub>3</sub>  
 Zhang, N.; Wang, Y. P.; Li, X.; et al.  
 CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 8325-8332 Part: A Published: MAY 2019
14. First-principles study of elastic, dielectric, and vibrational properties of orthoferrites RFeO<sub>3</sub> (R = Ho, Er, Tm and Lu)  
 Wang, Zhao-Qi; Mu, Yi; Zeng, Zhao-Yi; et al.  
 MATERIALS RESEARCH EXPRESS Volume: 6 Issue: 5 Article Number: 055605 Published: MAY 2019
13. Crossover in the pressure evolution of elementary distortions in RFeO<sub>3</sub> perovskites and its impact on their phase transition  
 Vilarinho, R.; Bouvier, P.; Guennou, M.; et al.  
 PHYSICAL REVIEW B Volume: 99 Issue: 6 Article Number: 064109 Published: FEB 25 2019
12. Suppression of the cooperative Jahn-Teller distortion and its effect on the Raman octahedra-rotation modes of TbMn<sub>1-x</sub>FexO<sub>3</sub>  
 Vilarinho, R.; Passos, D. J.; Queiros, E. C.; et al.  
 PHYSICAL REVIEW B Volume: 97 Issue: 14 Article Number: 144110 Published: APR 19 2018
11. Crystal structure and magnetic properties of Ti-doped Bi<sub>0.84</sub>La<sub>0.16</sub>FeO<sub>3</sub> at morphotropic phase boundary  
 Tho, P. T.; Clements, E. M.; Kim, D. H.; et al.  
 JOURNAL OF ALLOYS AND COMPOUNDS Volume: 741 Pages: 59-64 Published: APR 15 2018
10. Blanck, Dimitri; Schon, Anke; Mamede, Anne-Sophie; et al.  
 In situ Raman spectroscopy evidence of an accessible phase potentially involved in the enhanced activity of La -deficient lanthanum orthoferrite in 3-way catalysis (TWC)  
 CATALYSIS TODAY Volume: 283 Pages: 151-157 Published: APR 1 2017
9. Weber, Mads Christof; Guennou, Mael; Zhao, Hong Jian; et al.  
 Raman spectroscopy of rare-earth orthoferrites RFeO<sub>3</sub> (R=La, Sm, Eu, Gd, Tb, Dy)  
 PHYSICAL REVIEW B Volume: 94 Issue: 21 Article Number: 214103 Published: DEC 7 2016
8. Wang, H (Wang, Heng); Li, GS (Li, Guangshe); Li, LP (Li, Liping)  
 Influence of Mn-substitution on the structure and low-temperature electrical conduction properties of PrCoO<sub>3</sub>  
 CERAMICS INTERNATIONAL Volume: 42 Issue: 10 Pages: 12283-12288 DOI: 10.1016/j.ceramint.2016.04.175 Published: AUG 1 2016
7. Weber, M.C., Guennou, M., Dix, N., Pesquera, D., Sánchez, F., Herranz, G., Fontcuberta, J., López-Conesa, L., Estradé, S., Peiró, F., Iñiguez, J., Kreisel, J.  
 Multiple strain-induced phase transitions in LaNiO<sub>3</sub> thin films  
 PHYSICAL REVIEW B Volume: 94 Issue: 1 Article Number: 014118 DOI: 10.1103/PhysRevB.94.014118 Published: JUL 29 2016
6. Paul, B., Chatterjee, S., Gop, S., Roy, A., Grover, V., Shukla, R., Tyagi, A.K.  
 Evolution of lattice dynamics in ferroelectric hexagonal REInO<sub>3</sub> (RE = Ho, Dy, Tb, Gd, Eu, Sm) perovskites  
 MATERIALS RESEARCH EXPRESS Volume: 3 Issue: 7 Article Number: UNSP 075703 DOI: 10.1088/2053-1591/3/7/075703  
 Published: JUL 2016
5. Remya, G.R., Solomon, S., Thomas, J.K., John, A.  
 Optical and dielectric properties of nano GdAlO<sub>3</sub>  
 MATERIALS TODAY-PROCEEDINGS Volume: 2 Issue: 3 Pages: 1012-1016 DOI: 10.1016/j.matpr.2015.06.027 Published: 2015
4. Mota, D. A.; Almeida, A.; Rodrigues, V. H.; et al.  
 Dynamic and structural properties of orthorhombic rare-earth manganites under high pressure  
 PHYSICAL REVIEW B Volume: 90 Issue: 5 Article Number: 054104 Published: AUG 8 2014
3. Atuchin, Victor; Zhu, Lei; Lee, Soo Hyun; et al.  
 Microwave-Assisted Solvothermal Synthesis of Sr<sub>3</sub>V<sub>2</sub>O<sub>8</sub> Nanoparticles and Their Spectroscopic Properties  
 ASIAN JOURNAL OF CHEMISTRY 26 (5), pp. 1290-1292 Part: A MAR 2014
2. Lim, C.S., Atuchin, V.V.  
 Preparation and characterization of Sr<sub>3</sub>V<sub>2</sub>O<sub>8</sub> nanoparticles via cyclic MAS route  
 Proceedings of SPIE - The International Society for Optical Engineering Volume 8771, Article number 877112, 2013
1. Bielecki, J., Svedlindh, P., Tibebe, D.T., Cai, S., Eriksson, S.-G., Börjesson, L., Knee, C.S.  
 Structural and magnetic properties of isovalently substituted multiferroic BiFeO<sub>3</sub>: Insights from Raman spectroscopy  
 Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

79. “*Relationship between structural properties and activity in complete benzene oxidation over Au/CeO<sub>2</sub>-CoO<sub>x</sub> catalysts*”

L. Ilieva, P. Petrova, T. Tabakova, R. Zanella, M.V. Abrashev, J.W. Sobczak, W. Lisowski, Z. Kaszukur, and D. Andreeva

Catalysis Today **187**, 30– 38 (2012) (9 pages)

12. Gaálová, J., Topka, P.

Gold and ceria as catalysts for VOC abatement: A review  
Catalysts 11(7),789 (2021)

11. Carabineiro, S.A.C.

FACTS, UNIQUE PROPERTIES AND USES OF GOLD IN OXIDATION REACTIONS ( Book Chapter)  
Gold Nanoparticles: Advances in Research and Applications pp. 87-234 (2019)

10. Electric Field Promoted Complete Oxidation of Benzene over Pd<sub>Ce</sub>Cu Catalysts at Low Temperature

Shen, Feixiang; Li, Ke; Xu, Dejun; et al.

CATALYSTS Volume: 9 Issue: 12 Article Number: 1071 Published: DEC 2019

9. Mono- and bimetallic nano-Re systems doped Os, Mo, Ru, Ir as nanocatalytic platforms for the acetalization of polyalcohols into cyclic acetals and their applications as fuel additives

Kapkowski, M., Popiel, J., Siudyga, T., (...), Zubko, M., Polanski, J.

Applied Catalysis B: Environmental 239, pp. 154-167 (2018)

8. Manzoli, M; Vindigni, F; (...); Agostini, G

Structure-reactivity relationship in Co<sub>3</sub>O<sub>4</sub> promoted Au/CeO<sub>2</sub> catalysts for the CH<sub>3</sub>OH oxidation reaction revealed by in situ FTIR and operando EXAFS studies

Journal of Materials Chemistry A 5 (5) , pp.2083-2094 Feb 7 2017

7. Wang, Wei-Jia; Wang, Yan; Xu, Qian; et al

Interaction of cobalt with ceria thin films and its influence on supported Au nanoparticles

CHINESE CHEMICAL LETTERS Volume: 28 Issue: 8 Pages: 1760-1766 Published: AUG 2017

6. Nevanperä, T.K., Ojala, S., Bion, N., Epron, F., Keiski, R.L.

Catalytic oxidation of dimethyl disulfide (CH<sub>3</sub>SSCH<sub>3</sub>) over monometallic Au, Pt and Cu catalysts supported on gamma-Al<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub> and CeO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>

APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 182 Pages: 611-625 DOI: 10.1016/j.apcatb.2015.10.012 Published: MAR 2016

5. Wen, Meicheng; Takakura, Shuhei; Fuku, Kojirou; et al.

Enhancement of Pd-catalyzed Suzuki-Miyaura coupling reaction assisted by localized surface plasmon resonance of Au nanorods

CATALYSIS TODAY Volume: 242 Pages: 381-385 Part: B Published: MAR 15 2015

4. Wang, Yu; Chen, Bing-bing; Crocker, Mark; et al.

Understanding on the origins of hydroxyapatite stabilized gold nanoparticles as high-efficiency catalysts for formaldehyde and benzene oxidation

CATALYSIS COMMUNICATIONS Volume: 59 Pages: 195-200 Published: JAN 10 2015

3. Ralphs, K., Hardacre, C., James, S.L.

Application of heterogeneous catalysts prepared by mechanochemical synthesis

Chemical Society Reviews 42 (18), pp. 7701-7718, 2013

2. Arab, M., Lopes-Moriyama, A.L., Dos Santos, T.R., De Souza, C.P., Gavarri, J.R., Leroux, C.

Strontium and cerium tungstate materials SrWO<sub>4</sub> and Ce<sub>2</sub>(WO<sub>4</sub>)<sub>3</sub>: Methane oxidation and mixed conduction

Catalysis Today 208, pp. 35-41, 2013

1. Huang, J., Xue, C., Wang, B., Guo, X., Wang, S.

Gold-supported tin dioxide nanocatalysts for low temperature CO oxidation: Preparation, characterization and DRIFTS study

Reaction Kinetics, Mechanisms and Catalysis 108 (2), pp. 403-416, 2013

80. “*Raman spectroscopy and lattice-dynamical calculations of Sc<sub>3</sub>CrO<sub>6</sub> single crystals*”

N. D. Todorov, M. V. Abrashev, S. C. Russev, V. Marinova, R. P. Nikolova, and B. L. Shivachev

Physical Review B **85**, 214301 (2012) (7 pages)

3. Kesari, S., Rao, R., Balakrishnan, G.

Polarized Raman spectroscopic study and investigation of phonon modes of Co<sub>3</sub>(VO<sub>4</sub>)<sub>2</sub> at variable thermodynamic conditions

Solid State Sciences 149,107449 (2024)

2. Varma, M., Krottenmüller, M., Poswal, H.K., Kuntscher, C.A.

Pressure-Induced Structural Phase Transitions in the Chromium Spinel LiInCr<sub>4</sub>O<sub>8</sub> with Breathing Pyrochlore Lattice

Crystals 13(2),170 (2023)

1. Symmetries of modes in Ni<sub>3</sub>V<sub>2</sub>O<sub>8</sub>: Polarized Raman spectroscopy and ab initio phonon calculations

Kesari, Swayam; Rao, Rekha; Gupta, Mayanak K.; et al.

81. “*Study of electrochromic APCVD WO<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> films*”

G. Bodurov, T. Ivanova, M. Abrashev, and K. Gesheva

Journal of Physics: Conference Series **398** (2012) 012016 (6 pages)

4. Lu, Y.-R., Hsu, H.-H., Chen, J.-L., Chang, H.-W., Chen, C.-L., Chou, W.-C., Dong, C.-L.  
Atomic and electronic aspects of the coloration mechanism of gasochromic Pt/Mo-modified V<sub>2</sub>O<sub>5</sub> smart films: an in situ X-ray spectroscopic study  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 18 Issue: 7 Pages: 5203-5210 DOI: 10.1039/c5cp06870c Published: FEB 21 2016

3. Drosos, C., Vernardou, D.  
Perspectives of energy materials grown by APCVD  
Solar Energy Materials and Solar Cells Volume 140, September 2015, Article number 7655, Pages 1-8

2. Lin, Y. -S.; Tsai, T. -H.; Lu, W. -H.; et al.  
Lithium electrochromic properties of atmospheric pressure plasma jet-synthesized tungsten/molybdenum-mixed oxide films for flexible electrochromic device  
IONICS 20 (8), 1163-1174 AUG 2014

1. Mane, Anil U.; Elam, Jeffrey W.  
Atomic Layer Deposition of W:Al<sub>2</sub>O<sub>3</sub> Nanocomposite Films with Tunable Resistivity  
CHEMICAL VAPOR DEPOSITION Volume: 19, Issue: 4-6, Special Issue: SI, Pages: 186-193, 2013

82. “*Raman spectroscopy and lattice dynamical calculations of Sc<sub>2</sub>O<sub>3</sub> single crystals*”

N. D. Todorov, M. V. Abrashev, V. Marinova, M. Kadiyski, L. Dimowa, and E. Faulques

Physical Review B **87**, 104301 (2013) (5 pages)

31. Ereemeev, K., Loiko, P., Balabanov, S., (...), Camy, P., Braud, A.  
Spectroscopy of thulium ions in solid-solution sesquioxide laser ceramics: Inhomogeneous spectral line broadening, crystal-field engineering and C3i sites  
Optical Materials 148,114791 (2024)

30. Bernauer, J., Trapp, M., Wiehl, L., Kleebe, H.-J., Ionescu, E.  
Room-Temperature Synthesis of a Compositionally Complex Rare-Earth Carbonate Hydroxide and its Conversion into a Bixbyite-Type High-Entropy Sesquioxide  
European Journal of Inorganic Chemistry 27(3),e202300330 (2024)

29. Balabanov, S., Loiko, P., Basyrova, L., (...), Braud, A., Camy, P.  
Mid-infrared laser operation of (Er<sub>0.07</sub>La<sub>0.10</sub>Y<sub>0.83</sub>)<sub>2</sub>O<sub>3</sub> sesquioxide ceramic  
Laser Physics Letters 20(4),045801 (2023)

28. Maksimov, R., Shitov, V., Osipov, V., (...), Loiko, P., Camy, P.  
Fabrication, microstructure and mid-infrared luminescence of Er:(Sc<sub>x</sub>Y<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> transparent ceramics  
Optical Materials 137,113542 (2023)

27. Chou, S.-C., Zitzer, S., Russ, P.L., Schleid, T.  
Synthesis and crystal structure of two scandium oxotellurates(IV): Sc<sub>2</sub>Te<sub>3</sub>O<sub>9</sub> and Sc<sub>2</sub>Te<sub>4</sub>O<sub>11</sub>  
Zeitschrift für Naturforschung - Section B Journal of Chemical Sciences 77(11-12), pp. 797-808 (2022)

26. Candela, M.T., Aguado, F., Diego-Rucabado, A., González, J.A., Valiente, R.  
Non-resonant energy transfer from Eu<sup>3+</sup> to Yb<sup>3+</sup> in C-type and B-type (Eu<sub>1-x</sub>Yb<sub>x</sub>)<sub>2</sub>O<sub>3</sub> nanocrystals  
Journal of Alloys and Compounds 921,166043 (2022)

25. Bai, Y., Zhao, H., Xu, X., Zhang, J., Wang, S.  
Structure and Luminescence Properties of Ho:(Y<sub>1-x</sub>Sc<sub>x</sub>)<sub>2</sub>O<sub>3</sub> Ceramics  
Advanced Engineering Materials 24(11),2200289 (2022)

24. Ereemeev, K., Loiko, P., Braud, A., (...), Wang, L., Chen, W.  
Spectroscopy of solid-solution transparent sesquioxide laser ceramic Tm:LuYO<sub>3</sub>  
Optical Materials Express 12(9), pp. 3749-3762 (2022)

23. Polychronopoulou, K., Alkhoodri, S., Albedwawi, S., (...), Vega, L.F., Baker, M.A.  
Decoupling the Chemical and Mechanical Strain Effect on Steering the CO<sub>2</sub> Activation over CeO<sub>2</sub>-Based Oxides: An Experimental and DFT Approach  
ACS Applied Materials and Interfaces 14(29), pp. 33094-33119 (2022)

22. Rout, P.C., Sarangi, K.  
A systematic study on extraction and separation of scandium using phosphinic acid by both solvent extraction and hollow fibre membrane  
Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy 131(2), pp. 166-176 (2022)

21. Yadav, D., Bura, N., Bhoriya, A., Singh, J., Sharma, N.D.

- Estimation of anharmonic parameters of nano-crystalline Sc<sub>2</sub>O<sub>3</sub> and Nd<sub>2</sub>O<sub>3</sub>  
2021 *Materials Today Communications* 29,102759 (2021)
20. Loiko, P., Basyrova, L., Maksimov, R., (...), Mateos, X., Camy, P.  
Comparative study of Ho:Y<sub>2</sub>O<sub>3</sub> and Ho:Y<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> transparent ceramics produced from laser-ablated nanoparticles  
*Journal of Luminescence* 240,118460 (2021)
19. Balabanov, S., Permin, D., Evstropov, T., (...), Mateos, X., Loiko, P.  
Hot pressing of Yb:Y<sub>2</sub>O<sub>3</sub> laser ceramics with LiF sintering aid  
*Optical Materials* 119,111349 (2021)
18. Chen, S., Xie, Y., Feng, H., Guo, H.  
Band structures of RE<sub>2</sub>O<sub>3</sub>:Eu (RE = Lu, Y, Sc) from perspective of spin-polarized quasi-particle approximation  
*Modelling and Simulation in Materials Science and Engineering* 29(6),065002 (2021)
17. Spectroscopy and laser operation of highly-doped 10 at.% Yb:(Lu,Sc)<sub>2</sub>O<sub>3</sub> ceramics  
Jing, W., Loiko, P., Basyrova, L., (...), Díaz, F., Mateos, X.  
*Optical Materials* 117,111128 (2021)
16. Comparative study of Yb:Lu<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> and Yb:Lu<sub>2</sub>O<sub>3</sub> laser ceramics produced from laser-ablated nanopowders  
Basyrova, L., Loiko, P., Maksimov, R., (...), Díaz, F., Mateos, X.  
*Ceramics International* 47(5), pp. 6633-6642 (2021)
15. A systematic study on extraction and separation of scandium using phosphinic acid by both solvent extraction and hollow fibre membrane  
Rout, P. C.; Sarangi, K.  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY-TRANSACTIONS OF THE INSTITUTIONS OF MINING AND METALLURGY Early Access: MAR 2021
14. Unraveling microstrain-promoted structural evolution and thermally driven phase transition in c-Sc<sub>2</sub>O<sub>3</sub> nanocrystals at high pressure  
Zou, Yongtao; Li, Mu; Zhang, Wei; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214115 Published: DEC 31 2020
13. Exploring the surface-to-volume ratio in ultrasmall nanocrystals using the optical probe of Eu<sup>3+</sup> ion  
Fu, Huhui; Feng, Rui; Jiang, Feilong; et al.  
CHEMICAL COMMUNICATIONS Volume: 56 Issue: 93 Pages: 14725-14728 Published: DEC 4 2020
12. Optical properties and charge transport of textured Sc<sub>2</sub>O<sub>3</sub> thin films obtained by atomic layer deposition  
Lebedev, M. S.; Kruchinin, V. N.; Afonin, M. Yu.; et al.  
APPLIED SURFACE SCIENCE Volume: 478 Pages: 690-698 Published: JUN 1 2019
11. Lattice dynamics study of cubic Tb<sub>2</sub>O<sub>3</sub>  
Ibanez, Jordi; Blazquez, Oriol; Hernandez, Sergi; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 12 Pages: 2021-2027 Published: DEC 2018
10. Pressure induced structural phase transition in rare earth sesquioxide Tm<sub>2</sub>O<sub>3</sub>: Experiment and ab initio calculations  
Irshad, K. A.; Anees, P.; Sahoo, Shradhanjali; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 15 Article Number: 155901 Published: OCT 21 2018
9. Density functional study of the phase stability and Raman spectra of Yb<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>SiO<sub>5</sub> and Yb<sub>2</sub>Si<sub>2</sub>O<sub>7</sub> under pressure  
Ogawa, Takafumi; Otani, Noriko; Yokoi, Taishi; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 24 Pages: 16518-16527 Published: JUN 28 2018
8. Co-solubility of aluminium and scandium oxides in molten sodium cryolite  
Rudenko, A.V., Kataev, A.A., Zakiryanova, I.D., Tkacheva, O.  
*Tsvetnye Metally* (11), pp. 22-26 (2017)
7. Structure and vibrational spectra of thin films Y<sub>2</sub>O<sub>3</sub>:Eu  
Bordun, O.M., Bordun, I.O., Kukharsky, I.J., (...), Tsapovska, Z.I., Leonov, D.S.  
*Nanosistemi, Nanomateriali, Nanotehnologii* 15(1), pp. 27-36 (2017)
6. Jing, Wei; Loiko, Pavel; Serres, Josep Maria; et al.  
Synthesis, spectroscopy, and efficient laser operation of "mixed" sesquioxide Tm:(Lu, Sc)<sub>2</sub>O<sub>3</sub> transparent ceramics  
OPTICAL MATERIALS EXPRESS Volume: 7 Issue: 11 Pages: 4192-4202 Published: NOV 1 2017
5. Greiner, Stefan; Chou, Sheng-Chun; Schleid, Thomas  
Two anionically derivatized scandium oxoselenates(TV): ScF[SeO<sub>3</sub>] and Sc<sub>2</sub>O<sub>2</sub>[SeO<sub>3</sub>]  
JOURNAL OF SOLID STATE CHEMISTRY Volume: 246 Pages: 160-166 Published: FEB 2017
4. Irshad, KA (Irshad, K. A.); Shekar, NVC (Shekar, Chandra N. V.); Ravindran, TR (Ravindran, T. R.); Srihari, V (Srihari, V.); Pandey, KK (Pandey, K. K.)  
X-ray diffraction and Raman studies on Ho: Eu<sub>2</sub>O<sub>3</sub>  
JOURNAL OF MOLECULAR STRUCTURE Volume: 1128 Pages: 325-329 DOI: 10.1016/j.molstruc.2016.08.077 Published: JAN 15 2017

3. Fernández-González, R., Velázquez, J.J., Rodríguez, V.D., Rivera-López, F., Lukowiak, A., Chiasera, A., Ferrari, M., Gonçalves, R.R., Marrero-Jerez, J., Lahoz, F., Núñez, P.

Luminescence and structural analysis of Ce<sup>3+</sup> and Er<sup>3+</sup> doped and Ce<sup>3+</sup>-Er<sup>3+</sup> codoped Ca<sub>3</sub>Sc<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> garnets: influence of the doping concentration in the energy transfer processes

RSC ADVANCES Volume: 6 Issue: 18 Pages: 15054-15061 DOI: 10.1039/c5ra22630a Published: 2016

2. Ovsyannikov, SV, Bykova, E, Bykov, M, Wenz, MD, Pakhomova, AS, Glazyrin, K, Liermann, HP, Dubrovinsky, L  
Structural and vibrational properties of single crystals of Scandia, Sc<sub>2</sub>O<sub>3</sub> under high pressure

JOURNAL OF APPLIED PHYSICS Volume: 118 Issue: 16 Article Number: 165901 DOI: 10.1063/1.4933391 Published: OCT 28 2015

1. Velazquez, J. J.; Fernandez-Gonzalez, R.; Marrero-Jerez, J.; et al.

Structural and luminescence study of Ce<sup>3+</sup> and Tb<sup>3+</sup> doped Ca<sub>3</sub>Sc<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> garnets obtained by freeze-drying synthesis method

OPTICAL MATERIALS Volume: 46 Pages: 109-114 Published: AUG 2015

### 83. “Biogenic iron oxides produced by neutrophilic iron-oxidizing bacteria under laboratory conditions”

Ralitz Angelova, Lyubomir Slavov, Mihail Iliev, Blagoi Blagoev, Daniela Kovacheva, Miroslav Abrashev, Ivan Nedkov, and Veneta Groudeva

Current Opinion in Biotechnology **24**, Suppl. 1, S108–S109 (2013)

1. Shopska, M, Paneva, D, Kadinov, G, Todorova, S, Fabian, M, Yordanova, I, Cherkezova-Zheleva, Z, Mitov, I

Composition and catalytic behavior in CO oxidation of biogenic iron-containing materials

REACTION KINETICS MECHANISMS AND CATALYSIS Volume: 118 Issue: 1 Pages: 179-198 DOI: 10.1007/s11144-016-0989-6  
Published: JUN 2016

### 84. “Thin film optical coatings of Vanadium Oxide and mixed Tungsten/Vanadium Oxide deposited by APCVD employing precursors of Vanadyl Acetylacetonate and a mixture with tungsten hexacarbonyl”

Georgi Bodurov, Tatyana Ivanova, Miroslav Abrashev, Zoya Nenova, and Kostadinka Gesheva

Physics Procedia **46**, 127 – 136 (2013)

9. Zolfi, F, Ghobadifard, M, Mohebbi, S

High proficiency Ag/β-Ag<sub>2</sub>WO<sub>4</sub>/V<sub>3</sub>O<sub>4</sub>/g-C<sub>3</sub>N<sub>4</sub> heterojunction photocatalyst for the actuation of C(OH)-H bond

New Journal of Chemistry DOI: 10.1039/d4nj00395k APR 2024

8. Dogan, E., Altundag, S., Altin, E., Oz, E., Altin, S.

P2-type Na<sub>0.67</sub>Mn<sub>0.5-x</sub>V<sub>x</sub>Fe<sub>0.43</sub>Ti<sub>0.07</sub>O<sub>2</sub> powders for Na-ion cathodes: Ex-situ structural analysis and full-cell study

Electrochimica Acta 473,143470 (2024)

7. Dogan, E., Altundag, S., Altin, S., (...), Balci, E., Altin, E.

Production of V-Doped P2-type Na<sub>0.67</sub>Mn<sub>0.5</sub>Fe<sub>0.43</sub>Ai<sub>0.07</sub>O<sub>2</sub> Cathodes and Investigation of Na-Ion Full Cells Performance

Energy Technology 12(1),2300837 (2024)

6. Figueroa-Torres, M.Z., Ruiz-Gómez, M.A., González-López, J.R., (...), Cruz-López, A., Mendoza-Jiménez, J.A.

Characterization of VO<sub>2</sub> thin films deposited by simple and sustainable spray technique

MRS Advances 8(24), pp. 1413-1418 (2023)

5. Ishikawa, T., Niidome, K.

Easy control of surface morphology through a natural phenomenon

International Journal of Applied Ceramic Technology 20(3), pp. 1432-1441 (2023)

4. Room-temperature application of VO<sub>2</sub> microstructures on rigid and flexible substrates based on synthesis of crystalline VO<sub>2</sub> solution

Taha, Mohammad; Mayes, Edwin L. H.; Field, Matthew R.; et al.

MATERIALS ADVANCES Volume: 1 Issue: 6 Pages: 1685-1694 Published: SEP 1 2020

3. Crystal Structure, Surface Topography, Surface Morphology and Optical Properties of DC Magnetron Sputtered VO<sub>2</sub> Thin Films using VO<sub>2</sub> Target

Muslim, N., Md Idris, M.N.S., Soon, Y.W., (...), Lim, C.M., Voo, N.Y.

IOP Conference Series: Materials Science and Engineering 409(1),012025 (2018)

2. Graf, David; Schlaefler, Johannes; Garbe, Simon; et al.

Interdependence of Structure, Morphology, and Phase Transitions in CVD Grown VO<sub>2</sub> and V<sub>2</sub>O<sub>3</sub> Nanostructures

CHEMISTRY OF MATERIALS Volume: 29 Issue: 14 Pages: 5877-5885 Published: JUL 25 2017

1. Vernardou, D., Louloudakis, D., Spanakis, E., Katsarakis, N., Koudoumas, E.

Amorphous thermochromic VO<sub>2</sub> coatings grown by APCVD at low temperatures

Advanced Materials Letters Volume 6, Issue 7, 2015, Pages 660-663

### 85. “Phonon and magnon Raman scattering in CuB<sub>2</sub>O<sub>4</sub>”

V. G. Ivanov, M. V. Abrashev, N. D. Todorov, V. Tomov, R. P. Nikolova, A. P. Litvinchuk, and M. N. Iliev

Physical Review B **88**, 094301 (2013) (8 pages)



10. Pisarev, R.V., Dubrovin, R.M.  
Phonons, Magnons, and Excitons in the Noncentrosymmetric Magnetoelectric Antiferromagnet CuB<sub>2</sub>O<sub>4</sub>  
Journal of Experimental and Theoretical Physics 137(4), pp. 582-602 (2023)
9. Sahoo, S., Malavi, P., Karmakar, S.  
High-pressure structural transition and magnetic phase diagram of CuB<sub>2</sub>O<sub>4</sub>  
Physical Review B 107(9),094411 (2023)
8. Moshkina, E., Krylov, A., Kokh, D., (...), Rostovtsev, N., Bezmaternykh, L.  
Multicomponent flux growth and composition control of Cu<sub>2</sub>MnBO<sub>5</sub>:Ga ludwigites  
CrystEngComm (Article in Press ) DOI: 10.1039/d2ce00258b (2022)
7. Spectroscopic Signature of Spin-Charge-Lattice Coupling in CuB<sub>2</sub>O<sub>4</sub>  
Mero, Rea Divina; Lai, Chun-Hao; Du, Chao-Hung; et al.  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 125 Issue: 7 Pages: 4322-4329 Published: FEB 25 2021
6. Vapor Deposition of Magnetic Van der Waals NiI<sub>2</sub> Crystals  
Liu, Haining; Wang, Xinsheng; Wu, Juanxia; et al.  
ACS NANO Volume: 14 Issue: 8 Pages: 10544-10551 Published: AUG 25 2020
5. Exciton and exciton-magnon photoluminescence in the antiferromagnet CuB<sub>2</sub>O<sub>4</sub>  
Kudlacik, D.; Ivanov, V. Yu; Yakovlev, D. R.; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 3 Article Number: 035128 Published: JUL 16 2020
4. Symmetries of modes in Ni<sub>3</sub>V<sub>2</sub>O<sub>8</sub>: Polarized Raman spectroscopy and ab initio phonon calculations  
Kesari, Swayam; Rao, Rekha; Gupta, Mayanak K.; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 50 Issue: 4 Pages: 587-594 Published: APR 2019
3. Excitation of multiple phonon modes in copper metaborate CuB<sub>2</sub>O<sub>4</sub> via nonresonant impulsive stimulated Raman scattering  
Imasaka, Kotaro; Pisarev, Roman, V; Bezmaternykh, Leonard N.; et al.  
PHYSICAL REVIEW B Volume: 98 Issue: 5 Article Number: 054303 Published: AUG 7 2018
2. Femtosecond activation of magnetoelectricity  
Bossini, D.; Konishi, K.; Toyoda, S.; et al.  
NATURE PHYSICS Volume: 14 Issue: 4 Pages: 370 -+ Published: APR 2018
1. Molchanova, A. D.; Prosnikov, M. A.; Dubrovin, R. M.; et al.  
Lattice dynamics and electronic transitions in a structurally complex layered copper borate Cu-3(BO<sub>3</sub>)<sub>2</sub>  
PHYSICAL REVIEW B Volume: 96 Issue: 17 Article Number: 174305 Published: NOV 27 2017
86. *“Microwave plasma based single step method for free standing graphene synthesis at atmospheric conditions”*  
E. Tatarova, J. Henriques, C. C. Luhrs, A. Dias, J. Phillips, M. V. Abrashev, and C. M. Ferreira  
Applied Physics Letters **103**, 134101 (2013)
55. López-Cámara, C.-F., Fortugno, P., Heidelmann, M., Wiggers, H., Schulz, C.  
Graphene self-folding: Evolution of free-standing few-layer graphene in plasma synthesis  
Carbon 218,118732 (2024)
54. López-Cámara, C.-F., Fortugno, P., Asif, M., (...), Daun, K.J., Schulz, C.  
Evolution of particle size and morphology in plasma synthesis of few-layer graphene and soot  
Combustion and Flame 258,112713 (2023)
53. Zafar, M.A., Liu, Y., Hernandez, F.C.R., Varghese, O.K., Jacob, M.V.  
Plasma-Based Synthesis of Freestanding Graphene from a Natural Resource for Sensing Application  
Advanced Materials Interfaces 10(11),2202399 (2023)
52. Musikhin, S., Fortugno, P., Endres, T., (...), Daun, K.J., Schulz, C.  
Elemental carbon and hydrogen concentrations as the main factors in gas-phase graphene synthesis: Quantitative fourier-transform infrared spectroscopy study  
Carbon 202, pp. 47-60 (2023)
51. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)
50. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
Reviews of Modern Plasma Physics 6(1),37 (2022)
49. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.

A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
Journal of Energy Chemistry 74, pp. 252-282 (2022)

48. Rahman, S.U., Ahmed, W., Rehman, N.U., Alkhedher, M., Tag El Din, E.M.  
Fabrication of Graphene Sheets Using an Atmospheric Pressure Thermal Plasma Jet System  
Energies 15(19),7245 (2022)
47. Zhang, W., Wei, X., Chen, L., (...), Liu, C., Shan, J.  
Axial uniformity diagnosis of coaxial surface wave linear plasma by optical emission spectroscopy  
Plasma Science and Technology 24(2),025403 (2022)
46. Bárdoš, L., Baránková, H.  
Microwave Plasma Sources and Methods in Processing Technology ( Book)  
Microwave Plasma Sources and Methods in Processing Technology pp. 1-195 (2022)
45. Fortugno, P., Musikhin, S., Shi, X., (...), Wiggers, H., Schulz, C.  
Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen  
Carbon 186, pp. 560-573 (2022)
44. Kumar, SHBV; Ibaceta-Jana, J; (...); Muydinov, R  
Applicability of Atmospheric Pressure Plasma Jet (APPJ) Discharge for the Reduction in Graphene Oxide Films and Synthesis of Carbon Nanomaterials  
C-Journal of Carbon Research 7 (4) 71 Dec 2021
43. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
42. Leon, G., Martin, J.W., Bringley, E.J., Akroyd, J., Kraft, M.  
Carbon 182, pp. 203-213 (2021)  
The role of oxygenated species in the growth of graphene, fullerenes and carbonaceous particles
41. Toman, J., Jašek, O., Šnirer, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)
40. Ma, J., Chen, X., Song, M., Wang, C., Xia, W.  
Study on formation mechanism of three types of carbon nanoparticles during ethylene pyrolysis in thermal plasmas  
Diamond and Related Materials 117,108445 (2021)
39. Rincón, R., Muñoz, J., Morales-Calero, F.J., Orejas, J., Calzada, M.D.  
Assessment of two atmospheric-pressure microwave plasma sources for H<sub>2</sub> production from ethanol decomposition  
Applied Energy 294,116948 (2021)
38. Sun, Y., Zhang, J.  
Strategies for scalable gas-phase preparation of free-standing graphene  
CCS Chemistry 3(4), pp. 1058-1077 (2021)
37. Kudrle, V., Snirer, M., Toman, J., (...), Jašek, O., Krčma, F.  
Simulation and diagnostics of plasmachemical processes during microwave plasma synthesis of graphene nanosheets from ethanol  
NANOCON Conference Proceedings - International Conference on Nanomaterials 2021-October, pp. 57-62 (2021)
36. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
Casanova, A.; Rincon, R.; Munoz, J.; et al.  
FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
35. Pressure-dependent synthesis of graphene nanoflakes using Ar/H-2/CH4 non-thermal plasma based on rotating arc discharge  
Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.  
DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108176 Published: JAN 2021
34. Electron concentration in the non-luminous part of the atmospheric pressure filamentary discharge  
Faltynek, J.; Kudrle, V.; Snirer, M.; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 30 Issue: 1 Article Number: 015001 Published: JAN 2021
33. Synthesis of carbon nanoparticles in a non-thermal plasma process  
Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.  
CHEMICAL ENGINEERING SCIENCE Volume: 227 Article Number: 115921 Published: DEC 14 2020
32. Large-scale Growth of Quasifreestanding Graphene by using a Single-step Process  
Khadka, Ishwor Bahadur; Park, Ji-Hoon; Kim, Eun Hye; et al.  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 77 Issue: 9 Pages: 768-772 Published: NOV 2020
31. Effects of hydrogen/carbon molar ratio on graphene nano-flakes synthesis by a non-thermal plasma process  
Lu, Zhongshan; Li, Dongning; Wang, Cheng; et al.

- DIAMOND AND RELATED MATERIALS Volume: 108 Article Number: 107932 Published: OCT 2020
30. Computational study of plasma-induced flow instabilities in power modulated atmospheric-pressure microwave plasma jet  
Kubecka, M.; Snirer, M.; Obrusnik, A.; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 7 Article Number: 075001 Published: JUL 2020
29. Continuous preparation and formation mechanism of few-layer graphene by gliding arc plasma  
Zhong, Ruirong; Hong, Ruoyu  
CHEMICAL ENGINEERING JOURNAL Volume: 387 Article Number: 124102 Published: MAY 1 2020
28. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure  
Marinov, S.; Vachkov, V.; Kiss'ovski, Zh  
Journal of Physics Conference Series Volume: 1492 Article Number: 012032 Published: 2020
27. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 126 Issue: 3 Published: FEB 19 2020
26. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
NANOMATERIALS Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020
25. A 3D numerical analysis on magnetic field enhanced microwave linear plasma  
Zhang, Wenjin; Chen, Longwei; Jiang, Yiman; et al.  
AIP ADVANCES Volume: 10 Issue: 1 Article Number: 015220 Published: JAN 2020
24. Determination of electron density in microwave plasma torch by microwave interferometry  
Faltýnek, J., Kudrle, V., Šnirer, M., Toman, J., Jašek, O.  
46th EPS Conference on Plasma Physics, EPS 2019 (2019)
23. State-of-the-art advancements in studies and applications of graphene: a comprehensive review  
Walimbe, Pratik; Chaudhari, Mangesh  
MATERIALS TODAY SUSTAINABILITY Volume: 6 Article Number: 100026 Published: DEC 2019
22. Continuous synthesis of graphene nano-flakes by a magnetically rotating arc at atmospheric pressure  
Wang, Cheng; Sun, Lu; Dai, Xiaoyu; et al.  
CARBON Volume: 148 Pages: 394-402 Published: JUL 2019
21. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
20. Effect of hydrogen concentration on graphene synthesis using microwave-driven plasma-mediated methane cracking  
Singh, Madhu; Sengupta, Arupnanda; Zeller, Kurt; et al.  
CARBON Volume: 143 Pages: 802-813 Published: MAR 2019
19. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
18. Formation of carbon nanostructures by the plasma jets: Synthesis, characterization, application  
Shavelkina, M., Amirov, R., Bilera, I.  
Materials Today: Proceedings 5(12), pp. 25956-25961 (2018)
17. Surface-wave-sustained argon plasma kinetics from intermediate to atmospheric pressure  
Benova, Evgenia; Marinova, Plamena; Atanasova, Mariana; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 47 Article Number: 474004 Published: NOV 28 2018
16. Review of Graphene Growth From a Solid Carbon Source by Pulsed Laser Deposition (PLD)  
Bleu, Yannick; Bourquard, Florent; Tite, Teddy; et al.  
FRONTIERS IN CHEMISTRY Volume: 6 Article Number: 572 Published: NOV 21 2018
15. Graphene synthesized as by-product of gas purification in long-term space missions and its lithium-ion battery application  
Nie, Yao; Kacica, Clayton; Meyer, Marit E.; et al.  
ADVANCES IN SPACE RESEARCH Volume: 62 Issue: 5 Pages: 1015-1024 Published: SEP 1 2018
14. Synthesis of Hydrogenated Graphene during Acetylene Conversion in Helium Plasma Jet  
Shavelkina, M. B.; Amirov, R. Kh.; Shatalova, T. B.  
HIGH ENERGY CHEMISTRY Volume: 52 Issue: 4 Pages: 343-347 Published: JUL 2018
13. Plasma Synthesis of Graphene from Mango Peel  
Shah, Javishk; Lopez-Mercado, Janneth; Carreon, M. Guadalupe; et al.  
ACS OMEGA Volume: 3 Issue: 1 Pages: 455-463 Published: JAN 2018
12. Melero, C.; Rincon, R.; Munoz, J.; et al.

Scalable graphene production from ethanol decomposition by microwave argon plasma torch  
PLASMA PHYSICS AND CONTROLLED FUSION Volume: 60 Issue: 1 Article Number: 014009 Published: JAN 2018

11. Toman, Jozef; Jasek, Ondrej; Jurmanova, Jana  
THE INFLUENCE OF GAS ADMIXTURES ON THE SYNTHESIS OF GRAPHENE NANOSHEETS IN ARGON MICROWAVE  
PLASMA TORCH DISCHARGE  
8TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2016) Pages: 122-126 Published: 2017

10. Jo, E.H., Chang, H., Kim, S.K., Choi, J.-H., Park, S.-R., Lee, C.M., Jang, H.D.  
One-Step Synthesis of Pt/Graphene Composites from Pt Acid Dissolved Ethanol via Microwave Plasma Spray Pyrolysis  
SCIENTIFIC REPORTS Volume: 6 Article Number: 33236 DOI: 10.1038/srep33236 Published: SEP 13 2016

9. Andriotis, V.M.E., Rejzek, M., Barclay, E., Rugen, M.D., Field, R.A., Smith, A.M.  
Cell wall degradation is required for normal starch mobilisation in barley endosperm  
Scientific Reports 6, 33215 DOI: 10.1038/srep33215 (2016)

8. Dimitrov, Zh., Nikovski, M., Kiss'Ovski, Zh.  
Deposition of carbon nanostructures on metal substrates at atmospheric pressure  
Journal of Physics: Conference Series 700(1), 12045 DOI: 10.1088/1742-6596/700/1/012045 (2016)

7. Rincón, R., Marinas, A., Muñoz, J., Melero, C., Calzada, M.D.  
Experimental research on ethanol-chemistry decomposition routes in a microwave plasma torch for hydrogen production  
CHEMICAL ENGINEERING JOURNAL Volume: 284 Pages: 1117-1126 DOI: 10.1016/j.cej.2015.09.062 Published: JAN 15 2016

6. Chen, Chuan-Jie; Li, Shou-Zhe  
Spectroscopic measurement of plasma gas temperature of the atmospheric-pressure microwave induced nitrogen plasma torch  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 24 Issue: 3 Article Number: 035017 Published: MAY 2015

5. Rincon, R.; Melero, C.; Jimenez, M.; et al.  
Synthesis of multi-layer graphene and multi-wall carbon nanotubes from direct decomposition of ethanol by microwave plasma without using metal catalysts  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 24 Issue: 3 Article Number: 032005 Published: MAY 2015

4. Salavagione, Horacio J.  
Covalent Graphene-Polymer Nanocomposites  
GRAPHENE MATERIALS: FUNDAMENTALS AND EMERGING APPLICATIONS Book Series: Advanced Materials Series Pages: 101-149 Published: 2015

3. Paukner, C., Juda, K., Clayton, A., (...), Joaug, J., Koziol, K.  
Large scale production of few layer graphene from novel plasma reactor system  
Technical Proceedings of the 2014 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2014 Volume 1, 2014, Pages 45-48

2. Kumar, Indrajeet; Khare, Alike  
Multi- and few-layer graphene on insulating substrate via pulsed laser deposition technique  
APPLIED SURFACE SCIENCE Volume: 317 Pages: 1004-1009 Published: OCT 30 2014

1. Salavagione, Horacio J.  
Promising alternative routes for graphene production and functionalization  
JOURNAL OF MATERIALS CHEMISTRY A 2 (20), pp. 7138-7146 2014

### 87. "Lattice dynamics and spin-phonon coupling in CaMn<sub>2</sub>O<sub>4</sub>: A Raman study"

V. G. Ivanov, V. G. Hadjiev, A. P. Litvinchuk, D. Z. Dimitrov, B. L. Shivachev, M. V. Abrashev, B. Lorenz, and M. N. Iliev

Physical Review B **89**, 184307 (2014)

5. Tiyyagura, P., Mamidipalli, N.R., Suresh Babu, K.  
Multiple Dielectric Relaxations in CaMn<sub>2</sub>O<sub>4</sub> Polycrystalline Compound  
ECS Journal of Solid State Science and Technology 12(2), 023007 (2023)

4. Chukanov, NV and Vigasina, MF  
Vibrational (Infrared and Raman) Spectra of Minerals and Related Compounds  
VIBRATIONAL (INFRARED AND RAMAN) SPECTRA OF MINERALS AND RELATED COMPOUNDS , pp.1-1376 DOI: 10.1007/978-3-030-26803-9 (2020)

3. Electric transport properties of rare earth doped YbxCa<sub>1-x</sub>MnO<sub>3</sub> ceramics (part I: Optimization of ceramic processing)  
Rahmani, Meimanat; Pithan, Christian; Waser, Rainer  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 39 Issue: 4 Pages: 1245-1250 Published: APR 2019

2. Singh, Karan; Sharma, Mohit K.; Mukherjee, K.  
Spin-phonon coupling and exchange interaction in Gd substituted YFe<sub>0.5</sub>Cr<sub>0.5</sub>O  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 447 Pages: 26-31 Published: FEB 1 2018

1. Galuskin, E.V., Krüger, B., Krüger, H., Blass, G., Widmer, R., Galuskina, I.O.

88. “*Raman study of phonons in CaMn7O12: Effects of structural modulation and structural transition*”

M. N. Iliev, V. G. Hadjiev, M. M. Gospodinov, R. P. Nikolova, and M. V. Abrashev  
Physical Review B **89**, 214302 (2014)

11. Bhadram, V.S., Joseph, B., Delmonte, D., (...), Lobo, R.P., Gauzzi, A.  
Pressure-induced structural phase transition and suppression of Jahn-Teller distortion in the quadruple perovskite structure  
Physical Review Materials 5(10),104411 (2021)
10. Changes in spin and lattice dynamics induced by magnetic and structural phase transitions in multiferroic SrMn7O12  
Kamba, Stanislav; Goian, Veronica; Kadlec, Filip; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 18 Article Number: 184108 Published: MAY 20 2019
9. Magnetic transitions in CaMn7O12: Raman observation of spin-phonon couplings  
Toulouse, C.; Martin, C.; Measson, M-A; et al.  
PHYSICAL REVIEW B Volume: 99 Issue: 2 Article Number: 024303 Published: JAN 7 2019
8. Helical magnetism in Sr-doped CaMn7O12 films  
Huon, Amanda; Vibhakar, Anuradha M.; Grutter, Alexander J.; et al.  
PHYSICAL REVIEW B Volume: 98 Issue: 22 Article Number: 224419 Published: DEC 19 2018
7. Impact of Co-doping on the structural and magnetic properties of multiferroic CaMn7O12  
Nonato, A.; Yanez-Vilar, S.; Sanchez-Andujar, M.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 740 Pages: 559-566 Published: APR 5 2018
6. Souliou, S. M.; Li, Y.; Du, X.; et al.  
Soft-phonon-driven orbital order in CaMn7O12  
PHYSICAL REVIEW B Volume: 94 Issue: 18 Article Number: 184309 Published: NOV 22 2016
5. Zhang, H.-G., Ma, X.-C., Xie, L.  
The structural and magnetic properties of Sr-doped multiferroic CaMn7O12  
INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 29 Issue: 30 Article Number: 1550221 DOI:  
10.1142/S0217979215502215 Published: DEC 10 2015
4. Glazkova, Y.S., Terada, N., Matsushita, Y., Katsuya, Y., Tanaka, M., Sobolev, A.V., Presniakov, I.A., Belik, A.A.  
High-Pressure Synthesis, Crystal Structures, and Properties of CdMn7O12 and SrMn7O12 Perovskites  
INORGANIC CHEMISTRY Volume: 54 Issue: 18 Pages: 9081-9091 DOI: 10.1021/acs.inorgchem.5b01472 Published: SEP 21 2015
3. Yuan, Renliang; Duan, Lian; Du, Xinyu; et al.  
Identification and mechanical control of ferroelastic domain structure in rhombohedral CaMn7O12  
PHYSICAL REVIEW B Volume: 91 Issue: 5 Article Number: 054102 Published: FEB 3 2015
2. Nonato, A.; Araujo, B. S.; Ayala, A. P.; et al.  
Spin-phonon and magnetostriction phenomena in CaMn7O12 helimagnet probed by Raman spectroscopy  
APPLIED PHYSICS LETTERS Volume: 105 Issue: 22 Article Number: 222902 Published: DEC 1 2014
1. Du, Xinyu; Yuan, Renliang; Duan, Lian; et al.  
Soft vibrational mode associated with incommensurate orbital order in multiferroic CaMn7O12  
PHYSICAL REVIEW B 90(10), Art. No. 104414 SEP 17 2014
89. “*Microwave plasmas applied for the synthesis of free standing graphene sheets*”  
E Tatarova, A Dias, J Henriques, A M Botelho do Rego, A M Ferraria, M V Abrashev, C C Luhrs, J Phillips, F M Dias and C M Ferreira  
J. Phys. D: Appl. Phys. **47**, 385501 (2014) (11pp)
72. Hu, H., Chen, X., Wang, C., Xia, W.  
Experimental study of graphene synthesis by different gas-doped plasma  
Fullerenes Nanotubes and Carbon Nanostructures 32(4), pp. 346-356 (2024)
71. Shavelkina, M.B., Ivanov, P.P.  
Synthesis of thermally stable carbon nanostructures via ethanol pyrolysis in DC plasma jets  
Journal of Physics and Chemistry of Solids 181,111555 (2023)
70. Balqis, N., Mohamed Jan, B., Simon Cornelis Metselaar, H., (...), Kenanakis, G., Ikram, R.  
An Overview of Recycling Wastes into Graphene Derivatives Using Microwave Synthesis; Trends and Prospects  
Materials 16(10),3726 (2023)
69. Shavelkina, M.B., Kavyrshin, D.I., Amirov, R.Kh., (...), Dzagnidze, G.M., Ivanov, A.I.  
DC erosion jets for the production of composite graphene particles

- Physics of Plasmas 30(2),023507 (2023)
68. Musikhin, S., Fortugno, P., Endres, T., (...), Daun, K.J., Schulz, C.  
Elemental carbon and hydrogen concentrations as the main factors in gas-phase graphene synthesis: Quantitative fourier-transform infrared spectroscopy study  
Carbon 202, pp. 47-60 (2023)
67. Edward, K., Mamun, K., Narayan, S., (...), Rohindra, D., Rathnayake, U.  
State-of-the-Art Graphene Synthesis Methods and Environmental Concerns  
Applied and Environmental Soil Science 2023,8475504 (2023)
66. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)
65. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
Reviews of Modern Plasma Physics 6(1),37 (2022)
64. Rahman, S.U., Ahmed, W., Rehman, N.U., Alkhedher, M., Tag El Din, E.M.  
Fabrication of Graphene Sheets Using an Atmospheric Pressure Thermal Plasma Jet System  
Energies 15(19),7245 (2022)
63. Chen, C., Kong, W., Fang, Z., (...), Zhou, F., Wang, R.  
Numerical Modelling of Surface-Wave Plasma Discharges at Atmospheric Pressure by Electromagnetic Model  
Dianzi Keji Daxue Xuebao/Journal of the University of Electronic Science and Technology of China 51(2), pp. 305-313 (2022)
62. Breus, A., Abashin, S., Lukashov, I., Serdiuk, O., Baranov, O.  
Catalytic Growth of Carbon Nanostructures in Glow Discharge  
Lecture Notes in Mechanical Engineering] pp. 375-383 (2022)
61. Fortugno, P., Musikhin, S., Shi, X., (...), Wiggers, H., Schulz, C.  
Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen  
Carbon 186, pp. 560-573 (2022)
60. Kulyk, B., Freitas, M.A., Santos, N.F., (...), Tedim, J., Costa, F.M.  
A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings  
Critical Reviews in Solid State and Materials Sciences 47(3), pp. 309-355 (2022)
59. Jašek, O., Toman, J., Šnirer, M., (...), Všianský, D., Pavlinák, D.  
Microwave plasma-based high temperature dehydrogenation of hydrocarbons and alcohols as a single route to highly efficient gas phase synthesis of freestanding graphene  
Nanotechnology 32(50),505608 (2021)
58. Owji, E., Mokhtari, H., Ostovari, F., Darazereshki, B., Shakiba, N.  
2D materials coated on etched optical fibers as humidity sensor  
Scientific Reports 11(1),1771 (2021)
57. Shavelkina, M.B., Ivanov, P.P., Amirov, R.K., (...), Drachev, A.I., Shavelkin, M.A.  
Plasma Pyrolysis of Ethanol for the Production of Carbon Nanostructures  
High Energy Chemistry 55(6), pp. 531-536 (2021)
56. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
55. Leon, G., Martin, J.W., Bringley, E.J., Akroyd, J., Kraft, M.  
The role of oxygenated species in the growth of graphene, fullerenes and carbonaceous  
Carbon 182, pp. 203-213 (2021)
54. Toman, J., Jašek, O., Šnirer, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)
53. Ma, J., Chen, X., Song, M., Wang, C., Xia, W.  
Study on formation mechanism of three types of carbon nanoparticles during ethylene pyrolysis in thermal plasmas  
Diamond and Related Materials 117,108445 (2021)
52. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
Journal of Applied Physics 129(21),213304 (2021)
51. Snirer, M., Kudrle, V., Toman, J., Jašek, O., Jurmanová, J.  
Structure of microwave plasma-torch discharge during graphene synthesis from ethanol

50. Sun, Y., Zhang, J.  
Strategies for scalable gas-phase preparation of free-standing graphene  
CCS Chemistry 3(4), pp. 1058-1077 (2021)
49. Kudrle, V., Snirer, M., Toman, J., (...), Jašek, O., Krčma, F.  
Simulation and diagnostics of plasmachemical processes during microwave plasma synthesis of graphene nanosheets from ethanol  
NANOCON Conference Proceedings - International Conference on Nanomaterials 2021-October, pp. 57-62 (2021)
48. 2D materials coated on etched optical fibers as humidity sensor  
Owji, E., Mokhtari, H., Ostovari, F., Darazereshki, B., Shakiba, N.  
Scientific Reports 11(1), 1771 (2021)
47. Controlled high temperature stability of microwave plasma synthesized graphene nanosheets  
Jasek, Ondrej; Toman, Jozef; Vsiansky, Dalibor; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 16 Article Number: 165201 Published: APR 22 2021
46. Super heating/cooling rate enabled by microwave shock on polymeric graphene foam for high performance Lithium-Sulfur batteries  
Liu, Yiyang; Zhang, Yan; Liu, Yang; et al.  
CARBON Volume: 173 Pages: 809-816 Published: MAR 2021
45. A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings  
Kulyk, Bohdan; Freitas, Maria A.; Santos, Nuno F.; et al.  
CRITICAL REVIEWS IN SOLID STATE AND MATERIALS SCIENCES Early Access: FEB 2021
44. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
Casanova, A.; Rincon, R.; Munoz, J.; et al.  
FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
43. Pressure-dependent synthesis of graphene nanoflakes using Ar/H-2/CH4 non-thermal plasma based on rotating arc discharge  
Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.  
DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108176 Published: JAN 2021
42. Synthesis of carbon nanoparticles in a non-thermal plasma process  
Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.  
CHEMICAL ENGINEERING SCIENCE Volume: 227 Article Number: 115921 Published: DEC 14 2020
41. Effects of hydrogen/carbon molar ratio on graphene nano-flakes synthesis by a non-thermal plasma process  
Lu, Zhongshan; Li, Dongning; Wang, Cheng; et al.  
DIAMOND AND RELATED MATERIALS Volume: 108 Article Number: 107932 Published: OCT 2020
40. Optical emission spectroscopy of non-equilibrium microwave plasma torch sustained by focused radiation of gyrotron at 24 GHz  
Sintsov, Sergey; Tabata, Kuniyoshi; Mansfeld, Dmitry; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 30 Article Number: 305203 Published: JUL 22 2020
39. Graphene based polymer electrolyte membranes for electro-chemical energy applications  
Gahlot, Swati; Kulshrestha, Vaibhav  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 45 Issue: 34 Special Issue: SI Pages: 17029-17056  
Published: JUL 3 2020
38. Non-equilibrium Atmospheric-Pressure Plasma Torch Sustained in a Quasi-optical Beam of Subterahertz Radiation  
Sintsov, S. V.; Vodopyanov, A. V.; Viktorov, M. E.; et al.  
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES Volume: 41 Issue: 6 Pages: 711-727 Published: JUN 2020
37. Spectroscopic Study of a Helium Plasma Jet with Hydrocarbon Additives  
Shavelkina, M. B.; Amirov, R. Kh.; Kavyrshin, D. I.; et al.  
HIGH TEMPERATURE Volume: 58 Issue: 3 Pages: 309-316 Published: MAY 2020
36. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
DIAMOND AND RELATED MATERIALS Volume: 105 Article Number: 107798 Published: MAY 2020
35. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 126 Issue: 3 Published: FEB 19 2020
34. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
NANOMATERIALS Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020
33. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure  
Marinov, S.; Vachkov, V.; Kiss'ovski, Zh  
Journal of Physics Conference Series Volume: 1492 Article Number: 012032 Published: 2020

32. A 3D numerical analysis on magnetic field enhanced microwave linear plasma  
Zhang, Wenjin; Chen, Longwei; Jiang, Yiman; et al.  
AIP ADVANCES Volume: 10 Issue: 1 Article Number: 015220 Published: JAN 2020
31. 1D modeling of the equilibrium plasma flow in the scope of direct current plasma torch assisted graphene synthesis  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 49 Article Number: 495202 Published: DEC 4 2019
30. Plasma Jet-Assisted Synthesis of Graphene Using a DC Plasma Torch  
Shavelkina, M. B.; Amirov, R. Kh.; Kavyrshin, D., I.; et al.  
PLASMA PHYSICS REPORTS Volume: 45 Issue: 11 Pages: 1080-1086 Published: NOV 2019
29. Co and CeO<sub>2</sub> co-decorated N-doping carbon nanofibers for rechargeable Zn-air batteries  
Zhang, Zhengmei; Gao, Daqian; Xue, Desheng; et al.  
NANOTECHNOLOGY Volume: 30 Issue: 39 Article Number: 395401 Published: SEP 27 2019
28. Experimental characteristics of 2.45 GHz microwave reconfigurable plasma antennas  
Zhao, Jiansen; Sun, Zhen; Ren, Yuxiang; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 29 Article Number: 295202 Published: JUL 17 2019
27. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
26. Durability study of platinum nanoparticles supported on gas-phase synthesized graphene in oxygen reduction reaction conditions  
Bertin, Erwan; Muenzer, Adrian; Reichenberger, Sven; et al.  
APPLIED SURFACE SCIENCE Volume: 467 Pages: 1181-1186 Published: FEB 15 2019
25. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
24. A synergistic effect of Co and CeO<sub>2</sub> in nitrogen-doped carbon nanostructure for the enhanced oxygen electrode activity and stability  
Sivanantham, Arumugam; Ganesan, Pandian; Shanmugam, Sangaraju  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 237 Pages: 1148-1159 Published: DEC 5 2018
23. "Snowing" Graphene using Microwave Ovens  
Sun, Yangyong; Yang, Liangwei; Xia, Kailun; et al.  
ADVANCED MATERIALS Volume: 30 Issue: 40 Article Number: 1803189 Published: OCT 4 2018
22. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh.; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
21. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh.; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
20. Continuous Synthesis of Hydrogenated Graphene in Thermal Plasma  
Shavelkina, M. B.; Amirov, R. Kh.; Alikhanov, N. R.; et al.  
JOURNAL OF STRUCTURAL CHEMISTRY Volume: 59 Issue: 4 Pages: 773-779 Published: JUL 2018
19. All gas-phase synthesis of graphene: Characterization and its utilization for silicon-based lithium-ion batteries  
Muenzer, Adrian; Xiao, Lisong; Sehlleier, Yee Hwa; et al.  
ELECTROCHIMICA ACTA Volume: 272 Pages: 52-59 Published: MAY 10 2018
18. One-step synthesis of TiC/multilayer graphene composite by thermal plasma  
Kim, Dong-Wook; Heo, Un Seon; Kim, Kyo-Seon; et al.  
CURRENT APPLIED PHYSICS Volume: 18 Issue: 5 Pages: 551-558 Published: MAY 2018
17. High electrocatalytic activity of metal-free and non-doped hierarchical carbon nanowalls towards oxygen reduction reaction  
Lehmann, Karsten; Yurchenko, Olena; Melke, Julia; et al.  
ELECTROCHIMICA ACTA Volume: 269 Pages: 657-667 Published: APR 10 2018
16. ELECTROCHEMICAL PROPERTIES OF GRAPHENE NANOSHEETS SYNTHESISED IN MICROWAVE PLASMA TORCH DISCHARGE  
Toman, Jozef; Jasek, Ondrej; Prasek, Jan; et al.  
9TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2017) Pages: 88-93 Published: 2018
15. Investigations of novel high power atmospheric pressure microwave plasma source designed for gas processing  
Miotk, Robert; Jasinski, Mariusz; Mizeraczyk, Jerzy  
PRZEGLAD ELEKTROTECHNICZNY Volume: 94 Issue: 7 Pages: 98-101 Published: 2018
14. Thermal Growth of Graphene: A Review



- Tan, Hai; Wang, Deguo; Guo, Yanbao  
 COATINGS Volume: 8 Issue: 1 Article Number: 40 Published: JAN 2018
13. Melero, C.; Rincon, R.; Munoz, J.; et al.  
 Scalable graphene production from ethanol decomposition by microwave argon plasma torch  
 PLASMA PHYSICS AND CONTROLLED FUSION Volume: 60 Issue: 1 Article Number: 014009 Published: JAN 2018
12. Viveiros, Raquel; Dias, Francisco M.; Maia, Luisa B.; et al.  
 Green strategy to produce large core-shell affinity beads for gravity-driven API purification processes  
 JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: 54 Pages: 341-349 Published: OCT 25 2017
11. Shashurin, A.; Fang, X.; Zemlyanov, D.; et al.  
 Substrate independent approach for synthesis of graphene platelet networks  
 NANOTECHNOLOGY Volume: 28 Issue: 25 Article Number: 255604 Published: JUN 23 2017
10. Kovacevic, E.; Hussain, S.; Berndt, J.; et al.  
 Plasma Synthesis of Conductive Carbon Based Nanomaterials  
 PLASMA NANO SCIENCE AND TECHNOLOGY Book Series: ECS Transactions Volume: 77 Issue: 3 Pages: 37-39 Published: 2017
9. Park, Choon-Sang; Kim, Dong Ha; Shin, Bhum Jae; et al.  
 Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications  
 MATERIALS Volume: 9 Issue: 10 Article Number: 812 Published: OCT 2016
8. Loureiro, Jorge; Amorim, Jayr  
 Applications of Low-Temperature Plasmas  
 KINETICS AND SPECTROSCOPY OF LOW TEMPERATURE PLASMAS Book Series: Graduate Texts in Physics Pages: 413-440  
 Published: 2016
7. Park, C.-S., Kim, D.H., Shin, B.J., Kim, D.Y., Lee, H.-K., Tae, H.-S.  
 Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications  
 MATERIALS Volume: 9 Issue: 10 Article Number: 812 DOI: 10.3390/ma9100812 Published: OCT 2016
6. Rincón, R., Marinas, A., Muñoz, J., Melero, C., Calzada, M.D.  
 Experimental research on ethanol-chemistry decomposition routes in a microwave plasma torch for hydrogen production  
 CHEMICAL ENGINEERING JOURNAL Volume: 284 Pages: 1117-1126 DOI: 10.1016/j.cej.2015.09.062 Published: JAN 15 2016
5. Park, C.-S., Kim, D.H., Shin, B.J., Tae, H.-S.  
 Synthesis and Characterization of Nanofibrous Polyaniline Thin Film Prepared by Novel Atmospheric Pressure Plasma Polymerization  
 Technique  
 MATERIALS Volume: 9 Issue: 1 Article Number: 39 DOI: 10.3390/ma9010039 Published: JAN 2016
4. Campos, J.M., Ferraria, A.M., Botelho Do Rego, A.M., Ribeiro, M.R., Barros-Timmons, A.  
 Studies on PLA grafting onto graphene oxide and its effect on the ensuing composite films  
 MATERIALS CHEMISTRY AND PHYSICS Volume: 166 Pages: 122-132 DOI: 10.1016/j.matchemphys.2015.09.036 Published: SEP 15  
 2015
3. Bozduman, F, Gulec, A, Noree, S.; Durmaz, Y, Ismael, M, Oksuz, AU  
 GRAPHENE SYNTHESIS BY ATMOSPHERIC PRESSURE MICROWAVE PLASMA  
 2015 42ND IEEE INTERNATIONAL CONFERENCE ON PLASMA SCIENCES (ICOPS) Published: 2015
2. Shashurin, A.; Keidar, M.  
 Synthesis of 2D materials in arc plasmas  
 JOURNAL OF PHYSICS D-APPLIED PHYSICS 48(31) Article Number: 314007 AUG 12 2015
1. Rincon, R.; Melero, C.; Jimenez, M.; et al.  
 Synthesis of multi-layer graphene and multi-wall carbon nanotubes from direct decomposition of ethanol by microwave plasma without  
 using metal catalysts  
 PLASMA SOURCES SCIENCE & TECHNOLOGY 24 (3) Article Number: 032005 MAY 2015
90. “*Raman spectra of R2O3 (R—rare earth) sesquioxides with C-type bixbyite crystal structure: A comparative study*”  
 M. V. Abrashev, N. D. Todorov, and J. Geshev  
 Journal of Applied Physics **116**, 103508 (2014) (8pp)
114. Bernauer, J; Trapp, M; (...); Ionescu, E  
 Room-Temperature Synthesis of a Compositionally Complex Rare-Earth Carbonate Hydroxide and its Conversion into a Bixbyite-Type  
 High-Entropy Sesquioxide  
 European Journal of Inorganic Chemistry 27 (3) Jan 22 2024
113. Zhang, SJ; Xu, JW; (...); Wang, X  
 Inorganic Chemistry DOI: 10.1021/acs.inorgchem.4c00142 (Early Access) Apr 2024  
 Decoding the Reactivity Enhancement of Ln2Ce2O7 Compounds (Ln = Yb, Y, Tb, and Gd) for Soot Combustion: The Remarkable  
 Contribution of Variable Valence A-Sites

112. Kavya, J.V., Jyothi, G., Lalan, V., Gopchandran, K.G.  
Green light activated red luminescence from Y<sub>2</sub>O<sub>3</sub>: Eu<sup>3+</sup> nanophosphors  
*Chemical Physics Impact* 8,100576 (2024)
111. Kalusniak, S., Uvarova, A., Arlt, I., (...), Tanaka, H., Krankel, C.  
Growth, characterization, and efficient laser operation of Czochralski- and micro-pulling-down-grown Yb<sup>3+</sup>:YScO<sub>3</sub> mixed sesquioxides  
*Optical Materials Express* 14(2), pp. 304-318 (2024)
110. Ahmadian, H., Hessari, F.A., Arabi, A.M.  
Using different ratios of glycine to citric acid as fuel mixture in microwave-assisted combustion synthesis of Eu-doped Y<sub>2</sub>O<sub>3</sub>-Gd<sub>2</sub>O<sub>3</sub> nanophosphors  
*Journal of Materials Science: Materials in Electronics* 35(4),274 (2024)
109. Eremeev, K., Loiko, P., Balabanov, S., (...), Camy, P., Braud, A.  
Spectroscopy of thulium ions in solid-solution sesquioxide laser ceramics: Inhomogeneous spectral line broadening, crystal-field engineering and C3i sites  
*Optical Materials* 148,114791 (2024)
108. Pakalniškis, A., Niaura, G., Ramanauskas, R., (...), Skaudžius, R., Kareiva, A.  
Temperature-driven magnetic and structural transitions in multiferroic Lu<sub>(1-x)</sub>Sc<sub>x</sub>FeO<sub>3</sub>  
*Journal of Alloys and Compounds* 972,172805 (2024)
107. Wu, Z., Ji, W., Zhang, J., (...), Wang, W., Fu, Z.  
Grain-refining fabrication of nanocrystalline (La<sub>0.2</sub>Nd<sub>0.2</sub>Sm<sub>0.2</sub>Gd<sub>0.2</sub>Eu<sub>0.2</sub>)<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> high-entropy ceramics by ultra-high pressure sintering  
*Journal of Materials Science and Technology* 167, pp. 205-212 (2023)
106. Caño, A., Galiana, B., Perea, G.B., (...), Gonzalo, J., Serna, R.  
High quality optically active and integrable EuOOH films prepared by pulsed laser deposition  
*Applied Surface Science* 640,158236 (2023)
105. Candela, M.T., Aguado, F., González, J.A., Valiente, R.  
Photoluminescence and Raman study of the high-pressure behavior of monoclinic (Eu<sub>1-x</sub>Y<sub>b</sub>)<sub>2</sub>O<sub>3</sub> solid solution  
*Journal of Alloys and Compounds* 967,171621 (2023)
104. Kang, M., Xu, W., Wang, J., (...), Kong, L.B., Tang, D.  
Enhanced transmittance of Y<sub>2</sub>O<sub>3</sub> transparent ceramics from near-UV to near-infrared through reduced atmosphere annealing  
*Journal of the European Ceramic Society* 43(15), pp. 7096-7101 (2023)
103. Vermeersch, E., Košek, F., De Grave, J., (...), Vandenaabeele, P., Rousaki, A.  
Identification of tunnel structures in manganese oxide minerals using micro-Raman spectroscopy  
*Journal of Raman Spectroscopy* 54(11), pp. 1201-1212 (2023)
102. Yuan, H., Zhang, C., Lu, K., (...), Qi, J., Lu, T.  
Highly transparent polycrystalline Gd<sub>2</sub>O<sub>3</sub> ceramic attained via ZrO<sub>2</sub> stabilization effect  
*Journal of the European Ceramic Society* 43(11), pp. 4968-4975 (2023)
101. Slimak, J.E., Cote, A., Macdougall, G.J., Cooper, S.L.  
Soft-phonon anomalies and crystal electric field-phonon coupling in cubic lanthanide sesquioxides Eu<sub>2</sub>O<sub>3</sub> and Yb<sub>2</sub>O<sub>3</sub>  
*Physical Review B* 108(4),045128 (2023)
100. Pereira, A.L.J., Sans, J.A., Gomis, O., (...), Popescu, C., Manjón, F.J.  
Joint experimental and theoretical study of bulk Y<sub>2</sub>O<sub>3</sub> at high pressure  
*Results in Physics* 49,106499 (2023)
99. Jiang, S., Zhang, J., Yan, S.  
Shear stress induced phase transitions of cubic Eu<sub>2</sub>O<sub>3</sub> under non-hydrostatic pressures  
*AIP Advances* 13(5),055308 (2023)
98. Dias, J.A., Santagneli, S.H., Rodrigues, A.C.M., Bôas, N.V., Messaddeq, Y.  
Understanding the Evolution of the Structure and Electrical Properties during Crystallization of Li<sub>1.5</sub>Al<sub>0.5</sub>Ge<sub>1.5</sub>(PO<sub>4</sub>)<sub>3</sub> and Li<sub>1.5</sub>Sc<sub>0.17</sub>Al<sub>0.33</sub>Ge<sub>1.5</sub>(PO<sub>4</sub>)<sub>3</sub> NASICON - Type Glass Ceramics  
*Journal of Physical Chemistry C* 127(13), pp. 6207-6225 (2023)
97. Jegadeesan, P., Sen, S., Padmaprabu, C., (...), Das, A., Amirthapandian, S.  
Morphological and optical investigations on Gd<sub>2</sub>O<sub>3</sub> nanostructures  
*Inorganic Chemistry Communications* 150,110493 (2023)
96. Spiridigliozzi, L., Bortolotti, M., Dell'Agli, G.  
On the Effect of Standard Deviation of Cationic Radii on the Transition Temperature in Fluorite-Structured Entropy-Stabilized Oxides (F-ESO)  
*Materials* 16(6),2219 (2023)
95. Fatima, S., Munawar, T., Nadeem, M.S., (...), Koc, M., Iqbal, F.  
Boosted natural sunlight driven photodegradation of organic dyes using rGO anchored Pr/Cu dual-doped ZnO nanocomposite: Characterization and mechanistic insight

- Optical Materials 136,113397 (2023)
94. Karmakar, A., Arora, H., Nath, M., (...), Samanta, A., Bandyopadhyay, A.  
Determination of exchange integrals and effect of cationic site occupancy (8b/24d) on the structural and magnetic properties of nanocrystalline Mn-doped Gd<sub>2</sub>O<sub>3</sub>  
Journal of Alloys and Compounds 931,167475 (2023)
93. Sakamoto, D., Shiratani, M., Seo, H.  
Near-infrared light harvesting of upconverting Y<sub>2</sub>O<sub>3</sub>:Er<sup>3+</sup> nanoparticles and their photovoltaic application  
Electrochimica Acta 436,141407 (2022)
92. Dobretsova, E., Alimov, O., Guryev, D., (...), Novikov, I., Tsvetkov, V.  
Structural and Spectroscopic Features of the Bixbyite-Type Yttrium Scandate Doped by Rare-Earth Ions  
Crystals 12(12),1745 (2022)
91. Candela, M.T., Aguado, F., Diego-Rucabado, A., González, J.A., Valiente, R.  
Non-resonant energy transfer from Eu<sup>3+</sup> to Yb<sup>3+</sup> in C-type and B-type (Eu<sub>1-x</sub>Yb<sub>x</sub>)<sub>2</sub>O<sub>3</sub> nanocrystals  
Journal of Alloys and Compounds 921,166043 (2022)
90. Suzuki, A., Kalusniak, S., Tanaka, H., (...), Tokurakawa, M., Kränkel, C.  
Spectroscopy and 2.1 μm laser operation of Czochralski-grown Tm<sup>3+</sup>:YScO<sub>3</sub> crystals  
Optics Express 30(23), pp. 42762-42771 (2022)
89. Bai, Y., Zhao, H., Xu, X., Zhang, J., Wang, S.  
Structure and Luminescence Properties of Ho:(Y<sub>1-x</sub>Sc<sub>x</sub>)<sub>2</sub>O<sub>3</sub> Ceramics  
Advanced Engineering Materials 24(11),2200289 (2022)
88. Potts, S.K., Kegler, P., Modolo, G., (...), Bosbach, D., Neumeier, S.  
Structural incorporation of lanthanides (La, Eu, and Lu) into U<sub>3</sub>O<sub>8</sub> as a function of the ionic radius  
MRS Advances 7(7-8), pp. 128-133 (2022)
87. Pakalniškis, A., Alikin, D.O., Turygin, A.P., (...), Karpinsky, D.V., Kareiva, A.  
Crystal Structure and Concentration-Driven Phase Transitions in Lu(1-x)Sc<sub>x</sub>FeO<sub>3</sub> (0 ≤ x ≤ 1) Prepared by the Sol-Gel Method  
Materials 15(3),1048 (2022)
86. Martins, F.C.B., Firmino, E., Oliveira, L.S., (...), Cappa de Oliveira, L.F., Ferrari, J.L.  
Development of Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup> materials doped with variable Gd<sup>3+</sup> content and characterization of their photoluminescence properties under UV excitation  
Materials Chemistry and Physics 277,125498 (2022)
85. Polychronopoulou, K., Alkhoori, S., Albedwawi, S., (...), Vega, L.F., Baker, M.A.  
Decoupling the Chemical and Mechanical Strain Effect on Steering the CO<sub>2</sub> Activation over CeO<sub>2</sub>-Based Oxides: An Experimental and DFT Approach  
ACS Applied Materials and Interfaces 14(29), pp. 33094-33119 (2022)
84. Moncorgé, R., Guyot, Y., Kränkel, C., Lebbou, K., Yoshikawa, A.  
Mid-infrared emission properties of the Tm<sup>3+</sup>-doped sesquioxide crystals Y<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Sc<sub>2</sub>O<sub>3</sub> and mixed compounds (Y,Lu,Sc)<sub>2</sub>O<sub>3</sub> around 1.5-, 2- and 2.3-μm  
Journal of Luminescence 241,118537 (2022)
83. Rojas, D.P., Espeso, J.I., Fernández, L.R., Barquín, L.F.  
Heat capacity of nanocrystalline Yb<sub>2</sub>O<sub>3</sub>  
Ceramics International 48(1), pp. 879-886 (2022)
82. Tatiana, K., Tatiana, G., Pavel, T., (...), Alexander, I., Nikolay, L.  
Mossbauer and Raman spectroscopy study of Y-garnet particles' magnetic properties tune-up through mechanochemically synthesized precursors  
Hyperfine Interactions 242(1),57 (2021)
81. Manjón, F.J., Sans, J.Á., Rodríguez-hernández, P., Muñoz, A.  
Combined experimental and theoretical studies: Lattice-dynamical studies at high pressures with the help of ab initio calculations  
Minerals 11(11),1283 (2021)
80. Irimiciuc, S., More-Chevalier, J., Chertpalov, S., (...), Kúsová, K., Lančok, J.  
In-situ plasma monitoring by optical emission spectroscopy during pulsed laser deposition of doped Lu<sub>2</sub>O<sub>3</sub>  
Applied Physics B: Lasers and Optics 127(10),140 (2021)
79. Bura, N., Bhojriya, A., Yadav, D., Singh, J., Dilawar Sharma, N.  
Temperature-Dependent Phonon Behavior in Nanocrystalline Tm<sub>2</sub>O<sub>3</sub>: Fano Interference and Phonon Anharmonicity  
Journal of Physical Chemistry C 125(33), pp. 18259-18269 (2021)
78. Łazewski, J., Sternik, M., Jochym, P.T., (...), Baumbach, T., Piekarczyk, P.  
Lattice Dynamics and Structural Phase Transitions in Eu<sub>2</sub>O<sub>3</sub>  
Inorganic Chemistry 60(13), pp. 9571-9579 (2021)
77. Osipov, V.V., Vasin, D.A., Tikhonov, E.V., Maksimov, R.N., Shitov, V.A.

- Laser ablation synthesis and characteristics of Tm-doped Gd<sub>2</sub>O<sub>3</sub> nanoparticles  
Journal of Physics: Conference Series 1942(1),012026 (2021)
76. Lattice dynamics study of (Gd<sub>1-x</sub>Ybx)<sub>2</sub>O<sub>3</sub>(x=0.11) at high pressure  
Mari-Guaita, Julia; Gallego-Parra, S.; Sans, J. A.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 871 Article Number: 159525 Published: AUG 5 2021
75. Growth and spectroscopy of Tm<sup>3+</sup>,Ho<sup>3+</sup> co-doped LuYO<sub>3</sub> single crystal for 2.1 μm laser  
Chen, Guangzhu; Li, Shanming; Zhang, Yuhang; et al.  
JOURNAL OF LUMINESCENCE Volume: 234 Article Number: 117951 Published: JUN 2021
74. Intra-4f transitions-induced red emission in ZnO-Eu<sub>2</sub>O<sub>3</sub> ceramic  
Martins, D., Santos, D.A.A., Macêdo, M.A.  
Radiation Physics and Chemistry 183, 109392 (2021)
73. Antimony substitution leading to structural transformation (Bixbyite → Fluorite) and altering the optical band gap in Y<sub>2</sub>O<sub>3</sub>  
Nagarajan, Rajamani; Kumari, Promila  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 863 Article Number: 158733 Published: MAY 15 2021
72. Modification of the spectroscopic properties of Tb<sub>2</sub>O<sub>3</sub> phosphor under the high-pressure phase transitions sequence  
Candela, M. T.; Aguado, F.; Gonzalez-Lavin, J.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 859 Article Number: 157899 Published: APR 5 2021
71. Lattice dynamics of yttria: A combined investigation from spectrum measurements and first-principle calculations  
Wang, Chun-Hai; Shu, Wenhua; Qing, Yuchang; et al.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY Volume: 104 Issue: 4 Pages: 1797-1805 Published: APR 2021
70. Influence of varying thermodynamic parameters on the structural behavior of nano-crystalline europium sesquioxide  
Bura, Neha; Yadav, Deepa; Bhoriya, Ankit; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 856 Article Number: 158129 Published: MAR 5 2021
69. Unraveling microstrain-promoted structural evolution and thermally driven phase transition in c-Sc<sub>2</sub>O<sub>3</sub> nanocrystals at high pressure  
Zou, Yongtao; Li, Mu; Zhang, Wei; et al.  
PHYSICAL REVIEW B Volume: 102 Issue: 21 Article Number: 214115 Published: DEC 31 2020
68. KLi<sub>2</sub>RE(BO<sub>3</sub>)<sub>2</sub> (RE = Dy, Ho, Er, Tm, Yb, and Y): Structural, Spectroscopic, And Thermogravimetric Studies on a Series of Mixed-Alkali Rare-Earth Orthoborates  
Chen, Pengyun; Murshed, M. Mangir; Fischer, Michael; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 24 Pages: 18214-18224 Published: DEC 21 2020
67. Photoluminescence, thermoluminescence, and cathodoluminescence of optimized cubic Gd<sub>2</sub>O<sub>3</sub>:Bi phosphor powder  
Abdelrehman, Mogahid H. M.; Kroon, Robin E.; Yousif, Abdelrhman; et al.  
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A Volume: 38 Issue: 6 Article Number: 063207 Published: DEC 2020
66. Defect structure and vibrational states in Eu-doped cubic gadolinium oxide  
Kislov, Alexey N.; Zatsepin, Anatoly F.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 42 Pages: 24498-24505 Published: NOV 14 2020
65. EuxOy-PdO catalyst concerted efficiently catalyzes Suzuki-Miyaura coupling reaction  
Wang, Jing; Fan, Xiaoye; Liu, Bo; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 252 Article Number: 123227 Published: SEP 15 2020
64. Ultra-wide-bandgap (ScGa)<sub>2</sub>O<sub>3</sub> alloy thin films and related sensitive and fast responding solar-blind photodetectors  
Wang, Qile; Huang, Pan; Liu, Qi; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 834 Article Number: 155036 Published: SEP 5 2020
63. Growth and spectra of Tm<sup>3+</sup> doped LuYO<sub>3</sub> single crystal for 2 μm lasers  
Chen, Guangzhu; Li, Shanming; Zhang, Lianhan; et al.  
INFRARED PHYSICS & TECHNOLOGY Volume: 109 Article Number: 103431 Published: SEP 2020
62. X-ray absorption spectroscopy and Eu<sup>3+</sup>-emission characteristics in GaAs/SnO<sub>2</sub> heterostructure  
Bueno, Cristina F.; Ramos, Aline Y.; Bailly, Aude; et al.  
SN APPLIED SCIENCES Volume: 2 Issue: 9 Article Number: 1579 Published: AUG 28 2020
61. A Comparative Study on Luminescence Properties of Y<sub>2</sub>O<sub>3</sub>:Pr<sup>3+</sup> Nanocrystals Prepared by Different Synthesis Methods  
Diego-Rucabado, Andrea; Candela, Marina T.; Aguado, Fernando; et al.  
NANOMATERIALS Volume: 10 Issue: 8 Article Number: 1574 Published: AUG 2020
60. Structure, mechanical, optical, and imaging contrast features of Yb<sup>3+</sup>, Dy<sup>3+</sup>, Tb<sup>3+</sup>, Gd<sup>3+</sup>, Eu<sup>3+</sup>, and Nd<sup>3+</sup> substituted Y<sub>2</sub>O<sub>3</sub>-Ln<sub>2</sub>O<sub>3</sub> solid solution  
Kalaivani, Srigurunathan; Kannan, Sanjeevi  
JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS Volume: 108 Issue: 6 Pages: 2656-2669 Published: AUG 2020
59. Structural and Lattice-Dynamical Properties of Tb<sub>2</sub>O<sub>3</sub> under Compression: A Comparative Study with Rare Earth and Related Sesquioxides

- Ibanez, Jordi; Angel Sans, Juan; Cuenca-Gotor, Vanesa; et al.  
 INORGANIC CHEMISTRY Volume: 59 Issue: 14 Pages: 9648-9666 Published: JUL 20 2020
58. Preparation of In-doped Y2O3 ceramics through a sol-gel process: Effects on the structural and electronic properties  
 Richard, Diego; Renteria, Mario; Carbonari, Artur W.; et al.  
 CERAMICS INTERNATIONAL Volume: 46 Issue: 10 Pages: 16088-16095 Part: B Published: JUL 2020
57. Gaseous Reduction of Manganese Ores: A Review and Theoretical Insight  
 Cheraghi, Alireza; Yoozbashizadeh, Hossein; Safarian, Jafar  
 MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW Volume: 41 Issue: 3 Pages: 198-215 Published:  
 MAY 3 2020
56. Yb:Lu2O3 hydrothermally grown single-crystal high-resolution absorption spectra obtained between 8 and 300 K  
 Brown, David C.; Fleischman, Zackery; Merkle, Larry D.; et al.  
 APPLIED PHYSICS B-LASERS AND OPTICS Volume: 126 Issue: 4 Article Number: 62 Published: MAR 13 2020
55. High-mobility nanometer-thick crystalline In-Sm-O thin-film transistors via aqueous solution processing  
 Li, Yanwei; Zhu, Deliang; Xu, Wangying; et al.  
 JOURNAL OF MATERIALS CHEMISTRY C Volume: 8 Issue: 1 Pages: 310-318 Published: JAN 7 2020
54. Optimization of Deposition Parameter Of Cr Doped Eu2O3 Thin Films  
 Prakash, Ram; Kumar, Sandeep  
 AIP Conference Proceedings Volume: 2220 Article Number: 090004 Published: 2020
53. Rare-Earth-Doped Y4Al2O9 Nanoparticles for Stable Light-Converting Phosphors  
 Liu, Chenyang; Pokhrel, Suman; Tessarek, Christian; et al.  
 ACS APPLIED NANO MATERIALS Volume: 3 Issue: 1 Pages: 699-710 Published: JAN 2020
52. Phonon variations in nano-crystalline lutetium sesquioxide under the influence of varying temperature and pressure  
 Bura, Neha; Yadav, Deepa; Singh, Jasveer; et al.  
 JOURNAL OF APPLIED PHYSICS Volume: 126 Issue: 24 Article Number: 245901 Published: DEC 28 2019
51. Shape control over microwave hydrothermally grown Y2O3:Eu by europium concentration adjustment  
 Kaszewski, Jaroslaw; Rosowska, Julita; Witkowski, Bartłomiej S.; et al.  
 JOURNAL OF RARE EARTHS Volume: 37 Issue: 11 Pages: 1206-1212 Published: NOV 2019
50. Structural and Electronic Characterization Through Spectroscopy Analysis of Gd-Gd2O3 Nanoparticles  
 Perdigon-Lagunes, Pedro; Estevez, Octavio; Zorrilla, Cristina; et al.  
 JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY Volume: 19 Issue: 11 Pages: 7345-7355 Published: NOV 2019
49. Bulk Yttria as a Host for Lanthanides in Biomedical Applications: Influence of Concentration Gradients on Structural, Mechanical, Optical, and in Vitro Imaging Behavior  
 Kalaivani, Srigrunathan; Guleria, Anupam; Kumar, Dinesh; et al.  
 ACS APPLIED BIO MATERIALS Volume: 2 Issue: 10 Pages: 4634-4647 Published: OCT 21 2019
48. Growth, structure, and spectroscopic properties of a Tm<sup>3+</sup>, Ho<sup>3+</sup> co-doped Lu2O3 crystal for similar to 2.1  $\mu$ m lasers  
 Li, Shanming; Zhang, Lianhan; Tan, Xiaojun; et al.  
 OPTICAL MATERIALS Volume: 96 Article Number: 109277 Published: OCT 2019
47. Insight into the pressure effect on the structural stability and physical properties of cubic sesquioxides X2O3 (X = Sc, Y and In)  
 Li, Dongzhi; Zhang, Xudong; Liu, Cong; et al.  
 VACUUM Volume: 168 Article Number: 108855 Published: OCT 2019
46. Luminescence decay-based Y2O3:Er phosphor thermometry: Temperature sensitivity governed by multiphonon emission with an effective phonon energy transition  
 Eldridge, Jeffrey, I  
 JOURNAL OF LUMINESCENCE Volume: 214 Article Number: 116535 Published: OCT 2019
45. Yb-doping effect on structure and lattice dynamics of Gd2O3  
 Kislov, A. N.; Zatselin, A. F.  
 JOURNAL OF PHYSICS-CONDENSED MATTER Volume: 31 Issue: 38 Article Number: 385402 Published: SEP 25 2019
44. Collective substitutions of selective rare earths (Yb<sup>3+</sup>, Dy<sup>3+</sup>, Tb<sup>3+</sup>, Gd<sup>3+</sup>, Eu<sup>3+</sup>, Nd<sup>3+</sup>) in ZrO2: an exciting prospect for biomedical applications  
 Kalaivani, S.; Kannan, S.  
 DALTON TRANSACTIONS Volume: 48 Issue: 25 Pages: 9291-9302 Published: JUL 7 2019
43. Development of Y2O3: Ho<sup>3+</sup>/Yb<sup>3+</sup> Upconverting Nanophosphors for Enhancing Solar Cell Efficiency of Dye-Sensitized Solar Cells  
 Dutta, Joydip; Rai, Vineet Kumar; Durai, M. Malai; et al.  
 IEEE JOURNAL OF PHOTOVOLTAICS Volume: 9 Issue: 4 Pages: 1040-1045 Published: JUL 2019
42. Ammonium oxalate-assisted synthesis of Gd2O3 nanopowders  
 Foo, Yuan-Teng; Abdullah, Ahmad Zuhairi; Horri, Bahman Amini; et al.  
 CERAMICS INTERNATIONAL Volume: 45 Issue: 7 Pages: 9082-9091 Part: A Published: MAY 2019
41. Ce-Sm-xCu cost-efficient catalysts for H-2 production through the glycerol steam reforming reaction

- Polychronopoulou, Kyriaki; Charisiou, Nikolaos D.; Siakavelas, Georgios I.; et al.  
SUSTAINABLE ENERGY & FUELS Volume: 3 Issue: 3 Pages: 673-691 Published: MAR 1 2019
40. Eu-induced lattice vibrations in Gd<sub>2</sub>O<sub>3</sub> crystals  
Kislov, A. N.; Zatsepin, A. F.  
Journal of Physics Conference Series Volume: 1391 Article Number: 012018 Published: 2019
39. Simulation of static and dynamic lattice properties of Yb-doped gadolinium oxide  
Kislov, A. N.; Zatsepin, A. F.  
MATERIALS TODAY-PROCEEDINGS Volume: 18 Pages: 520-524 Part: 2 Published: 2019
38. A novel conductometric sensor based on hierarchical self-assembly nanoparticles Sm<sub>2</sub>O<sub>3</sub> for VOCs monitoring  
Jamnani, S.R., Moghaddam, H.M., Leonardi, S.G., Neri, G.  
Ceramics International 44(14), pp. 16953-16959 (2018)
37. Lattice dynamics study of cubic Tb<sub>2</sub>O<sub>3</sub>  
Ibanez, Jordi; Blazquez, Oriol; Hernandez, Sergi; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 49 Issue: 12 Pages: 2021-2027 Published: DEC 2018
36. Tuning the activity of Cu-containing rare earth oxide catalysts for CO oxidation reaction: Cooling while heating paradigm in microwave-assisted synthesis  
AlKetbi, M.; Polychronopoulou, K.; Zedan, Abdallah F.; et al.  
MATERIALS RESEARCH BULLETIN Volume: 108 Pages: 142-150 Published: DEC 2018
35. Phase transformations induced by heavy ion irradiation in Gd<sub>2</sub>O<sub>3</sub>: Comparison between ballistic and electronic excitation regimes  
Bilgen, S.; Sattonnay, G.; Grygiel, C.; et al.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 435 Pages: 12-18 Published: NOV 15 2018
34. Synthesis, spectroscopic characterization and laser operation of Ho<sup>3+</sup> in "mixed" (Lu,Sc)(<sub>2</sub>)O-3 ceramics  
Jing, Wei; Loiko, Pavel; Maria Serres, Josep; et al.  
JOURNAL OF LUMINESCENCE Volume: 203 Pages: 145-151 Published: NOV 2018
33. Sub-solidus phase equilibria in the YO<sub>1.5</sub>-TaO<sub>2.5</sub> system  
Fernandez, Abel N.; Macauley, Chandra A.; Park, Daesung; et al.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 38 Issue: 14 Pages: 4786-4798 Published: NOV 2018
32. Pressure induced structural phase transition in rare earth sesquioxide Tm<sub>2</sub>O<sub>3</sub>: Experiment and ab initio calculations  
Irshad, K. A.; Anees, P.; Sahoo, Shradhanjali; et al.  
JOURNAL OF APPLIED PHYSICS Volume: 124 Issue: 15 Article Number: 155901 Published: OCT 21 2018
31. Phase equilibria in the ZrO<sub>2</sub>-YO<sub>1.5</sub>-TaO<sub>2.5</sub> system at 1250 degrees C  
Macauley, Chandra A.; Fernandez, Abel N.; Van Sluytman, Jason S.; et al.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY Volume: 38 Issue: 13 Pages: 4523-4532 Published: OCT 2018
30. Density functional study of the phase stability and Raman spectra of Yb<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>SiO<sub>5</sub> and Yb<sub>2</sub>Si<sub>2</sub>O<sub>7</sub> under pressure  
Ogawa, Takafumi; Otani, Noriko; Yokoi, Taishi; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 24 Pages: 16518-16527 Published: JUN 28 2018
29. RAMAN SCATTERING IN GLASSY Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub>  
Puga, Pavlo P.; Danyliuk, Pavlo S.; Rizak, Galina, V; et al.  
JOURNAL OF CHEMISTRY AND TECHNOLOGIES Volume: 26 Issue: 2 Pages: 31-38 Published: 2018
28. Raman scattering in glassy Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub> doped with Er<sub>2</sub>O<sub>3</sub>  
Puga, P. P.; Danyliuk, P. S.; Gomonai, A., I; et al.  
UKRAINIAN JOURNAL OF PHYSICAL OPTICS Volume: 19 Issue: 4 Pages: 211-219 Published: 2018
27. Loiko, P., Koopmann, P., Mateos, X., (...), Petrov, V., Krankel, C.  
Highly Efficient, Compact Tm<sup>3+</sup>:RE<sub>2</sub>O<sub>3</sub> (RE = Y, Lu, Sc) Sesquioxide Lasers Based on Thermal Guiding  
IEEE Journal of Selected Topics in Quantum Electronics 24(5),1600713, 2018
26. Kumar, S., Prakash, R., Choudhary, R.J., Phase, D.M.  
Photoemission studies on (1 1 1) textured Cr doped Eu<sub>2</sub>O<sub>3</sub> thin film  
Journal of Alloys and Compounds 738, pp. 233-238, 2018
25. Polychronopoulou, K., Zedan, A.F., AlKetbi, M., (...), Isakovic, A.F., AlHassan, S.  
Tailoring the efficiency of an active catalyst for CO abatement through oxidation reaction: The case study of samarium-doped ceria  
Journal of Environmental Chemical Engineering 6(1), pp. 266-280, 2018
24. Perdigon-Lagunes, P., Estevez, O., Zorrilla Cangas, C., Herrera-Becerra, R.  
Gd - Gd<sub>2</sub>O<sub>3</sub> multimodal nanoparticles as labeling agents  
MRS Advances 3(14), pp. 761-766, 2017
23. Bordun, O.M., Bordun, I.O., Kukharsky, I.J., (...), Tsapovska, Z.I., Leonov, D.S.  
Structure and vibrational spectra of thin films Y<sub>2</sub>O<sub>3</sub>:Eu  
Nanosistemi, Nanomateriali, Nanotehnologii 15(1), pp. 27-36, 2017

22. Bispo, A.G., Ceccato, D.A., Lima, S.A.M., Pires, A.M.  
Red phosphor based on Eu<sup>3+</sup>-isoelectronically doped Ba<sub>2</sub>SiO<sub>4</sub> obtained via sol-gel route for solid state lighting  
RSC Advances 7(85), pp. 53752-53762, 2017
21. Lahiri, Rini; Ghosh, Anupam; Dwivedi, Shyam Murli Manohar Dhar; et al.  
Performance of Erbium-doped TiO<sub>2</sub> thin film grown by physical vapor deposition technique  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 123 Issue: 9 Article Number: 573 Published: SEP 2017
20. Raj, Athira K. V.; Rao, P. Prabhakar; Sreena, T. S.; et al.  
Influence of local structure on photoluminescence properties of Eu<sup>3+</sup> doped CeO<sub>2</sub> red phosphors through induced oxygen vacancies by contrasting rare earth substitutions  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 19 Issue: 30 Pages: 20110-20120 Published: AUG 14 2017
19. Anbarasu, V.; Dhilip, M.; Kumar, K. Saravana; et al.  
Effect of transition metal ion substitution on structural and magnetic properties of Eu<sub>2</sub>O<sub>3</sub> sesquioxide system  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 16 Pages: 12197-12206 Published: AUG 2017
18. Anbarasu, V., Dhilip, M., Saravana Kumar, K., Sivakumar, K.  
Effect of trivalent transition metal ion substitution in multifunctional properties of Dy<sub>2</sub>O<sub>3</sub> system  
Journal of Materials Science: Materials in Electronics 28(12), pp. 8976-8985, 2017
17. Wu Qian; Weng Wei-Zhang; Liu Chun-Li; et al.  
Effect of Preparation Methods on Photo-Induced Formation of Peroxide Species on Nd<sub>2</sub>O<sub>3</sub>  
ACTA PHYSICO-CHIMICA SINICA Volume: 33 Issue: 10 Pages: 2064-2071 Published: JUL 17 2017
16. El Ghouli, J.; El Mir, L.  
Structural and optical properties of Tb<sup>3+</sup> doped Y<sub>2</sub>O<sub>3</sub> nanoparticles  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Volume: 28 Issue: 12 Pages: 9066-9071 Published: JUN 2017
15. Tomar, Renu; Kumar, Parmod; Kumar, Ashish; et al.  
Investigations on structural and magnetic properties of Mn doped Er<sub>2</sub>O<sub>3</sub>  
SOLID STATE SCIENCES Volume: 67 Pages: 8-12 Published: MAY 2017
14. Zhang, Xian; Gui, Wenhua; Zeng, Qingfeng  
First-principles study of structural, mechanical, and thermodynamic properties of cubic Y<sub>2</sub>O<sub>3</sub> under high pressure  
CERAMICS INTERNATIONAL Volume: 43 Issue: 3 Pages: 3346-3355 Published: FEB 15 2017
13. Irshad K.A., Chandra Shekar N.V., Ravindran T.R., Srihari V., K.K. Pandey  
X-ray diffraction and Raman studies on Ho: Eu<sub>2</sub>O<sub>3</sub>  
Journal of Molecular Structure 1128, 325-329 DOI: 10.1016/j.molstruc.2016.08.077 (2017)
12. Sharma, Nita Dilawar; Singh, Jasveer; Vijay, Aditi; et al.  
Pressure-Induced Structural Transition Trends in Nanocrystalline Rare-Earth Sesquioxides: A Raman Investigation  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 120 Issue: 21 Pages: 11679-11689 Published: JUN 2 2016
11. Kishimura, Hiroaki; Hamada, Sho; Aruga, Atsushi; et al.  
Effect of shock compression on optical and structural properties of Eu<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup> powders  
JOURNAL OF APPLIED PHYSICS Volume: 119 Issue: 20 Article Number: 205111 Published: MAY 28 2016
10. Ahuja, Babu Lal; Sharma, Sonu; Heda, Narayan Lal; et al.  
Electronic and optical properties of ceramic Sc<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub>: Compton spectroscopy and first principles calculations  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 92 Pages: 53-63 Published: MAY 2016
9. Sattonnay, G., Bilgen, S., Thomé, L., Grygiel, C., Monnet, I., Plantevin, O., Huet, C., Miro, S., Simon, P.  
Structural and microstructural tailoring of rare earth sesquioxides by swift heavy ion irradiation  
Physica Status Solidi (B) Basic Research 253(11), 2110-2114 DOI: 10.1002/pssb.201600451 (2016)
8. Dilawar Sharma, N., Singh, J., Vijay, A., Samanta, K., Dogra, S., Bandyopadhyay, A.K.  
Pressure-Induced Structural Transition Trends in Nanocrystalline Rare-Earth Sesquioxides: A Raman Investigation  
Journal of Physical Chemistry C 120(21), 11679-11689 DOI: 10.1021/acs.jpcc.6b02104 (2016)
7. Jiang, J., Yao, B.-L., Gao, X.-R., Wang, L.-K., Li, H.-P., Deng, L.-D.  
Synthesis and optical properties of copper doped Y<sub>2</sub>Ba<sub>2</sub>O<sub>5</sub> pigments with high near-infrared reflectance  
Wuji Cailiao Xuebao/Journal of Inorganic Materials 31(6), 641-646 DOI: 10.15541/jim20150562 (2016)
6. Popov, V.V., Menushenkov, A.P., Yastrebtev, A.A., Korovin, S.A., Tumarkin, A.V., Pisarev, A.A., Tsarenko, N.A., Arzhatkina, L.A., Arzhatkina, O.A.  
The effect of synthesis conditions on the structure of compounds formed in the Dy<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> system  
Russian Journal of Inorganic Chemistry 61(4), 403-411 DOI: 10.1134/S003602361604015X (2016)
5. Du, P., Lim, J.H., Leem, J.W., Cha, S.M., Yu, J.S.  
Enhanced Photovoltaic Performance of Dye-Sensitized Solar Cells by Efficient Near-Infrared Sunlight Harvesting using Upconverting Y<sub>2</sub>O<sub>3</sub>:Er<sup>3+</sup>/Yb<sup>3+</sup> Phosphor Nanoparticles

4. Quesada, Adrian; del Campo, Adolfo; Fernandez, Jose F.

Stabilization of cubic phase in dense Eu<sub>2</sub>O<sub>3</sub> ceramics

MATERIALS LETTERS Volume: 157 Pages: 77-80 Published: OCT 15 2015

3. Kumar, Sandeep; Prakash, Ram; Choudhary, R. J.; et al.

Structural, XPS and magnetic studies of pulsed laser deposited Fe doped Eu<sub>2</sub>O<sub>3</sub> thin film

MATERIALS RESEARCH BULLETIN Volume: 70 Pages: 392-396 Published: OCT 2015

2. Du, Peng; Luo, Laihui; Yue, Qingying; et al.

The simultaneous realization of high- and low-temperature thermometry in Er<sup>3+</sup>/Yb<sup>3+</sup>-codoped Y<sub>2</sub>O<sub>3</sub> nanoparticles

MATERIALS LETTERS 143, 209-211 MAR 15 2015

1. Khomenkova, L., Kushnirenko, V.I., Osipyonok, N.M., (...), Strelchuk, V.V., Borkovska, L.V.

Effect of rare-earth doping on structural and luminescent properties of screen-printed ZnO films

ECS Transactions Volume 66, Issue 1, 2015, Pages 321-332

### 91. “*Simple procedure for an estimation of the coal rank using micro-Raman spectroscopy*”

Ruth Hinrichs, Matthew T. Brown, Marcos A.Z. Vasconcellos, Miroslav V. Abrashev, and Wolfgang Kalkreuth

International Journal of Coal Geology **136**, 52–58 (2014) (7 pages)

125. Chatterjee, A., Maiti, P., Siddiqi, H., (...), Durga Prasad, G., Meikap, B.C.

Interpreting crystallographic and microcrystalline structural effect for demineralization of low-grade thermal coal in multi-stage chemical leaching: A cleaner combustion approach

Powder Technology 435,119435 (2024)

124. Zhang, S., Jia, X., Wang, X., (...), Jia, X., Hu, H.

Using the Conditional Process Analysis Model to Characterize the Evolution of Carbon Structure in Taxodium ascendens Biochar with Varied Pyrolysis Temperature and Holding Time

Plants 13(3),460 (2024)

123. Li, S., Zhu, Y., He, R.

Mechanistic analysis of chemical structure evolution for coals under igneous intrusion

Fuel 357,130055 (2024)

122. Ostadhassan, M., Hazra, B.

Backtracking to Parent Maceral from Produced Bitumen with Raman Spectroscopy

SpringerBriefs in Petroleum Geoscience and Engineering Part F1588, pp. 87-104 (2024)

121. Chu, W., Dai, W., Wang, B., (...), Li, H., Jiang, N.

Graphite Equivalent Evaluation of Anthracite-Associated Graphite by Raman Spectroscopy

Materials 16(23),7278 (2023)

120. Adsul, T., Ghosh, S., Ojha, A., Bhattacharyya, S., Varma, A.K.

Spectral narratives of microstructural restyling and their controls on hydrocarbon generation potential from coal

International Journal of Coal Science and Technology 10(1),33 (2023)

119. Wang, Y., Xie, L., Li, J., (...), Yang, C., Xie, Z.

Characteristics evaluation of high-over mature organic matter based on laser Raman and Fourier transform mass spectrometry experiments

Natural Gas Industry 43(11), pp. 83-99 (2023)

118. Stokes, M.R., Jubb, A.M., Hackley, P.C., (...), Sanders, M.M., Hatcherian, J.J.

Evaluation of portable Raman spectroscopic analysis for source-rock thermal maturity assessments on bulk crushed rock

International Journal of Coal Geology 279,104374 (2023)

117. Wei, J., Wang, M., Li, B., (...), Zhang, H., Xu, D.

Synergy mechanism of biochar and petcoke co-combustion based on potassium migration and transformation

Fuel Processing Technology 250,107927 (2023)

116. Culka, A., Jehlička, J., Opluštil, S.

Evaluation of carbonification of coals using a portable Raman spectrometer

Journal of Raman Spectroscopy 54(11), pp. 1220-1232 (2023)

115. Chabalala, V., Wagner, N., Malumbazo, N.

Application of Organic Petrology and Raman Spectroscopy in Thermal Maturity Determination of the Karoo Basin (RSA) Shale Samples

Minerals 13(9),1199 (2023)

114. Gao, Y., Liu, B., Fu, X., (...), Gentzis, T., Ostadhassan, M.

Nanomechanical and chemical variations of inertinite and vitrinite within lacustrine shale during oil generation

Marine and Petroleum Geology 154,106318 (2023)

113. Wang, Y., Ma, C., Zou, C., (...), Shi, R., Zhao, S.



- Structure evolution and performance analysis of blue-coke in the upper part of ferrosilicon furnace  
Guocheng Gongcheng Xuebao/The Chinese Journal of Process Engineering 23(5), pp. 744-754 (2023)
112. Vergara Sassarini, N.A., Schito, A., Gasparrini, M., Michel, P., Corrado, S.  
Automatic organofacies identification by means of Machine Learning on Raman spectra  
International Journal of Coal Geology 271,104237 (2023)
111. Cheng, N., Shi, M., Hou, Q., Pan, J., Han, Y.  
Application of Raman spectroscopy in characterization of coal macromolecular structure  
Meitan Xuebao/Journal of the China Coal Society 48(3), pp. 1311-1324 (2023)
110. Wang, Y., Qiu, N., Tao, N., (...), Shen, B., Borjigin, T.  
Thermal maturity calibration of extremely high-mature pre-Devonian strata: A case study from the Lower Cambrian Qiongzhusi Formation in the Sichuan Basin, South China  
Geoenergy Science and Engineering 222,211411 (2023)
109. Liu, S., Li, X.  
Experimental study on the effect of cold soaking with liquid nitrogen on the coal chemical and microstructural characteristics  
Environmental Science and Pollution Research 30(13), pp. 36080-36097 (2023)
108. Yuan, L., Liu, Q., Li, K., (...), Li, X., Mathews, J.P.  
The evolution of coal, examining the transitions from anthracite to natural graphite: a spectroscopy and optical microscopy evaluation  
Frontiers of Earth Science 17(1), pp. 87-99 (2023)
107. Fu, S., Wang, L., Li, S., Zheng, S., Li, J.  
The effect of organic matter fraction extracted on micropores development degree and CH<sub>4</sub> adsorption capacity of coal  
Gas Science and Engineering 110,204870 (2023)
106. Shao, Y., Wang, S., Li, X.  
The Effect of Silicon-Containing Minerals on Coal Evolution at High-Temperature Pre-Graphitization Stage  
Minerals 13(1),20 (2023)
105. Han, S., Xie, L., Du, X., (...), Horsfield, B., Mahlstedt, N.  
Insights into organic metagenesis using Raman spectroscopy and high resolution mass spectrometry: A case study of the Shahezi formation, deep Songliao basin, China  
International Journal of Coal Geology 265,104153 (2023)
104. He, J., Zou, C., Zhao, J., (...), Ren, M., Xu, Y.  
Influence of Raman Spectroscopy Test Conditions on the Results of Carbon Chemical Structure of Chars  
Energies 15(15),5627 (2022)
103. Spina, A., Brogi, A., Capezzuoli, E., (...), Schito, A., Liotta, D.  
Use of palynology and thermal maturity in deformed geological units: A case study from the Permian succession in the Monte Leoni area (Middle Tuscan Ridge, inner Northern Apennines, Italy)  
Sedimentary Geology 438,106210 (2022)
102. Wang, X., Liu, H., Zhang, D., (...), Zeng, P., Zhang, H.  
Effects of CO<sub>2</sub> adsorption on molecular structure characteristics of coal: Implications for CO<sub>2</sub> geological sequestration  
Fuel 321,124155 (2022)
101. Hackley, P.C., Jubb, A.M., Smith, P.L., (...), Botterell, P.J., Birdwell, J.E.  
Evaluating aromatization of solid bitumen generated in the presence and absence of water: Implications for solid bitumen reflectance as a thermal proxy  
International Journal of Coal Geology 258,104016 (2022)
100. Guido, A., Sposato, M., Palladino, G., Vescogni, A., Miriello, D.  
Biominalization of primary carbonate cements: a new biosignature in the fossil record from the Anisian of Southern Italy  
Lethaia 55(1) (2022)
99. Cheng, N., Pan, J., Shi, M., Hou, Q., Han, Y.  
Using Raman spectroscopy to evaluate coal maturity: The problem  
Fuel 312,122811 (2022)
98. Malysheva, V.Y., Fedorova, N.I., Nikitin, A.P., Ismagilov, Z.R.  
Vitrinite Components of Kuznetsk Basin Coal: Thermogravimetric and Raman Spectroscopic Analysis  
Coke and Chemistry 65(3), pp. 81-87 (2022)
97. Chen, C., Tang, Y., Guo, X.  
Comparison of structural characteristics of high-organic-sulfur and low-organic-sulfur coal of various ranks based on FTIR and Raman spectroscopy  
Fuel 310,122362 (2022)
96. Li, X.-P., Zeng, Q.  
Development and Progress of Spectral Analysis in Coal Structure Research  
Guang Pu Xue Yu Guang Pu Fen Xi/Spectroscopy and Spectral Analysis 42(2), pp. 350-357 (2022)

95. Yeletsky, P.M., Dubinin, Y.V., Yazykov, N.A., (...), Okotrub, K.A., Yakovlev, V.A.  
Conversion of natural feedstocks to porous carbons via carbonization in fluidized catalyst bed followed by leaching the feedstock mineral template phase: A comparison of biomass and sedimentary raw materials  
*Fuel Processing Technology* 226,107076 (2022)
94. Li, Y., Lu, L., Wu, S., Tang, Y.  
Source Rock Maturity Assessment Using the Advanced Surface-enhanced Raman Spectroscopy  
SPE/AAPG/SEG Unconventional Resources Technology Conference, URTC 2022 (2022)
93. Zhang, Y., Wang, H., Wang, X.  
Structural Characteristics of Lignite Char from Different Pyrolysis Reactors and the Influence on Their Gasification Reactivity  
*Journal of the Brazilian Chemical Society* 33(3), pp. 268-273 (2022)
92. Cao, D., Liu, Z., Wang, A., (...), Ding, Z., Li, Y.  
Control of coal metamorphism by tectonic physicochemical conditions  
*Earth Science Frontiers* 29(1), pp. 439-448 (2022)
91. Ghorai, S., Ghosh, B., Chandaliya, V.K., (...), Dash, P.S., Mal, D.  
Difference in structural chemistry of non-coking and coking coal using acid treatment demineralization technique  
*International Journal of Coal Preparation and Utilization* 42(3), pp. 788-808 (2022)
90. Wang, L., Qin, R., Li, Y., Zhang, H.  
On the difference of graphitization behavior between vitrinite- and inertinite-rich anthracites during heat treatment  
*Energy Sources, Part A: Recovery, Utilization and Environmental Effects* 44(2), pp. 4991-5003 (2022)
89. Chen, H., Wang, S., Deng, J., (...), Liu, Y., Li, X.  
Petrologic Characteristics and Chemical Structures of Macerals in a Suite of Thermally Altered Coals by Confocal Raman  
*ACS Omega* 6(49), pp. 33409-33418 (2021)
88. Spina, A., Cirilli, S., Sorci, A., (...), Rashidi, M., Rettori, R.  
Assessing thermal maturity through a multi-proxy approach: A case study from the permian faraghan formation (zagros basin, Southwest Iran)  
*Geosciences (Switzerland)* 11(12),484 (2021)
87. Xu, Y.-M., Pan, Z.-Y., Hu, H.-Q.  
Study on structure and combustion performance of Daliuta coal pyrolysis char by Raman spectroscopy  
*Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology* 49(11), pp. 1656-1666 (2021)
86. Guo, J., MacMillan, B., Zamiri, M.S., Balcom, B.J.  
Two dimensional 1H magnetic resonance relaxometry-based analyses of Argonne premium coals  
*Fuel* 302,121106 (2021)
85. Muirhead, D.K., Kedar, L., Schito, A., (...), Bond, C.E., Romano, C.  
Raman Spectral Shifts in Naturally Faulted Rocks  
*Geochemistry, Geophysics, Geosystems* 22(10),e2021GC009923 (2021)
84. Wu, Y., Li, K., Wang, Z., (...), Cao, H., Liu, Q.  
Fluctuations in graphitization of coal seam-derived natural graphite upon approaching the qitianling granite intrusion, hunan, china  
*Minerals* 11(10),1147 (2021)
83. Yang, W., He, S., Zhai, G., (...), Yuan, X., Wei, S.  
Maturity Assessment of the Lower Cambrian and Sinian Shales Using Multiple Technical Approaches  
*Journal of Earth Science* 32(5), pp. 1262-1277 (2021)
82. Pang, Q., Hu, G., Hu, C., Zhang, C.  
Variation of Organic Pore Structure With Maceral Types in the Longmaxi Shale, Sichuan Basin  
*Frontiers in Earth Science* 9,715278 (2021)
81. Corrado, S., Gusmeo, T., Schito, A., (...), Conventi, E., Cavazza, W.  
Validating far-field deformation styles from the Adjara-Trialeti fold-and-thrust belt to the Greater Caucasus (Georgia) through multi-proxy thermal maturity datasets  
*Marine and Petroleum Geology* 130,105141 (2021)
80. Jin, Y., Wu, S., Gao, L., (...), Meng, F., Tang, Y.  
Raman Thermal Maturity of Coal and Type II Kerogen Based on Surface-Enhanced Raman Spectroscopy (SERS)  
*ACS Omega* 6(28), pp. 18504-18508 (2021)
79. Schito, A., Guedes, A., Valentim, B., Sassarini, A.V., Corrado, S.  
A predictive model for maceral discrimination by means of raman spectra on dispersed organic matter: A case study from the carpathian fold-and-thrust belt (Ukraine)  
*Geosciences (Switzerland)* 11(5),213 (2021)
78. The applicability of Raman spectroscopy in the assessment of palaeowildfire intensity  
Theurer, Thomas; Muirhead, David K.; Jolley, David; et al.  
PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY Volume: 570 Article Number: 110363 Published: MAY 15 2021

77. Maturity and thermal evolution differences between two sets of Lower Palaeozoic shales and its significance for shale gas formation in south-western Sichuan Basin, China  
Wang, Ye; Qiu, Nansheng; Xie, Xiaomin; et al.  
Geological Journal 56(7), pp. 3698-3719 (2021)
76. First evidence of microplastic contamination in the freshwater of Lake Guaiba, Porto Alegre, Brazil  
Bertoldi, Crislaine; Lara, Larissa Z.; Mizushima, Fernanda A. de L.; et al.  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 759 Article Number: 143503 Published: MAR 10 2021
75. Raman Spectroscopy as a Versatile Tool for Investigating Thermochemical Processing of Coal, Biomass, and Wastes: Recent Advances and Future Perspectives  
Xu, Jun; He, Qichen; Xiong, Zhe; et al.  
ENERGY & FUELS Volume: 35 Issue: 4 Pages: 2870-2913 Published: FEB 18 2021
74. Raman mapping of coal halos induced by uranium mineral radiation  
Machovic, Vladimir; Havelcova, Martina; Sykorova, Ivana; et al.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY Volume: 246 Article Number: 118996 Published: FEB 5 2021
73. Research on Molecular Structure Characteristics of Vitrinite and Inertinite from Bituminous Coal with FTIR, Micro-Raman, and XRD Spectroscopy  
Zhou, He; Wu, Caifang; Pan, Jienan; et al.  
ENERGY & FUELS Volume: 35 Issue: 2 Special Issue: SI Pages: 1322-1335 Published: JAN 21 2021
72. Maturity Assessment of the Lower Cambrian and Sinian Shales Using Multiple Technical Approaches  
Yang, Wei; He, Sheng; Zhai, Gangyi; et al.  
JOURNAL OF EARTH SCIENCE Early Access: JAN 2021
71. Micro-Raman Spectroscopy of Selected Macerals of the Huminite Group: An Example from the Szczercow Lignite Deposit (Central Poland)  
Bielowicz, Barbara; Morga, Rafal  
ENERGIES Volume: 14 Issue: 2 Article Number: 281 Published: JAN 2021
70. The effects of char and potassium on the fast pyrolysis behaviors of biomass in an infrared-heating condition  
Zhu, Haodong; Yi, Baojun; Hu, Hongyun; et al.  
ENERGY Volume: 214 Article Number: 119065 Published: JAN 1 2021
69. Raman spectroscopy as a tool for provenancing black limestones (bigi morati) used in antiquity  
Raneri, Simona; Kosek, Filip; Lazzarini, Lorenzo; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 52 Issue: 1 Special Issue: SI Pages: 241-250 Published: JAN 2021
68. Effect of chemical structure and sulfur speciation of high-sulfur coking coals on sulfur transformation during pyrolysis  
Shen, Y.-F., Wang, M.-J., Hu, Y.-F., (...), Bao, W.-R., Chang, L.-P.  
Ranliao Huaxue Xuebao/Journal of Fuel Chemistry and Technology 48(2), pp. 144-153 (2020)
67. Application of Micro-Raman Spectroscopy for the Quantitative Analysis of Vitrinite Reflectance in Medium and High Rank Colombian Coals  
Urbano-Noguera, Ruben-Dario; Estupinan-Duran, Hugo-Armando; Neira-Arenas, Gustavo  
REVISTA FACULTAD DE INGENIERIA, UNIVERSIDAD PEDAGOGICA Y TECNOLÓGICA DE COLOMBIA Volume: 29 Issue: 54 Article Number: e12241 Published: DEC 15 2020
66. An integrated platform for thermal maturity assessment of polyphase, long-lasting sedimentary basins, from classical to brand-new thermal parameters and models: An example from the on-shore Baltic Basin (Poland)  
Corrado, S.; Schito, A.; Romano, C.; et al.  
MARINE AND PETROLEUM GEOLOGY Volume: 122 Article Number: 104547 Published: DEC 2020
65. Paleogeothermal Gradients Across an Inverted Hyperextended Rift System: Example of the Mauleon Fossil Rift (Western Pyrenees)  
Saspiturry, N.; Lahfid, A.; Baudin, T.; et al.  
TECTONICS Volume: 39 Issue: 10 Article Number: e2020TC006206 Published: OCT 2020
64. Validating Structural Styles in the Flysch Basin Northern Rif (Morocco) by Means of Thermal Modeling  
Atouabat, Achraf; Corrado, Sveva; Schito, Andrea; et al.  
GEOSCIENCES Volume: 10 Issue: 9 Article Number: 325 Published: SEP 2020
63. Progress of Raman spectroscopic investigations on the structure and properties of coal  
Xu, Yanmei; Chen, Xia; Wang, Liang; et al.  
JOURNAL OF RAMAN SPECTROSCOPY Volume: 51 Issue: 9 Special Issue: SI Pages: 1874-1884 Published: SEP 2020
62. Backtracking to Parent Maceral from Produced Bitumen with Raman Spectroscopy  
Khatibi, Seyedalireza; Abarghani, Arash; Liu, Kouqi; et al.  
MINERALS Volume: 10 Issue: 8 Article Number: 679 Published: AUG 2020
61. Spectral manifestations of coal metamorphism: Insights from coal microstructural framework  
Ghosh, Santanu; Ojha, Anwita; Varma, Atul Kumar  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 228 Article Number: 103549 Published: AUG 1 2020

60. Thermal maturation as revealed by micro-Raman spectroscopy of mineral-organic aggregation (MOA) in marine shales with high and over maturities  
Xiao, Xianming; Zhou, Qin; Cheng, Peng; et al.  
SCIENCE CHINA-EARTH SCIENCES Volume: 63 Issue: 10 Pages: 1540-1552 Published: OCT 2020
59. Molecular structure characterization of lignite treated with ionic liquid via FTIR and XRD spectroscopy  
Li Zhao; Ni Guanhua; Wang Hui; et al.  
FUEL Volume: 272 Article Number: 117705 Published: JUL 15 2020
58. Raman spectroscopy of biochar from the pyrolysis of three typical Chinese biomasses: A novel method for rapidly evaluating the biochar property  
Xu, Jun; Liu, Jiawei; Ling, Peng; et al.  
ENERGY Volume: 202 Article Number: 117644 Published: JUL 1 2020
57. Geochemistry of shear zone-hosted uranium mineralisation at the Zadni Chodov uranium deposit (Bohemian Massif)  
Havelcova, Martina; Machovic, Vladimir; Rene, Milos; et al.  
ORE GEOLOGY REVIEWS Volume: 120 Article Number: 103428 Published: MAY 2020
56. Evaluation of terrestrial carbonaceous matter aromatization by Raman spectroscopy and its application to C chondrites  
Schmidt, Jaques S.; Hinrichs, Ruth  
METEORITICS & PLANETARY SCIENCE Volume: 55 Issue: 4 Pages: 800-817 Published: APR 2020
55. Chemical imaging of coal in micro-scale with Raman mapping technology  
Xu, Jun; Liu, Jiawei; Zhang, Xin; et al.  
FUEL Volume: 264 Article Number: 116826 Published: MAR 15 2020
54. Raman spectroscopy of intruded coals from the Illinois Basin: Correlation with rank and estimated alteration temperature  
Li, Kuo; Rimmer, Susan M.; Presswood, Severin M.; et al.  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 219 Article Number: 103369 Published: FEB 15 2020
53. Structural order evaluation and structural evolution of coal derived natural graphite during graphitization  
Zhang, Shuai; Liu, Qinfu; Zhang, Hao; et al.  
CARBON Volume: 157 Pages: 714-723 Published: FEB 2020
52. An automatic approach for characterization of the thermal maturity of dispersed organic matter Raman spectra at low diagenetic stages  
Schito, Andrea; Corrado, Sveva  
APPLICATION OF ANALYTICAL TECHNIQUES TO PETROLEUM SYSTEMS Book Series: Geological Society Special Publication Volume: 484 Pages: 107-119 Published: 2020
51. Raman spectroscopy: an effective thermal marker in low temperature carbonaceous fold-thrust belts  
Muirhead, D. K.; Bond, C. E.; Watkins, H.; et al.  
FOLD AND THRUST BELTS: STRUCTURAL STYLE, EVOLUTION AND EXPLORATION Book Series: Geological Society Special Publication Volume: 490 Pages: 135-151 Published: 2020
50. Thermal history of the Carboniferous strata in the northern part of the Intra-Sudetic Basin (SW Poland): A combined Raman spectroscopy and organic petrography study  
Botor, Dariusz; Tobola, Tomasz; Waliczek, Marta  
ACTA GEOLOGICA POLONICA Volume: 70 Issue: 3 Pages: 363-396 Published: 2020
49. About the Microstructure of the Graptolite Periderm - Examples from the Holy Cross Mountains (Poland)  
Morga, R.  
IOP Conference Series: Earth and Environmental Science 362(1),012076 (2019)
48. Utility of Raman spectroscopy in estimates of the thermal maturity of Ediacaran organic matter: An example from the East European Craton  
Goryl, M.; Banasik, K.; Smolarek-Lach, J.; Marynowski, L.  
Chemie der Erde 79(3), pp. 467-474 (2019)
47. Crystallite Structure Characteristics and Its Influence on Methane Adsorption for Different Rank Coals  
Meng, Junqing; Li, Shichao; Niu, Jiaying  
ACS OMEGA Volume: 4 Issue: 24 Pages: 20762-20772 Published: DEC 10 2019
46. Raman spectroscopy as a tool to determine the thermal maturity of organic matter: Application to sedimentary, metamorphic and structural geology  
Henry, Delano G.; Jarvis, Ian; Gillmore, Gavin; et al.  
EARTH-SCIENCE REVIEWS Volume: 198 Article Number: 102936 Published: NOV 2019
45. Quantitative evaluation of vitrinite reflectance in shale using Raman spectroscopy and multivariate analysis  
Lupoi, Jason S.; Hackley, Paul C.; Birsic, Erin; et al.  
FUEL Volume: 254 Article Number: 115573 Published: OCT 15 2019
44. Difference in structural chemistry of non-coking and coking coal using acid treatment demineralization technique  
Ghorai, Soumitra; Ghosh, Bidisha; Chandaliya, Vimal Kumar; et al.  
INTERNATIONAL JOURNAL OF COAL PREPARATION AND UTILIZATION Early Access: SEP 2019

43. Utility of Raman spectroscopy in estimates of the thermal maturity of Ediacaran organic matter: An example from the East European Craton  
Goryl, Magdalena; Banasik, Kamila; Smolarek-Lach, Justyna; et al.  
GEOCHEMISTRY Volume: 79 Issue: 3 Special Issue: SI Pages: 467-474 Published: SEP 2019
42. Thermal maturity determination for oil prone organic matter based on the Raman spectra of artificial matured samples  
Mi, Jingkui; He, Kun; Fan, Junjia; et al.  
VIBRATIONAL SPECTROSCOPY Volume: 104 Article Number: 102940 Published: SEP 2019
41. Raman spectroscopy of graptolite periderm and its potential as an organic maturity indicator for the Lower Paleozoic in southwestern China  
Hao, Jingyue; Zhong, Ningning; Luo, Qingyong; et al.  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 213 Article Number: 103278 Published: SEP 1 2019
40. On the difference of graphitization behavior between vitrinite- and inertinite-rich anthracites during heat treatment  
Wang, Lu; Qin, Rongfang; Li, Yu; et al.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS Early Access: AUG 2019
39. Natural and experimental structural evolution of dispersed organic matter in mudstones: The Shimanto accretionary complex, southwest Japan  
Nakamura, Yoshihiro; Hara, Hidetoshi; Kagi, Hiroyuki  
ISLAND ARC Volume: 28 Issue: 5 Article Number: e12318 Published: SEP 2019
38. Comparing optical and Raman spectroscopic investigations of phytoclasts and sporomorphs for thermal maturity assessment: the case study of Hettangian continental facies in the Holy cross Mts. (central Poland)  
Schito, A.; Spina, A.; Corrado, S.; et al.  
MARINE AND PETROLEUM GEOLOGY Volume: 104 Pages: 331-345 Published: JUN 2019
37. Effects of chemical composition, disorder degree and crystallite structure of coal macromolecule on nanopores (0.4-150 nm) in different rank naturally-matured coals  
Liu, Yu; Zhu, Yanming; Chen, Shangbin  
FUEL Volume: 242 Pages: 553-561 Published: APR 15 2019
36. Raman spectroscopic study of chemical structure and thermal maturity of vitrinite from a suite of Australia coals  
Zhang, Yulong; Li, Zhongsheng  
FUEL Volume: 241 Pages: 188-198 Published: APR 1 2019
35. Coal microcrystalline structural changes related to methane adsorption/desorption  
Pan, Jienan; Lv, Minmin; Hou, Quanlin; et al.  
FUEL Volume: 239 Pages: 13-23 Published: MAR 1 2019
34. A rapid method for determining organic matter maturity using Raman spectroscopy: Application to Carboniferous organic-rich mudstones and coals  
Henry, D. G.; Jarvis, I; Gillmore, G.; et al.  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 203 Pages: 87-98 Published: FEB 2 2019
33. Changes in the structure of lignite macerals during the gasification process determined by Raman spectroscopy  
Bielowicz, Barbara  
PRZEMYSŁ CHEMICZNY Volume: 98 Issue: 2 Pages: 241-245 Published: FEB 2019
32. Micro-Raman Spectroscopy of Microscopically Distinguishable Components of Naturally Graphitized Coals from Central Hunan Province, China  
Li, Kuo; Rimmer, Susan M.; Liu, Qinfu; et al.  
ENERGY & FUELS Volume: 33 Issue: 2 Pages: 1037-1048 Published: FEB 2019
31. Integrated assessment of thermal maturity of the Upper Ordovician-Lower Silurian Wufeng-Longmaxi shale in Sichuan Basin, China  
Wang, Ye; Qiu, Nansheng; Borjigin, Tenger; et al.  
MARINE AND PETROLEUM GEOLOGY Volume: 100 Pages: 447-465 Published: FEB 2019
30. The fluorescence interference in Raman spectrum of raw coals and its application for evaluating coal property and combustion characteristics  
Xiang, Jun; Liu, Jiawei; Xu, Jun; et al.  
PROCEEDINGS OF THE COMBUSTION INSTITUTE Volume: 37 Issue: 3 Pages: 3053-3060 Published: 2019
29. Quantitative evaluation of vitrinite reflectance and atomic O/C in coal using Raman spectroscopy and multivariate analysis  
Lupoi, Jason S.; Fritz, Luke P.; Hackley, Paul C.; et al.  
FUEL Volume: 230 Pages: 1-8 Published: OCT 15 2018
28. Ultrasonic-assisted cleaning of Indian low-grade coal for clean and sustainable energy  
Barma, Santosh Deb; Sathish, R.; Baskey, Prasanta Kumar  
JOURNAL OF CLEANER PRODUCTION Volume: 195 Pages: 1203-1213 Published: SEP 10 2018
27. Evaluating Molecular Evolution of Kerogen by Raman Spectroscopy: Correlation with Optical Microscopy and Rock-Eval Pyrolysis  
Khatibi, Seyedalireza; Ostadhassan, Mehdi; Tuschel, David; et al.  
ENERGIES Volume: 11 Issue: 6 Article Number: 1406 Published: JUN 2018

26. Jason S. Lupoi, Luke P. Fritz, Paul C. Hackley, Logan Solotky, Amy Weislogel, Steve Schlaegle  
Quantitative evaluation of vitrinite reflectance and atomic O/C in coal using Raman spectroscopy and multivariate analysis  
*Fuel* 230, 1-8 (2018).
25. Henry, D.G., Jarvis, I., Gillmore, G., Stephenson, M., Emmings, J.F.  
Assessing low-maturity organic matter in shales using Raman spectroscopy: Effects of sample preparation and operating procedure  
*International Journal of Coal Geology* 191, pp. 135-151, 2018.
24. Liu, Xianfeng; Song, Dazhao; He, Xueqiu; et al.  
Coal macromolecular structural characteristic and its influence on coalbed methane adsorption  
*FUEL* Volume: 222 Pages: 687-694 Published: JUN 15 2018
23. Morga, Rafal; Pawlyta, Mirosława  
Microstructure of graptolite periderm in Silurian gas shales of Northern Poland  
*INTERNATIONAL JOURNAL OF COAL GEOLOGY* Volume: 189 Pages: 1-7 Published: MAR 15 2018
21. Wilkins, Ronald W. T.; Sherwood, Neil; Li, Zhongsheng  
RaMM (Raman maturity method) study of samples used in an interlaboratory exercise on a standard test method for determination of vitrinite reflectance on dispersed organic matter in rocks  
*MARINE AND PETROLEUM GEOLOGY* Volume: 91 Pages: 236-250 Published: MAR 2018
20. Xu, Jun; Tang, Hao; Su, Sheng; et al.  
A study of the relationships between coal structures and combustion characteristics: The insights from micro-Raman spectroscopy based on 32 kinds of Chinese coals  
*APPLIED ENERGY* Volume: 212 Pages: 46-56 Published: FEB 15 2018
19. Wang, Qi; Zhang, Jianliang; Wang, Guangwei; et al.  
Thermal and Kinetic Analysis of Coal with Different Waste Plastics (PVC) in Cocombustion  
*ENERGY & FUELS* Volume: 32 Issue: 2 Pages: 2145-2155 Published: FEB 2018
18. Lima, Demetrius W.; Fiegenbaum, Fernanda; Trombetta, Fernanda; et al.  
Influence of graphitic materials microstructure in the hydrogen evolution in aqueous solution of tetra-alkylammonium-sulfonic acid ionic liquid  
*INTERNATIONAL JOURNAL OF HYDROGEN ENERGY* Volume: 43 Issue: 3 Pages: 1239-1250 Published: JAN 18 2018
17. Khatibi, Seyedalireza; Ostadhassan, Mehdi; Tuschel, David; et al.  
Raman spectroscopy to study thermal maturity and elastic modulus of kerogen  
*INTERNATIONAL JOURNAL OF COAL GEOLOGY* Volume: 185 Pages: 103-118 Published: JAN 2 2018
16. Luensdorf, N. Keno; Dunkl, Istvan; Schmidt, Burkhard C.; et al.  
Towards a Higher Comparability of Geothermometric Data Obtained by Raman Spectroscopy of Carbonaceous Material. Part 2: A Revised Geothermometer  
*GEOSTANDARDS AND GEOANALYTICAL RESEARCH* Volume: 41 Issue: 4 Pages: 593-612 Published: DEC 2017
15. Wu, Dun; Chen, Binyu; Sun, Ruoyu; et al.  
Thermal behavior and Raman spectral characteristics of step-heating perhydrous coal: Implications for thermal maturity process  
*JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS* Volume: 128 Pages: 143-155 Published: NOV 2017
14. Lupoi, Jason S.; Fritz, Luke P.; Parris, Thomas M.; et al.  
Assessment of Thermal Maturity Trends in Devonian-Mississippian Source Rocks Using Raman Spectroscopy: Limitations of Peak-Fitting Method  
*FRONTIERS IN ENERGY RESEARCH* Volume: 5 Article Number: UNSP 24 Published: SEP 27 2017
13. Xu, Jun; Tang, Hao; Su, Sheng; et al.  
Micro-Raman Spectroscopy Study of 32 Kinds of Chinese Coals: Second-Order Raman Spectrum and Its Correlations with Coal Properties  
*ENERGY & FUELS* Volume: 31 Issue: 8 Pages: 7884-7893 Published: AUG 2017
12. Schito, Andrea; Romano, Claudia; Corrado, Sveva; et al.  
Diagenetic thermal evolution of organic matter by Raman spectroscopy  
*ORGANIC GEOCHEMISTRY* Volume: 106 Pages: 57-67 Published: APR 2017
11. Schito, A.; Corrado, S.; Trolese, M.; et al.  
Assessment of thermal evolution of Paleozoic successions of the Holy Cross Mountains (Poland)  
*MARINE AND PETROLEUM GEOLOGY* Volume: 80 Pages: 112-132 Published: FEB 2017
10. Pan, Jienan; Lv, Minmin; Bai, Heling; et al.  
Effects of Metamorphism and Deformation on the Coal Macromolecular Structure by Laser Raman Spectroscopy  
*ENERGY & FUELS* Volume: 31 Issue: 2 Pages: 1136-1146 Published: FEB 2017
9. Jiang, Jingyu; Wu, Dun; Mou, Junhui; et al.  
Macromolecular structure evolution and its significance for perhydrous coal under drying and pyrolysis conditions  
*DRYING TECHNOLOGY* Volume: 35 Issue: 11 Special Issue: SI Pages: 1398-1411 Published: 2017
8. Botor, Dariusz; Tobola, Tomasz; Jelonek, Iwona

THERMAL HISTORY OF THE LOWER CARBONIFEROUS CULM BASIN IN THE NIZKY JESENÍK MTS. (NE BOHEMIAN MASSIF, CZECH REPUBLIC AND POLAND)  
ANNALES SOCIÉTATIS GEOLOGORUM POLONIAE Volume: 87 Issue: 1 Pages: 13-40 Published: 2017

7. Xie, Ying-Fang; You, Jing-Lin; Lu, Li-Ming  
In-Situ Temperature Dependent Raman Spectra of Coal  
PROCEEDINGS OF THE 3RD INTERNATIONAL CONFERENCE ON MATERIAL ENGINEERING AND APPLICATION (ICMEA 2016) Book Series: AER-Advances in Engineering Research Volume: 103 Pages: 303-309 Published: 2016

6. Li, X., Zeng, F.-G., Wang, W., Dong, K.  
Raman characterization of structural evolution in the low-middle rank coals  
Meitan Xuebao/Journal of the China Coal Society 41(9), 2298-2304 DOI: 10.13225/j.cnki.jccs.2016.0053 (2016)

5. Schmidt Mumm, A., Inan, S.  
Microscale organic maturity determination of graptolites using Raman spectroscopy  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 162 Pages: 96-107 DOI: 10.1016/j.coal.2016.05.002 Published: MAY 15 2016

4. Lunsdorf, NK, Lunsdorf, JO  
Evaluating Raman spectra of carbonaceous matter by automated, iterative curve-fitting  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 160 Pages: 51-62 DOI: 10.1016/j.coal.2016.04.008 Published: APR 15 2016

3. Rantitsch, G., Lämmerer, W., Fisslthaler, E., Mitsche, S., Kaltenböck, H.  
On the discrimination of semi-graphite and graphite by Raman spectroscopy  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 159 Pages: 48-56 DOI: 10.1016/j.coal.2016.04.001 Published: APR 1 2016

2. Inan, S., Goodarzi, F., Schmidt Mumm, A., Arouri, K., Qathami, S., Ardakani, O.H., Inan, T., Tuwailib, A.A.  
The Silurian Qusaiba Hot Shales of Saudi Arabia: An integrated assessment of thermal maturity  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 159 Pages: 107-119 DOI: 10.1016/j.coal.2016.04.004 Published: APR 1 2016

1. Lünsdorf, N.K.  
Raman spectroscopy of dispersed vitrinite - Methodical aspects and correlation with reflectance  
INTERNATIONAL JOURNAL OF COAL GEOLOGY Volume: 153 Pages: 75-86 DOI: 10.1016/j.coal.2015.11.010 Published: JAN 1 2016

## 92. “Two dimensional polymerization of graphene oxide: Bottom-up approach”

Victor Atanasov, Stoyan Russev, Lyudmil Lyutov, Yulian Zagraniansky, Iglia Dimitrova, Georgy Avdeev, Ivalina Avramova, Evgenia Vulcheva, Kiril Kirilov, Atanas Tzonev, Miroslav Abrashev, and Gichka Tsutsumanova  
Materials Chemistry and Physics **163**, 172-181 (2015) (10 pages)

1. A novel composite based on pyrene thiazole grafted on graphene oxide: physico-chemical characterization and electrochemical investigations  
Tudose, Madalina; Baratoiu-Carpen, Rodica D.; Anghel, Elena Maria; et al.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 262 Article Number: 124315 Published: APR 1 2021

## 93. “On the plasma-based growth of ‘flowing’ graphene sheets at atmospheric pressure conditions”

Tsyganov, D., Bundaleska, N., Tatarova, E., Dias, A., Henriques, J., Rego, A., Ferraria, A., Abrashev, M.V., Dias, F.M., Luhrs, C.C., Phillips, J.  
Plasma Sources Sci. Technol. **25**, 015013 (2016) (22 pages) DOI: 10.1088/0963-0252/25/1/015013

51. Chen, X., Hu, H., Xia, W., Zhang, Z.  
Comparison study on carbon nanomaterial synthesis from methane and acetylene in DC arc plasma  
Fullerenes Nanotubes and Carbon Nanostructures 32(5), pp. 471-482 (2024)

50. Hu, H., Chen, X., Wang, C., Xia, W.  
Experimental study of graphene synthesis by different gas-doped plasma  
Fullerenes Nanotubes and Carbon Nanostructures 32(4), pp. 346-356 (2024)

49. Saifutdinov, A., Kustova, E.  
Simulation of filamentation dynamics of microwave discharge in nitrogen  
Plasma Sources Science and Technology 32(12),125010 (2023)

48. Shavelkina, M.B., Ivanov, P.P.  
Synthesis of thermally stable carbon nanostructures via ethanol pyrolysis in DC plasma jets  
Journal of Physics and Chemistry of Solids 181,111555 (2023)

47. Morales-Calero, F.J., Rincón, R., Muñoz, J., Calzada, M.D.  
Experimental characterization of TIAGO torch discharges: surface wave discharge behavior and (post-)discharge kinetics

- Plasma Sources Science and Technology 32(6),065001 (2023)
46. Saifutdinov, A.I., Germanov, N.P., Saifutdinova, A.A., Sorokina, A.R.  
Investigation of the Conversion of Small Ethanol Impurities in Argon in Atmospheric-Pressure Glow Discharge  
High Energy Chemistry 57(1), pp. 35-52 (2023)
45. Musikhin, S., Fortugno, P., Endres, T., (...), Daun, K.J., Schulz, C.  
Elemental carbon and hydrogen concentrations as the main factors in gas-phase graphene synthesis: Quantitative fourier-transform infrared spectroscopy study  
Carbon 202, pp. 47-60 (2023)
44. Edward, K., Mamun, K., Narayan, S., (...), Rohindra, D., Rathnayake, U.  
State-of-the-Art Graphene Synthesis Methods and Environmental Concerns  
Applied and Environmental Soil Science 2023,8475504 (2023)
43. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)
42. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
Reviews of Modern Plasma Physics 6(1),37 (2022)
41. Lebedev, Y.A., Tatarinov, A.V., Epshtein, I.L., Titov, A.Y.  
Zero-Dimensional Simulation of Microwave Discharge in Aqueous Ethanol Solution  
High Energy Chemistry 56(6), pp. 448-460 (2022)
40. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.  
A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
Journal of Energy Chemistry 74, pp. 252-282 (2022)
39. Parvin, N., Kumar, V., Joo, S.W., Park, S.-S., Mandal, T.K.  
Recent Advances in the Characterized Identification of Mono-to-Multi-Layer Graphene and Its Biomedical Applications: A Review  
Electronics (Switzerland) 11(20),3345 (2022)
38. Zafar, M.A., Jacob, M.V.  
Synthesis of free-standing graphene in atmospheric pressure microwave plasma for the oil-water separation application  
Applied Surface Science Advances 11,100312 (2022)
37. Heo, S., Lim, T., Kim, B.S., Suk, J.W., Bak, M.S.  
Impact of N<sub>2</sub> admixture on the synthesis of graphitic carbon nanoparticles using atmospheric-pressure microwave plasma  
Journal of Physics D: Applied Physics 55(27),275201 (2022)
36. Zafar, M.A., Varghese, O.K., Robles Hernandez, F.C., Liu, Y., Jacob, M.V.  
Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions  
ACS Applied Materials and Interfaces 14(4), pp. 5797-5806 (2022)
35. Fortugno, P., Musikhin, S., Shi, X., (...), Wiggers, H., Schulz, C.  
Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen  
Carbon 186, pp. 560-573 (2022)
34. Jašek, O., Toman, J., Šnirer, M., (...), Všianský, D., Pavlinák, D.  
Microwave plasma-based high temperature dehydrogenation of hydrocarbons and alcohols as a single route to highly efficient gas phase synthesis of freestanding graphene  
Nanotechnology 32(50),505608 (2021)
33. Kavyrshin, D.I., Shavelkina, M.B., Chinnov, V.F., Miazin, A.S.  
Spectral study of argon-methane mixture plasma jet generated by a DC plasmatron  
Journal of Physics: Conference Series 2100(1),012018 (2021)
32. Shavelkina, M.B., Ivanov, P.P., Amirov, R.K., (...), Drachev, A.I., Shavelkin, M.A.  
Plasma Pyrolysis of Ethanol for the Production of Carbon Nanostructures  
High Energy Chemistry 55(6), pp. 531-536 (2021)
31. Shavelkina, M.B., Ivanov, P.P., Amirov, R.K., Bocharov, A.N.  
Multichannel Nature of Synthesis of Carbon Nanostructures in Low-Temperature Plasma  
Plasma Physics Reports 47(10), pp. 1014-1020 (2021)
30. Toman, J., Jašek, O., Šnirer, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)
29. Ma, J., Chen, X., Song, M., Wang, C., Xia, W.



- Study on formation mechanism of three types of carbon nanoparticles during ethylene pyrolysis in thermal plasmas  
Diamond and Related Materials 117,108445 (2021)
28. Snirer, M., Kudrle, V., Toman, J., Jašek, O., Jurmanová, J.  
Structure of microwave plasma-torch discharge during graphene synthesis from ethanol  
Plasma Sources Science and Technology 30(6),065020 (2021)
27. Sun, Y., Zhang, J.  
Strategies for scalable gas-phase preparation of free-standing graphene  
CCS Chemistry 3(4), pp. 1058-1077 (2021)
26. Jašek, O., Toman, J., Šnirer, M., (...), Jurmanová, J., Všianský, D.  
GROWTH MECHANISM AND FUNCTIONAL PROPERTIES OF GAS-PHASE SYNTHESIZED FEW-LAYER GRAPHENE  
NANOCON Conference Proceedings - International Conference on Nanomaterials pp. 29-35 (2021)
25. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
Diamond and Related Materials 116,108417 (2021)
24. Controlled high temperature stability of microwave plasma synthesized graphene nanosheets  
Jasek, Ondrej; Toman, Jozef; Vsiansky, Dalibor; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 16 Article Number: 165201 Published: APR 22 2021
23. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
Casanova, A.; Rincon, R.; Munoz, J.; et al.  
FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
22. Shavelkina, M.B., Filimonova, E.A., Amirov, R.Kh.  
Effect of helium/propane-butane atmosphere on the synthesis of graphene in plasma jet system  
Plasma Sources Science and Technology 29(2),025024 (2020)
21. The role of microwave plasma temperature during graphene nanosheets deposition on dielectric substrate: Modelling and experiment  
Kubečka, M., Toman, J., Šnirer, M., (...), Kudrle, V., Jurmanová, J.  
NANOCON Conference Proceedings - International Conference on Nanomaterials  
2020-October, pp. 80-84 (2020)
20. Effect of charging solid particles on their growth process and parameters of microwave discharge in liquid n-heptane  
Lebedev, Yu A.; Tatarinov, A., V; Epstein, I. L.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 6 Article Number: 065013 Published: JUN 2020
19. Effect of Plasma Ignition on the Growth Temperature Decrease of Single-Walled Carbon Nanotubes in a Plasma-Coupled Hybrid  
Chemical-Vapor-Deposition System  
Jo, Sung-Il; Lee, Byeong-Joo; Jeong, Goo-Hwan  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 76 Issue: 12 Pages: 1110-1115 Published: JUN 2020
18. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
DIAMOND AND RELATED MATERIALS Volume: 105 Article Number: 107798 Published: MAY 2020
17. Simulation of Microwave Discharge in Liquid n-Heptane in the Presence of Argon in the Discharge Region  
Lebedev, Yu A.; Tatarinov, A., V; Epshtein, I. L.  
HIGH ENERGY CHEMISTRY Volume: 54 Issue: 3 Pages: 217-226 Published: MAY 2020
16. Distinctive Features of Graphene Synthesized in a Plasma Jet Created by a DC Plasma Torch  
Shavelkina, Marina; Ivanov, Peter; Bocharov, Aleksey; et al.  
MATERIALS Volume: 13 Issue: 7 Article Number: 1728 Published: APR 2020
15. Influence of molecular admixtures on filamentation in microwave plasma torch  
Snirer, M., Kudrle, V., Toman, J., (...), Faltýnek, J., Jurmanová, J.  
46th EPS Conference on Plasma Physics, EPS 2019 (2019)
14. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel  
microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
13. Graphene synthesis by microwave plasma chemical vapor deposition: analysis of the emission spectra and modeling  
Pashova, K.; Hinkov, I; Aubert, X.; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 28 Issue: 4 Article Number: 045001 Published: APR 2019
12. Modeling of plasma-enhanced chemical vapor deposition growth of graphene on cobalt substrates  
Hinkov, Ivaylo; Pashova, Katya; Farhat, Samir  
DIAMOND AND RELATED MATERIALS Volume: 93 Pages: 84-95 Published: MAR 2019
11. Direct synthesis of hydrogenated graphene via hydrocarbon decomposition in plasmas  
Shavelkina, M. B.; Amirov, R. H.

10. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
9. GRAPHENE NANOSHEETS SYNTHESIZED IN MICROWAVE PLASMA AND LIQUID EXFOLIATED GRAPHENE: STRUCTURAL CHARACTERIZATION STUDY  
Jurmanova, Jana; Jasek, Ondrej; Toman, Jozef; et al.  
10TH ANNIVERSARY INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2018 (R)) Pages: 63-68 Published: 2019
8. Plasma diagnostics during microwave plasma synthesis of graphene nanosheets  
Snirer, M., Toman, J., Kudrle, V., (...), Faltynek, J., Jurmanov, J.  
45th EPS Conference on Plasma Physics, EPS 2018 2018-July, pp. 537-540 (2018)
7. Methane/nitrogen plasma-assisted synthesis of graphene and carbon nanotubes  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 51 Issue: 29 Article Number: 294005 Published: JUL 25 2018
6. ELECTROCHEMICAL PROPERTIES OF GRAPHENE NANOSHEETS SYNTHESISED IN MICROWAVE PLASMA TORCH DISCHARGE  
Toman, Jozef; Jasek, Ondrej; Prasek, Jan; et al.  
9TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2017) Pages: 88-93 Published: 2018
5. Averin, Konstantin A.; Lebedev, Yuri A.; Shchegolikhin, Alexander N.; et al.  
Nanosize carbon products formed in microwave discharge in liquid alkanes  
PLASMA PROCESSES AND POLYMERS Volume: 14 Issue: 9 Article Number: e1600227 Published: SEP 2017
4. THE INFLUENCE OF GAS ADMIXTURES ON THE SYNTHESIS OF GRAPHENE NANOSHEETS IN ARGON MICROWAVE PLASMA TORCH DISCHARGE  
Toman, Jozef; Jasek, Ondrej; Jurmanova, Jana  
8TH INTERNATIONAL CONFERENCE ON NANOMATERIALS - RESEARCH & APPLICATION (NANOCON 2016) Pages: 122-126 Published: 2017
3. Park, CS (Park, Choon-Sang); Kim, DH (Kim, Dong Ha); Shin, BJ (Shin, Bhum Jae); Kim, DY (Kim, Do Yeob); Lee, HK (Lee, Hyung-Kun); Tae, HS (Tae, Heung-Sik)  
Conductive Polymer Synthesis with Single-Crystallinity via a Novel Plasma Polymerization Technique for Gas Sensor Applications  
MATERIALS Volume: 9 Issue: 10 Article Number: 812 DOI: 10.3390/ma9100812 Published: OCT 2016
2. Arias-Monje, Pedro J.; Menon, Sarath K.; Zea, Hugo; et al.  
Nitrogen Doped Graphene Generated by Microwave Plasma and Reduction Expansion Synthesis  
NANOSCIENCE AND NANOTECHNOLOGY LETTERS Volume: 8 Issue: 2 Pages: 120-128 Published: FEB 2016
1. Park, C.-S., Kim, D.H., Shin, B.J., Kim, D.Y., Lee, H.-K., Tae, H.-S.  
Synthesis and Characterization of Nanofibrous Polyaniline Thin Film Prepared by Novel Atmospheric Pressure Plasma Polymerization Technique  
MATERIALS Volume: 9 Issue: 1 Article Number: 39 DOI: 10.3390/ma9010039 Published: JAN 2016
94. *“Vibrational spectroscopy of Ga<sup>+</sup> ion implanted ta-C films”*  
Berova, M., Sandulov, M., Tsvetkova, T., Bischoff, L., Boettger, R., Abrashev, M.  
Journal of Physics: Conference Series **682**, 012020 (2016) (6 pages) DOI: 10.1088/1742-6596/682/1/012020
95. *“Phase composition identification and microstructure of BaTiO<sub>3</sub>-containing sodium-aluminoborosilicate glass-ceramics”*  
Harizanova, R., Abrashev, M., Avramova, I., Vladislavova, L., Bocker, C., Tsutsumanova, G., Avdeev, G., Rüssel, C.  
Solid State Sciences **52**, 49-56 (2016) DOI: 10.1016/j.solidstatedsciences.2015.12.007
2. Rapid removal of ammonia nitrogen in low-concentration from wastewater by amorphous sodium titanate nano-particles  
Zhang, Wenlong; Fu, Rao; Wang, Li; et al.  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 668 Pages: 815-824 Published: JUN 10 2019
1. Gamma Irradiation and Heat Treatment Effects on Barium Borosilicate Glasses Doped Titanium Oxide  
El-Alaily, N. A.; Abou Hussein, E. M.; Eldin, F. M. Ezz  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS Volume: 28 Issue: 6 Pages: 2662-2676 Published: NOV 2018
96. *“Production of N-graphene by microwave N<sub>2</sub>-Ar plasma”*

Dias, A., Bundaleski, N., Tatarova, E., Dias, F.M., Abrashev, M., Cvelbar, U., Teodoro, O.M.N.D., Henriques, J.

Journal of Physics D – Applied Physics **49**(5), 055307 (2016) DOI: 10.1088/0022-3727/49/5/055307

19. Sovizi, S., Angizi, S., Ahmad Alem, S.A., (...), Simchi, A., Kruse, P.  
Plasma Processing and Treatment of 2D Transition Metal Dichalcogenides: Tuning Properties and Defect Engineering  
Chemical Reviews 123(24), pp. 13869-13951 (2023)
18. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.  
A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
Journal of Energy Chemistry 74, pp. 252-282 (2022)
17. Cai, S., Xu, C., Jiang, D., (...), Li, Z., Wang, Y.  
Air-permeable electrode for highly sensitive and noninvasive glucose monitoring enabled by graphene fiber fabrics  
Nano Energy 93,106904 (2022)
16. Kavyrshin, D.I., Shavelkina, M.B., Chinnov, V.F., Miazin, A.S.  
Spectral study of argon-methane mixture plasma jet generated by a DC plasmatron  
Journal of Physics: Conference Series 2100(1),012018 (2021)
15. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
14. Calculation of two-temperature thermodynamic and transport properties of argon-nitrogen plasma  
Pan Zi-Han; Chen Xian-Hui; Wang Cheng; et al.  
ACTA PHYSICA SINICA Volume: 70 Issue: 8 Article Number: 085201 Published: APR 20 2021
13. One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh  
Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 11 Issue: 4 Article Number: 837 Published: APR 2021
12. Incorporation-limiting mechanisms during nitrogenation of monolayer graphene films in nitrogen flowing afterglows  
Robert Bigras, G.; Martel, R.; Stafford, L.  
NANOSCALE Volume: 13 Issue: 5 Pages: 2891-2901 Published: FEB 7 2021
11. Scalable and fast fabrication of holey multilayer graphene via microwave and its application in supercapacitors  
Bai, Yuge; Yin, Yuting; Xuan, Yingying; et al.  
NANOTECHNOLOGY Volume: 32 Issue: 4 Article Number: 045602 Published: JAN 22 2021
10. Active-screen plasma multi-functionalization of graphene oxide for supercapacitor application  
Jing, Zhiyuan; Qi, Shaojun; Tao, Xiao; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 56 Issue: 4 Pages: 3296-3311 Published: FEB 2021
9. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials  
Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020
8. Nitrogen functionalization of MWCNTs in Ar-N-2 dielectric barrier discharge - Gas ratio effect  
Abdel-Fattah, E.; Ogawa, D.; Nakamura, K.  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS Volume: 261  
Article Number: 114680 Published: NOV 2020
7. Synthesis of plasma treated nitrogen-doped graphite oxide for supercapacitor applications  
Ghanashyam, Gyawali; Jeong, Hae Kyung  
JOURNAL OF ENERGY STORAGE Volume: 26 Article Number: 100923 Published: DEC 2019
6. One-step growth of reduced graphene oxide on arbitrary substrates  
Chen, Mingguang; Yengel, Emre; Zhang, Junwei; et al.  
CARBON Volume: 144 Pages: 457-463 Published: APR 2019
5. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
4. Treatment of graphene films in the early and late afterglows of N-2 plasmas: comparison of the defect generation and N-incorporation dynamics  
Bigras, Germain Robert; Glad, Xavier; Martel, Richard; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 27 Issue: 12 Article Number: 124004 Published: DEC 2018
3. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

2. Bjelajac, Andjelika; Djokic, Veljko; Petrovic, Rada; et al.  
Absorption boost of TiO<sub>2</sub> nanotubes by doping with N and sensitization with CdS quantum dots  
CERAMICS INTERNATIONAL Volume: 43 Issue: 17 Pages: 15040-15046 Published: DEC 1 2017

1. Georgieva, Violeta; Berthelot, Antonin; Silva, Tiago; et al.  
Understanding Microwave Surface-Wave Sustained Plasmas at Intermediate Pressure by 2D Modeling and Experiments  
PLASMA PROCESSES AND POLYMERS Volume: 14 Issue: 4-5 Special Issue: SI Article Number: 1600185 Published: APR 2017

97. *“Estimation of the oxygen content of RBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> (R = Er, Y, Eu, Dy) superconducting samples by spectrophotometry and Raman spectroscopy: a comparison between chemical and physical methods for oxygen determination”*

Stela Georgieva, Angelina Stoyanova-Ivanova and Miroslav Abrashev  
Mediterranean Journal of Physics **1**(1), 16-21 (2016)

98. *“Biogenic nanosized iron oxides obtained from cultivation of iron bacteria from the genus Leptothrix”*

Nedkov, I., Slavov, L., Angelova, R., Blagoev, B., Kovacheva, D., Abrashev, M.V., Iliev, M., Groudeva, V.

Journal of Biological Physics **42**(4), 587-600 (2016) DOI: 10.1007/s10867-016-9426-3

7. Lu, L., Luo, Z., Yu, X., (...), Lei, M., Du, H.  
Oxidative Weathering of Neutral Mine Drainage from Gold Mine Tailings Impoundment: Tracking Formation and Transformation of Biogenic Iron Minerals and the Associated Arsenic  
ACS Earth and Space Chemistry **8**(2), pp. 335-347 (2024)

6. Lalinská-Voleková, B., Majerová, H., Kautmanová, I., (...), Brčeková, J., Šottník, P.  
Hydrous ferric oxides (HFO's) precipitated from contaminated waters at several abandoned Sb deposits – Interdisciplinary assessment  
Science of the Total Environment **821**,153248 (2022)

5. ThomasArrigo, L.K., Notini, L., Shuster, J., (...), Kappler, A., Kretzschmar, R.  
Mineral characterization and composition of Fe-rich flocs from wetlands of Iceland: Implications for Fe, C and trace element export  
Science of the Total Environment **816**,151567 (2022)

4. Matýsek, D., Jirásek, J.  
Let's not underestimate the microbial precipitation of iron and manganese oxyhydroxides in the environment  
Bulletin Mineralogie Petrologie **29**(1), pp. 115-123 (2021)

3. Preparation and Characterization of Additional Metallic Element-Containing Tubular Iron Oxides of Bacterial Origin  
Tamura, Katsunori; Kunoh, Tatsuki; Nakanishi, Makoto; et al.  
ACS OMEGA Volume: 5 Issue: 42 Pages: 27287-27294 Published: OCT 27 2020

2. High-Quality Inorganic Red Pigment Prepared by Aluminum Deposition on Biogenous Iron Oxide Sheaths  
Tamura, Katsunori; Kunoh, Tatsuki; Nagaoka, Noriyuki; et al.  
ACS APPLIED BIO MATERIALS Volume: 3 Issue: 9 Pages: 5699-5707 Published: SEP 21 2020

1. Characterization of iron oxide nanoparticle films at the air-water interface in Arctic tundra waters  
Jubb, Aaron M.; Eskelsen, Jeremy R.; Yin, Xiangping; et al.  
SCIENCE OF THE TOTAL ENVIRONMENT Volume: 633 Pages: 1460-1468 Published: AUG 15 2018

99. *“Optical, structural and electrochromic properties of sputter-deposited W-Mo oxide thin films”*

K. Gesheva, M. A. Arvizu, G. Bodurov, T. Ivanova, G. A. Niklasson, M. Iliev, T. Vlachov, P. Terzijska, G. Popkirov, M. Abrashev, S. Boyadjiev, G. Jágerszki, I. M. Szilágyi, and Y. Marinov  
Journal of Physics: Conference Series **764**, 012010 (2016) DOI:10.1088/1742-6596/764/1/012010

5. Nisa, M.-U., Nadeem, N., Yaseen, M., (...), Mustafa, G., Shahid, I.  
Applications of graphene-based tungsten oxide nanocomposites: a review  
Journal of Nanostructure in Chemistry **13**(2), pp. 167-196 (2023)

4. Maktoof, A.S., Mohammed, G.H.  
The Effect of Au Nanoparticles on the Structural and Optical Properties of (NiO:WO<sub>3</sub>) Thin Films Prepared by PLD Technique  
Iraqi Journal of Science **63**(6), pp. 2502-2513 (2022)

3. Mesoporous Molybdenum-Tungsten Mixed Metal Oxide: A Solid Acid Catalyst for Green, Highly Efficient sp<sup>3</sup>-sp<sup>2</sup> C-C Coupling Reactions  
Thalgaspiitiya, W.R.K., Kapuge, T.K., He, J., (...), Kerns, P., Suib, S.L.  
ACS Applied Materials and Interfaces **12**(5), pp. 5990-5998 (2020)

2. The Single Cells and Cell Populations Viability Estimation in vitro by the Time-Domain Impedance Spectroscopy  
Stupin, D. D.

1. Khan, G. R.; Ahmad, Bilal

Effect of quantum confinement on thermoelectric properties of vanadium dioxide nanofilms

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 123 Issue: 12 Article Number: 795 Published: DEC 2017

100. *“Towards large-scale in freestanding graphene and N-graphene sheets”*

E. Tatarova, A. Dias, J. Henriques, M. Abrashev, N. Bundaleska, E. Kovacevic, N. Bundaleski, U. Cvelbar, E. Valcheva, B. Arnaudov, A. M. Botelho do Rego, A. M. Ferraria, J. Berndt, E. Felizardo, O. M. N. D. Teodoro, Th. Strunskus, L. L. Alves, and B. Gonçalves  
Scientific Reports 7, 10175 (2017) DOI: 10.1038/s41598-017-10810-3

54. Ajeel, F.N., Ahmed, A.B.

Enhanced thermoelectric performances in graphene nanoribbons via BN dimers doping: Theoretical study  
Chemical Physics Impact 8,100413 (2024)

53. Chobsilp, T., Threrujirapapong, T., Yordsri, V., (...), Treetong, A., Muangrat, W.

One-step facile growth of nitrogen-doped graphene nanowalls by catalyst-free thermal chemical vapor deposition  
Fullerenes Nanotubes and Carbon Nanostructures 32(3), pp. 300-306 (2024)

52. Beckers, J., Berndt, J., Block, D., (...), Tolias, P., van de Kerkhof, M.

Physics and applications of dusty plasmas: The Perspectives 2023  
Physics of Plasmas 30(12),120601 (2023)

51. Qi, X., Ma, Y., Liu, S., (...), Peng, W., Hu, G.

Suppression of Secondary Electron Emissions on the Graphene-Coated Polyimide Materials Prepared by Chemical Vapor Deposition  
Coatings 13(10),1805 (2023)

50. Zafar, M.A., Liu, Y., Hernandez, F.C.R., Varghese, O.K., Jacob, M.V.

Plasma-Based Synthesis of Freestanding Graphene from a Natural Resource for Sensing Application  
Advanced Materials Interfaces 10(11),2202399 (2023)

49. Camargo, B.C., El-Kerdi, B., Alaferdov, A., (...), Birowska, M., Escoffier, W.

Self-doped graphite nanobelts  
Carbon 207, pp. 240-244 (2023)

48. Borja-Maldonado, F., López Zavala, M.Á.

Assessment of Graphite, Graphene, and Hydrophilic-Treated Graphene Electrodes to Improve Power Generation and Wastewater Treatment in Microbial Fuel Cells  
Bioengineering 10(3),378 (2023)

47. Shavelkina, M.B., Kavyrshin, D.I., Amirov, R.Kh., (...), Dzagnidze, G.M., Ivanov, A.I.

DC erosion jets for the production of composite graphene particles  
Physics of Plasmas 30(2),023507 (2023)

46. Zafar, M.A., Jacob, M.V.

Plasma-based synthesis of graphene and applications: a focused review  
Reviews of Modern Plasma Physics 6(1),37 (2022)

45. Hameed, T.A., Sharmoukh, W., Anis, B., Youssef, A.M.

Enhanced photocatalytic activity and diode performance of ZnO-GO nanocomposites via doping with aluminum  
International Journal of Energy Research 46(15), pp. 22601-22624 (2022)

44. Mallick, M., N, A.

Effects of electrophoretic deposited graphene coating thickness on the corrosion and wear behaviors of commercially pure titanium  
Surface and Coatings Technology 450,128946 (2022)

43. Levchenko, I., Mandhakini, M., Prasad, K., (...), Xu, S., Bazaka, K.

Functional Nanomaterials from Waste and Low-Value Natural Products: A Technological Approach Level  
Advanced Materials Technologies 7(11),2101471 (2022)

42. Parvin, N., Kumar, V., Joo, S.W., Park, S.-S., Mandal, T.K.

Recent Advances in the Characterized Identification of Mono-to-Multi-Layer Graphene and Its Biomedical Applications: A Review  
Electronics (Switzerland) 11(20),3345 (2022)

41. Wang, J., Wu, W., Kondo, H., Fan, T., Zhou, H.

Recent progress in microwave-assisted preparations of 2D materials and catalysis applications  
Nanotechnology 33(34),342002 (2022)

40. Vachkov, V., Kiss'Ovski, Z.

Simulations of a capacitor with graphene electrodes  
Journal of Physics: Conference Series 2240(1),012036 (2022)

39. Zafar, M.A., Varghese, O.K., Robles Hernandez, F.C., Liu, Y., Jacob, M.V.

- Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions  
ACS Applied Materials and Interfaces 14(4), pp. 5797-5806 (2022)
38. Kulyk, B., Freitas, M.A., Santos, N.F., (...), Tedim, J., Costa, F.M.  
A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings  
Critical Reviews in Solid State and Materials Sciences 47(3), pp. 309-355 (2022)
37. Kavyrshin, D.I., Shavelkina, M.B., Chinnov, V.F., Miazin, A.S.  
Spectral study of argon-methane mixture plasma jet generated by a DC plasmatron  
Journal of Physics: Conference Series 2100(1),012018 (2021)
36. Khan, I., Hararak, B., Fernando, G.F.  
Improved procedure for electro-spinning and carbonisation of neat solvent-fractionated softwood Kraft lignin  
Scientific Reports 11(1),16237 (2021)
35. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
34. Wang, X.-Z., Zheng, Y.-H., Xue, Y., (...), Kou, Z.-Q., Liu, J.-P.  
Study on the destruction process of cationic exchange resins treated by Li<sub>2</sub>CO<sub>3</sub>-Na<sub>2</sub>CO<sub>3</sub>-K<sub>2</sub>CO<sub>3</sub> molten salt  
Journal of Environmental Chemical Engineering 9(5),105948 (2021)
33. Mariano, S.F.M., Silva, C., Medeiros, F.I., Pillaca, E.J.D.M., Ueda, M.  
Graphene-like coated steel tube via biased hollow cathode discharges  
Vacuum 192,110431 (2021)
32. Sharma, S., Yashwanth, P.K., Roy, B.  
Deactivation study of the BICOVOX catalysts used in low temperature steam reforming of ethanol for H<sub>2</sub> production  
Journal of Physics and Chemistry of Solids 156,110138 (2021)
31. Ahmad, W., Ullah, Z., Sonil, N.I., Khan, K.  
Introduction, production, characterization and applications of defects in graphene  
Journal of Materials Science: Materials in Electronics 32(15), pp. 19991-20030 (2021)
30. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
Journal of Applied Physics 129(21),213304 (2021)
29. Sun, Y., Zhang, J.  
Strategies for scalable gas-phase preparation of free-standing graphene  
CCS Chemistry 3(4), pp. 1058-1077 (2021)
28. Deactivation study of the BICOVOX catalysts used in low temperature steam reforming of ethanol for H<sub>2</sub> production  
Sharma, S., Yashwanth, P.K., Roy, B.  
Journal of Physics and Chemistry of Solids 156,110138 (2021)
27. Advances of microwave plasma-enhanced chemical vapor deposition in fabrication of carbon nanotubes: a review  
Liu, Yanjing; He, Jiawei; Zhang, Nan; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 56 Issue: 22 Pages: 12559-12583 Published: AUG 2021
26. Engineering tunable conductivity, p-n junction and light-harvesting semi-conductivity of graphene oxide by fixing reduction mood only  
Karim, Mohammad Razaul; Uddin, Md. Nizam; Shaikh, Md. Aslam; et al.  
JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 120 Pages: 325-335 Published: MAR 2021
25. A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings  
Kulyk, Bohdan; Freitas, Maria A.; Santos, Nuno F.; et al.  
CRITICAL REVIEWS IN SOLID STATE AND MATERIALS SCIENCES Early Access: FEB 2021
24. Optimizing high-quality graphene nanoflakes production through organic (bio)-precursor plasma decomposition  
Casanova, A.; Rincon, R.; Munoz, J.; et al.  
FUEL PROCESSING TECHNOLOGY Volume: 212 Article Number: 106630 Published: FEB 2021
23. Pure electric and magnetic fields applied to reduced graphene oxide for defect repair and oxygen removal  
Miyata, Takeshi; Gohda, Syun; Fujii, Takashi; et al.  
CARBON Volume: 171 Pages: 10-15 Published: JAN 2021
22. Low temperature steam reforming of ethanol over cobalt doped bismuth vanadate [Bi-4(V<sub>0.90</sub>Co<sub>0.10</sub>)<sub>2</sub>O<sub>11</sub>-delta (BICOVOX)] catalysts for hydrogen production  
Sharma, Shweta; Aich, Shampa; Roy, Banasri  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS Volume: 148 Article Number: 109754 Published: JAN 2021
21. Numerical and Experimental Study of the Multichannel Nature of the Synthesis of Carbon Nanostructures in DC Plasma Jets  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
PLASMA CHEMISTRY AND PLASMA PROCESSING Volume: 41 Issue: 1 Pages: 171-189 Published: JAN 2021

20. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials  
Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020
19. Self-sustained solid -state exothermic reaction for scalable graphene production  
Yang, Min; Liu, Jinxu; Li, Shukui; et al.  
MATERIALS & DESIGN Volume: 196 Article Number: 109135 Published: NOV 2020
18. Low-temperature low-power PECVD synthesis of vertically aligned graphene  
Hussain, Shahzad; Kovacevic, Eva; Berndt, Johannes; et al.  
NANOTECHNOLOGY Volume: 31 Issue: 39 Article Number: 395604 Published: SEP 25 2020
17. Effect of BN dimers on the stability, electronic, and thermal properties of monolayer graphene  
Abdullah, Nzar Rauf; Abdalla, Danyal A.; Ahmed, Taha Y.; et al.  
RESULTS IN PHYSICS Volume: 18 Article Number: 103282 Published: SEP 2020
16. Effect of preparation on opto-electrical properties of CdS /N, S-rGO photocatalyst for splitting of water by visible light  
Alam, Zahoor; Verma, Bhawna; Sinha, A. S. K.  
MATERIALS CHEMISTRY AND PHYSICS Volume: 249 Article Number: 123212 Published: JUL 15 2020
15. Bifunctional electron conductive solid electrolyte and dye degrading photocatalyst from rGO-aminoalkane non-metallic origin  
Karim, Mohammad Razaul; Rahman, Mohammed M.; Asiri, Abdullah M.  
JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 112 Pages: 87-96 Published: JUL 2020
14. Synthesis of a zinc oxide/graphene hybrid material by the direct thermal decomposition of oxalate  
Little, Daniel J.; Pfund, Jacob D.; McLain, Avery A.; et al.  
MATERIALS RESEARCH EXPRESS Volume: 7 Issue: 6 Article Number: 065005 Published: JUN 2020
13. Branched Alkylamine-Reduced Graphene Oxide Hybrids as a Dual Proton-Electron Conductor and Organic-Only Water-Splitting Photocatalyst  
Karim, Mohammad Razaul; Rahman, Mohammed M.; Asiri, Abdullah M.; et al.  
ACS APPLIED MATERIALS & INTERFACES Volume: 12 Issue: 9 Pages: 10829-10838 Published: MAR 4 2020
12. Design of a 1D/2D C<sub>3</sub>N<sub>4</sub>/rGO composite as an anode material for stable and effective potassium storage  
Adekoya, David; Li, Meng; Hankel, Marlies; et al.  
ENERGY STORAGE MATERIALS Volume: 25 Pages: 495-501 Published: MAR 2020
11. N-Graphene Nanowalls via Plasma Nitrogen Incorporation and Substitution: The Experimental Evidence  
Santhosh, Neelakandan M.; Filipic, Gregor; Kovacevic, Eva; et al.  
NANO-MICRO LETTERS Volume: 12 Issue: 1 Article Number: 53 Published: FEB 17 2020
10. Effective PEGylation method to improve biocompatibility of graphene derivatives  
Demirel, Erhan; Karaca, Ezgi; Durmaz, Yasemin Yuksel  
EUROPEAN POLYMER JOURNAL Volume: 124 Article Number: 109504 Published: FEB 5 2020
9. Effect of helium/propane-butane atmosphere on the synthesis of graphene in plasma jet system  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 2 Article Number: 025024 Published: FEB 2020
8. Deposition of vertical carbon nanosheets by MPECVD at atmospheric pressure  
Marinov, S.; Vachkov, V.; Kiss'ovski, Zh  
Journal of Physics Conference Series Volume: 1492 Article Number: 012032 Published: 2020
7. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
6. Understanding the structural and chemical changes in vertical graphene nanowalls upon plasma nitrogen ion implantation  
Manojkumar, P. A.; Krishna, Nanda Gopala; Mangamma, G.; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 21 Issue: 20 Pages: 10773-10783 Published: MAY 28 2019
5. Kinetic study of Z-scheme C<sub>3</sub>N<sub>4</sub>/CuWO<sub>4</sub> photocatalyst towards solar light inactivation of mixed populated bacteria  
Gupta, Rimzhim; Boruah, Bhanupriya; Modak, Jayant M.; et al.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY Volume: 372 Pages: 108-121 Published: MAR 1 2019
4. Collagen functionalized graphene sheets decorated with in situ synthesized nano hydroxyapatite electrospun into fibers  
Yadav, Balram Singh; Sahu, Ranjan Kumar; Pramanick, Ashit Kumar; et al.  
MATERIALS TODAY COMMUNICATIONS Volume: 18 Pages: 167-175 Published: MAR 2019
3. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019

2. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

1. From nanometre to millimetre: a range of capabilities for plasma-enabled surface functionalization and nanostructuring  
Baranov, O.; Levchenko, I.; Bell, J. M.; et al.  
MATERIALS HORIZONS Volume: 5 Issue: 5 Published: SEP 1 2018

101. *“Microwave plasma enabled synthesis of free standing carbon nanostructures at atmospheric pressure conditions”*

N. Bundaleska, D. Tsyganov, A. Dias, E. Felizardo, J. Henriques, F. M. Dias, M. Abrashev, J. Kissovski and E. Tatarova  
Phys.Chem.Chem.Phys. **20**, 13810 (2018) DOI: 10.1039/c8cp01896k IF = 4.123

47. Zafar, M.A., Liu, Y., Allende, S., Jacob, M.V.  
Unconventional eco-friendly synthesis of graphene and its electrochemical analysis  
Nano-Structures and Nano-Objects 38,101129 (2024)

46. Ge, L., Chandra, S., Zafar, T., Park, S.S.  
Manufacturing Carbon Fiber Using Alberta Oilsands Asphaltene with Microwave Plasma Assistance  
C-Journal of Carbon Research 10(1),1 (2024)

45. Chen, L., Zhang, W., Qin, W., (...), Yang, Q., Su, B.  
Progress on graphene preparation from low carbon hydrocarbons by thermal plasma pyrolysis  
Gao Xiao Hua Xue Gong Cheng Xue Bao/Journal of Chemical Engineering of Chinese Universities 37(6), pp. 863-874 (2023)

44. Wang, S.-F., Xue, D., Liang, J., (...), Xie, Y., Zhang, J.-M.  
The synergistic regulation effect on the structure and electronic properties of graphene by methane plasma, Stone-Wales defect and equibiaxial strain  
Diamond and Related Materials 140,110426 (2023)

43. Cao, M.J., Li, S.D., Nie, L.F., Chen, Y.F.  
Research progress on graphene production by methane cracking: approach and growth mechanism  
Materials Today Sustainability 24,100522 (2023)

42. Dadsetan, M., Latham, K.G., Kumral, B., (...), Titirici, M.M., Thomson, M.J.  
Carbon film produced from microwave-driven methane pyrolysis  
Carbon Trends 12,100283 (2023)

41. Dadsetan, M., Latham, K.G., Khan, M.F., (...), Titirici, M.M., Thomson, M.J.  
Characterization of carbon products from microwave-driven methane pyrolysis  
Carbon Trends 12,100277 (2023)

40. Fortugno, P., López-Cámara, C.-F., Hagen, F., Wiggers, H., Schulz, C.  
Relevance of C/O ratios in the gas-phase synthesis of freestanding few-layer graphene  
Applications in Energy and Combustion Science 15,100180 (2023)

39. Zafar, M.A., Liu, Y., Hernandez, F.C.R., Varghese, O.K., Jacob, M.V.  
Plasma-Based Synthesis of Freestanding Graphene from a Natural Resource for Sensing Application  
Advanced Materials Interfaces 10(11),2202399 (2023)

38. Musikhin, S., Fortugno, P., Endres, T., (...), Daun, K.J., Schulz, C.  
Elemental carbon and hydrogen concentrations as the main factors in gas-phase graphene synthesis: Quantitative fourier-transform infrared spectroscopy study  
Carbon 202, pp. 47-60 (2023)

37. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)

36. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
Reviews of Modern Plasma Physics 6(1),37 (2022)

35. Zafar, M.A., Jacob, M.V.  
Synthesis of free-standing graphene in atmospheric pressure microwave plasma for the oil-water separation application  
Applied Surface Science Advances 11,100312 (2022)

34. Heo, S., Lim, T., Kim, B.S., Suk, J.W., Bak, M.S.  
Impact of N<sub>2</sub> admixture on the synthesis of graphitic carbon nanoparticles using atmospheric-pressure microwave plasma  
Journal of Physics D: Applied Physics 55(27),275201 (2022)

33. Zafar, M.A., Varghese, O.K., Robles Hernandez, F.C., Liu, Y., Jacob, M.V.



- Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions  
ACS Applied Materials and Interfaces 14(4), pp. 5797-5806 (2022)
32. Ouyang, B., Wang, Y., Wang, X., (...), Kan, E., Rawat, R.S.  
Rational design of hierarchically structured dual-encapsulated CoMoO<sub>4</sub> nanosheets via in situ plasma tuning for efficient Li<sup>+</sup> storage  
MRS Bulletin (Article in Press) DOI: 10.1557/s43577-022-00312-7 (2022)
31. Breus, A., Abashin, S., Lukashov, I., Serdiuk, O., Baranov, O.  
Catalytic Growth of Carbon Nanostructures in Glow Discharge  
Lecture Notes in Mechanical Engineering pp. 375-383 (2022)
30. Fortugno, P., Musikhin, S., Shi, X., (...), Wiggers, H., Schulz, C.  
Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen  
Carbon 186, pp. 560-573 (2022)
29. Breus, A., Abashin, S., Serdiuk, O.  
Carbon nanostructure growth: new application of magnetron discharge  
Journal of Achievements in Materials and Manufacturing Engineering 109(1), pp. 17-25 (2021)
28. Shavelkina, M.B., Ivanov, P.P., Amirov, R.K., Bocharov, A.N.  
Multichannel Nature of Synthesis of Carbon Nanostructures in Low-Temperature Plasma  
Plasma Physics Reports 47(10), pp. 1014-1020 (2021)
27. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
26. Leon, G., Martin, J.W., Bringley, E.J., Akroyd, J., Kraft, M.  
The role of oxygenated species in the growth of graphene, fullerenes and carbonaceous particles  
Carbon 182, pp. 203-213 (2021)
25. Toman, J., Jašek, O., Šnirer, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)
24. Snirer, M., Kudrle, V., Toman, J., Jašek, O., Jurmanová, J.  
Structure of microwave plasma-torch discharge during graphene synthesis from ethanol  
Plasma Sources Science and Technology 30(6),065020 (2021)
23. Sun, Y., Zhang, J.  
Strategies for scalable gas-phase preparation of free-standing graphene  
CCS Chemistry 3(4), pp. 1058-1077 (2021)
22. Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing  
Wang, Z., Yu, C., Huang, H., (...), Yu, J., Qiu, J.  
Nano Energy 85, 106027 (2021)
21. Experiments and modeling of atmospheric pressure microwave plasma reforming of a methane-carbon dioxide mixture  
Sun, Hojoong; Lee, Jungwun; Bak, Moon Soo  
JOURNAL OF CO<sub>2</sub> UTILIZATION Volume: 46 Article Number: 101464 Published: APR 2021
20. Influence of hydrogen addition on methane coupling in a moderate pressure microwave plasma  
Wnukowski, M.; van de Steeg, A. W.; Hrycak, B.; et al.  
FUEL Volume: 288 Article Number: 119674 Published: MAR 15 2021
19. Experiments on Atmospheric Pressure Microwave Plasmas Produced in a He/CH<sub>4</sub> Mixture  
Heo, Seonil; Sun, Hojoong; Lee, Jungwun; et al.  
TRANSACTIONS OF THE KOREAN SOCIETY OF MECHANICAL ENGINEERS B Volume: 45 Issue: 3 Pages: 173-179  
Published: MAR 2021
18. Pressure-dependent synthesis of graphene nanoflakes using Ar/H-2/CH<sub>4</sub> non-thermal plasma based on rotating arc discharge  
Wang, Cheng; Lu, ZhongShan; Ma, Jing; et al.  
DIAMOND AND RELATED MATERIALS Volume: 111 Article Number: 108176 Published: JAN 2021
17. Advance in Using Plasma Technology for Modification or Fabrication of Carbon-Based Materials and Their Applications in Environmental, Material, and Energy Fields  
Sun, Xin; Bao, Jiacheng; Li, Kai; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 7 Article Number: 2006287 Published: FEB 2021
16. Numerical and Experimental Study of the Multichannel Nature of the Synthesis of Carbon Nanostructures in DC Plasma Jets  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
PLASMA CHEMISTRY AND PLASMA PROCESSING Volume: 41 Issue: 1 Pages: 171-189 Published: JAN 2021
15. The role of microwave plasma temperature during graphene nanosheets deposition on dielectric substrate: Modelling and experiment  
Kubečka, M., Toman, J., Šnirer, M., (...), Kudrle, V., Jurmanová, J.

14. Synthesis of carbon nanoparticles in a non-thermal plasma process  
Wang, Cheng; Li, Dongning; Lu, ZhongShan; et al.  
CHEMICAL ENGINEERING SCIENCE Volume: 227 Article Number: 115921 Published: DEC 14 2020
  13. Microwave Plasma Formation of Nanographene and Graphitic Carbon Black  
Kumal, Raju R.; Gharpure, Akshay; Viswanathan, Vignesh; et al.  
C-JOURNAL OF CARBON RESEARCH Volume: 6 Issue: 4 Article Number: 70 Published: DEC 2020
  12. Progress in waste utilization via thermal plasma  
Sikarwar, Vineet Singh; Hrabovsky, Milan; Van Oost, Guido; et al.  
PROGRESS IN ENERGY AND COMBUSTION SCIENCE Volume: 81 Article Number: 100873 Published: NOV 2020
  11. Characterization of few-layer graphene aerosols by laser-induced incandescence  
Musikhin, Stanislav; Fortugno, Paolo; Corbin, Joel C.; et al.  
CARBON Volume: 167 Pages: 870-880 Published: OCT 15 2020
  10. Performance analysis of a 2.45 GHz microwave plasma torch for CO<sub>2</sub> decomposition in gas swirl configuration  
D'Isa, F. A.; Carbone, E. A. D.; Hecimovic, A.; et al.  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 10 Article Number: 105009 Published: OCT 2020
  9. Synthesis of few-layer graphene flakes by magnetically rotating arc plasma: effects of input power and feedstock injection position  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 126 Issue: 3 Published: FEB 19 2020
  8. Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure  
Wang, Cheng; Song, Ming; Chen, Xianhui; et al.  
NANOMATERIALS Volume: 10 Issue: 2 Article Number: 309 Published: FEB 2020
  7. One-step Synthesis of Carbon Nanotubes Network with Rich Oxygenated Functional Groups via Microwave Plasma in Atmospheric Pressure  
Li, Dashuai; Tong, Ling; Gao, Bo  
MRS ADVANCES Volume: 5 Issue: 52-53 Special Issue: SI Pages: 2679-2684 Article Number: PII S2059852120002157  
Published: 2020
  6. Influence of N<sub>2</sub>, O<sub>2</sub>, and H<sub>2</sub> admixtures on the electron power balance and neutral gas heating in microwave Ar plasmas at atmospheric pressure  
Durocher-Jean, Antoine; Delnour, Nicolas; Stafford, Luc  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 47 Article Number: 475201 Published: NOV 20 2019
  5. Conversion of coalbed methane surrogate into hydrogen and graphene sheets using rotating gliding arc plasma  
Wu, Angjian; Chen, Hang; Zheng, Jiageng; et al.  
PLASMA SCIENCE & TECHNOLOGY Volume: 21 Issue: 11 Article Number: 115501 Published: NOV 2019
  4. On the interplay between plasma discharge instability and formation of free-standing graphene nanosheets in a dual-channel microwave plasma torch at atmospheric pressure  
Toman, Jozef; Jasek, Ondrej; Snirer, Miroslav; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 52 Issue: 26 Article Number: 265205 Published: JUN 26 2019
  3. Energy conversion efficiency in low- and atmospheric-pressure plasma polymerization processes with hydrocarbons  
Hegemann, Dirk; Nisol, Bernard; Gaiser, Sandra; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 21 Issue: 17 Pages: 8698-8708 Published: MAY 7 2019
  2. Graphene synthesized in atmospheric plasmas-A review  
Dato, Albert  
JOURNAL OF MATERIALS RESEARCH Volume: 34 Issue: 1 Special Issue: SI Pages: 214-230 Published: JAN 14 2019
  1. Investigation on the growth mechanism of SiC whiskers during microwave synthesis  
Song, Bozhen; Zhao, Biao; Lu, Yanfei; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 20 Issue: 40 Pages: 25799-25805 Published: OCT 28 2018
102. *“Omphacite-bearing axes from the Early Neolithic site Galabnik (Western Bulgaria): mineral identification by Raman spectroscopy”*  
Aneta Bakamska, Miroslav Abrashev, Ruslan I. Kostov  
Review of the Bulgarian Geological Society, vol. 79, part 1, 51–57 (2018).

1. Musa, M  
The Importance of Multidisciplinary Analytical Strategies to Solve Identification and Characterization Challenges in Gemology: The Example of the "Green Stones"  
Applied Sciences - Basel 12 (14) Jul 2022

103. *“Large-scale synthesis of freestanding N-doped graphene using microwave plasma”*

N. Bundaleska, J. Henriques, M. Abrashev, A. M. Botelho do Rego, A. M. Ferraria, A. Almeida, F. M. Dias, E. Valcheva, B. Arnaudov, K. K. Upadhyay, M. F. Montemor & E. Tatarova  
*Scientific Reports* **8**, 12595 (2018) DOI: 10.1038/s41598-018-30870-3 IF = 3.998

68. Zafar, M.A., Liu, Y., Allende, S., Jacob, M.V.  
Unconventional eco-friendly synthesis of graphene and its electrochemical analysis  
*Nano-Structures and Nano-Objects* 38,101129 (2024)
67. Singh, R.  
Electronic and vibrational spectra of substitutional pair-defects of Boron and Nitrogen atoms in graphene and graphane  
*Surface Science* 741,122421 (2024)
66. Nogueira, M., Matos, I., Bernardo, M., (...), Fonseca, I., Lapa, N.  
Recovery of rare earth elements (Nd<sup>3+</sup> and Dy<sup>3+</sup>) by using carbon-based adsorbents from spent tire rubber  
*Waste Management* 174, pp. 451-461 (2024)
65. Tegua Doumbi, R., Noumi, G.B., Domga  
Synthesis of Ti/SnO<sub>2</sub>-Sb electrode modified by nitrogen and sulfur co-doped graphene for optimization the electrooxidation of neutral red and methyl orange dyes  
*Environmental Engineering Research* 28(5),220378 (2023)
64. Malnarič, I., Alič, B., Krajnc, M., Vesel, A., Šebenik, U.  
Rheological study of highly concentrated aqueous graphene oxide suspensions: the effects of concentration, particle lateral dimensions and number of layers per particle  
*Colloids and Surfaces A: Physicochemical and Engineering Aspects* 675,132012 (2023)
63. Jaisi, B.P., Zhu, R., Kalita, G., Umeno, M.  
Morphological changes of carbon thin films with nitrogen doping synthesized by microwave-excited surface wave plasma CVD  
*Materials Chemistry and Physics* 307,128183 (2023)
62. Ekwere, P., Ndipingwi, M., Nolly, C., Ikpo, C., Iwuoha, E.  
Microwave synthesis of antimony oxide graphene nanoparticles - a new electrode material for supercapacitors  
*Nanoscale Advances* 5(18), pp. 5137-5153 (2023)
61. Dehghani, Z., Madani, A.  
Enhanced electro-optical properties of nematic liquid crystal doped with Nitrogen doped graphene quantum dots  
*Optik* 286,171015 (2023)
60. Ekwere, P., Ndipingwi, M., Ikpo, C., (...), Uhuo, O., Iwuoha, E.  
High stability asymmetric supercapacitor cell developed with novel microwave-synthesized graphene-stabilized ruthenium antimonide nanomaterial  
*Journal of Energy Storage* 63,106853 (2023)
59. Kausar, A.  
N-Doped Graphene and Polymer Sequent Nanocomposite—Nitty-Gritties and Scoping Insights  
*Polymer-Plastics Technology and Materials* 62(11), pp. 1347-1363 (2023)
58. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
*Fuel Processing Technology* 239,107534 (2023)
57. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
*Reviews of Modern Plasma Physics* 6(1),37 (2022)
56. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.  
A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
*Journal of Energy Chemistry* 74, pp. 252-282 (2022)
55. Liang, G., Xing, S., Yu, L., (...), Bai, S., Zhang, J.  
N-doped graphene film prepared by rapid thermal shock for ultra-sensitive temperature reading  
*Applied Surface Science* 600,154117 (2022)
54. Zafar, M.A., Jacob, M.V.  
Synthesis of free-standing graphene in atmospheric pressure microwave plasma for the oil-water separation application  
*Applied Surface Science Advances* 11,100312 (2022)
53. Veni Keertheeswari, N., Madaswamy, S.L., Chokkiah, B., (...), Lee, S.C., Dhanusuraman, R.  
Synthesis of polydiphenylamine nanostructures via microwave and ultra-sonication method for supercapacitor performance  
*Journal of Materials Science: Materials in Electronics* 33(29), pp. 23236-23249 (2022)
52. Vasseghian, Y., Le, V.T., Joo, S.-W., (...), Chelliapan, S., Klemeš, J.J.

- Spotlighting graphene-based catalysts for the mitigation of environmentally hazardous pollutants to cleaner production: A review  
*Journal of Cleaner Production* 365,132702 (2022)
51. Wang, J., Wu, W., Kondo, H., Fan, T., Zhou, H.  
 Recent progress in microwave-assisted preparations of 2D materials and catalysis applications  
*Nanotechnology* 33(34),342002 (2022)
50. Jagodar, A., Berndt, J., von Wahl, E., (...), Kovacevic, E., Brault, P.  
 Nitrogen incorporation in graphene nanowalls via plasma processes: Experiments and simulations  
*Applied Surface Science* 591,153165 (2022)
49. Tareen, A.K., Khan, K., Iqbal, M., (...), Li, C., Zhang, H.  
 Recent advances in novel graphene: new horizons in renewable energy storage technologies  
*Journal of Materials Chemistry C* 10(32), pp. 11472-11531 (2022)
48. Heo, S., Lim, T., Kim, B.S., Suk, J.W., Bak, M.S.  
 Impact of N<sub>2</sub> admixture on the synthesis of graphitic carbon nanoparticles using atmospheric-pressure microwave plasma  
*Journal of Physics D: Applied Physics* 55(27),275201 (2022)
47. Kumar, N., Kumar Dwivedi, S., Chandra Tiwari, D., Tomar, R.  
 Study of rGO-CNF/Ce-TiO<sub>2</sub> based heterojunction for optoelectronic devices  
*Materials Letters* 315,131945 (2022)
46. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K., Kar, K.K.  
 Microwave as a Tool for Synthesis of Carbon-Based Electrodes for Energy Storage  
*ACS Applied Materials and Interfaces* 14(18), pp. 20306-20325 (2022)
45. Liu, L., Xie, Z., Du, X., (...), Li, B., Liu, X.  
 Large-scale mechanical preparation of graphene containing nickel, nitrogen and oxygen dopants as supercapacitor electrode material  
*Chemical Engineering Journal* 430,132815 (2022)
44. Zafar, M.A., Varghese, O.K., Robles Hernandez, F.C., Liu, Y., Jacob, M.V.  
 Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions  
*ACS Applied Materials and Interfaces* 14(4), pp. 5797-5806 (2022)
43. Dinadayalane, T., Lazare, J., Alzaaqi, N.F., (...), Hill, B., Campbell, A.E.  
 Structures, properties, and applications of nitrogen-doped graphene  
*Theoretical and Computational Chemistry* 21, pp. 211-248 (2022)
42. Fortugno, P., Musikhin, S., Shi, X., (...), Wiggers, H., Schulz, C.  
 Synthesis of freestanding few-layer graphene in microwave plasma: The role of oxygen  
*Carbon* 186, pp. 560-573 (2022)
41. Kumar, R., Sahoo, S., Joanni, E., (...), Matsuda, A., Kar, K.K.  
 Heteroatom doping of 2D graphene materials for electromagnetic interference shielding: a review of recent progress  
*Critical Reviews in Solid State and Materials Sciences* 47(4), pp. 570-619 (2022)
40. Li, Z., Lin, J., Li, B., (...), Wang, H., Li, Q.  
 Construction of heteroatom-doped and three-dimensional graphene materials for the applications in supercapacitors: A review  
*Journal of Energy Storage* 44,103437 (2021)
39. Sharifmadian, O., Zhai, C., Hung, J., (...), Wise, S.G., Akhavan, B.  
 Mechanically robust nitrogen-rich plasma polymers: Biofunctional interfaces for surface engineering of biomedical implants  
*Materials Today Advances* 12,100188 (2021)
38. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
 Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
*Diamond and Related Materials* 118,108548 (2021)
37. Reddy, K.S., Deshpande, P.A.  
 Density Functional Theory Study of the Immobilization and Hindered Surface Migration of Pd<sub>3</sub> and Pd<sub>4</sub> Nanoclusters over Defect-Ridden Graphene: Implications for Heterogeneous Catalysis  
*ACS Applied Nano Materials* 4(9), pp. 9068-9079 (2021)
36. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
 In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
*Journal of Applied Physics* 129(21),213304 (2021)
35. Sun, Y., Zhang, J.  
 Strategies for scalable gas-phase preparation of free-standing graphene  
*CCS Chemistry* 3(4), pp. 1058-1077 (2021)
34. Graphene-based 3D XNOR-VRRAM with ternary precision for neuromorphic computing  
 Alimkhanuly, B., Sohn, J., Chang, I.-J., Lee, S.  
*npj 2D Materials and Applications* 5(1), 55 (2021)

33. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
Diamond and Related Materials 116, 108417 (2021)
32. Engineering hydrogenation active sites on graphene oxide and N-doped graphene by plasma treatment  
Magureanu, Monica; Mandache, N. B.; Rizescu, C.; et al.  
APPLIED CATALYSIS B-ENVIRONMENTAL Volume: 287 Article Number: 119962 Published: JUN 15 2021
31. Tunable Synthesis of Predominant Semi-Ionic and Covalent Fluorine Bonding States on a Graphene Surface  
Lee, Jae-Won; Jeong, Seung-Pil; You, Nam-Ho; et al.  
NANOMATERIALS Volume: 11 Issue: 4 Article Number: 942 Published: APR 2021
30. One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh  
Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 11 Issue: 4 Article Number: 837 Published: APR 2021
29. Effects of Doped N, B, P, and S Atoms on Graphene toward Oxygen Evolution Reactions  
Priyadarsini, Adyasa; Mallik, Bhabani S.  
ACS OMEGA Volume: 6 Issue: 8 Pages: 5368-5378 Published: MAR 2 2021
28. Hybridized Graphene for Supercapacitors: Beyond the Limitation of Pure Graphene  
Zhang, Huihui; Yang, Dan; Lau, Alan; et al.  
SMALL Volume: 17 Issue: 12 Article Number: 2007311 Published: MAR 2021
27. Investigation of L-Tryptophan Electrochemical Oxidation with a Graphene-Modified Electrode  
Pogacean, Florina; Varodi, Codruta; Coros, Maria; et al.  
BIOSENSORS-BASEL Volume: 11 Issue: 2 Article Number: 36 Published: FEB 2021
26. Assigning XPS features in B,N-doped graphene: input from ab initio quantum chemical calculations  
Costa, Ramon; Morales-Garcia, Angel; Figueras, Marc; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 23 Issue: 2 Pages: 1558-1565 Published: JAN 14 2021
25. Electrochemical exfoliation-streamline method for synthesis of nitrogen doped graphene  
Olins, Roberts; Lesnicenoks, Peteris; Kleperis, Janis; et al.  
CHEMIIA Volume: 32 Issue: 1 Pages: 9-16 Published: 2021
24. Exploring reactivity and product formation in N(S-4) collisions with pristine and defected graphene with direct dynamics simulations  
Nieman, Reed; Spezia, Riccardo; Jayee, Bhumika; et al.  
JOURNAL OF CHEMICAL PHYSICS Volume: 153 Issue: 18 Article Number: 184702 Published: NOV 14 2020
23. A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials  
Vesel, Alenka; Zaplotnik, Rok; Primc, Gregor; et al.  
NANOMATERIALS Volume: 10 Issue: 11 Article Number: 2286 Published: NOV 2020
22. Surface coordination chemistry of graphene: Understanding the coordination of single transition metal atoms  
Grasseschi, Daniel; Silva, Walner Costa; Paiva, Ronald de Souza; et al.  
COORDINATION CHEMISTRY REVIEWS Volume: 422 Article Number: 213469 Published: NOV 1 2020
21. Tungsten nitride-coated graphene fibers for high-performance wearable supercapacitors  
Salman, Ali; Padmajan Sasikala, Suchithra; Kim, In Ho; et al.  
NANOSCALE Volume: 12 Issue: 39 Pages: 20239-20249 Published: OCT 21 2020
20. Preparation of graphene-based nanomaterials by pulsed RF discharges on liquid organic compounds  
Amaro-Gahete, Juan; Mora, Manuel; Gutierrez, Pablo; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 43 Article Number: 435202 Published: OCT 21 2020
19. Perspectives on plasma-assisted synthesis of N-doped nanoparticles as nanopesticides for pest control in crops  
Quoc Hue Pho; Losic, Dusan; Ostrikov, Kostya (Ken); et al.  
REACTION CHEMISTRY & ENGINEERING Volume: 5 Issue: 8 Pages: 1374-1396 Published: AUG 1 2020
18. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
DIAMOND AND RELATED MATERIALS Volume: 105 Article Number: 107798 Published: MAY 2020
17. Composites of thiol-grafted PEDOT with N-doped graphene or graphitic carbon nitride as an electrochemical sensor for the detection of paracetamol  
Yan, Yinqiang; Jamal, Ruxangul; Yu, Zongna; et al.  
JOURNAL OF MATERIALS SCIENCE Volume: 55 Issue: 13 Pages: 5571-5586 Published: MAY 2020
16. Nanostructured manganese oxides electrode with ultra-long lifetime for electrochemical capacitors  
Gaire, Madhu; Liang, Kun; Luo, Sijun; et al.  
RSC ADVANCES Volume: 10 Issue: 28 Pages: 16817-16825 Published: APR 28 2020
15. Nitrogen-Doped Graphene: The Influence of Doping Level on the Charge-Transfer Resistance and Apparent Heterogeneous Electron Transfer Rate  
Coros, Maria; Varodi, Codruta; Pogacean, Florina; et al.

14. Plasma-assisted nitrogen fixation in nanomaterials: fabrication, characterization, and application  
Lin, Liangliang; Xu, Hujun; Gao, Haiyan; et al.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 13 Article Number: 133001 Published: MAR 25 2020
13. Thermal Conversion of Triazine-Based Covalent Organic Frameworks to Nitrogen-Doped Nanoporous Carbons and Their Capacitor Performance  
Kim, Gayoung; Shiraki, Tomohiro; Fujigaya, Tsuyohiko  
BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN Volume: 93 Issue: 3 Pages: 414-420 Published: MAR 2020
12. Cytotoxicity mechanisms of nitrogen-doped graphene obtained by electrochemical exfoliation of graphite rods, on human endothelial and colon cancer cells  
Baldea, Ioana; Olteanu, Diana; Filip, Gabriela Adriana; et al.  
CARBON Volume: 158 Pages: 267-281 Published: MAR 2020
11. Effect of helium/propane-butane atmosphere on the synthesis of graphene in plasma jet system  
Shavelkina, M. B.; Filimonova, E. A.; Amirov, R. Kh  
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 29 Issue: 2 Article Number: 025024 Published: FEB 2020
10. Heteroatom doped 3D graphene aerogel supported catalysts for formic acid and methanol oxidation  
Cogenli, M. Selim; Yurtcan, Ayse Bayrakceken  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 45 Issue: 1 Pages: 650-666 Published: JAN 1 2020
9. Microplasmas for Advanced Materials and Devices  
Chiang, Wei-Hung; Mariotti, Davide; Sankaran, R. Mohan; et al.  
ADVANCED MATERIALS Volume: 32 Issue: 18 Special Issue: SI Article Number: 1905508 Published: MAY 2020
8. Synthesis of plasma treated nitrogen-doped graphite oxide for supercapacitor applications  
Ghanashyam, Gyawali; Jeong, Hae Kyung  
JOURNAL OF ENERGY STORAGE Volume: 26 Article Number: 100923 Published: DEC 2019
7. Nitrogen-doped metal-free carbon catalysts for (electro)chemical CO<sub>2</sub> conversion and valorisation  
Fernandes, Diana M.; Peixoto, Andreia F.; Freire, Cristina  
DALTON TRANSACTIONS Volume: 48 Issue: 36 Pages: 13508-13528 Published: SEP 28 2019
6. Multifunctional Solar Waterways: Plasma-Enabled Self-Cleaning Nanoarchitectures for Energy-Efficient Desalination  
Wu, Shenghao; Xiong, Guoping; Yang, Huachao; et al.  
ADVANCED ENERGY MATERIALS Volume: 9 Issue: 30 Article Number: 1901286 Published: AUG 14 2019
5. Synthesis of nitrogen-doped plasma treated graphite for supercapacitor applications  
Ghanashyam, Gyawali; Jeong, Hae Kyung  
CHEMICAL PHYSICS LETTERS Volume: 725 Pages: 31-37 Published: JUN 16 2019
4. Correcting Flaws in the Assignment of Nitrogen Chemical Environments in N-Doped Graphene  
Figueras, Marc; Villar-Garcia, Ignacio J.; Vines, Francesc; et al.  
JOURNAL OF PHYSICAL CHEMISTRY C Volume: 123 Issue: 17 Pages: 11319-11327 Published: MAY 2 2019
3. Heteroatom-doped graphene and its application as a counter electrode in dye-sensitized solar cells  
Ngidi, Nonjabulo P. D.; Ollengo, Moses A.; Nyamori, Vincent O.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH Volume: 43 Issue: 5 Pages: 1702-1734 Published: APR 2019
2. Gas diffusion layers based on graphene flakes doped with nitrogen  
Shavelkina, M. B.; Kleimenov, B., V.; Zhuk, A. Z.; et al.  
Journal of Physics Conference Series Volume: 1281 Article Number: 012072 Published: 2019
1. Properties of Nitrogen/Silicon Doped Vertically Oriented Graphene Produced by ICP CVD Roll-to-Roll Technology  
Rozel, Petr; Radziuk, Darya; Mikhnavets, Lubov; et al.  
COATINGS Volume: 9 Issue: 1 Article Number: 60 Published: JAN 2019
104. *“Microwave N<sub>2</sub>-Ar plasmas applied for N-graphene post synthesis”*  
N Bundaleska, N Bundaleski, A Dias, F M Dias, M Abrashev, G Filipič, U Cvelbar, Z Rakočević, Zh Kissovski, J Henriques, and E Tatarova  
Materials Research Express **5**, 095605 (2018) DOI:10.1088/2053-1591/aad7e9 IF = 1.929
7. Fang, C., Zhou, Y., Jia, L., Yan, R.  
Interfacial properties of multicomponent plasma-modified high-performance fiber-reinforced composites: A review  
Polymer Composites **43**(8), pp. 4866-4883 (2022)
6. Vinchon, P., Glad, X., Robert Bigras, G., (...), Martel, R., Stafford, L.  
Postgrowth modification of monolayer graphene films by low-pressure diborane-argon plasma  
Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films **39**(4), 043003 (2021)
5. Incorporation-limiting mechanisms during nitrogenation of monolayer graphene films in nitrogen flowing afterglows

Robert Bigras, G.; Martel, R.; Stafford, L.  
NANOSCALE Volume: 13 Issue: 5 Pages: 2891-2901 Published: FEB 7 2021

4. Influence of the bonding of rebar dowel with adhesive on wood-concrete composite specimens  
Molina, Julio Cesar; Barros Oliveira, Carolina Aparecida; Christoforo, Andre Luis; et al.  
PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-STRUCTURES AND BUILDINGS Volume: 173 Issue: 12  
Pages: 904-913 Article Number: 1900058 Published: DEC 2020

3. Testing methods for shear strength of bond line between concrete and different types of engineered wood  
Fu, Qiuni; Yan, Libo; Kasal, Bohumil  
INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES Volume: 102 Article Number: 102671 Published: OCT 2020

2. Study of graphene layer growth on dielectric substrate in microwave plasma torch at atmospheric pressure  
Jasek, Ondrej; Toman, Jozef; Jurmanova, Jana; et al.  
DIAMOND AND RELATED MATERIALS Volume: 105 Article Number: 107798 Published: MAY 2020

1. Oriented Carbon Nanostructures by Plasma Processing: Recent Advances and Future Challenges  
Santhosh, Neelakandan M.; Filipic, Gregor; Tatarova, Elena; et al.  
MICROMACHINES Volume: 9 Issue: 11 Article Number: 565 Published: NOV 2018

105. *“Phase composition and crystal structure determination of cobalt ferrite, modified with Ce, Nd and Dy ions by X-ray and neutron diffraction”*

M. Tsvetkov, M. Milanova, I. Ivanova, D. Neov, Z. Cherkezova-Zheleva, J. Zaharieva, and M. Abrashev

Journal of Molecular Structure **1179**, 233-241(2019) DOI: 10.1016/j.molstruc.2018.07.083 IF = 2.463

20. Amor, M; Mosselmans, JFW; (...); Chevrier, DM  
Crystal-Chemical and Biological Controls of Elemental Incorporation into Magnetite Nanocrystals  
Chemistry of Materials 35 (2) , pp.927-939 Jan 24 2023

19. Vinod, G., Rajashekhar, K., Naik, J.L.  
Dysprosium doped  $\text{Cu}_0.8\text{Cd}_0.2\text{Dy}_x\text{Fe}_2-x\text{O}_4$  nano ferrites: A combined impact of  $\text{Dy}^{3+}$  on enhanced physical, optical, magnetic, and DC-electrical properties  
Ceramics International 49(2), pp. 2829-2851 (2023)

18. Mehmood, K., Rehman, A.U., Amin, N., Morley, N.A., Arshad, M.I.  
Graphene nanoplatelets/Ni-Co-Nd spinel ferrite composites with improving dielectric properties  
Journal of Alloys and Compounds 930,167335 (2023)

17. Kadhim, S.A., Al-Saadi, T.M.  
Study of the Effect of  $\text{Ce}^{3+}$  on the Gas Sensitivity and Magnetic Properties of  $\text{Cu}_x\text{Ce}_{0.3-x}\text{Ni}_{0.7}\text{Fe}_2\text{O}_4$  Ferrite Nanoparticles  
Materials Science Forum 1083, pp. 3-12 (2023)

16. Kharat, S.P., Gaikwad, S.K., Kambale, R.C., Kolekar, Y.D., Ramana, C.V.  
Correlation between Cation Distribution and Magnetic and Dielectric Properties of  $\text{Dy}^{3+}$ -Substituted Fe-Rich Cobalt Ferrite  
Inorganic Chemistry 61(48), pp. 19319-19332 (2022)

15. Irfan, M., Ayyaz, M., Naz, M.Y., (...), Alsaiari, M., Niazi, U.M.  
Testing of optical, dielectric and photocatalytic properties of  $\text{Ce}^{3+}$  doped cobalt-cadmium nanocomposite for high frequency devices and wastewater treatment  
Ceramics International 48(6), pp. 8517-8528 (2022)

14. Ahmed, O.A., Abed, A.H., Al-Saadi, T.M.  
Magnetic Properties and Structural Analysis of Ce-Doped Mg-Cr Nano-Ferrites Synthesized Using Auto-Combustion Technique  
Macromolecular Symposia 401(1),2100311 (2022)

13. Aziz, C., Azhdar, B.  
Synthesis of dysprosium doped cobalt ferrites nanoparticles by solgel auto-combustion method and influence of grinding techniques on structural, Morphological, and magnetic properties  
Journal of Magnetism and Magnetic Materials 542,168577 (2022)

12. Shaikh, B.B.R., Toksha, B.G., Shirsath, S.E., (...), Tonde, S., Chishty, S.Q.  
Microstructure, magnetic, and dielectric interplay in  $\text{NiCuZn}$  ferrite with rare earth doping for magneto-dielectric applications  
Journal of Magnetism and Magnetic Materials 537,168229 (2021)

11. Mmelesi, O.K., Masunga, N., Kuvarega, A., (...), Mamba, B.B., Kefeni, K.K.  
Cobalt ferrite nanoparticles and nanocomposites: Photocatalytic, antimicrobial activity and toxicity in water treatment  
Materials Science in Semiconductor Processing 123,105523 (2021)

10. Dojcinovic, M.P., Vasiljevic, Z.Z., Pavlovic, V.P., (...), Tadic, N.B., Nikolic, M.V.  
Mixed Mg-Co spinel ferrites: Structure, morphology, magnetic and photocatalytic properties  
Journal of Alloys and Compounds 855,157429 (2021)

9. Arcaro, S., Venturini, J.

Chemical and Mechanical Properties of Ferrites  
Topics in Mining, Metallurgy and Materials Engineering pp. 49-67 (2021)

8. Cobalt ferrite nanoparticles and nanocomposites: Photocatalytic, antimicrobial activity and toxicity in water treatment  
Mmelesi, Olga Kelebogile; Masunga, Ngonidzashé; Kuvarega, Alex; et al.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING Volume: 123 Article Number: 105523 Published: MAR 1 2021

7. Mixed Mg-Co spinel ferrites: Structure, morphology, magnetic and photocatalytic properties  
Dojcinovic, Milena P.; Vasiljevic, Zorka Z.; Pavlovic, Vera P.; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 855 Article Number: 157429 Part: 1 Published: FEB 25 2021

6. Effect of aqueous electrolytes on the supercapacitive performance of glycol-mediated CoFe(2)O(4)nanoparticles  
Rani, Barkha; Sahu, Niroj Kumar  
ASIA-PACIFIC JOURNAL OF CHEMICAL ENGINEERING Volume: 15 Issue: 5 Article Number: e2548 Published: SEP 2020

5. Correlating the size and cation inversion factor in context of magnetic and optical behavior of CoFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Singh, Jitendra Pal; Park, Jae Yeon; Singh, Varsha; et al.  
RSC ADVANCES Volume: 10 Issue: 36 Pages: 21259-21269 Published: JUN 7 2020

4. Neutron diffraction and Mossbauer spectroscopy studies for Ce doped CoFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Hashhash, A.; Bobrikov, I; Yehia, M.; et al.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 503 Article Number: 166624 Published: JUN 1 2020

3. Lanthanum-doped spinel cobalt ferrite (CoFe<sub>2</sub>O<sub>4</sub>) nanoparticles for environmental applications  
Mariosi, Fabricio Ravanello; Venturini, Janio; Viegas, Alexandre da Cas; et al.  
CERAMICS INTERNATIONAL Volume: 46 Issue: 3 Pages: 2772-2779 Published: FEB 15 2020

2. Nd<sup>3+</sup> Ion-Substituted Co<sub>1-2x</sub>Ni<sub>x</sub>Mn<sub>x</sub>Fe<sub>2-y</sub>Nd<sub>y</sub>O<sub>4</sub> Nanoparticles: Structural, Morphological, and Magnetic Investigations  
Almessiere, M.A., Slimani, Y., Ali, S., (...), Ercan, I., Sozeri, H.  
Journal of Inorganic and Organometallic Polymers and Materials 29(3), pp. 783-791 (2019)

1. Structural and magnetic study of Sm doped NiFe<sub>2</sub>O<sub>4</sub> nanoparticles  
Yehia, M., Hashhash, A.  
Journal of Materials Science: Materials in Electronics 30(7), pp. 6768-6775 (2019)

## 106. "Origin of the heat-induced improvement of catalytic activity and stability of MnOx electrocatalysts for water oxidation"

Miroslav V. Abrashev, Petko Chernev, Paul Kubella, Mohammad Reza Mohammadi, Chiara Pasquini, Holger Dau, and Ivelina Zaharieva

J. Mater. Chem. A 7, 17022 (2019) DOI: 10.1039/c9ta05108b IF = 11.301

22. Otsubo, Y., Otani, K., Li, A., (...), Miyauchi, M., Yamaguchi, A.  
Hydrothermal electrochemical flow reactor to independently control temperature, pressure, and potential for manganese oxide electrodeposition  
Ceramics International 50(4), pp. 5992-6000 (2024)

21. Zhou, J., Wang, S.  
Investigation of manganese-iron oxide nanocomposite immobilized on powdered activated carbon as an efficient activator of peroxymonosulfate for antibiotics degradation: Conjunction of adsorption, radical and nonradical processes  
Environmental Research 238,117150 (2023)

20. Mondal, I., Menezes, P.V., Laun, K., (...), Driess, M., Menezes, P.W.  
In-Liquid Plasma-Mediated Manganese Oxide Electrocatalysts for Quasi-Industrial Water Oxidation and Selective Dehydrogenation  
ACS Nano 17(14), pp. 14043-14052 (2023)

19. Zhu, P., Pu, Y., Wang, M., (...), Qin, H., Shi, J.  
MnOOH-Catalyzed Autoxidation of Glutathione for Reactive Oxygen Species Production and Nanocatalytic Tumor Innate Immunotherapy  
Journal of the American Chemical Society 145(10), pp. 5803-5815 (2023)

18. Villalobos, J., Morales, D.M., Antipin, D., (...), Xiao, J., Risch, M.  
Stabilization of a Mn-Co Oxide During Oxygen Evolution in Alkaline Media  
ChemElectroChem 9(13),e202200482 (2022)

17. Walter, C., Kalra, S., Beltrán-Suito, R., (...), Menezes, P.W., Driess, M.  
Manganese sulfide enables the formation of a highly active β-MnOOH electrocatalyst for effective alkaline water oxidation  
Materials Today Chemistry 24,100905 (2022)

16. Wang, X., Huang, G., Pan, Z., (...), Shen, P.K., Zhu, J  
One-pot synthesis of Mn<sub>2</sub>P-Mn<sub>2</sub>O<sub>3</sub> heterogeneous nanoparticles in a P, N -doped three-dimensional porous carbon framework as a highly efficient bifunctional electrocatalyst for overall water splitting  
Chemical Engineering Journal 428,131190 (2022)

15. Huang, L., Cheng, G., Zhao, Y., (...), Sun, M., Yu, L.



- Crystalline Form Controlled Synthesis of MnO<sub>2</sub> Nanoarrays for Electrocatalytic Oxygen Evolution Performance  
Chinese Journal of Inorganic Chemistry 38(2), pp. 333-343 (2022)
14. Narayanan, T.M., Zhu, Y.G., Gençer, E., McKinley, G., Shao-Horn, Y.  
Low-cost manganese dioxide semi-solid electrode for flow batteries  
Joule 5(11), pp. 2934-2954 (2021)
13. Zhu, S., Le, J., Li, J., Liu, D., Kuang, Y.  
Tungsten doped manganese silicate films as stable and efficient oxygen evolution catalysts in near-neutral media  
Journal of Materials Chemistry A 9(33), pp. 17893-17904 (2021)
12. Ovsyannikov, S.V., Tsirlin, A.A., Korobeynikov, I.V., (...), Rogalev, A., Dubrovinsky, L.  
Synthesis of Ilmenite-type  $\epsilon$ -Mn<sub>2</sub>O<sub>3</sub> and Its Properties  
Inorganic Chemistry 60(17), pp. 13348-13358 (2021)
11. Ovsyannikov, S.V., Aslandukova, A.A., Aslandukov, A., (...), Khandarkhaeva, S., Dubrovinsky, L.  
Structural Stability and Properties of Marokite-Type  $\eta$ -Mn<sub>3</sub>O<sub>4</sub>  
Inorganic Chemistry 60(17), pp. 13440-13452 (2021)
10. Combination of Highly Efficient Electrocatalytic Water Oxidation with Selective Oxygenation of Organic Substrates using Manganese Borophosphates  
Menezes, P.W., Walter, C., Chakraborty, B., (...), Dau, H., Driess, M.  
Advanced Materials 33(9), 2004098 (2021)
9. The photocatalytic overall water splitting hydrogen production of g-C<sub>3</sub>N<sub>4</sub>/CdS hollow core-shell heterojunction via the HER/OER matching of Pt/MnO<sub>x</sub>  
Pan, Jiaqi; Wang, Panhong; Wang, Peipei; et al.  
CHEMICAL ENGINEERING JOURNAL Volume: 405 Article Number: 126622 Published: FEB 1 2021
8. Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy  
Cho, Kang Hee; Park, Sunghak; Seo, Hongmin; et al.  
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION Volume: 60 Issue: 9 Pages: 4673-4681 Published: FEB 23 2021
7. Strategies to Develop Earth-Abundant Heterogeneous Oxygen Evolution Reaction Catalysts for pH-Neutral or pH-Near-Neutral Electrolytes  
Dong, Yan; Komarneni, Sridhar  
SMALL METHODS Volume: 5 Issue: 1 Article Number: 2000719 Published: JAN 2021
6. Valence-induced distortion controls the resistivity and thermal stability of Co<sub>2.77</sub>Mn<sub>1.71</sub>Fe<sub>1.10</sub>Zn<sub>0.42</sub>O<sub>8</sub> ceramics  
Wang, Bing; Yao, Jincheng; Wang, Junhua; et al.  
MATERIALS & DESIGN Volume: 192 Article Number: 108736 Published: AUG 2020
5. Manganese oxide-based heterogeneous electrocatalysts for water oxidation  
Park, Sunghak; Lee, Yoon Ho; Choi, Seungwoo; et al.  
ENERGY & ENVIRONMENTAL SCIENCE Volume: 13 Issue: 8 Pages: 2310-2340 Published: AUG 1 2020
4. Boosting water oxidation activity by tuning the proton transfer process of cobalt phosphonates in neutral solution  
Lv, Jiangquan; Guan, Xiangfeng; Yu, Muxin; et al.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 25 Pages: 14255-14260 Published: JUL 7 2020
3. Reversible and irreversible processes during cyclic voltammetry of an electrodeposited manganese oxide as catalyst for the oxygen evolution reaction  
Villalobos, Javier; Golnak, Ronny; Xi, Lifei; et al.  
JOURNAL OF PHYSICS-ENERGY Volume: 2 Issue: 3 Article Number: 034009 Published: JUL 2020
2. Surface-Guided Formation of Amorphous Mixed-Metal Oxyhydroxides on Ultrathin MnO<sub>2</sub> Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution  
Fang, Ming; Han, Dong; Xu, Wen-Bo; et al.  
ADVANCED ENERGY MATERIALS Volume: 10 Issue: 27 Article Number: 2001059 Published: JUL 2020
1. Enhanced water oxidation performances of birnessite and magnetic birnessite nanocomposites by transition metal ion doping  
Elmaci, Gokhan; Ozgenc, Gokhan; Kurz, Philipp; et al.  
SUSTAINABLE ENERGY & FUELS Volume: 4 Issue: 6 Pages: 3157-3166 Published: JUN 1 2020

107. „Phase composition and structure of TiO<sub>2</sub> powders: Effect of phosphorus dopant“  
Irina D. Stambolova, Daniela D. Stoyanova, Miroslav V. Abrashev, Vladimir N. Blaskov, Maria G. Shipochka, Sasho V. Vassilev, and Alexander E. Eliyas  
Comptes rendus de l'Académie bulgare des Sciences **72**, 1195-2010 (2019)  
DOI:10.7546/CRABS.2019.09.05 IF = 0.343

108. “Free-standing N-Graphene as conductive matrix for Ni(OH)<sub>2</sub> based supercapacitive electrodes”

Kush K. Upadhyay, N. Bundaleska, M. Abrashev, N. Bundaleski, O.M.N.D. Teodoro, I. Fonseca, Andre Mao de Ferro, Rui Pedro Silva, E. Tatarova, and M. F. Montemor  
*Electrochimica Acta* **334**, 135592 (2020) DOI: 10.1016/j.electacta.2019.135592 IF = 6.215

32. Hussain, M.N., Inayat, A., Ansir, R., (...), Haider, A., Shah, S.M.  
Probing the Synergy of Ni(OH)<sub>2</sub>/NiO Nanoparticles Supported on rGO for Battery-Type Supercapacitors  
*Energy Technology* 12(2),2300854 (2024)
31. Gao, H., Yan, Y., Guo, Y., (...), Zhang, J., Wang, N.  
Amorphous cellulose edge-functionalized graphene oxide for anticorrosive reinforcement of waterborne epoxy coatings  
*Applied Surface Science* 616,156576 (2023)
30. Guo, B., Li, Y., Gao, Y., (...), Mi, C., Li, M.  
Strategy of Voltage Match on the Maximum Power Point for a High-Efficiency Photorechargeable Device  
*ACS Applied Materials and Interfaces* 15(9), pp. 11875-11884 (2023)
29. Guo, B., Gao, Y., Li, Y., (...), Liu, L., Li, M.  
Battery-Type-Behavior-Retention Ni(OH)<sub>2</sub>-rGO Composite for an Ultrahigh-Specific-Capacity Asymmetric Electrochemical Capacitor Electrode  
*ACS Omega* 8(7), pp. 6289-6301 (2023)
28. Wu, X., Zeng, F., Song, X., (...), Yu, M., Jiang, C.  
In-situ growth of Ni(OH)<sub>2</sub> nanoplates on highly oxidized graphene for all-solid-state flexible supercapacitors  
*Chemical Engineering Journal* 456,140947 (2023)
27. Bailmare, D.B., Khajanji, P., Deshmukh, A.D.  
Multidimensional graphene-based advanced materials for electrochemically stable supercapacitors ( Book Chapter)  
*Novel Applications of Carbon Based Nano-materials* pp. 146-168 (2022)
26. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.  
A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
*Journal of Energy Chemistry* 74, pp. 252-282 (2022)
25. Guo, B., Gao, Y., Li, Y., (...), Lyu, X., Li, M.  
Research on low internal resistance electrode materials for integrated photovoltaic-storage device  
*Gongneng Cailiao/Journal of Functional Materials* 53(10), pp. 10001-10007 (2022)
24. Deng, B.-W., Yang, Y., Liu, Y.-X., Yin, B., Yang, M.-B.  
A hierarchically combined reduced graphene oxide/Nickel oxide hybrid supercapacitor device demonstrating compliant flexibility and high energy density  
*Journal of Colloid and Interface Science* 618, pp. 399-410 (2022)
23. Guo, B., Gao, Y., Li, Y., (...), Chen, S., Li, M.  
Ni(OH)<sub>2</sub>Nanosheets Grown on Reduced Graphene Oxide for Supercapacitor Electrodes  
*ACS Applied Nano Materials* 5(5), pp. 7471-7480 (2022)
22. Fruehwald, H.M., Zenkina, O.V., Easton, E.B.  
Carbon-nitrogen-metal material as a high performing oxygen evolution catalyst  
*Catalysis Science and Technology* 12(10), pp. 3102-3105 (2022)
21. Aghazadeh, M., Rad, H.F.  
In situ growth of Ni(OH)<sub>2</sub>-porous nitrogen-doped graphene composite onto Ni foam support as advanced electrochemical supercapacitors materials  
*Journal of Materials Science: Materials in Electronics* 33(14), pp. 11038-11054 (2022)
20. Chang, J., Zhang, S., Shi, M., (...), Wei, T., Fan, Z.  
Ni, Co Hydroxide Modified by Partial Substitution of OH<sup>-</sup> with Cl<sup>-</sup> for Boosting Ultra-Fast Redox Kinetics up to 500 mV s<sup>-1</sup> in Supercapacitors  
*Advanced Functional Materials* 32(17),2109225 (2022)
19. Li, N., Yuan, K., Gao, T., (...), Xu, L., Xu, J.  
Controllable synthesis of hierarchical nanoporous carbon@Ni(OH)<sub>2</sub> rambutan-like composite microspheres for high-performance hybrid supercapacitor  
*Arabian Journal of Chemistry* 15(2),103580 (2022)
18. Li, W., Huang, Z., Jia, Y., (...), He, W., Lou, X.  
Sulfate assisted synthesis of  $\alpha$ -type nickel hydroxide nanowires with 3D reticulation for energy storage in hybrid supercapacitors  
*Materials Chemistry Frontiers* 6(1), pp. 94-102 (2022)
17. Sakita, A.M.P., Noce, R.D., Lavall, R.L.  
Potential-dependent electrochemical impedance spectroscopy as a powerful tool for evaluating supercapacitor electrode performance  
*Journal of the Electrochemical Society* 168(8),080525 (2021)

16. Deng, B.-W., Yang, Y., Yin, B., Yang, M.-B.  
Fabrication of a NiO@NF supported free-standing porous carbon supercapacitor electrode using temperature-controlled phase separation method  
Journal of Colloid and Interface Science 594, pp. 770-780 (2021)
15. Xu, J., Tang, M., Hu, Z., (...), Wu, J., Cheng, J.  
Standing and lying ni(OH)<sub>2</sub> nanosheets on multilayer graphene for high-performance supercapacitors  
Nanomaterials 11(7),1662 (2021)
14. Gao, Y., Guo, B., Li, M.  
NICKEL HYDROXIDE DECORATED GRAPHENE NANOHYBRIDS FOR SUPERCAPACITORS  
IET Conference Proceedings 2021(5), pp. 705-709 (2021)
13. Basirun, W.J., Saeed, I.M., Rahman, M.S., Mazari, S.A.  
Nickel oxides/hydroxides-graphene as hybrid supercapattery nanocomposites for advanced charge storage materials—a review  
Critical Reviews in Solid State and Materials Sciences 46(6), pp. 553-586 (2021)
12. Fabrication of a NiO@NF supported free-standing porous carbon supercapacitor electrode using temperature-controlled phase separation method  
Deng, Bo-wen; Yang, Yi; Yin, Bo; et al.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 594 Pages: 770-780 Published: JUL 15 2021
11. Ni on graphene oxide: a highly active and stable alkaline oxygen evolution catalyst  
Fruehwald, Holly M.; Moghaddam, Reza B.; Melino, Peter D.; et al.  
CATALYSIS SCIENCE & TECHNOLOGY Early Access: APR 2021
10. Direct Growth of Oxygen Vacancy-Enriched Co<sub>3</sub>O<sub>4</sub> Nanosheets on Carbon Nanotubes for High-Performance Supercapacitors  
Zhang, Xiaoyu; Ma, Ge; Shui, Lingling; et al.  
ACS APPLIED MATERIALS & INTERFACES Volume: 13 Issue: 3 Pages: 4419-4428 Published: JAN 27 2021
9. Self-assembled PANI/CeO<sub>2</sub>/Ni(OH)<sub>2</sub> hierarchical hybrid spheres with improved energy storage capacity for high-performance supercapacitors  
Guo, Qingfu; Yuan, Jinzhong; Tang, Yubao; et al.  
ELECTROCHIMICA ACTA Volume: 367 Article Number: 137525 Published: JAN 20 2021
8. Ultrathin Ni(OH)<sub>2</sub> layer coupling with graphene for fast electron/ion transport in supercapacitor  
Zhang, Xiaoyu; Wang, Hongsen; Shui, Lingling; et al.  
SCIENCE CHINA-MATERIALS Volume: 64 Issue: 2 Pages: 339-348 Published: FEB 2021
7. Advance in Using Plasma Technology for Modification or Fabrication of Carbon-Based Materials and Their Applications in Environmental, Material, and Energy Fields  
Sun, Xin; Bao, Jiacheng; Li, Kai; et al.  
ADVANCED FUNCTIONAL MATERIALS Volume: 31 Issue: 7 Article Number: 2006287 Published: FEB 2021
6. Promising Rice-Husk-Derived Carbon/Ni(OH)<sub>2</sub> Composite Materials as a High-Performing Supercapacitor Electrode  
Cai, Jie; Zhang, Die; Ding, Wen-Ping; et al.  
ACS OMEGA Volume: 5 Issue: 46 Pages: 29896-29902 Published: NOV 24 2020
5. Versatility of Amide-Functionalized Co(II) and Ni(II) Coordination Polymers: From Thermochromic-Triggered Structural Transformations to Supercapacitors and Electrocatalysts for Water Splitting  
Paul, Anup; Upadhyay, Kush K.; Backovic, Gordana; et al.  
INORGANIC CHEMISTRY Volume: 59 Issue: 22 Pages: 16301-16318 Published: NOV 16 2020
4. Cai, J., Zhang, D., Ding, W.-P., (...), Fei, P., Si, T.-L.  
Promising rice-husk-derived carbon/Ni(OH)<sub>2</sub> composite materials as a high-performing supercapacitor electrode  
ACS Omega 5(46), pp. 29896-29902 (2020)
3. A facile preparation of Nickel Foam-supported Ni(OH)<sub>2</sub> nano arrays via in-situ etching method with superior bendable electrochemical performance for wearable power supply  
Nie, Yajing; Pan, Junli; Jiang, Wenchao; et al.  
JOURNAL OF ALLOYS AND COMPOUNDS Volume: 835 Article Number: 155293 Published: SEP 15 2020
2. Graphene and Lithium-Based Battery Electrodes: A Review of Recent Literature  
Lavagna, Luca; Meligrana, Giuseppina; Gerbaldi, Claudio; et al.  
ENERGIES Volume: 13 Issue: 18 Article Number: 4867 Published: SEP 2020
1. Nickel hydroxide nanoparticles and their hybrids with carbon nanotubes for electrochemical energy storage applications  
Shakir, Imran; Almutairi, Zeyad; Shar, Sahar Saad; et al.  
RESULTS IN PHYSICS Volume: 17 Article Number: 103117 Published: JUN 2020

109. “Microwave plasma-based direct synthesis of free-standing N-graphene”  
D. Tsyganov, N. Bundaleska, A. Dias, J. Henriques, E. Felizardo, M. Abrashev, J. Kissovski, A. M. Botelho do Rego, A. M. Ferraria, and E. Tatarova  
Phys. Chem. Chem. Phys. **22**, 4772-4787 (2020) DOI: 10.1039/c9cp05509f IF = 3.430

20. Al-Kamal, A.K., Hammad, M., Yusuf Ali, M., (...), Schulz, C., Wiggers, H.  
Titanium/graphene nanocomposites from scalable gas-phase synthesis for high-capacity and high-stability sodium-ion battery anodes  
*Nanotechnology* 35(22),225602 (2024)
19. Mahmoud, A.G., Librando, I.L., Paul, A., (...), Geraldes, C.F.G.C., Pombeiro, A.J.L.  
Novel organotin-PTA complexes supported on mesoporous carbon materials as recyclable catalysts for solvent-free cyanosilylation of aldehydes  
*Catalysis Today* 423,114270 (2023)
18. Zafar, M.A., Liu, Y., Hernandez, F.C.R., Varghese, O.K., Jacob, M.V.  
Plasma-Based Synthesis of Freestanding Graphene from a Natural Resource for Sensing Application  
*Advanced Materials Interfaces* 10(11),2202399 (2023)
17. Musikhin, S., Fortugno, P., Endres, T., (...), Daun, K.J., Schulz, C.  
Elemental carbon and hydrogen concentrations as the main factors in gas-phase graphene synthesis: Quantitative fourier-transform infrared spectroscopy study  
*Carbon* 202, pp. 47-60 (2023)
16. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
*Fuel Processing Technology* 239,107534 (2023)
15. Zafar, M.A., Jacob, M.V.  
Plasma-based synthesis of graphene and applications: a focused review  
*Reviews of Modern Plasma Physics* 6(1),37 (2022)
14. Song, M., Wang, C., Zhu, C., You, T., Xia, W.  
An effective fabrication and highly tunable microwave absorption of nitrogen-doped graphene  
*Diamond and Related Materials* 129,109348 (2022)
13. Kumar, R., Sahoo, S., Joanni, E., Singh, R.K.  
A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating  
*Journal of Energy Chemistry* 74, pp. 252-282 (2022)
12. Wang, J., Wu, W., Kondo, H., Fan, T., Zhou, H.  
Recent progress in microwave-assisted preparations of 2D materials and catalysis applications  
*Nanotechnology* 33(34),342002 (2022)
11. Ruhmlieb, C., Taplick, M., Nissen, M., (...), Kipp, T., Mews, A.  
Deposition of triazine-based graphitic carbon nitride via plasma-induced polymerisation of melamine  
*Journal of Materials Chemistry A* 10(17), pp. 9680-9692 (2022)
10. Zafar, M.A., Varghese, O.K., Robles Hernandez, F.C., Liu, Y., Jacob, M.V.  
Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions  
*ACS Applied Materials and Interfaces* 14(4), pp. 5797-5806 (2022)
9. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
*Diamond and Related Materials* 118,108548 (2021)
8. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
*Journal of Applied Physics* 129(21),213304 (2021)
7. Snirer, M., Kudrle, V., Toman, J., Jašek, O., Jurmanová, J.  
Structure of microwave plasma-torch discharge during graphene synthesis from ethanol  
*Plasma Sources Science and Technology* 30(6),065020 (2021)
6. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
*Diamond and Related Materials* 116, 108417 (2021)
5. Electron concentration in the non-luminous part of the atmospheric pressure filamentary discharge  
Faltynek, J.; Kudrle, V.; Snirer, M.; et al.  
*PLASMA SOURCES SCIENCE & TECHNOLOGY* Volume: 30 Issue: 1 Article Number: 015001 Published: JAN 2021
4. Recent Advancements of N-Doped Graphene for Rechargeable Batteries: A Review  
Ikram, Rabia; Jan, Badrul Mohamed; Pervez, Syed Atif; et al.  
*CRYSTALS* Volume: 10 Issue: 12 Article Number: 1080 Published: DEC 2020
3. Graphene Flakes for Electronic Applications: DC Plasma Jet-Assisted Synthesis  
Antonova, Irina V.; Shavelkina, Marina B.; Ivanov, Artem I.; et al.  
*NANOMATERIALS* Volume: 10 Issue: 10 Article Number: 2050 Published: OCT 2020

2. Effect of the Plasma Gas Composition on the Properties of Graphene  
Shavelkina, M. B.; Ivanov, P. P.; Bocharov, A. N.; et al.  
HIGH ENERGY CHEMISTRY Volume: 54 Issue: 5 Pages: 374-377 Published: SEP 2020

1. Improving the Performance of Zn-Air Batteries with N-Doped Electroexfoliated Graphene  
Ilnicka, Anna; Skorupska, Malgorzata; Romanowski, Piotr; et al.  
MATERIALS Volume: 13 Issue: 9 Article Number: 2115 Published: MAY 2020

110. *“Raman spectroscopy of alpha-FeOOH (goethite) near antiferromagnetic to paramagnetic phase transition”*

M. V. Abrashev, V. G. Ivanov, B. S. Stefanov, N. D. Todorov, J. Rosell, and V. Skumryev  
J. Appl. Phys. **127**, 205108 (2020) DOI: 10.1063/5.0006352 IF = 2.286

15. Kashima, A., Urashima, S.-H., Yui, H.  
Analytical method for stable background reduction for Raman spectra of carbon-containing meteorite and terrestrial samples suffering from intense fluorescence  
Meteoritics and Planetary Science 59(2), pp. 338-350 (2024)

14. Gandhi, D., Nag, A., Perka, A.K.  
Effect of welding heat input on the corrosion behaviour of high strength steel rebars  
Welding in the World 68(2), pp. 213-225 (2024)

13. Nairan, A., Feng, Z., Zheng, R., Khan, U., Gao, J.  
Engineering Metallic Alloy Electrode for Robust and Active Water Electrocatalysis with Large Current Density Exceeding 2000 mA cm<sup>-2</sup>  
Advanced Materials (Article in Press) DOI: 10.1002/adma.202401448 (2024)

12. Huang, HZ; Chen, QL; (...); Wu, YH  
Characteristics of the Colour Zones and Inclusions in Unusual Multicoloured Quartz from Brazil  
Journal of Gemology 38 (8) , pp.784-794 (2023)

11. Krzemnicki, M.S., Lefèvre, P., Zhou, W., Braun, J., Spiekermann, G.  
Dehydration of Diaspore and Goethite during Low-Temperature Heating as Criterion to Separate Unheated from Heated Rubies and Sapphires  
Minerals 13(12),1557 (2023)

10. Kubiak, A., Voronkina, A., Pajewska-Szmyt, M., (...), Ehrlich, H., Jesionowski, T.  
Creation of a 3D Goethite-Spongin Composite Using an Extreme Biomimetics Approach  
Biomimetics 8(7),533 (2023)

9. Yang, H., Vijaykumar, G., Chen, Z., (...), Driess, M., Menezes, P.W.  
In Situ Reconstruction of Helical Iron Borophosphate Precatalyst toward Durable Industrial Alkaline Water Electrolysis and Selective Oxidation of Alcohols  
Advanced Functional Materials 33(41),2303702 (2023)

8. Heath, M.M., Poureshghi, F., Seland, F., Sunde, S., Kriek, R.J.  
The Enhancing Effect of  $\alpha$ -FeOOH on Ni Surfaces Toward Electrolytic Water Splitting  
Energy Technology 11(8),2300313 (2023)

7. Qu, Y., Yin, Z., Kustatscher, E., (...), Vajda, V., Ivarsson, M.  
Traces of Ancient Life in Oceanic Basalt Preserved as Iron-Mineralized Ultrastructures: Implications for Detecting Extraterrestrial Biosignatures  
Astrobiology 23(7), pp. 769-785 (2023)

6. Zhou, P., Wong, P.K., Niu, P., (...), Wang, S., Pan, H.  
Anodized AlCoCrFeNi high-entropy alloy for alkaline water electrolysis with ultra-high performance  
Science China Materials 66(3), pp. 1033-1041 (2023)

5. Dutta, D.P., Abraham, S.  
Composite of  $\alpha$ -FeOOH and Mesoporous Carbon Derived from Indian Blackberry Seeds as Low-Cost and Recyclable Photocatalyst for Degradation of Ciprofloxacin  
Catalysts 13(1),191 (2023)

4. Mallick, L., Rajput, A., Adak, M.K., (...), Choudhary, P., Chakraborty, B.  
 $\gamma$ -FeO(OH) with multiple surface terminations: Intrinsically active for the electrocatalytic oxygen evolution reaction  
Dalton Transactions 51(39), pp. 15094-15110 (2022)

3. Flores-Cano, D.A., Checca-Huaman, N.-R., Castro-Merino, I.-L., (...), Litterst, F.J., Ramos-Guivar, J.A.  
Progress toward Room-Temperature Synthesis and Functionalization of Iron-Oxide Nanoparticles  
International Journal of Molecular Sciences 23(15),8279 (2022)

2. Karadag, A., Kaygisiz, E., Nikitin, T., (...), Yilmaz, A., Fausto, R.  
Micro-Raman Spectroscopy and X-ray Diffraction Analyses of the Core and Shell Compartments of an Iron-Rich Fulgurite

Molecules 27(10),3053 (2022)

1 Giannetta, B., Cassetta, M., de Souza, D.O., (...), Aquilanti, G., Zaccone, C.  
Coupling X-ray Absorption and Raman Spectroscopies to Characterize Iron Species in a Karst Pedosedimentary Record  
Soil Systems 6(1),24 (2022)

111. *“Prospects for microwave plasma synthesized N-graphene in secondary electron emission mitigation applications”*

N. Bundaleska, A. Dias, N. Bundaleski, E. Felizardo, J. Henriques, D. Tsyganov, M. Abrashev, E. Valcheva, J. Kisoovski, A. M. Ferraria, A. M. Botelho do Rego, A. Almeida, J. Zavašnik, U. Cvelbar, O. M. N. D. Teodoro, Th. Strunskus, and E. Tatarova  
Scientific Reports 10, 13013 (2020) DOI: 10.1038/s41598-020-69844-9 IF = 3.998

13. Chen, W., Yuan, F., Guo, X., (...), Zheng, L., Zhang, Y.  
Enhancing performance of nitrogen-doped graphene nano-catalyst for oxygen reduction reaction by Ag loading  
International Journal of Hydrogen Energy 59, pp. 375-382 (2024)

12. Oguz, I.C., Jaouen, F., Mineva, T.  
Exploring Spin Distribution and Electronic Properties in FeN<sub>4</sub>-Graphene Catalysts with Edge Terminations  
Molecules 29(2),479 (2024)

11. Srivastava, S., Yadav, R.K., Singh, S., (...), Kim, T.W., Baeg, J.-O.  
Synthesis of highly efficient nitrogen enrich graphene eosin-Y coupled photocatalyst that uses solar energy in trifluoromethylation of benzaldehydes  
Journal of Chemical Sciences 135(4),109 (2023)

10. Zafar, M.A., Liu, Y., Allende, S., Jacob, M.V.  
Expeditious and Eco-friendly fabrication of Graphene-Ag nanocomposite for methyl paraben sensing  
Applied Surface Science 638,158006 (2023)

9. Jiang, H., Xian, J., Hu, R., (...), Xu, W., Wan, J.  
Microwave discharge for rapid introduction of bimetallic-synergistic configuration to conductive catecholate toward long-term supercapacitor  
Chemical Engineering Journal 455,140804 (2023)

8. Levchenko, I., Mandhakini, M., Prasad, K., (...), Xu, S., Bazaka, K.  
Functional Nanomaterials from Waste and Low-Value Natural Products: A Technological Approach Level  
Advanced Materials Technologies 7(11),2101471 (2022)

7. Najah, A., Boivin, D., Noël, C., (...), Henrion, G., Cuynet, S.  
Amino-grafting pre-functionalization of terephthalic acid by impulse dielectric-barrier discharge (DBD) plasma for amino-based Metal-Organic Frameworks (MOFs)  
Materials Chemistry and Physics 290,126629 (2022)

6. Heo, S., Lim, T., Kim, B.S., Suk, J.W., Bak, M.S.  
Impact of N<sub>2</sub> admixture on the synthesis of graphitic carbon nanoparticles using atmospheric-pressure microwave plasma  
Journal of Physics D: Applied Physics 55(27),275201 (2022)

5. Talukder, N., Wang, Y., Nunna, B.B., Lee, E.S.  
Nitrogen-doped graphene nanomaterials for electrochemical catalysis/reactions: A review on chemical structures and stability  
Carbon 185, pp. 198-214 (2021)

4. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)

3. Toman, J., Jašek, O., Šnír, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)

2. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
Journal of Applied Physics 129(21),213304 (2021)

1 Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Diamond and Related Materials 116,108417 (2021)

112. *„Simultaneous Synthesis and Nitrogen Doping of Free-Standing Graphene Applying Microwave Plasma“*

D. Tsyganov, N. Bundaleska, J. Henriques, E. Felizardo, A. Dias, M. Abrashev, J. Kissovski, A. M. Botelho do Rego, A. M. Ferraria, and E. Tatarova  
Materials **13**, 4213 (2020) DOI: 10.3390/ma13184213 IF = 3.057

9. Biti, S., McCue, A.J., Dionisi, D., Graça, I., Martín, C.F.  
Greener carbon capture using microwave heating for the development of cellulose-based adsorbents  
Fuel 358,130246 (2024)
  8. Toman, J., Šnirer, M., Rincón, R., (...), Muñoz, J., Calzada, M.D  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)
  7. Parvin, N., Kumar, V., Joo, S.W., Park, S.-S., Mandal, T.K.  
Recent Advances in the Characterized Identification of Mono-to-Multi-Layer Graphene and Its Biomedical Applications: A Review  
Electronics (Switzerland) 11(20),3345 (2022)
  6. Wang, H., Han, Y., Luo, P., (...), Zhang, B., Huang, K.  
Advances in Microwave-Enhanced Chemical Vapor Deposition for Graphene Synthesis  
ChemistrySelect 7(18),e202200103 (2022)
  5. Lu, Z., Wang, C., Chen, X., Song, M., Xia, W.  
Effects of buffer gas on N-doped graphene in a non-thermal plasma process  
Diamond and Related Materials 118,108548 (2021)
  4. Toman, J., Jašek, O., Šnirer, M., (...), Kudrle, V., Michalička, J.  
On the transition of reaction pathway during microwave plasma gas-phase synthesis of graphene nanosheets: From amorphous to highly crystalline structure  
Plasma Processes and Polymers 18(8),2100008 (2021)
  3. Wang, C., Lu, Z., Song, M., (...), Zheng, Y., Xia, W.  
In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma  
Journal of Applied Physics 129(21),213304 (2021)
  2. Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma  
Song, M., Wang, C., Chen, X., Ma, J., Xia, W.  
Diamond and Related Materials 116, 108417 (2021)
  1. Atmospheric pressure plasmas in material science  
Ptasińska, S.  
Materials 14(8), 1963 (2021)
113. *“Enhanced effect of combination of new hybrid TiO<sub>2</sub> phase and phosphorus dopant on the physicochemical properties and UV/Visible light photocatalytic activity”*  
I. Stambolova, D. Stoyanova, M. Shipochka, V. Blaskov, D. Nihtianova, P. Markov, A. Eliyas, R. Mladenova, L. Dimitrov, M. Abrashev, G. Avdeev, and K. Zaharieva  
Materials Characterization **172**, 110775 (2021) DOI: 10.1016/j.matchar.2020.110775 IF = 3.562
8. Sharma, A., Yano, M., Zhang, C., (...), Chen, G., Yang, Y.  
Efficient and stable immobilization of TiO<sub>2</sub>-based composite photocatalytic system for separation and purification of organic pollutants in wastewater under solar light  
Journal of Photochemistry and Photobiology A: Chemistry 452,115549 (2024)
  7. Mehralipour, J., Darvishali, S., Bagheri, S., Kermani, M.  
Photocatalytic-ozonation process in oxytetracycline degradation in aqueous solution: composite characterization, optimization, energy consumption, and by-products  
Scientific Reports 13(1),11113 (2023)
  6. Zhao, H., Duan, J., Zhang, Z., Wang, W.  
High-performance gas-liquid-solid optofluidic microreactor with TiO<sub>2</sub>-x-Ag@HKUST-1/carbon paper for efficient photocatalytic nitrogen fixation to ammonia  
Colloids and Surfaces A: Physicochemical and Engineering Aspects 660,130874 (2023)
  5. Lu, L., Zhang, C.-L., Mi, S.-B.  
Probing interface structure and cation segregation in (In, Nb) co-doped TiO<sub>2</sub> thin films  
Materials Characterization 191,112164 (2022)
  4. Sharma, A., Ming, J., Liu, N., (...), Chen, G., Yang, Y.  
Sustainable and efficient reduction of pollutants by immobilized PEG-P/Ag/Ag<sub>2</sub>O/Ag<sub>3</sub>PO<sub>4</sub>/TiO<sub>2</sub> photocatalyst for purification of saline wastewater  
Marine Pollution Bulletin 179,113731 (2022)
  3. Yu, S.-Y., Liu, Y., Ren, H.-T., Liu, Z.-Y., Han, X.

Importance of the ligand-to-metal charge transfer (LMCT) pathway in the photocatalytic oxidation of arsenite by TiO<sub>2</sub>  
Physical Chemistry Chemical Physics 24(22), pp. 13661-13670 (2022)

2. Wang, C., Yu, R.

Highly efficient visible light photocatalysis of tablet-like carbon-doped TiO<sub>2</sub> photocatalysts via pyrolysis of cellulose/MIL-125(Ti) at low temperature

Journal of Solid State Chemistry 309,122992 (2022)

1 Hassankhani-Majd, Z., Anbia, M.

Comparative Study of Synthesis Parameters of Nanoporous Titania Particles to Improve Structural Properties and Photocatalytic Activity  
ChemistrySelect 6(47), pp. 13488-13498 (2021)

#### 114. “Catalytic and photocatalytic properties of zinc-nickel ferrites”

M. P. Tsvetkov, M. M. Milanova, Z. P. Cherkezova-Zheleva, T. S. Tsoncheva, J. Ts. Zaharieva, M. V. Abrashev and I. G. Mitov

J. Chem. Sci. **133**, 24 (2021) DOI: 10.1007/s12039-020-01882-2 IF = 1.406

6. Gavrilova, M.A., Gavrilova, D.A., Kondrashkova, I.S., Krasilin, A.A.

Formation of Zn<sub>0.5</sub>Ni<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> Nanocrystals in Conditions of Solution Combustion: Effect of the Type of Fuel on the Structure and Morphology

Glass Physics and Chemistry 49(4), pp. 394-401 (2023)

5. Albini, B., Restelli, S., Ambrosetti, M., (...), Mozzati, M.C., Galinetto, P.

Raman spectroscopy in pure and doped zinc ferrites nanoparticles

Journal of Materials Science: Materials in Electronics 34(12),1030 (2023)

4. Aoulad El Hadj Ali, Y., Ahrouch, M., Ait Lahcen, A., Abdellaoui, Y., Stitou, M.

Recent Advances and Prospects of Biochar-based Adsorbents for Malachite Green Removal: A Comprehensive Review

Chemistry Africa 6(2), pp. 579-608 (2023)

3. Wei, L., Gu, A., Guo, Z., (...), Jin, G., Lei, Y.

An Integrated Study on the Fading Mechanism of Malachite Green Industrial Dye for the Marquisette Curtain in the Studio of Cleansing Fragrance, the Palace Museum (Beijing)

Molecules 27(14),4411 (2022)

2. Jiang, X., Yan, W., Xiong, Z., Zhao, L.

A highly dispersed magnetic polymetallic catalyst to activate peroxymonosulfate for the degradation of organic pollutants in wastewater

Environmental Science: Nano 9(8), pp. 2939-2953 (2022)

1 Kochetov, G., Samchenko, D., Arhatenko, T.

DETERMINATION OF INFLUENCE OF pH ON REACTION MIXTURE OF FERRITATION PROCESS WITH ELECTROMAGNETIC PULSE ACTIVATION ON THE PROCESSING OF GALVANIC SLUDGE

Eastern-European Journal of Enterprise Technologies 4(10-112), pp. 24-30 (2021)

#### 115. „Impact of Polyethylene Glycol Functionalization of Graphene Oxide on Anticoagulation and Haemolytic Properties of Human Blood“

Trayana Kamenska, Miroslav Abrashev, Milena Georgieva, Natalia Krasteva

Materials **14**, 4853 (2021) DOI: 10.3390/ma14174853 IF = 3.623

6. Kalyani Bhardwaj, B., Suresh, P.S.

Synthesis, characterization and multi-spectroscopic DNA/HSA interaction studies of synthetic human Follicle-Stimulating Hormone Beta 33–53 peptide conjugated PEGylated graphene oxide nanoparticles

Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy 306,123552 (2024)

5. Yanich, TV; Derkho, MA and Tegza, A

Hemostatic Profile of Holstein Heifers Depending on Age

International Transaction Journal of Engineering Management & Applied Sciences & Technologies 13 (1) (2022)

4. Yu, C., Feng, X., Li, Q., (...), Xiao, L., Hou, L.

A durable heterogeneous catalyst for photoinduced controlled radical polymerization under white LED light irradiation in an aqueous solution

New Journal of Chemistry 46(48), pp. 23338-23343 (2022)

3. Sepehri, R., Zahedi, P., Kabiri, M., Nojavan, C.

Heparin-coated Poly(ethylene terephthalate)/Graphene Oxide Nanofibers Used for Vascular Tissue Engineering Application

Fibers and Polymers 23(11), pp. 3012-3021 (2022)

2. Munir, T., Imran, M., Muzammil, S., (...), Shafeeq, S., Afzal, M.

Antimicrobial activities of polyethylene glycol and citric acid coated graphene oxide-NPs synthesized via Hummer's method

Arabian Journal of Chemistry 15(9),104075 (2022)

1 Shen, J., Dong, J., Shao, F., (...), Zhang, Y., Cai, Y.

Graphene oxide induces autophagy and apoptosis via the ROS-dependent AMPK/mTOR/ULK-1 pathway in colorectal cancer cells



116. *“Silver Flowerlike Structures for Surface-Enhanced Raman Spectroscopy”*

G. G. Tsutsumanova, N. D. Todorov, S. C. Russev, M. V. Abrashev, V. G. Ivanov, Al. V. Lukoyanov  
Nanomaterials **11**(12), 3184 (2021) DOI:10.3390/nano11123184 IF = 5.076

1 Sakir, M., Torun, N., Kayaci, N., (...), Kalay, M., Onses, M.S.  
Silver nanoflowers with SERS activity and unclonable morphology  
Materials Today Chemistry 29,101423 (2023)

117. *“Simple and Environment-Friendly Method for Graphene Synthesis by Using Ultrasound”*

Irena Markovska, Dimitar Georgiev, Fila Yovkova, Miroslav Abrashev  
Current Nanoscience **18** (1), 106-118 (2022) DOI: 10.2174/1573413716666210222100629 IF = 1.824

118. *“N-Graphene-Metal-Oxide(Sulfide) hybrid Nanostructures: Single-step plasma-enabled approach for energy storage applications”*

A. Dias, N. Bundaleska, E. Felizardo, D. Tsyganov, A. Almeida, A.M. Ferraria, A.M. Botelho do Rego, M. Abrashev, Th. Strunskus, N.M. Santhosh, U. Cvelbar, J. Zavasnik, M.F. Montemor, M.M. Almeida, Patrícia A. Carvalho, J. Kissovski, L.L. Alves, E. Tatarova  
Chemical Engineering Journal **430**, 1-13 (2022) DOI: 10.1016/j.cej.2021.133153 IF = 13.273

11. Bjelajac, A., Phillipe, A.-M., Guillot, J., (...), Choquet, P., Bulou, S.  
Iron oxide/graphene oxide nanocomposite synthesis using atmospheric cold plasma  
RSC Advances 14(3), pp. 1750-1756 (2024)

10. Shaji, N; Santhosh, NM; (...); Lee, CW  
Moving toward Smart Hybrid Vertical Carbon/MoS<sub>2</sub> Binder-Free Electrodes for High-Performing Sodium-Ion Batteries  
ACS Sustainable Chemistry & Engineering 11 (8) , pp.3260-3269 Feb 27 2023

9. Zafar, M.A., Liu, Y., Allende, S., Jacob, M.V.  
Expeditious and Eco-friendly fabrication of Graphene-Ag nanocomposite for methyl paraben sensing  
Applied Surface Science 638,158006 (2023)

8. Morales-Calero, F.J., Rincón, R., Muñoz, J., Calzada, M.D.  
Experimental characterization of TIAGO torch discharges: surface wave discharge behavior and (post-)discharge kinetics  
Plasma Sources Science and Technology 32(6),065001 (2023)

7. Wang, F., Lee, J., Chen, L., (...), Jiang, S., Kim, I.-D.  
Inspired by Wood: Thick Electrodes for Supercapacitors  
ACS Nano 17(10), pp. 8866-8898 (2023)

6. Levchenko, I., Baranov, O., Riccardi, C., (...), Xu, S., Bazaka, K.  
Nanoengineered Carbon-Based Interfaces for Advanced Energy and Photonics Applications: A Recent Progress and Innovations  
Advanced Materials Interfaces 10(1),2201739 (2023)

5. Hossain, M.K., Hendi, A., Asim, N., (...), Rafiqul Islam, M., Hussain, S.M.S.  
Chemiresistive Gas Sensing using Graphene-Metal Oxide Hybrids  
Chemistry - An Asian Journal (Article in Press) DOI: 10.1002/asia.202300529 (2023)

4. Toman, J., Šnír, M., Rincón, R., (...), Muñoz, J., Calzada, M.D.  
On the gas-phase graphene nanosheet synthesis in atmospheric microwave plasma torch: Upscaling potential and graphene nanosheet-copper nanocomposite oxidation resistance  
Fuel Processing Technology 239,107534 (2023)

3. Dharmalingam, P., Palani, G., Apsari, R., (...), Kumar, V., Ali, Y.  
Synthesis of metal oxides/sulfides-based nanocomposites and their environmental applications: a review  
Materials Today Sustainability 20,100232 (2022)

2. Ramesh, S., Karuppasamy, K., Vikraman, D., (...), Kim, J.-H., Kim, H.S.  
Structural and electrochemical properties of NiCo<sub>2</sub>S<sub>4</sub>@N-doped graphene oxide/carboxy methyl cellulose interface composite for supercapacitor electrode materials  
Journal of Energy Storage 55,105728 (2022)

1 Vachkov, V., Kiss'Ovski, Z.  
Simulations of a capacitor with graphene electrodes  
Journal of Physics: Conference Series 2240(1),012036 (2022)

119. *“Free-standing graphene-carbon as negative and FeCoS as positive electrode for asymmetric supercapacitor”*

Kush K. Upadhyay, N. Bundaleska, M. Abrashev, J. Kissovski, N. Bundaleski, O.M.N.D. Teodoro, Andre Mao de Ferro, Rui Pedro Silva, A. Dias, E. Felizardo, E. Tatarova, M.F. Montemor

3. E, Y., Shen, X., Chen, X., (...), Jiang, W., Abdullah, M.

Preparation of biomass composite activated carbon based supercapacitor materials and their application in energy storage devices  
Chemical Engineering Science 282,119193 (2023)

2. Shirvani, M., Hosseiny Davarani, S.S.

Designing of the CoFeX (X= Se, P, S) Flower-like Structures on Nickel Foam as Efficient Positive Electrodes for a High-Performance Hybrid Supercapacitor

Energy and Fuels 37(13), pp. 9626-9640 (2023)

1 Jiang, S., Pang, M., Du, Y., (...), Pan, Q., Zhao, J.

Designing hierarchical S and P coordinated Co-Ni bimetallic nanoparticles for enhanced supercapacitor electrode  
Journal of Alloys and Compounds 944,169259 (2023)

120. *“Low temperature electrical transport in microwave plasma fabricated free-standing graphene and N-graphene sheets”*

E. Valcheva, K. Kirilov, N. Bundaleska, A. Dias, E. Felizardo, M. Abrashev, N. Bundaleski, O.M.N.D. Teodoro, Th. Strunskus, Zh. Kiss’ovski, L. L. Alves and E. Tatarova

Materials Research Express **10** (2), 25602-25612 (2023) DOI:10.1088/2053-1591/acb7ca IF = 2.30

1 Nguyen, Y.H., Mai, P.T., Nguyen, N.P.T., (...), Phan, M.N., Bui, T.H.

Fabrication of graphene from graphite using high-powered ultrasonic vibrators  
Materials Research Express 11(2),025006 (2024)

121. *“Spontaneous silver deposition on cathodically pre-treated screen-printed carbon electrodes”*

Aneliya Nakova, Miroslav Abrashev, Vessela Tsakova

Journal of Solid State Electrochemistry, 14328488 (2023), DOI:10.1007/s10008-023-05602-x, IF = 2.747

122. *“Plasma-enabled multifunctional platform for gram-scale production of graphene and derivatives”*

Ana Dias, Edgar Felizardo, Neli Bundaleska, Miroslav Abrashev, Jivko Kisoovski, Ana M. Ferraria, Ana M. Rego, Thomas Strunskus, Patrícia A. Carvalho, Amelia Almeida, Janez Zavasnik, Eva Kovacevic, Johannes Berndt, Nenad Bundaleski, Mohammed-Ramzi Ammar, Orlando M.N.D. Teodoro, Luís L. Alves, Bruno Gonçalves, Elena Tatarova

Applied Materials Today **36**, 102056-12 (2024) DOI:10.1016/j.apmt.2024.102056 IF = 8.663

123. *“Deposition of vertical carbon nanostructures by microwave plasma source on nickel and alumina”*

S. Marinov, I. Ivanov, G. Popov, M. Abrashev, Zh. Kiss’ovski

Journal of Physics: Conference Series **2710**, 1-5 (2024), DOI:10.1088/1742-6596/2710/1/012002, SJR = 0.183

124. *“Deposition of carbon nanolayers by PECVD on ceramic substrates”*

I. Ivanov, S. Marinov, G. Popov, M. Abrashev, K. Kirilov, Zh. Kiss’ovski

Journal of Physics: Conference Series **2710**, 1-5 (2024) DOI:10.1088/1742-6596/2710/1/012006 SJR = 0.183

125. *“Plasma-Driven Tuning of Dielectric Permittivity in Graphene”*

Elena Tatarova, Ana Dias, Plamen Dankov, Jivko Kisoovski, Ana Maria Botelho do Rego, Neli Bundaleska, Edgar Felizardo, Miroslav Abrashev, Ana Maria Ferraria, Thomas Strunskus, Vasyl Shvalya, Neelakandan M. Santhosh, Ivan Valeriev Ivanov, Martin Košiček, Janez Zavašnik, Luis Lemos Alves, Bruno Gonçalves, and Uroš Cvelbar

Small, 1-7 (2024) DOI:10.1002/sml.202303421 IF = 13.3