

Забелязани цитирания на работи с участието на проф. Николай Недялков

Jendrzejewski R., Slivinski G., Martev I., Nedialkov N., Atanasov P., Proc. SPIE, 4238, 149-154 (2000).

1. Yilbas B.S., Arif A.F.M., Karatas C., Akhtar S., Abdul Aleem B.J., *Intern. J. of Advanced Manuf. Tech.*, 49, 9-12, 1009-1018 (2010).
2. Yilbas B.S., Sahin A.Z., Ayar T., Abdul Aleem B.J., *Intern. J. of Surf. Sci. & Engin.*, 4, 4-6, 492-504 (2010).
3. Yilbas B., Arif A.F.M., Karatas C., Aleem B.J.A., Tabet N., *Industrial Lubrication and Tribology*, 62 (4), 214-223 (2010).
Atanasov P.A., Eugenieva E.D., Nedialkov N.N., J. Appl. Phys.: 89, 4, 2013-2016 (2001).
4. Tangwarodomnukun, V.a, Wang, J.a , Huang, C.Z.b, Zhu, H.T., *International Journal of Machine Tools and Manufacture*, Volume 79, April 2014, Pages 1-16
5. Tangwarodomnukun V., "Towards damage-free micro-fabrication of silicon substrates using a hybrid laser-waterjet technology", *PhD Thesis*, New South Wales Uni., pgs. 206 (2012).
6. Chen T.-Ch., Darling R.B., "Fundamentals of laser ablation of the materials used in microfluidics" in "*Micromachining techniques for fabrication of micro and nano structures*", 3, 35-60 (2012).
7. Ahn D., Jang D., Choi T.-Y., Kim D., *Appl. Phys. Lett.*, 100, 104104 (2012).
8. Lin H.-K., Lee Ch.-J., Hu T.-T., Li Ch.-H., Huang J. Ch.Ch., *Optics & Laser Engineering*, 50, 6, 883-886 (2012).
9. Samant A.N., Dahotre N.B., *International J. of Applied Ceramic Technology*, 8 (1), 127-139 (2011).
10. Shen Xinwei, "Numerical modeling and experimental investigation of laser-assisted machining of silicon nitride ceramics", *PhD Thesis*, Department of Industrial & Manufacturing Systems Engineering (2010).
11. Kim D.S., "*The investigation of thermal response for via hole drilling subjected to short pulsed laser*", 10, 187-188 (2009).
12. Ho C.Y., Wen M.Y., Tsai Y.-H., *J. of the Australian Ceramic Society* 45 (2), 59-63 (2009).
13. Samant A.N., Dahotre N.B., *Ceramics International* 35 (5), 2093-2097 (2009).
14. Samant A.N., Dahotre N.B., *International J. of Machine Tools and Manufacture* 48 (12-13), 1345-1353 (2008).
15. "Analysis of photomechanical damages in laser drilling of thin silicon wafer", 11, 747-748 (2008).
16. Osvay K., Képiró I. and Berkesi O., *Appl. Surf. Sci.*, 252, 13 SPEC. ISS., 4516-4522 (2006).
17. Patil R.H., "Thermal modeling of laser drilling and cutting of engineering materials", *MS Thesis*, Oklahoma State Uni., USA, 133 pgs. (2005).
18. Lan Bin, "Laser-assisted MEMS fabrication by third harmonic DPSS Nd: YAG laser", Thesis, ME, Nat. Uni. of Singapore (2004).
19. Lee D.W. and Cheng M.D., *J. Aerosol Sci.*: 35 (12), 1513-1526 (2004).
20. Ho C.Y. and Lu J.K., *J. Mater. Process. Tech.*: 140, 260-265 Sp. Issue (2003).
21. Li C.F., Johnson D.B., and Kovacevic R., *P.I. Mech. Eng. B-J Eng.*: 217, 5, 583-600 (2003).
22. Li C.F., Johnson D.B., and Kovacevic R., *Int. J. Mach. Tool Manuf.*: 43, 9, 925-936 (2003).
Atanasov P.A., Nedialkov N.N., Imamova S.E., Ruf. A., Hugel H., Dausinger F., Berger P., Appl. Surf. Sci., 186/1-4, 369-373 (2002).
23. Zhao X., Shin Y.C., *J. Phys. D: Appl. Phys.*, 45, 10, 105201 (2012).
24. Gong X.-F., Yang G.-X., Li P., Wang Y., Ning X.-J., *Intern. J. of Modern Physics B*, 25 (4), 543-550 (2011).
25. Liu X., Feng P., *Advanced Materials Research*, 97-101, 3807-3810 (2010).
26. Semaltianos N.G., Perrie W., Cheng J., French P., Sharp M., Dearden G., Watkins K.G., *Appl. Phys. A: Mater. Sci. & Proces.*, 98 (2), 345-355 (2010).
27. Bennaceur-Doumaz D., Djebli M., *Appl. Surf. Sci.*, 255, 8, 4595-4599 (2009).
28. Liu X., Zhou W., Chen C., Zhao L., Zhang Y., *J. of Materials Proces. Tech.*, 203, (1-3), 202-207 (2008).
29. Huang Z.G., Guo Z.N., Chen X., Yu Z.Q., Yu T.M., Lee W.B., *Nanotechnology* 18 (10) art. no. 105703 (2007).
30. Liu X., Wang Y., Zhao L.-J., *J. of Beijing Inst. of Tech. (Eng. Ed)*: 15 (4), 406-410 (2006).
31. Yamashita Y., Yokomine T., Ebara S., *Int. J. Thermophys.*, 27 (2): 627-646 (2006).
32. Vitiello M., *Ph D thesis*, N 20, 95 (2006).
33. Huang Z.G., Guo Z.N., Chen X., Yue T.M., To S., Lee W.B., *Materials & Manufacturing Processes*, 24, 4, 393-397 (2006).
34. Stapleton M.W., McKiernan A.P., and Mosnier J.P., *J. Appl. Phys.*: 97 (6), 1-12 (2005).
35. Wang Yang, Liu Xuan, Han Rong-di, *Microfabrication Technology*, 2, 5-14 (2005).
36. Hirayama Y. and Obara M., *J. Appl. Phys.*: 97, 6, 1-6 (2005).
37. Hirayama Y. and Obara M., *Proc. SPIE*: 5714, 271-282 (2005).
38. Xu X., *Materials Research Society Symposium Proc.*, 850, 3-11, (2005).
39. Cheng C. and Xu X., *Phys. Rev B*: 72, (16) 1-15, 165415 (2005).
40. Xiamfan Xu, "Fundamentals of Phase Change Processes in Laser-Materials Interaction" (Invited), *37th AIAA Thermophys. Conf.*, 28 June - 1 July 2004, Portland, Oregon (2004).
41. Cheng C and Xu X, *Appl. Phys. A – Mater. Sci. & Proces.*, 79, 4-6: 761-765 (2004).
42. Cheng C and Xu X, *American Soc. Mechan. Engin., Heat Transfer Division, HTD 375 (3)*, 541-546 (2004).
43. "Femtosecond imaging-mode laser-induced breakdown spectroscopy", *PhD thesis*, Kassel Uni. (2004).
44. Zheng L., Lambropoulos J.C., and Schmid A.W., *J. Non-Crystalline Solids*: 347, 1-3, 144-152 (2004).
45. Xu X.F., Cheng C.R., and Chowdhury I.H., *J. of Heat Transf. – Trans. of the ASME*: 126, 5, 727-734 (2004).
46. Conforti P.F., Yingling Y.G., *Applied physics: Materials science & processing*, 79, 757(2004).
47. Lippert T. and Dickinson J.T., *Chem. Rev.* 103 (2), 453-485 (2003).

48. Cheng C and Xu X, *American Soc. Mechan. Engin., Heat Transfer Division, HTD* 374 (3), 361-368 (2003).

Nedialkov N.N., Atanasov P.A., Sawczak M., Slivinski G., Proc. SPIE, 5120, 703-708 (2003).

49. Vlasova M., Márquez Aguilar P.A., Reséndiz-González M.C., Kakazey M., González I., Stetsenko V., Tomila T., Ragulya A., *Optics & Laser Technology*, 42, 1, 8-17 (2010).

Nedialkov N.N., Imamova S.E., Atanasov P.A., Heusel G., Breitling D., Ruf A., Hügel H., Dausinger F., Berger P., Thin Solid Films, 453/454, 496-500 (2004).

50. Menezes, P.L. , Lovell, M.R., Avdeev, I.V., Lin, J.S., Higgs I, C.F., *International Journal of Advanced Manufacturing Technology*, Volume 70, Issue 1-4, 2014, Pages 635-648.

51. Shaheen, M.E., Gagnon, J.E., Fryer, B.J. *Journal of Applied Physics* 114 (8), 2013, art. no. 083110

52. Zhao, X., Shin, Y.C. *Appl. Surf. Sci.* 283, 2013, 94-99

53. Kumar A., Pollock T.M., *J. Appl. Phys.*, 110, 8, 083114, doi:10.1063/1.3653839 (2011).

54. Gong X.-F., Yang G.-X., Li P., Wang Y., Ning X.-J., *Intern. J. of Modern Physics B*, 25 (4), 543-550 (2011).

55. Du G., Chen F., Yang Q., Si J., Hou X., *Optics Commun.*, 284 (2), 640-645 (2011).

56. Noh J., Lee J., Shin D., Sohn H., Suh J., Oh J., *J. of the Opt. Soc. of Korea*, 13, 1, Sp. Iss. 75-79 (2009).

57. Xin-Lin Wang, Miss Crane, Chang Yan Xiao, ZHU Wei-hua, Chen Zhiyong, Lu Peixiang, *Optics*, 12. 38, 3052-3056 (2009).

58. Borrielli A., Torrisi L., Margarone D., Caridi F., Mezzasalma A.M., *Nuclear Instrum. & Methods in Phys. Res. B: Beam Inter. with Mater. and Atoms* 266 (18), 3968-3974 (2008)

59. Vatsya S.R., Nikumb S.K., *Journal of Physics: Conference Series*: 59 (1), 149, 704-707 (2007).

60. Zheng H.Y., Deng Y.Z., Vatsya S.R., Nikumb S.K., *Appl. Surf. Sci.*: 253 (7), 3408-3412 (2007).

61. Xu Bing, Song Ren-guo, Dai Li-na, *Optoelectron. Technology*, 26, 2, 138-142 (2006).

62. Vatsya S.R., Li C., and Nikumb S.K., *J. Appl. Phys.*: 97, 3, 034912, 1-6 (2005).

Nedialkov N.N., Imamova S.E., Atanasov P.A., J. Phys. D: Appl. Phys., 37, 4, 638-643 (2004).

63. Ivanov, K.A. , Shulyapov, S.A., Ksenofontov, P.A., Tsymbalov, I.N., Volkov, R.V., Savel'Ev, A.B. , Brantov, A.V., Bychenkov, V.Y., Turinge, A.A., Lapik, A.M., Rusakov, A.V., Djilkibaev, R.M., Nedorezov, V.G., *Physics of Plasmas*, Volume 21, Issue 9, 1 September 2014, Article number 093110.

64. Rung, S. , Christiansen, A., Hellmann, R., *Applied Surface Science*, Volume 305, 30 June 2014, Pages 347-351.

65. Shaheen, M.E.ab , Gagnon, J.E.ac, Fryer, B.J.ac, *Laser Physics*, Volume 24, Issue 10, 1 October 2014, Article number 106102

66. Palav K., Saxena I., Ehmman K.F., *Micro Nano-Manuf.*, 2(3), 031001 (2014).

67. Ling, T.D., Liu, P., Xiong, S., Grzina, D., Cao, J., Wang, Q.J., Xia, Z.C., Talwar, R., *Tribol. Lett.* 52 (1), 2013, 113-122

68. Cheng J., Liu C.-S., Shang S., Liu D., Perrie W., Dearden G., Watkins K., *Optics and Laser Technology*, 46 (1), 88-102 (2013).

69. Ryser M., Neff M., Pilz S., Burn A., Romano V., *Proc. SPIE*, 8237, N: 82373I (2012).

70. Gill-Comeau M, Lewis L.J., *Phys. Rev. B*, 84, 22, 224110, 16 pgs. (2011).

71. Koç M., Özel T., Wu B., Özel T., *Ch. 6. Micro-Laser Processing* in "Micro-Manufacturing: Design and Manufacturing of Micro-Products", Wiley, DOI: 10.1002/9781118010570 (2011).

72. Döring S., Richter S., Nolte S., Tünnermann A., *Proc. of SPIE*, 7925, art. no. 792517 (2011).

73. Sharma A.K., Smedley J., Tsang Th., Rao T., *Rev. Sci. Instrum.*, 82, 3, 033113, (2011).

74. Jaeggi B., Neuenschwander B., Schmid M., Muralt M., Zuercher J., Hunziker U., *Physics Procedia*, 12, 2, 164-171(2011).

75. Gao X., Song X.-W., Lin J.-Q., *Chinese Physics B*, 20 (2), art. no. 024210 (2011).

76. McDonald J.P., Thouless M.D., Yalisove S.M., *J. Mater. Res.*, 25, 6, 1087-1095 (2010).

77. Lewis L.J., Perez D., "Theory and Simulation of Laser Ablation – from Basic Mechanisms to Applications", in "*Laser Precision Microfabrication*", Springer Series in Materials Science, 135, 35-61 (2010).

78. Besner S., Meunier M., "Laser Synthesis of Nanomaterials" in "*Laser Precision Microfabrication*", Springer Series in Materials Science, 135, 163-187 (2010).

79. Döring S., Richter S., Nolte S., Tünnermann A., *Optics Express*, 18, 19, 20395-20400 (2010).

80. Hu W.Q., Shin Y.C., King G., *Phys. Rev. B*, 82, 9, 094111 (2010).

81. Wang S., Wang Y., Ding X., Liang W., Deng Z., Chu L., Fu G., *Qiangjiguang Yu Lizishu/High Power Laser and Particle Beams* 22 (8), 1843-1846 (2010).

82. McDonald J.P., Thouless M.D., Yalisove S.M., *J. Mater. Res.*, 25, 6, 1087-1095 (2010).

83. Hu W., Shin Y.C., King G., *Appl. Phys. A: Mater. Sci. & Proces.*, 98 (2), 407-415 (2010).

84. Wu B., Shin Y.C., *Proc. of the ASME Intern. Manufacturing Sci. & Engin. Conf. 2009, MSEC2009* 1, 853-859 (2009).

85. Bechtold P., Roth S., Schmidt M., *ICALEO 2009 - 28th Intern. Congress on Applications of Lasers and Electro-Optics, Congress Proc.*, 102, 1124-1133 (2009).

86. Fossa J.S., Andreeta M.R.B., Hernandes A.C., *Laser Physics*, 19, 10, 2045-2049 (2009).

87. Hu D.Z., *Acta Phys. Sinica*, 58 (2), 1077-1082 (2009).

88. Wu B., Shin Y.C., *Appl. Surf. Sci.* 255 (9) 4996-5002 (2009).

89. Horn A., "*Ultra-fast Material Metrology*", Willey-VCH ISBN 978-3-527-40887-0 (2009).

90. Breitling D., "Gasphaseneinflüsse beim Abtragen und Bohren mit ultrakurz gepulster Laserstrahlung", *PhD Thesis*,

Stuttgart Uni., pp. 197 (2009).

91. Fang R.R., Zhang D.M., Wei H., Li Z.H., Yang F.X., Tan X.Y., *Chinese Phys. Lett.*, 25, 10, 3716-3719 (2008).
 92. Mingareev I., Horn A., *Appl. Phys. A: Mater. Sci. and Proc.*, 92 (4), 917-920 (2008).
 93. Lin Z., Johnson R.A., Zhigilei L.V., *Phys. Rev. B - Condensed Matter and Materials Physics* 77 (21), art. no. 214108 (2008).
 94. McDonald J.P., Ma S., Pollock T.M., Yalisove S.M., Nees J.A., *J. of Applied Physics* 103 (9), art. no. 093111 (2008).
 95. Amoroso S., Bruzzese R., Pagano C., Wang X., *Appl. Phys. A: Mater. Sci. and Proc.*: 89 (4), 1017-1024 (2007).
 96. Upadhyay A.K. and Urbassek H.M.: *J. of Phys. D: Appl. Phys.* 40, (11), 3518-3526 (2007).
 97. Gu X. and Urbassek H.M., *Appl. Surf. Sci.*, 253 (9) 4142-4149 (2007).
 98. Wu B. and Shin Y.C., *Appl. Surf. Sci.*, 253 (8), 4079-4084 (2007).
 99. Gu X. and Urbassek H.M., *J. Phys D: Appl. Phys.*, 39 (21), N 018, 4621-4627 (2006).
 100. Horn A., Mingareev I., Miyamoto I., *JLMN-Journal of Laser Micro/Nanoengineering*, 1, 3, 264-268 (2006).
 101. Let Qiyi, Xue Fu St., Xu Long jiang, Zhang Deyong, *Acoustics/Chinese*, 25, 3, 204-208 (2006).
 102. Amoroso S., Ausanio G., Bruzzese R., Gragnaniello L., Lanotte L., Vitiello M., Wang X., *Appl. Surf. Sci.* 252 (13 SPEC. ISS.), 4863-4870 (2006)
 103. Mingareev I., Horn A., Kreutz E.W., *Proc. SPIE*, 6261 I, art. no. 62610A (2006).
 104. Lorazo P., Lewis L.J., Meunier M., *Phys. Rev. B*, 73, 13, 134108, 1-22 (2006).
 105. Cheng C. and Xu X., *Phys. Rev B*: 72, (16) 1-15 (2005).
 106. Upadhyay A.K., Urbassek H.M.: *J. of Phys. D: Appl. Phys.* 38, 16, 2933-2941, (2005).
 107. Le Harzic R., Breitling D., Sommer S., Föhl C., Valette S., König K., Dausinger F., Audouard E., *Proc. SPIE*, 5713, 115-122 (2005).
 108. Borowiec A., Tiedje H.F., and Haugen H.K.: *Appl. Surf. Sci.*, 243, 1-4, 129-137 (2005).
 109. Xu X.F., Cheng C.R., and Chowdhury I.H., *J. of Heat Transf. – Tran. of the ASME*: 126, 5, 727-734 (2004).
 110. Bolotin V.P., Cherkassky V.S., Igumenov I.K., Kayran D.A. et al, "Status of the Novosibirsk free electron laser and first experiments with high power terahertz radiation", Budker INP 2004-57, 1-22 (2004).
 111. Bolotin V.P., Cherkassky V.S., Igumenov I.K., Kayran D.A., Knyazev B.A., Kolobanov E.I., Kotenkov V.V., Kubarev V.V. et al, *Fth Int. Conf. on Submilim. Sci. & Tech.*, Oct. 13-15, Phys. Res. Lab., Ahmedabad, India, 1-8 (2004).
- Nedialkov N.N., Atanasov P.A., Imamova S.E., Ruf A., Berger P., Dausinger F., *Appl. Phys. A*, 79 (4-6), 1121-1125, (2004).**
112. Wu, C., Zhigilei, L.V., *Applied Physics A: Materials Science and Processing*, Volume 114, Issue 1, January 2014, Pages 11-32.
 113. Wu C., Karim E.T., Volkov A.N., Zhigilei L.V., *Lasers in Materials Science*, Springer Series in Materials Science, 191, 67-100 (2014).
 114. Karim E.T., Wu C., Zhigilei L.V., "Molecular dynamics simulations of laser-materials interactions: General and material-specific mechanisms of material removal and generation of crystal defects", Chapter of Book, Springer, 27-49 (2014).
 115. Stavropoulos P., Efthymiou K., Chryssolouris G., *Procedia CIRP*, 3, 471-476 (2012).
 116. Lewis L.J., Perez D., "Principles and Applications in the Preparation of Nanomaterials" in "Computer Models in Laser Ablation in Liquids", 111-156 (2012).
 117. Gill-Comeau M, Lewis L.J., *Phys. Rev. B*, 84, 22, 224110, 16 pgs. (2011).
 118. Zhigilei L.V., Lin Z., Ivanov D.S., Leveugle E., Duff W., Thomas D., Sevilla C., Guy S.J., "Atomic/molecular-level simulation of laser-materials interactions", in *Laser-Surface Interactions for New-Materials Production*, eds. Miotello A., Ossi P.M., Springer, 130, 43-79 (2010).
 119. Stasic J., Gakovic B., Krmpot A., Pavlovic V., Trtica M., Jelenkovic B., *Laser and Particle Beams*, 27, 4, 699-707 (2009).
 120. Stasic J., Trtica M., Gakovic B., Petrovic S., Batani D., Desai T., Panjan P., *Appl. Surf. Sci.* 255 (8), 4474-4478 (2009).
 121. Stasic J., Trtica M., Gakovic B., Batani D., Desai T., Brankovic G., *Appl. Surf. Sci.* 255 (19), 8221-8225 (2009).
 122. Trtica M.S., Radak B.B., Gakovic B.M., Milovanovic D.S., Batani D., Desai T., *Laser and Part. Beams*, 27 (1) 85-90 (2009).
 123. Cebollada A., Martin J.M.G., Clavero C., Balcells Ll., Estradé S., Arbiol J., Peiró F., Smith C., Clarke R., Martínez L., Huttel Y., Román E., Telling N.D., Van Der Laan G., *Phys. Rev. B*, 79, 1, 014414 (2009).
 124. Stasic J., Trtica M., Gakovic B., Petrovic S., Batani D., Desai T., Panjan P., *Appl. Surf. Sci.* 255, 8, 4474-4478 (2009).
 125. Zhigilei L.V., Lin Z., Ivanov D.S., Leveugle E., Duff W.H., Thomas D., Sevilla C., Guy S.J., Chapter for *Proc. of the 1st International School on Laser-Surface Interactions for New Materials Production: Tailoring Structure and Properties*, July 13-20, Venice, Italy (2008)
 126. Stavropoulos P., Chryssolouris G., *International J. of Nanomanufacturing*, 1, 6, 736 - 750 (2007).
 127. Ni Xiaochang, Wang Chingyue, Liang Jianguo, *Acta Photonica Sinica*, 35, 1, 1-4 (2006).
 128. Hegazy M.S., Elsayed-Ali H.E., *J. Appl. Phys.*, 99, 5, 054308 (2006).
 129. Sharma A.K. and Thareja R.K.: *J. Appl. Phys.*, 98, 3, 033304, 1-5 (2005).
 130. Amoroso S. and Vitiello M.: *Proc. SPIE*, 5830, 11-20 (2005).

Imamova S.E., Atanasov P.A., Nedialkov N.N., *Nucl. Instr. Meth. Phys. Res. B*, 227, 4, 490-498 (2005).

131. Hoang, V.V., Long, N.T., Son, D.N., *Computational Materials Science*, Volume 95, December 2014, Pages 491-501.
132. Yao, W.J., Wang, N., Lee, J.Y., *Adv. Mat. Res.* 690 693, 2013, 1840-1845
133. Tang, H., Bai, M., Dou, Y., Ran, Q., Lo, G.V. 301, 2013, 36-40.

134. Yao W.J., Li J.S., Wang J.Y., Wang N., *Journal of Alloys and Compounds*, 543, 5, 176-180 (2012).
135. Stavropoulos P., Efthymiou K., Chryssolouris G., *Procedia CIRP*, 3, 471-476 (2012).
136. Ma Y., Garofalini S.H., *J. Am. Chem. Soc.*, Article ASAP, 134 (19), 8205-8211 (2012).
137. Phuoc Duy T., Van Hoang V., *Physica B: Condensed Matter*, 407 (6), 978-984 (2012).
138. Koç M., Özel T., Wu B., Özel T., *Ch. 6. Micro-Laser Processing* in “Micro-Manufacturing: Design and Manufacturing of Micro-Products”, Wiley, DOI: 10.1002/9781118010570 (2011).
139. Becquart C.S., Domain C., *Metallurgical and Materials Transactions A*, 42 (4), 852-870 (2011).
140. Hu W.Q., Shin Y.C., King G., *Phys. Rev. B*, 82, 9, 094111 (2010).
141. Wu B., Shin Y.C., *Proc. of the ASME Intern. Manufacturing Sci. and Engin. Conf. 2009, MSEC2009* 1, 853-859 (2009).
142. Cheng J., Perrie W., Wu B., Tao S., Edwardson S.P., Dearden G., Watkins K.G., *Appl. Surf. Sci.*, 255, 18, 8171-8175 (2009).
143. Van Hoang V., Cuong N.H., *Physica B: Condensed Matter* 404 (2) 340-346 (2009).
144. Wu B., Shin Y.C., *Appl. Surf. Sci.* 255 (9) 4996-5002 (2009).
145. Stavropoulos P., Chryssolouris G., *Intern. J. of Nanomanufacturing*, 1, 6, 736-750 (2007).
146. Upadhyay A.K., Urbassek H.M., *J. of Physics D: Applied Physics* 40 (11), art. no. 039, 3518-3526 (2007).
147. Gu X. and Urbassek H.M., *Appl. Surf. Sci.*, 253 (9), 4142-4149 (2007).
148. Wu B. and Shin Y.C., *Appl. Surf. Sci.*, 253 (8), 4079-4084 (2007).
149. Gu X. and Urbassek H.M., *J. Phys. D: Appl. Phys.*, 39 (21), art. N 018, 4621-4627 (2006).
- Nedialkov N.N., Imamova S.E., Atanasov P.A., Berger P., Dausinger F., *Appl. Surf. Sci.*, 247, 243-248 (2005).
150. Nath, A.K., *Comprehensive Materials Processing*, 9, 2014, 115-175.
151. Menezes, P.L., Lovell, M.R., Avdeev, I.V., Lin, J.S., Higgs Iii, C.F., *Int. J. Adv. Manuf. Techn.*, 70, 2014, 635-648.
152. Nath A.K., “High power lasers in material processing applications: An overview of recent developments”, in “*Laser-Assisted Fabrication of Materials*”, Springer Series in Materials Science, 161, 69-111 (2013).
153. Stavropoulos P., Efthymiou K., Chryssolouris G., *Procedia CIRP*, 3, 471-476 (2012)
154. Xu B., Song R.G., Wang C., He W.Zh., *Advanced Materials Research*, 538-541, 1888-1891(2012).
155. Xu B., Song R.G., Wang C., *Advanced Materials Research*, 415-417, 747-750 (2012).
156. Savolainen J.M., Christensen M.S., Balling P., *Phys. Rev. B*, 84, 19, 193410, 4 pages (2011).
157. Gill-Comeau M., “Étude par dynamique moléculaire de l'ablation par impulsions laser ultrabrèves de cibles nanocristallines“, *MSc Thesis*, Université de Montréal (2011).
158. Koç M., Özel T., Wu B., Özel T., *Ch. 6. Micro-Laser Processing* in “Micro-Manufacturing: Design and Manufacturing of Micro-Products”, Wiley, DOI: 10.1002/9781118010570 (2011).
159. Latif A., Khaleeq-Ur-Rahman M., Rafique M.S., Bhatti K.A., *Physica B: Condensed Matter*, 406 (9), 1713-1716 (2011).
160. Latif A., Khaleeq-Ur-Rahman M., Bhatti K.A., Rafique M.S., Rizvi Z.H., *Physica B: Condensed Matter*, 405 (20), 4250-4255 (2010).
161. Hu W.Q., Shin Y.C., King G., *Phys. Rev. B*, 82, 9, 094111 (2010).
162. Hu W.Q., Shin Y.C., King G.B., *J. of Manufacturing Science & Engin. – Transactions of the ASME*, 132, 1, N 011009 (2010).
163. Hayden C.J., *J. of Micromechanics & Microengin.*, 20 (2), art. no. 025010 (2010).
164. Wang X.-L., Wu H., Chang Y.-X., Zhu W.-H., Chen Z.-Y., Lu P.-X., *Guangzi Xuebao/Acta Photonica Sinica*, 38 (12), 3052-3056 (2009).
165. Menendez-Manjon A., Jakobi J., Schwabe K., Krauss J.K., Barcikowski S., *J. of Laser Micro Nanoengineering*, 4, 2, 95-99 (2009).
166. Cheng J., Perrie W., Wu B., Tao S., Edwardson S.P., Dearden G., Watkins K.G., *Appl. Surf. Sci.*, 255, 18, 8171-8175 (2009).
167. Hu W.Q., Shin Y.C., King G.B., *MSEC 2008: Proc. of the ASME Intern. Manufacturing Sci. and Engin. Conf. 2008*, 2, 321-328 (2009).
168. Wu B., Shin Y.C., *Proc. of the ASME Intern. Manufacturing Sci. and Engin. Conf. 2009, MSEC2009*, 1, 853-859 (2009).
169. Hu D.Z., *Acta Phys. Sinica*, 58 (2) 1077-1082 (2009).
170. Wu B., Shin Y.C., *Appl. Surf. Sci.* 255 (9) 4996-5002 (2009).
171. Xu B., Song R.G., Tang P.H., Wang J., Chai G.Z., Zhang Y.Z., Ye Z.Z., *Surf. Engin. (ICSE 2007, Key Engin. Mater.)*, 373-374, 346-349 (2008).
172. Xu B., Song R.G., Tang P.H., Wang J., Chai G.Z., Zhang Y.Z., Ye Z.Z., *Key Engineering Materials*, 373-374, 346-349 (2008).
173. Stavropoulos P., Chryssolouris G., *Intern. J. of Nanomanufacturing*, 1, 6, 736 - 750 (2007).
174. Wu B. and Shin Y.C., *Appl. Surf. Sci.*, 253 (8), 4079-4084 (2007).
175. Chemnitzer R., “Intercalation von Stickstoff und Wasserstoff in Sr₂N sowie ortsabhängige Feststoffcharakterisierung mit Laserablation“, *DSc Thesis*, Technischen Universität Dresden, pp.139, N 80, (2006).
176. Xu Bing, Song Renguo, Dai Lina, Deng Lei, *Chin. Photonics Technology*, 2, 5, 138-142 (2006).
177. Graguaniello L., “Studio del processo di ablazione laser con impulse ultracorti”, *MS Thesis*, Università degli studi di Napoli “Federico II”, N 12, 100 (2005).
- Nedialkov N.N., Imamova S.E., Atanasov P.A., Berger P., Dausinger F., Proc. SPIE, 5777, 846-849 (2005).**
178. Yilbas B.S., Shuja S.Z., *Lasers in Engineering*, 20, (3-4), 129-142 (2010).
- Nedialkov N.N., Atanasov P.A., Sawczak M., Śliwiński G., Proc. SPIE, 5777, 850-854 (2005).**
179. Satapathy B.B., Rana J., Maity K.P., *IOSR Journal of Engineering*, 2 (3), 382-388 (2012).
- Nedialkov N.N., Atanasov P.A., Breitling D., Heusel G., Dausinger F., Proc. SPIE, 5830, art. no. 12, 80-84 (2005).**
180. Zhao, X., Shin, Y.C., *Appl. Surf. Sci.* 283, 2013, 94-99.
181. Cheng J., Liu C.-S., Shang S., Liu D., Perrie W., Dearden G., Watkins K., *Optics and Laser Technology*, 46 (1), 88-102

- (2013).
182. Cheng J., Perrie W., Edwardson S.P., Fearon E., Dearden G., Watkins K.G., *Appl. Surf. Sci.*, 256, 5, 1514-1520 (2009).
Nedialkov N.N., Sawczak M., Jadraque M., Atanasov P.A., Martin M., Sliwinski G., Proc. SPIE, 5958, 36-43 (2005).
 183. Ji Lingfei, Yan Yinzhou, Bao Yong, Chen Xiaochuan, Jiang Yijian, *Chin. J. of Lasers*, 38, 6, 89-94 (2011).
Amoruso S., Bruzzese R., Vitiello M., Nedialkov N.N., Atanasov P.A., J. Appl. Phys., 98 (4) 044907, 1-7 (2005).
 184. Mazhukin, V.I., Demin, M.M., Shapranov, A.V., *Applied Surface Science*, Volume 302, 30 May 2014, Pages 6-10.
 185. Peña-Rodríguez, O., González-Izquierdo, J., Rivera, A.B., Balabanian, G., Olivares, J., Perlado, J.M., Bañares, L., *Optical Materials Express*, Volume 4, Issue 9, 2014, Pages 1943-1952.
 186. Diwakar P.K., Harilal S.S., Hassanein A., Phillips M.C., *Journal of Applied Physics*, 116(13), 133301 (2014).
 187. Povarnitsyn M., Fokin V., Voloshko A., Delfour L., Itina T.E., "Numerical analysis of ultrashort laser ablation: application for fabrication of nanoparticles and nanostructures", AIP Conference, Proceedings, American Institute of Physics, 2014, pp.8. ffujm-01077430f (2014).
 188. Starikov S.V., Faenov A.Ya., Pikuz T.A., Skobelev I.Yu., Fortov V.E., Tamotsu S., Ishino M., Tanaka M., Hasegawa N., Nishikino M., Kaihori T., Imazono T., Kando M., Kawachi T., *Appl. Phys. B*, 116(4), 1005-1016 (2014).
 189. Itina T.E., Povarnitsyn M.E., Voloshko A., *Proc SPIE*, 8969-4, 1-10 (2014).
 190. Povarnitsyn M.E., Itina T.E., *Applied Physics A*, 117, 1, 175-178 (2014).
 191. Chakravarty U., Naik P.A., Chakera J.A., Upadhyay A., Gupta, P.D., *Applied Physics A*, 115(4), 1457-1467 (2014).
 192. Kundrapu M.N., "Modeling and Simulation of Ablation-Controlled Plasmas", *PhD thesis*, The Faculty of The School of Engineering and Applied Science of The George Washington University (2012).
 193. Li X., Jiang L., *Applied Physics A: Materials Science & Processing*, 109, 2, 367-376 (2012).
 194. Vorobyev A.Y., Guo C., *Laser & Photonics Reviews*, DOI: 10.1002/lpor.201200017, in press (2012).
 195. Gottfried J.L., *Applied Optics*, 51, 7, B13-B21 (2012).
 196. Gill-Comeau M., Lewis L.J., *Phys. Rev. B*, 84, 22, 224110, 16pgs. (2011).
 197. Savolainen J.M., Christensen M.S., Balling P., *Phys. Rev. B* 84, 193410, 4 pages (2011).
 198. Wu Z., Zhu X., Zhang N., *J. Appl. Phys.*, 109 (5), art. no. 053113 (2011).
 199. Nakano H., "Ultrafast X-Ray Absorption Spectroscopy Using Femtosecond Laser-Driven X-Rays", *Lectures on Ultrafast Intense Laser Science I, Springer Series in Chemical Physics*, 94, 203-222 (2011).
 200. Ristoscu C., Mihailescu I.N., "Effect of Pulse Laser Duration and Shape on PLD Thin Films Morphology and Structure" in *Lasers – Applications in Science and Industry*, Ch. 3, 53-74 (2011).
 201. Boulmer-Leborne C., Benzerga R., Perrière J., "NP formation by fs laser ablation", in *Laser-Surface Interactions for New-Materials Production*, eds. Miotello A., Ossi P.M., Springer, 130, 125-140 (2010).
 202. Nakano H., Oguri K., Okano Y., Nishikawa T., *Appl. Phys. A: Mater. Sci. & Proces.*, 101, 3, Special Issue, 523-531 (2010).
 203. Gottfried J.L., "Laser-generated Nanoenergetic Materials", *ADA516848*, Investigation of Chemical Processes 1-27 (2010).
 204. Demaske B.J., Zhakhovsky V.V., Inogamov N.A., Oleynik I.I., *Phys. Rev. B* 82, 064113, 5 pages (2010).
 205. Chakravarty U., Naik P.A., Mukherjee C., Kumbhare S.R., Gupta P.D., *J. Appl. Phys.*, 108, 053107; 5 pages (2010).
 206. Guillermin M., "Étude du panache d'ablation laser femtoseconde, contrôle et optimisation des procédés", *DSc Thesis*, Uni. Jean Monnet de Saint-Etienne (2009).
 207. Chakravarty U., Naik P.A., Kumbhare S.R., Gupta P.D., *J. of the Optical Soc. of Korea* 13 (1), 80-85 (2009).
 208. Axente E., Noël S., Hermann J., Sentis M., Mihailescu I.N., *Appl. Surf. Sci.*, 255 (24), 9734-9737 (2009).
 209. Grossman E., Shpilman Z., Gouzman I., Eliezer S., Louzon E., *Phys. Status Solidi (A) Appl. & Mater.* 206 (7), 1541-1548 (2009).
 210. Kundrapu M., Keidar M., *J. Appl. Phys.*, 105 (8), art. no. 083302 (2009).
 211. Oguri K., Okano Y., Nishikawa T., Nakano H., *Phys. Rev. B*, 79, 14, 144106 (2009).
 212. Guillermin M., Liebig C., Garrelie F., Stoian R., Loir A.S., Audouard E., *Appl. Surf. Sci.*, 255 (10) 5163-5166 (2009).
 213. Sanz M., Walczak M., de Nalda R., Oujja M., Marco J.F., Rodriguez J., Izquierdo J.G., Bañares L., Castillejo M., *Appl. Surf. Sci.*, 255 (10) 5206-5210 (2009).
 214. Itina T.E., *Appl. Surf. Sci.*, 255 (10), 5107-5111 (2009).
 215. Eliezer Sh., "Nanoparticles Induced by Femtosecond Lasers", ch. 8, 274-301 (2009).
 217. Cerchez M., Jung R., Osterholz J., Toncian T., Willi O., Mulser P., Ruhl H., *Phys. Rev. Lett.*, 100, 24, 245001 (2008).
 218. Sage R.S., Cappel U.B., Ashfold M.N.R., Walker N.R., *J. Appl. Phys.*, 103, 9, N.: 093301 (2008).
 219. Axente E., Noël S., Hermann J., Sentis M., Mihailescu I.N., *J. Phys. D-Appl. Phys.*, 41, 10, N.: 105216 (2008).
 221. Itina T.E., *Chemical Physics Letters*: 452 (1-3), 129-132 (2008).
 222. Shan F., Porter R., Cheng N., Masiel D.J., Guo T., *J. of Physical Chemistry C*: 111 (12), 4643-4647 (2007).
 223. Vitoux P., "Élaboration de nanocomposites "nanoparticules métalliques / polymère" en milieux fluides supercritiques", *Université Sciences et Technologies – Bordeaux, DSc Thesis* (2008).
 224. Perrière J., Boulmer-Leborgne C., Benzerga R., Tricot S., *J. of Phys. D: Appl. Phys.* 40 (22), 7069-7076 (2007).
 225. Oguri K., Okano Y., Nishikawa T., Nakano H., *Phys. Rev. Lett.*: 99 (16), art. no. 165003 (2007).
 226. Povarnitsyn M.E., Itina T.E., Sentis M., Khishchenko K.V., Levashov P.R., *Phys. Rev. B - Condensed Mat. & Mater. Phys.*, 75 (23), art. no. 235414 (2007).
 227. Yang L., Wang C., Ni X., Wu Y., Jia W., Chai L., *Chinese Opt. Lett.*, 5 (5), 308-310 (2007).
 228. Odell G.W., "Metal Oxide Nanoparticles: Optical Properties and Interaction with Chemical Warfare Agent Simulants", *PhD Thesis*, Fac. of Virginia, Polytechnic Uni. (2006).
 229. Schou J., Lunney J.G., *Springer Series in Optical Sciences*, 129, 67-95 (2006).
 230. Kudryashov S.I., Lyon K., Allen S.D., *Proc. SPIE*, 6261 II, art. no. 62612U (2006).

231. Garrelie F., Donnet C., Loir A.S., Benchikh N., *Proc. SPIE*, 6261 I, art. no. 62610L (2006).
232. Okano Y., Oguri K., Nishikawa T., Nakano H., *Appl. Phys. Lett.*, 89, 221502 (2006).
233. Kudryashov S.I., Lyon K., Shukla S., Murry D., Allen S.D., *J. Appl. Phys.*, 100 (5), Art. No. 056103 (2006).
234. Kudryashov S.I., Lyon K., Allen S.D., *Phys. Rev.E* 73 (5), Art. No. 055301 Part 2 (2006).
- Nedialkov N.N., Atanasov P.A., *Appl. Surf. Sci.*, 252, 4411-4415 (2006).**
235. Sun, M., Eppelt, U., Schulz, W., Zhu, J., *Opt. Engin.*, 53, 2014, Article number 051512.
236. Zhang, G., Guo, J., Ming, W., Huang, Y., Shao, X., Zhang, Z., *Appl. Surf. Sci.*, 290, 2014, 359-367.
237. Menezes, P.L., Lovell, M.R., Avdeev, I.V., Lin, J.S., Higgs Iii, C.F., *Int. J. Adv. Manuf. Techn.*, 70, 2014, 635-648.
238. Wu Ch., Karim E.T., Volkov A.N., Zhigilei L.V., *Springer Series in Materials Science, Lasers in Materials Science*, 191, 67-100 (2014).
239. Cheng J., Liu C.-s., Shang S., Liu D., Perrie W., Dearden G., Watkins K., *Optics & Laser Technology*, 46, 88-102 (2013).
240. Türkoğlu A.K., Ersoy T., Canbaz F., Akturk S., *Applied Physics A: Materials Science & Processing*, 108, 4 935-941 (2012).
241. Döring S., Richter S., Nolte S., Tünnermann A., *Proc. of SPIE*, 7925, art. no. 792517 (2011).
242. Zhigilei L.V., Lin Z., Ivanov D.S., Leveugle E., Duff W.H., Thomas D., Sevilla C., Guy S.J., "Chapter for *Proceedings of the 1st international school on laser-surface interactions for new materials production: tailoring structure and properties*, July 13–20, 2008, Venice, Italy. (2008).
243. Döring S., Richter S., Nolte S., Tünnermann A., *Optics Express*, 18 (19), 20395-20400 (2010).
244. Döring S., Ancona A., Hädrich S., Limpert J., Nolte S., Tünnermann A., *Appl. Phys. A: Mater. Sci. & Proces.*, 100 (1), 53-56 (2010).
245. Zhigilei L.V., Lin Z., Ivanov D.S., Leveugle E., Duff W.H., Thomas D., Sevilla C., Guy S.J., "Atomic/molecular-level simulation of laser-materials interactions", in *Laser-Surface Interactions for New-Materials Production*, eds. Miotello A., Ossi P.M., Springer 130, 43-79 (2010).
246. Weck A., Crawford T.H.R., Wilkinson D.S., Haugen H.K., Preston J.S., *Appl. Phys. A: Mater. Sci. & Proces.* 90 (3), 537-543 (2008).
247. Bouilly D., Perez D., Lewis L.J., *Phys. Rev. B - Condensed Matter and Materials Physics* 76 (18), art. no. 184119 (2007).
- Nedyalkov N., Sakai T., Miyanishi T., Obara M., *J. Phys. D* 39, 2006, 5037-5042.**
248. Eversole D, Luk'yanchuk B, Ben-Yakar A, *App. Phys A* 89 (2): 283-291 (2007)
249. Kaur S, Singh SP, Biradar AM, et al., *App. Phys. Lett.* 91 (2): Art. No. 023120 (2007)
250. Luk'yanchuk BS, Qiu CW, Source: APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 92 Issue: 4 Pages: 773-776 Published: SEP 2008
251. Mock, J.J., Hill, R.T., Degiron, A., Zauscher, S., Chilkoti, A., Smith, D.R. 2008 *Nano Letters* 8 (8), pp. 2245-2252
252. Plech, A., Leiderer, P., Boneberg, J. 2009 *Laser and Photonics Reviews* 3 (5), pp. 435-451
253. Hashimoto, S., Uwada, T., Hagiri, M., Takai, H., Ueki, T. 2009 *Journal of Physical Chemistry C* 113 (48), pp. 20640-20647
254. Wu, Y., Nordlander, P. 2010 *Journal of Physical Chemistry C* 114 (16), pp. 7302-7307
255. Hashimoto, S., Werner, D., Uwada, T., *J. Photochem. Photobiology C: Photochemistry Reviews* 13, 2012, 28-54
256. Boulais, E., Lachaine, R., Hatef, A., Meunier, M., *J. Photochem. Photobiol. C*, 17, 2013, 26-49
257. Tripathi, S., Ganguly, P., Haranath, D., Haase, W., Biradar, A.M., *Appl. Phys. Lett.* 102 (6), 2013, art. no. 063115
258. Askari, A.A., Bahrapour, A.R., *Nano* 8 (1), 2013, art. no. 1350003.
259. Furukawa, K., Kameyama, T., -IchiOkazaki, K., Yako, T., Otsuki, M., Tsuboi, Y., Torimoto, T., *Chem. Lett.* 40 (12), 2011, 1411-1413
260. Hashimoto, S., Uwada, T., Hagiri, M., Shiraishi, R., *J. Phys. Chem. C* 115 (12), 2011, 4986-4993.
261. Yun, B., Wang, Z., Hu, G., Cui, Y., *Opt. Communic.* 283 (14), 2010, 2947-295
262. Kolwas, K., Derkachova, A. *Opto-electronics Review* 18 (4), 2010, 429-437.
263. Hidai, H., Keduka, S., Matusaka, S., Morita, N., *Seimitsu Kogaku Kaishi/J. Jap. Soc. Prec. Engineering* 78 (11), 2012, 980-984.
264. Rodríguez, C.E., Peláez, R.J., Afonso, C.N., Riedel, S., Leiderer, P., Jimenez-Rey, D., Font, A.C, *Appl. Surf. Sci.*, 302, 2014, pp. 32 - 36
- Nedyalkov N.N., Takada H., Obara M., *Appl. Phys. A* 85, 2006, 163-168.**
265. Eversole D, Luk'yanchuk B, Ben-Yakar A, *App. Phys A* 89 (2): 283-291 (2007)
266. Danielle Cleveland a; Robert G. Michel A Review of Near-Field Laser Ablation for High-Resolution Nanoscale Surface Analysis, *Applied Spectroscopy Reviews*, Volume 43, Issue 2 March 2008, pages 93 - 110
267. Hubenthal, F., Morarescu, R., Englert, L., Haag, L., Baumert, T., Träger, F., *Applied Physics Letters* 95 (6), art. no. 063101, (2009)
268. Hashimoto, S., Uwada, T., Hagiri, M., Takai, H., Ueki, T. 2009 *Journal of Physical Chemistry C* 113 (48), pp. 20640-20647
269. Chao, H., Jimin, C., 2010, 4th Pacific International Conference on Applications of Lasers and Optics, PICALO 2010
270. Leitz, K.-H., Quentin, U., Hornung, B., Otto, A., Alexeev, I., Schmidt, M., *Physics Procedia* 5 (PART 1), 2010, 237-244
271. Warshavski, O., Minai, L., Bisker, G., Yelin, D., *J. Phys. Chem. C* 115 (10), 2011, 3910-3917
272. Hashimoto, S., Uwada, T., Hagiri, M., Shiraishi, R., *J. Phys. Chem. C* 115 (12), 2011, 4986-4993
273. Leitz, K.-H., Quentin, U., Hornung, B., Otto, A., Alexeev, I., Schmidt, M., 7925, 2011, art. no. 792518
274. Li, L., Hong, M., Schmidt, M., Zhong, M., Malshe, A., Huis In'Tveld, B., Kovalenko, V., *CIRP Annals – Manufact. Technology* 60 (2), 2011, 735-755

275. Morarescu, R., Träger, F., Hubenthal, F., Intern. J. Circuits, Systems and Signal Processing 5 (4), 2011, 407-414
276. Chong, T.C., Hong, M.H., Shi, L.P. 2010 Laser and Photonics Reviews 4 (1), pp. 123-143
277. Bisker, G., Minai, L., Yelin, D., Plasmonics 7, 2012, 609-617.
278. Quentin, U., Leitz, K.-H., Deichmann, L., Alexeev, I., Schmidt, M., J. Laser Appl. 24, 2012, 042003.
279. Liu, J.C., Liu, D.M., Shao, T.M., Laser Phys. Lett. 9, 2012, 511-518.
280. Bisker, G., Yelin, D., J. Opt. Soc. Am. B 29, 2012, 1383-1393.
281. Hashimoto, S., Werner, D., Uwada, T., J. Photochem. Photobiology C: Photochemistry Reviews 13, 2012, 28-54
282. Jamali, A. A., Witzigmann, B., Morarescu, R., Baumert, Th., Träger, F., Hubenthal, F., Appl. Phys. A, 2012, DOI: 10.1007/s00339-012-7135-8
283. Wirth, J., Garwe, F., Meyer, R., Csáki, A., Stranik, O., Fritzsche, W., Nano Letters, Volume 14, Issue 7, 9 July 2014, Pages 3809-3816
- Hirayama Y., Atanasov P.A., Obara M., Nedialkov N.N., Imamova S.E., Japan. J. Appl. Phys., 45 (2A), 792-797 (2006).**
284. Miyasaka Y., Hashida M., Ikuta Y., Otani K., Tokita S., Sakabe S., Phys. Rev. B, 86, 7, N 075431 (2012).
285. Hashida M., Miyasaka Y., Ikuta Y., Tokita Sh., Sakabe Sh., Phys. Rev. B 83, 23, 235413 (2011).
286. Forster M., Égerházi L., Haselberger C., Huber C., Kautek W., Appl. Phys. A: Mater. Sci. & Proces., 102 (1), 27-33 (2011).
287. Cheng M.C., Sung C.K., Proc. of ASME 10th Biennial Conf. on Engin. Sysytems Design and Analysis, 5, 557-563 (2010).
288. Hashida M., Namba S., Okamuro K., Phys. Rev. B, 81, 11, 115442 (2010).
- Amoruso S., Bruzzese R., Wang X., Nedialkov N.N., Atanasov P.A., J. Phys. D – Appl. Phys.: (2) 331-340 (2007).**
289. Mirza, I., O'Connell, G., Wang, J.J., Lunney, J.G., Nanotechnology, 25, 2014, Article number 265301.
290. Rouleau, C.M., Shih, C.-Y., Wu, C., Zhigilei, L.V., Puretzky, A.A., Geohegan, D.B., Appl. Phys. Lett., 104, 2014, Article number 193106.
291. Inogamov, N.A., Petrov, Yu.V., Khokhlov, V.A., Anisimov, S.I., Zhakhovskii, V.V., Ashitkov, S.I., Komarov, P.S., Agranat, M.B., Fortov, V.E., Migdal, K.P., Il'Nitskii, D.K., Émirov, Yu.N., J Optical Techn. 81, 2014, 233-249.
292. Bourquard, F., Loir, A.-S., Donnet, C., Garrelie, F., Appl. Phys. Lett., 104, 2014, Article number 104101.
293. Bourquard, F., Tite, T., Loir, A.-S., Donnet, C., Garrelie, F., J. Phys. Chem. C, 118, 2014, 4377-4385.
294. Wu, C., Zhigilei, L.V., Appl. Phys. A, 114, 2014, 11-32.
295. Smijesh, N., Chandrasekharan, K., Joshi, J.C., Philip, R., Journal of Applied Physics, Volume 116, Issue 1, 7 July 2014, Article number 013301.
296. Peña-Rodríguez, O., González-Izquierdo, J., Rivera, A., Balabanian, G., Olivares, J., Perlado, J.M., Bañares, L., Optical Materials Express, Volume 4, Issue 9, 2014, Pages 1943-1952.
297. O'Connell G., Donnelly T., Lunney J. G., Applied Physics A, 117, 1, 289-293 (2014).
298. Zhang L., Cao X.W., Li S.G., Xiang R.Y., Sun H.C., Applied Mechanics and Materials, 633, 665-670 (2014).
299. Guo J., Wang T., Wang D., Shao J., Chen A., Jin M., Applied Physics A, 117, 1367-1374 (2014).
300. Zuhlke, C.A., Anderson, T.P., Alexander, D.R. Appl. Surf. Sci. 283, 2013, 648-653
301. Donnelly, T., Lunney, J.G., Appl. Surf. Sci. 282, 2013, 133-137.
302. Zuhlke, C.A., Anderson, T.P., Alexander, D.R., Appl. Phys. Lett. 103 (12), 2013, art. no. 121603
303. Smijesh, N., Philip, R., J. Appl. Phys. 114 (9), 2013, art. no. 093301
304. Banerjee, S.P., Chen, Z., Fedosejevs, R., J. Appl. Phys. 113 (18), 2013, art. no. 183101
305. Vorobyev, A.Y., Guo, C., Laser and Photonics Reviews 7 (3), 2013, 385-407
306. Chen, A., Sui, L., Shi, Y., Jiang, Y., Yang, D., Liu, H., Jin, M., Ding, D., Thin Solid Films 529, 2013, 209-216.
307. Vorobyev, A.Y., Guo, C., Appl. Phys. Lett. 102 (7), 2013, art. no. 074107.
308. Toftmann, B., Doggett, B., Budtz-Jørgensen, C., Schou, J., Lunney, J.G., J. Appl. Phys. 113 (8), 2013, art. no. 083304
309. Balling, P., Schou, J., Rep. Progr. Phys. 76 (3), 2013, art. no. 036502.
310. Leng N., Jiang L., Li X., Xu C., Liu P., Lu Y., Appl. Phys. A: Mater. Sci. & Proces., 109, 3, 679-684 (2012).
311. Vorobyev A.Y., Guo C., Laser & Photonics Reviews, DOI: 10.1002/lpor.201200017, in press (2012).
312. Di Maio Y., Colombier J.P., Cazottes P., Audouard E., Optics & Lasers in Engineering, 50, 11, 1582-1591 (2012)
313. Chen A., Sui L., Y. Shi, Y. Jiang, D. Yang, H. Liu, M. Jin, D. Ding, Thin Solid Films, in press (2012).
314. Fischer D., de la Fuente G.F., Jansen M., Rev. Sci. Instrum. 83, 4, 043901-8 (2012).
315. Wang T., Guo J., Shao J., Sun T., Chen A., Liu H., Ding D., Optics & Laser Technology, 44, 5, 1551-1555 (2012).
316. Smyth C.A., Mirza I., Lunney J.G., McCabe E.M., Proc. SPIE, 8234, art. no. 82341G (2012).
317. Lansart L., Millon E., Perrière J., Mathias J., Petit A., Seiler W., Boulmer-Leborgne C., Appl. Surf. Sci., 258 (23), 9112-9115 (2012).
318. Mirza I., Lunney J.G., 30th ICPIG, August 28th – September 2nd 2011, Belfast, Northern Ireland, UK, 3pg. (2011).
319. Akman E., Oztoprak B.G., Gunes M., Kacar E., Demir A., Photonics and Nanostructures - Fundamentals and Applications 9 (3), 276-286 (2011).
320. Chumakov A.N., Bereza N.A., Hu J.D., Bosak N.A., Guo Z.X., Xie Q.Q., J. of Engin. Phys. & Thermophysics 84 (3), 567-573 (2011).
321. De Bonisa A., Teghil R., Rau J.V., Galasso A., Orlando S., Santagata A., Appl. Surf. Sci., 257 (12), 5315-5318 (2011).
322. Besner S., Meunier M., "Laser Synthesis of Nanomaterials" in "Laser Precision Microfabrication", Springer Series in Materials Science, 135, 163-187, DOI: 10.1007/978-3-642-10523-4_7 (2010).
323. Demaske B.J., Zhakhovsky V.V., Inogamov N.A., Oleynik I.I., AIP Conference Proc., 1278, 121-130 (2010).
324. Chen A.M., Xu H.F., Jiang Y.F., Sui L.Z., Ding D.J., Liu H., Jin M.X., Appl. Surf. Sci., 257 (5), 1678-1683 (2010).
325. Demaske B.J., Zhakhovsky V.V., Inogamov N.A., Oleynik I.I., Phys. Rev. B, 82, 064113 (2010).
326. Inogamov N.A., Ashitkov S.I., Zhakhovsky V.V., Shepelev V.V., Khokhlov V.A., Komarov P.S., Agranat M.B.,

- Anisimov S.I., Fortov V.E., *Appl. Phys. A: Mater. Sci. & Proces.*, 101, 1, 1-5, (2010).
327. Inogamov N.A., Petrov Y.V., *J. of Exper. & Theor. Phys.*, 110, 3, 446-468 (2010).
328. Wendelen W., Dzhurakhalov A.A., Peeters F.M., *J. of Phys. Chem. C*, 114, 12, 5652-5660 (2010).
329. Salminen T., Hahtala M., Seppala I., Niemi T., Pessa M., *Appl. Phys. A – Mater. Sci. & Proces.*, 98, 3, 487-490 (2010).
330. Boulmer-Leborne C., Benzerger R., Perrière J., „NP formation by fs laser ablation“, in *Laser-Surface Interactions for New-Materials Production*, eds. Miotello A., Ossi P.M., Springer, 130, 125-140 (2010).
332. Inogamov N.A., Zhakhovskii V.V., Ashitkov S.I., Khokhlov V.A., Petrov Yu.V., Komarov P.S., Agranat M.B., Anisimov S.I., Nishihara K., *Appl. Surf. Sci.*, 255, 24, 9712-9716 (2009).
333. Murakami Makoto, Hu Zhendong, Che Yong, Liu Bing, “Method for fabricating thin films”, *US patent* N 20090246413 (2009).
334. Murakami Makoto, Hu Zhendong, Che Yong, Liu Bing, Uehara Yuzuru, Liu Zhenlin, “Method for fabricating thin films”, *US patent* N 20090246530 (2009).
335. Petronic S., Drecun-Nesic S., Milosavljevic A., *Acta Phys. Polonica A*, 116, 4, 550-552 (2009).
336. Milosavljevic A., Petronic S., Sreckovic M., Kovacevic A., Krmpot A., Kovacevic K., *Acta Phys. Polonica A*, 116, 4, 553-556 (2009).
337. Altucci C., Nisoli M., Procino I., Sansone G., Tosa V., Velotta R., Vozzi C., Xia J., *European Phys. J.: Special Topics*, 175, 1, 11-14 (2009).
338. Donnelly T., Lunney J.G., Ni X., *J. of Appl. Phys.*, 106 (1), art. no. 013304 (2009).
339. Guillermin M., “Etude du panache d'ablation laser femtoseconde, controle et optimisation des procedes“, *DSc Thesis*, Uni. Jean Monnet de Saint-Etienne (2009).
340. Grossman E., Shpilman Z., Gouzman I., Eliezer S., Louzon E., *Physica Status Solidi (A) Appl. & Mater.* 206 (7), 1541-1548 (2009).
341. Xu R.-Q., Cui Y.-P., Lu J., Ni X.-W., *Chinese Physics Letters*, 26 (1), art. no. 015201, 176-182 (2009).
342. Murakami M., Liu B., Hu Z., Liu Z., Uehara Y., Che Y., *Applied Phys. Express* 2 (4), 0425011-0425013 (2009).
343. Guillermin M., Liebig C., Garrelie F., Stoian R., Loir A.S., Audouard E., *Appl. Surf. Sci.*, 255 (10) 5163-5166 (2009).
344. Santagata A., Albano G., Spera D., Teghil R., Villani P., Parisi G.P., De Bonis A., Sordelet D.J., *Appl. Surf. Sci.*, 255 (10) 5159-5162 (2009).
345. Sanz M., Walczak M., de Nalda R., Oujja M., Marco J.F., Rodriguez J., Izquierdo J.G., Banares L., Castillejo M., *Appl. Surf. Sci.*, 255 (10) 5206-5210 (2009).
346. Iannotti V., Amoroso S., Ausanio G., Barone A.C., Campana C., Wang X., Lanotte L., *Applied Surf. Sci.*, 255 (10) 5224-5227 (2009).
347. Eliezer Sh., “*Nanoparticles Induced by Femtosecond Lasers*”, ch. 8, 274-301 (2009).
348. Santagata A., Spera D., Albano G., Teghil R., Parisi G.P., De Bonis A., Villani P., *Appl. Phys. A: Mater. Sci. & Proc.*, 93, 4, 929-934 (2008).
349. Iannotti V., Ausanio G., Barone A.C., Campana C., Hison C., Lanotte L., *J. Mater. Proc. Tech.*: 208 (1-3), 409-414 (2008).
350. Iannotti V., Aruta C., Ausanio G., *J. Phys D-Appl. Phys.*: 41 (19), 195006 (2008).
351. Iannotti V., Ausanio G., Campana C., D’Orazio F., Hison C., Lucari F., Lanotte L., *J. Magnetism & Magnetic Mater.*, 320, 20, e594-e598 (2008).
352. Jang J.-H., Lin J., *Surface and Coatings Technology* 202 (24), 6136-6141 (2008).
353. Williams G.O., O’Connor G.M., Mannion P.T., Glynn T.J., *Applied Surf. Sci.*, 254 (18), 5921-5926 (2008).
354. Huang P.H., Lai H.Y., *Phys. Rev. B*, 77, 12, 125408 (2008).
355. Lopeandia A.F., “*Development of Membrane-based Calorimeters to Measure Phase Transitions at the Nanoscale*”, *PhD Thesis*, 1-201 (2007).
356. Perrière J., Boulmer-Leborgne C., Benzerger R., Tricot S., *J. of Phys. D: Appl. Phys.* 40 (22), 7069-7076 (2007).
Atanasov P.A., Takada H., Nedyalkov N.N., Obara M., *Appl. Surf. Sci.*, 253, 19, 8304-8308 (2007).
357. Sugioka K., Cheng Y., “Ultrafast lasers—reliable tools for advanced materials processing”, *Light: Science & Applications*, 3(4), 149, (2014).
358. Rahimi L., Bahrapour A.R., Pepe G.P., *J. of Phys. D: Applied Physics*, 45(47), 475306 (2012).
359. Heinemann, D., Schomaker, M., Kalies, S., Schieck, M., Carlson, R., Escobar, H.M., Ripken, T., (...), Heisterkamp, A. *PLoS ONE* 8 (3), 2013, art. no. e58604.
360. Samad R.E., Leandro M.M., Nilson D.V.J., de Rossi W., "Ultrashort Laser Pulses Machining" in *Laser Pulses – Theory, Technology, and Applications*, 143-174 (2012).
361. Wang N., Rokhlin S.I., Farson D.F., *J. of Nanoparticle Research*, 13, 10, 4491-4509 (2011).
362. Helvajian H., “Process Control in Laser Material Processing for the Micro and Nanometer Scale Domains” in “*Laser Precision Microfabrication, Springer Series in Materials Science*, 135, 1-34 (2010).
363. Wang Ningyu, “Melting, Solidification and Sintering/Coalescence of Nanoparticles”, *PhD thesis*, Ohio State Uni., pp. 253 (2010).
364. Hiroyuki Niino, “Hybrid Laser Processing of Transparent Materials in “*Laser Precision Microfabrication*”, *Springer Series in Materials Science*, 135, 293-310 (2010).
365. Park Tae-Ho, “Plasmonic properties of metallic nanostructures”, *PhD thesis*, Rice Uni., pp. 122 (2010).
366. Hashimoto S., Uwada T., Hagiri M., Takai H., Ueki T., *J. of Phys. Chem. C*, 113 (48), 20640-20647 (2009).
367. Chang W.S., Yoo B.H., Cho S.H., *Jap. J. Appl. Phys.* 47 (8), 6998-7001, 3 (2008).
368. Yamada K., Itoh T., Tsuboi Y., *Appl. Phys. Express*, 1, 8, 0870011-0870013 (2008).
369. Park T.H., Mirin N., Lassiter J.B., Nehl C.L., Halas N.J., Nordlander P., *ACS NANO*, 2, 1, 25-32 (2008).

- Nedialkov N.N., Atanasov P.A., Amoruso S., Bruzzese R., Wang X., *Appl. Surf. Sci.*, 253, 19, 7761-7766 (2007).**
370. Shaheen, M.E., Gagnon, J.E., Fryer, B.J., *Laser Physics*, Volume 24, Issue 10, 1 October 2014, Article number 106102.
371. Lehr J., de Marchi F., Matus L., MacLeod J., Rosei F., Kietzig A. M., *Applied Surface Science*, 320, 455-465 (2014).
372. Hu Lifeng, Ping Xue, Lin Caoyu, J. Wenzhou University: *Natural Sci.*, 35, 1, 58-62 (2014).
373. Leng N., Jiang L., Li X., Xu C., Liu P., Lu Y., *Appl. Phys. A: Mater. Sci. & Proces.*, 109, 3, 679-684 (2012).
374. D'Abzac F.X., Seydoux-Guillaume A.M., Chmeleff J., Datas L., Poitrasson F., *J. Anal. At. Spectrometry*, 27, 1, 99-107 (2012).
375. Fang R., Wei H., Giu X., *ICSEM 2011*, 1, Article N 6081184, 203-206 (2011).
376. Döring S., Richter S., Nolte S., Tünnermann A., *Proc. SPIE*, 7925, art. no. 792517 (2011).
377. Kobtsev S.M., Kukarin S.V., Fedotov Y.S., Ivanenko A.V., *Laser Physics*, 21 (2), 308-311 (2011).
378. Marla D., Bhandarkar U.V., Joshi S.S., *J. of Appl. Phys.*, 109 (2), art. no. 021101 (2011).
379. Döring S., Richter S., Nolte S., Tünnermann A., *Optics Express*, 18 (19), 20395-20400 (2010).
380. Baladi A., Mamooiry R.S., *5th Intern. Conf. on MEMS NANO, and Smart Systems, ICMENS 2009*, art. no. 5489318, 218-221 (2010).
381. Wang W., Jiang G., Mei X., Wang K., Shao J., Yang C., *Applied Surface Science*, 256, 11, 3612-3617 (2010).
382. Hayden C.J., *J. of Micromechanics & Microengin.*, 20 (2), art. no. 025010 (2010).
383. Qi X., Suh S., *Intern. J. of Heat & Mass Transf.*, 53, 1-3, 41-47 (2010).
384. Teghil R., D'Alessio L., De Bonis A., Galasso A., Ibris N., Salvi A.M., Santagata A., Villani P., *J. of Phys. Chem. A*, 113, 52, 14969-14974 (2010).
385. Guillermin M., "Etude du panache d'ablation laser femtoseconde, controle et optimisation des procedes", *DSc Thesis*, Uni. Jean Monnet de Saint-Etienne (2009).
386. Baudelet M., Richardson M., Sigman M., *IEEE Conf. on Technologies for Homeland Security, HST 2009*, N 5168075, 464-468 (2009).
387. Teghil R., De Bonis A., Galasso A., Villani P., Santagata A., *Proc. of ICNM – 2009*, 242-245 (2009).
388. Cheng J., Perrie W., Wu B., Tao S., Edwardson S.P., Dearden G., Watkins K.G., *Appl. Surf. Sci.*, 255, 18, 8171-8175 (2009).
389. Li X., Jiang L., Tsai H.-L., *Proc. SPIE*, 7202, art. no. 72020B (2009).
390. Qi X., Suh C.S., *IMECE 2008: Mechanics of Solids, Structures & Fluids*, 12, 351-359 (2009).
391. Qi X., Suh C.S., *J. of Thermal Strasses*, 32 (5) 477-493 (2009).
392. Guillermin M., Liebig C., Garrelie F., Stoian R., Loir A.-S., Audouard E., *Appl. Surf. Sci.*, 255 (10) 5163-5166 (2009).
393. Tang Xiaojuan, Liu Xiang, Zhong Zhanrong, *Materials Review*, 19, 6, 93-98 (2009).
394. Teghil R., Santagata A., De Bonis A., Albano G., Villani P., Spera D., Parisi G.P., Galasso A., *Physica Scripta*, 78, 5, 058113 (2008).
395. Jang J.H., Lin J., *Surface and Coatings Technology* 202 (24), 6136-6141 (2008).
- Amoruso S., Bruzzese R., Wang X., Nedialkov N.N., Atanasov P.A., *Nanotechnology*, 18, 14, 145612, 1-6 (2007).**
396. Li X., Jiang L., *Applied Physics A: Materials Science & Processing*, DOI: 10.1007/s00339-012-7269-8, in press (2012).
397. Di Maio Y., Colombier J.P., Cazottes P., Audouard E., *Optics & Lasers in Engineering*, in press (2012)
398. Ristoscu C., Mihailescu I.N., "Effect of Pulse Laser Duration and Shape on PLD Thin Films Morphology and Structure" in *Lasers – Applications in Science and Industry*, Ch. 3, 53-74 (2011).
399. Chakravarty U., Naik P.A., Mukherjee C., Kumbhare S.R., Gupta P.D., *J. Appl. Phys.*, 108, 5, 053107 (2010).
400. Huang P.-H., Lai H.-Y., *J. Appl. Phys.*, 108 (12), art. no. 123504 (2010).
401. Guillermin M., Colombier J.P., Valette S., Audouard E., Garrelie F., Stoian R., *Phys. Rev. B*, 82, 035430, 16 pages (2010).
402. Guillermin M., "Etude du panache d'ablation laser femtoseconde, controle et optimisation des procedes", *DSc Thesis*, Uni. Jean Monnet de Saint-Etienne (2009).
403. Veletanlic E., Goh M.C., *J. of Phys. Chemistry C*, 113, 42, 18020-18026 (2009).
404. Apiñániz J.I., Martínez R., Longarte A., Castaño F., *Informacion Tecnologica*, 20, 2, 3-11 (2009).
405. Sysoev N.N., Osipov A.I., Uvarov A.V., *Moscow University Physics Bulletin*, 64, № 1, 1-9 (2009).
406. Guillermin M., Liebig C., Garrelie F., Stoian R., Loir A.S., Audouard E., *Appl. Surf. Sci.*, 255 (10) 5163-5166 (2009).
407. Szorenyi T., Geretovszky Z., "Functionalized Nanoscale Mater., Dev. and Systems" - *NATO Science for Peace and Security Series B – Phys. and Biophys.*, 121-143 (2008).
408. Jang J.-H., Lin J., *Surface and Coatings Technology*, 202 (24), 6136-6141 (2008).
409. Huang, P.H., Lai, H.Y., *Nanotechnology*, 19 (25), art. no. 255701 (2008).
410. Huang P.H., Lai H.Y., *Phys. Rev. B*, 77, 12, 125408 (2008).
- Atanasov P.A., Nedialkov N.N., Sakai T., Obara M., *Appl. Surf. Sci.*, 254, 4, 794-798 (2007).**
411. Lina Shi, Hailiang Li, Yuchan Du, and Changqing Xie, *JOSA B*, in press (2012).
412. Nakamura T., Hirata N., Sekino Y., Nagaoka S., Nakajima A., *J. of Phys. Chemistry C*, 114 (39), 16270-16277 (2010).
413. Nakamura T., Hirata N., Nagaoka S., Nakajima A., *Chemical Physics Letters*, 489 (1-3), 69-74 (2010).
414. Hiroyuki Niino, *Hybrid Laser Processing of Transparent Materials in Laser Precision Microfabrication, Springer Series in Materials Science*, 135, 293-310 (2010).
415. Robitaille, A., Boulais, E., Meunier, M., *Opt. Express* 21 (8), 2013, 9703-9710.
416. Boulais, E., Lachaine, R., Hatef, A., Meunier, M., *J. Photochem. Photobiol. C* 17, 2013, 26-49.
417. Wu, J., Shi, W., Chopra, N., *Carbon*, 68, issue , year 2014, pp. 708 – 717
418. Sipos Á., Somogyi A., Szabó G., Csete M., *Plasmonics*, 9, 5, 1207-1219 (2014).

Nedialkov N.N., Miyaniishi T., Obara M., *Appl. Surf. Sci.* 253, 2007, 6558-6562.

419. Patra, C.R., Bhattacharya, R., Mukhopadhyay, D., Mukherjee, P. 2008 *Journal of Biomedical Nanotechnology* 4 (2), pp.

420. Sakabe, S., Hashida, M., Tokita, S., Namba, S., Okamuro, K. 2009 *Physical Review B - Condensed Matter and Materials Physics* 79 (3), art. no. 033409
421. Wang, H., Liang, C., Chen, X., Wang, L., Yang, Y., Yang, J., Zhu, S., Li, C. 2009 *Rare Metals* 28 (3), pp. 272-276
422. Plech, A., Leiderer, P., Boneberg, J. 2009 *Laser and Photonics Reviews* 3 (5), pp. 435-451
423. Zhou, Z., Xu, J., He, F., Liao, Y., Cheng, Y., Sugioka, K., Midorikawa, K. 2010 *Japanese Journal of Applied Physics* 49 (2), art. no. 022703
424. Liang, C., Wang, H., Yang, J., Li, B., Yang, Y., Li, H., *Appl. Surf. Sci.* 261, 2012, 337-342.
425. Liang, C., Wang, H., Yang, J., Cai, Y., Hu, X., Yang, Y., Li, B., (...), Yang, X., *ACS Appl. Mater. Interf.* 5 (16), 2013, 8179-8186.
426. Wang, H., Liang, C., Yang, Y., Li, C., *Biomed. Mater.* 5 (5), 2010, art. no. 54115
427. Morarescu, R., Englert, L., Kolaric, B., Damman, P., Vallée, R.A.L., Baumert, T., Hubenthal, F., Träger, F., *J. Mater. Chem.* 21 (12), 2011, 4076-4081
428. Furukawa, K., Kameyama, T., -IchiOkazaki, K., Yako, T., Otsuki, M., Tsuboi, Y., Torimoto, T., *Chem. Lett.* 40 (12), 2011, 1411-1413.

Nedyalkov N., Sakai T., Miyanishi T., Obara M., *Appl. Phys. Lett.* 90, 2007, 123106.

429. Mock JJ, Hill RT, Degiron A, et al. Source: NANO LETTERS Volume: 8 Issue: 8 Pages: 2245-2252, 2008
430. Luk'yanchuk BS, Qiu CWS. Source: APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 92 Issue: 4 Pages: 773-776 Published: SEP 2008
431. Wang, Z.B., Guo, W., Luk'yanchuk, B.S., Pena, A., Li, L., Liu, Z. 2008 *Proceedings of SPIE - The International Society for Optical Engineering* 7005, art. no. 70050S
432. Huang, C.-H., Lin, H.-Y., Chang, C.-H., Chui, H.-C. 2009 *Proceedings of SPIE - The International Society for Optical Engineering* 7224, art. no. 722411
433. Hubenthal, F., Morarescu, R., Englert, L., Haag, L., Baumert, T., Träger, F. 2009 *Applied Physics Letters* 95 (6), art. no. 063101
434. Lin, C.H., Jiang, L., Chai, Y.H., Xiao, H., Chen, S.J., Tsai, H.L. 2010 *Applied Physics A: Materials Science and Processing* 98 (4), pp. 855-860
435. Lin, H.-Y., Huang, C.-H., Chang, C.-H., Chui, H.-C. 2010 *Progress in Biomedical Optics and Imaging - Proceedings of SPIE* 7577, art. no. 757704
436. Lin, H.-Y., Huang, C.-H., Chang, C.-H., Lan, Y.-C., Chui, H.-C. 2010 *Proceedings of SPIE - The International Society for Optical Engineering* 7608, art. no. 760814
437. Morarescu, R., Träger, F., Hubenthal, F., *Intern. J. Circuits, Systems and Signal Processing* 5 (4), 2011, 407-414
438. Morarescu, R., Englert, L., Kolaric, B., Damman, P., Vallée, R.A.L., Baumert, T., Hubenthal, F., Träger, F. *J. Mater. Chem.* 21 (12), 2011, 4076-4081.
439. Csete, M., Sipos, Á., Szalai, A., Szabo, G., *IEEE Photon. J.* 4, 2012, pp. 1909-1921.
440. Yang, J., Ichii, T., Murase, K., Sugimura, H., *Langmuir* 28, 2012, 7579-7584.
441. Hubenthal, F., Hendrich, C., Vartanyan, T.A., Träger, F., *Plasmonics* 8 (2), 2013, 435-448
- Nedyalkov N.N., Atanasov P.A., Obara M., *Nanotechnology*, 18, 30, 305703 (2007).**

442. Shinohara T., Terakawa M., *Applied Physics A*, 116, 3, 1025-1031 (2014).
443. Shi L., Li H., Du Y., Xie Ch., *JOSA B*, in press ID 175317 (2012).
444. Csete M., Sipos A., Szalai A., Szabo G., *Photonics Journal, IEEE*, 4, 5, 1909-1921 (2012).
445. Sipos A., Szalai A., Csete M., *Proc. SPIE*, 8323, doi:10.1117/12.916403 (2012).
446. Hashimoto S., Werner D., Uwada T., *J. of Photochem. & Photobiology C: Photochem. Rev.*, 13, 1, 28-54 (2012).
447. Csete M., Sipos A., Szalai A., Szabo G., *arXiv:1112.3335v3*, 1-12 (2011).
448. Hashimoto S., Uwada T., Hagiri M., Shiraishi R., *J. Phys. Chem. C*, 115 (12), 4986-4993 (2011).
449. Nikbakht M., Mahdih M.H., *J. Phys. Chem. C*, 115 (5), 1561-1568 (2011).
450. Harrison R.K., Ben-Yakar A., *Optics Express*, 18 (21), 22556-22571 (2010).
451. Carias H., Chandran H., Vanlue S., Thusu V., *Biomolecular Detection using DNA Based Nanoparticle Arrays*, 1-10 (2010).
452. Nakamura T., Hirata N., Sekino Y., Nagaoka S., Nakajima A., *J. of Phys. Chem. C*, 114 (39), 16270-16277 (2010).
453. Nakamura T., Hirata N., Nagaoka S., Nakajima A., *Chem. Phys. Lett.*, 489, 1-3, 69-74 (2010).
454. Niino H., „Hybrid Laser Processing of Transparent Materials”, *Laser Precision Microfabrication, Springer Series in Materials Science*, 135, 293-310 (2010).
455. Plech A., Leiderer P., Boneberg J., *Laser & Photonics Rev.*, 3, 5, 435-451 (2009).
456. Sen T., Patra A., *Journal of Physical Chemistry C*, 113 (30), 13125-13132 (2009).
457. Toderas F., Baia M., Farcau V., Astilean S., Ulinici S., *J. of Optoelectron. & Adv. Mater.*, 10 (12) 3265-3269 (2008).
458. Yamada K., Itoh T., Tsuboi Y., *Appl. Phys. Express*, 1, 8, 0870011-0870013 (2008).
459. Levchenko I., Ostrikov K., *Nanotechnology*, 19, 33, 335703 (2008).
460. Khatri O.P., Murase K., Sugimura H., *Langmuir*, 24, 8, 3787-3793 (2008).
461. Yuan L.Q., Zhong X.X., Ostrikov K., *Nanotechnology*, 19 (15), 155304 (2008).
462. Robitaille, A., Boulais, E., Meunier, M., *Opt. Express* 21 (8), 2013, 9703-9710.

- 463.D.J. Hwang, N. Misra, C.P. Grigoropoulos, A.M. Minor, S.S. Mao, *Appl. Phys. A*, 91, 219-222, 2008
- 464.Kuhler, P., García de Abajo, F.J., Solis, J., Mosbacher, M., Leiderer, P., Afonso C.N., Siegel, J. 2009 *Small* 5 (16), pp. 1825-1829
- 465.Huang, H., Guo, Z. 2009 ASME International Mechanical Engineering Congress and Exposition, Proceedings 10 (PART B), pp. 1273-1278
- 466.Ahsan, M.S., Kim, Y.G., Lee, M.S. *J. Non-Cryst. Solids* 357 (3), 2011, 851-857
- 467.Narazaki, A., Kurosaki, R., Sato, T., Niino, H., *Appl. Phys. Express* 6 (9), 2013, art. no. 092601.
- 468.Mitsuhashi, T., Terakawa, M., *Journal of Biomedical Optics*, Volume 19, Issue 1, January 2014, Article number 015003
- 469.Hirayama, T. , Ikeda, M., Suzuki, T., Matsuoka, T., Sawada, H., Kawahara, K., *Journal of Tribology*, Volume 136, Issue 3, July 2014, Article number 031501
- 470.Narazaki, A. , Kurosaki, R., Sato, T., Kawaguchi, Y., Niino, H., *Journal of Laser Micro Nanoengineering*, Volume 9, Issue 1, March 2014, Pages 10-14.
- 471.David, C., Kühler, P., De Abajo, F.J.G. , Siegel, J., *Optics Express*, Volume 22, Issue 7, 41736, Pages 8226-8233.

Nedialkov N., Sawczak M., Jendrzewski R., Atanasov P., Martin M., Śliwiński G., *Appl. Surf. Sci.*, 254 (4), 893-897 (2007).

- 472.Hanon M.M., Akman E., Genc Oztoprak B., Gunes M., Taha Z.A., Hajim K.I., Kacar E., Gundogdu O., Demir A., *Optics & Laser Technology*, 44, 4, 913-922 (2012).
- 473.Samant A.N., Daniel C., Chang R.H., Blue C.A., Dahorte N.B., *Int. J. of Adv. Manufacturing Technol.*, 45, 7-8, 704-713 (2009).
- 474.Ctvrtnickova T., Cabalin L., Laserna J., Kanicky V., Nicolas G., *Appl. Surf. Sci.*, 255 (10) 5329-5333 (2009).
- 475.Antończak, A.J.a , Koziół, P.E.a, Stępak, B.b, Szymczyk, P.c, Abramski, K.M, *Proc SPIE*, Volume 8968, 2014, Article number 896814.

Koleva M.E., Atanasov P.A., Nedialkov N.N., Fukuoka H., Obara M., *Appl. Surf. Sci.*, 254, 4, 1228-1231 (2007).

- 476.Akilan T., Srinivasan N., Saravanan R., *Journal of Materials Science: Materials in Electronics*, 25(7), 2898-2904 (2014).
- 477.Gopalakrishnan N., Balakrishnan L., Brindha A., Jayalakshmi G., *Crystal Research & Technology*, 47, 1, 45-52 (2012).
- 478.Srivastava A.K., Senthil K., Deepa M., Gakhar R., Tawale J.S., *World Journal of Nano Science and Engineering*, 1, 15-19 (2011).
- 479.Karamat S., Rawat R.S., Lee P., Tan T.L., Ramanujan R.V., Zhou W., *Appl. Surf. Sci.*, 256, 8, 2309-2314 (2010).
- 480.Tahir N., Hussain S.T., Usman M., Hasanain S.K., Mumtaz A., *Appl. Surf. Sci.*, 255 (20), 8506-8510 (2009).
- 481.Deepa M., Bahadur N., Srivastava A.K., Chaganti P., Sood K.N., *J. Phys. & Chem. Solids* 70 (2), 291-297 (2009).
- 482.Srivastava A.K., Deepa M., Bahadur N., Goyat M.S., *Materials Chemistry and Physics*, 114 (1) 194-198 (2009).
- 483.Xu C.K., Yang K.K., Liu Y.Y., Huang L.W., Lee H., Cho J., Wang H.: *J. of Phys. Chem. C*, 112, 49, 19236-19241 (2008).
- 484.Xu C.K., Yang K.K., Huang L.W., Liu Y., Wang H.: *J. Phys. D-Appl. Phys* : 41 (19), 195005 (2008).

Nedyalkov N.N., Imamova S.E., Atanasov P.A., Obara M., *Proc. SPIE*, 7027, 702709 (2008).

- 485.Beliatis M.J., Martin N.A., Leming E.J., Silva S.R.P., Henley S.J., *Langmuir*, 27 (3), 1241–1244 (2011).

Sakano T., Tanaka Y., Nishimura R., Nedyalkov N.N., Atanasov P.A., Saiki T., Obara M., *J. Phys. D: Appl. Phys.*, 41, 235304 (2008).

- 486.Yoon S., Shin H.Y., Shim E.L., Choi Y.J., Park J., *Nanoscale*, <https://doi.org/10.1039/C4NR04527K> (2014).
- 487.Hou X., *Materials Letters*, 137, 319–322 (2014).
- 488.Singh N.K., Medwal R., Annapoorni S., *Journal of Materials Science*, 49, 24, 8386-8393 (2014).
- 489.Mai F.D., Yu C.C., Liu Y.C., Chang C.C., Yang K.H., *J. of Electroanalytical Chem.*, 712, 96-102 (2014).
- 490.Chen H.C., Hsu T.C., Liu Y.C., Yu C.C., *Journal of Electroanalytical Chemistry*, 724, 48-54 (2014).
- 491.Zhou M., Diao K., Zhang J., Wu W., *Physica E: Low-dimensional Systems and Nanostructures*, 56, 59–63 (2014).
- 492.Chen H.C., Ting-Chu Hsu, Yu-Chuan Liu, Kuang-Hsuan Yang, *RSC Adv.*, 4, 10553-10559 (2014).
493. Kuang-Hsuan Yang, Chia-Ming Chang, *Materials Research Bulletin*, in press (2012).
494. Sudakar C., Singh S., Rao M.S.R., Lawes G., *Springer Series in Materials Science*, 149 (1), 37-68 (2012).
495. Tan E.Z., Yin P.G., You T.T., Wang H., Guo L., *ACS Appl. Materials & Interfaces*, 4, 7, 3432-3437 (2012).
- 496.Chang S.T., Hsieh B.-F., Liu Y.-C., *Thin Solid Films*, 520 (8), 3369-3373 (2012).
- 497.Chun-Chao Chang, Kuang-Hsuan Yang, Yu-Chuan Liu, Chung-Chin Yu, Yi-Hao Wu, *Analyst*, 137, 4943-4950 (2012).
- 498.Chen R., Li D., Hu H., Zhao Y., Wang Y., Wong N., Wang S., Zhang Y., Hu J., Shen Z., Xiong Q., *J. Phys. Chem. C*, 116 (7), 4416–4422 (2012).
499. Hou X.M., Wang L.X., He G.F., Hao J.C., *CRYSTENGCOMM*, 14, 16, 5158-5162 (2012).
500. Jiang W.F., Zhang Y.F., Wang Y.S., Xu L., Li X.J., *Appl. Surf. Sci.*, 258, 5, 1662-1665 (2011).
- 501.Xu Sheng; Wang Zhong Lin, *Nano Research*, 4, 11, 1013-1098 (2011).
502. Su Q.Q., Ma X.Y., Dong J., Jiang C.Y., Qian W.P., *ACS Appl. Materials & Interfaces*, 3, 6, 1873-1879 (2011).
503. Im J., Singh J., Soares J.W., Steeves D.M., Whitten J.E., *J. of Physical Chemistry C*, 115 (21), 10518-10523 (2011).

504. Herrera G.M., Félix H., Fierro P.M., Balaguera M., Pacheco L., Briano J.G., Marquez F., Hernández-Rivera S.P., *Proc. of SPIE*, 8031, art. no. 80312X (2011).
505. Fukami K., Chourou M.L., Miyagawa R., Noval Á.M., Sakka T., Manso-Silván M., Martín-Palma R.J., Ogata Y.H., *Materials*, 4 (4), 791-800 (2011).
506. Hsiao W.H., Chen H.Y., Yang Y.C., Chen Y.L., Lee C.Y., Chiu H.T., *ACS Appl. Mater. Interfaces*, 3 (9), 3280–3284 (2011).
507. Habouti S., Mátéfi-Tempfli M., Solterbeck C.-H., Es-Souni M., Mátéfi-Tempfli S., Es-Souni M., *Nano Today*, 6, 1, 12-19 (2011).
508. He H., Cai W.P., Lin Y.X., Chen B.S., *Langmuir*, 26, 11, 8925- 8932 (2010).
509. Wang Y., Ni Z., Hu H., Hao Y., Wong C.P., Yu T., Thong J.T.L., Shen Z.X., *Appl. Phys. Lett.*, 97 (16), art. no. 163111 (2010).
510. Chen L.M., Luo L.B., Chen Z.H., Zhang M.L., Zapien J.A., Lee C.S., Lee S.T., *J. of Phys. Chem. C*, 114, 1, 93-100 (2010).
511. Gutes A., Carraro C., Maboudian R., *ACS Appl. Mater. & Interfaces*, 1, 11 2551-2555 (2009).
512. Goncalves G., Marques P.A.A.P., Granadeiro C.M., Nogueira H.I.S., Singh M.K., Grácio J., *Chemistry of Materials*, 21 (20), 4796-4802 (2009).
- Nedyalkov N.N., Imamova S.E., Atanasov P.A., Obara M., *Appl. Surf. Sci.*, 255, 5125-5129 (2009).**
513. Grochowska K., Sliwinski G., *Solid State Phenomena*, 183, 81-88 (2012).
514. Grochowska K., Śliwiński G., *Photonics Letters of Poland*, 3, 3, 101-103 (2011).
515. Senoudi Assia Rachida, “Etude des Propriétés Optiques des Nanostructures Métal Composite par la Méthode des Eléments Finis“, PhD thesis (2012).
516. Askari, A.A., Bahrampour, A.R. *Nano* 8 (1), 2013, art. no. 1350003
517. Yang, Z.-Y., Chen, K.-P., *Optics Express*, Volume 22, Issue 11, 41792, 2014, Pages 12737-12749.
518. Grochowska K., Siuzdak K., Śliwiński G., *European Journal of Inorganic Chemistry*, <https://doi.org/10.1002/ejic.201402485>, (2014).
- Tanaka Y., Nedyalkov N.N., Obara M., *Appl. Phys. A* 97, 2009, 91-98.**
519. Boriskina, S.V., Reinhard, B.M., *Nanoscale* 4, 2012, 76-90.
520. Hong, Y., Pourmand, M., Boriskina, S.V., Reinhard, B.M., *Adv. Mater.* 25 (1), 2013, 115-119.
521. D'Agostino, S., Sala, F.D., *ACS Nano* 4 (7), 2010, 4117-4125
- Miyaniishi T., Sakai T., Nedyalkov N.N. Obara M., *Appl. Phys. A* 96, 2009 843-850.**
522. Muraoka, K., Yamada, K., Shoji, T., Sugimura, H., Kitamura, N., Tsuboi, Y., *J. Laser Micro/Nanoengin.* 7, 2012, 260.
523. Li, L., Hong, M., Schmidt, M., Zhong, M., Malshe, A., Huis In'Tveld, B., Kovalenko, V., *CIRP Annals – Manuf. Techn.* 60 (2), 2011, 735-755.
524. Hidai, H., Keduka, S., Matusaka, S., Morita, N., *Seimitsu Kogaku Kaishi/J. Jap. Soc. Prec. Engin.* 78 (11) 2012, 980-984.
525. Boulais, E., Lachaine, R., Hatef, A., Meunier, M., *J. Photochem. Photobiol. C* 17, 2013 26-49
- Nedyalkov N., Imamova S., Atanasov P., Obara M., *J. of Phys.: Conference Series*, 223, 1-8, 012035 (2010).**
526. Cheng H.-Y., Chiou J.-W., Ting J.-M., Chen J.-M., Lee J.-F., Tzeng Y., *Appl. Surf. Sci.*, 264, (2013), 202-206.
527. Russell A.G., McKnight M.D., Hestekin J.A., Roper D.K., *Langmuir* 27 (12), 7799-7805 (2011).
- Dikovska A.Og., Atanasova G.B., Nedyalkov N.N., Stefanov P.K., Atanasov P.A., Karakoleva E.I., Andreev A.Ts., *Sensors and Actuators B*, 146, 1, 331-336 (2010).**
528. Fallah, H., Chaudhari, M., Bora, T., Harun, S.W., Mohammed, W.S., Dutta, J. *Optics Letters* 38 (18), 2013 , pp. 3620-3622.
529. Rahman, M.M., Khan, S.B., Jamal, A., Faisal, M., Asiri, A.M., Alamry, K.A., Khan, A., Al-Youbi, A.O., *Micro and Nanosystems* 5 (1), 2013, 3-13
530. Bilro L., Alberto N., Pinto J.L., Nogueira R., *Sensors (Switzerland)*, 12 (9), 12184-12207 (2012).
531. Zamarreno C. R., Matias I.R.; Arregui F. J., *Sensors Journal IEEE*, 12, 8, 2699–2710 (2012).
532. Rahman M.M., Bahadar Khan S., Jamal A., Faisal M., Asiri A.M., *Chemical Engineering Journal*, 192, 122-128 (2012).
533. Rahman M.M., Khan S.B., Jamal A., Faisal M., Asiri A.M., *Talanta*, 95, 18-24 (2012).
534. Rahman M.M., Khan S.B., Jamal A., Faisal M., Asiri A.M., *Microchimica Acta*, 178, 1-2, 99-106 (2012).
535. Dar G.N., Umar A., Zaidi S.A., Baskoutas S., Hwang S.D., Abaker M., Al-Hajry A., Al-Sayari S.A., *Talanta*, 89, 155-161 (2012).
536. Lúcia Bilro, Nélia Alberto, João L. Pinto and Rogério Nogueira, *Sensors*, 12 (9), 12184-12207 (2012).
537. Abaker M., Umar A., Baskoutas S., Dar G.N., Zaidi S.A., Al-Sayari S.A., Al-Hajry A., Kim S.H., Hwang S.W., *J. of Physics D: Applied Physics* 44 (42), art. no. 425401 (2011).
538. Renganathan B., Sastikumar D., Gobi G., Yogamalar N. R., Bose A. C., *Optics & Laser Technology*, 43 (8), 1398-1404 (2011).
539. Rahman M.M., Jamal A., Khan S.B., Faisal M., *Superlattices and Microstructures*, 50 (4), 369-376 (2011).
540. Renganathan B., Sastikumar D., Gobi G., Yogamalar N.R., Bose A.C., *Sensors and Actuators, B: Chemical*, 156 (1), 263-270 (2011).
541. Choi K.-I., Lee J.-H., *Science of Advanced Materials*, 3 (5) 811-820 (2011).
542. Fu W.-H., Hsiao V.K.S., Tang J.-Y., Wu M.-H., Chen, Z., *Sensors and Actuators, B: Chemical*, 156 (1), 423-427 (2011).
543. Khan S.B., Rahman M.M., Jang E.S., Akhtar K., Han H., *Talanta* 84 (4), 1005-1010 (2011).
544. Rahman M.M., Jamal A., Khan S.B., Faisal M., *ACS Applied Materials & Interfaces*: 3, 4, 1346-1351 (2011)
545. Kim K.J., Eom J.-H., Kim Y.-W., *Nippon Seramikkusu Kyokai Gakujutsu Ronbunshi/J. of the Ceramic Soc. of Japan*, 119 (1386) 136-139 (2011).

546. Rahman, M.M. , Khan, S.B., Asiri, A.M., *Microchimica Acta*, Volume 181, Issue 5-6, April 2014, Pages 553-563.
547. Renganathan, B. , Ganesan, A.R., *Optical Fiber Technology*, Volume 20, Issue 1, January 2014, Pages 48-52
548. Poole, Z.L., Ohodnicki, P., Chen, R., Lin, Y., Chen, K.P., *Optics Express*, Volume 22, Issue 3, 10 February 2014, Pages 2665-2674.
549. Fallah, H., Harun, S.W., Mohammed, W.S. , Dutta, J., *Journal of the Optical Society of America B: Optical Physics*, Volume 31, Issue 9, 1 September 2014, Pages 2232-2238
550. Bora, T., Fallah, H., Chaudhari, M., Apiwattanadej, T., Harun, S.W., Mohammed, W.S., Dutta, J., *Sensors and Actuators, B: Chemical*, Volume 202, 31 October 2014, Pages 543-550
551. Wen, X.Y. , Huang, J., Xiao, H., Yang, M.H., *Measurement Science and Technology* Volume 25, Issue 11, 1 November 2014, Article number 114002
552. Patil S.N., "Preparation and characterization of ZnO CuO and ZnO CuO films and their use to trace and monitor the H₂S gas", PhD Thesis, Shivaji Uni., Maharashtra, India, 154 pgs. (2014).
553. Faisal M., Khan S.B., Rahman M.M., Ismail A.A., Asiri A.M., Al-Sayari S.A., *J. of the Taiwan Institute of Chemical Engineers*, 45, 5, 2733-2741 (2014).

Tanaka Y., Obara G., Zenidaka A., Nedyalkov N.N., Terakawa M., Obara M., *Opt. Express*, 18, 2010, 27226-27237.

554. Deng, H.-D., Li, G.-C., Dai, Q.-F., Ouyang, M., Lan, S., Gopal, A.V., Trofimov, V.A., Lysak, T.M., *Opt. Express* 20, 2012, 10963-10970
555. Zhou, W., Hinojosa, B.B., Nino, J.C., *J. Am. Ceramic Soc.* 95, 2012, 457-460.

Imamova S., Dikovska A., Nedyalkov N., Atanasov P., Sawczak M., Jendrzewski R., Sliwinski G., Obara M. *J. Optoelect. Adv. Mater.*, (3) 2010, 500-504

556. Lorenz, P., Klöppel, M., Frost, F., Ehrhardt, M., Zimmer, K., Li, P. *Appl. Surf. Sci.* 280, 2013, 933-939
557. Lorenz, P., Klöppel, M., Frost, F., Ehrhardt, M., Li, P., Zimmer, K. *Technical Proceedings of the 2013 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2013*, 1, 686-689
558. Lorenz, P., Frost, F., Ehrhardt, M., Zimmer, K. *Appl. Phys. A*, 111 (4), 2013, 1025-1030.
559. Kukreja, L.M. , Verma, S., Pathrose, D.A., Rao, B.T., *Journal of Physics D: Applied Physics*, Volume 47, Issue 3, 22 January 2014, Article number 034015

Nedyalkov N.N., Imamova S.E., Atanasov P.A., Miyanishi T., Obara M. 2010, *J. Optoelect. Adv. Mater.*, (3) 2010, 484-489

560. Kornbluth, M., Nitzan, A., Seideman, T., *J. Chem. Phys.* 138 (17), 2013, art. no. 174707
- Naydenova Ts., Atanasov P., Koleva M., Nedialkov N., Perriere J., Defourneau D., Fukuoka H., Obara M., Baumgart Ch., Zhou Sh., Schmidt H., *Thin Solid Films*, 518, 19, 30, 5505-5508 (2010).**
561. Çolak H., Türkoğlu O., *J. of Mater. Sci.: Materials in Electronics*, 23, 9, 1750-1758 (2012).
562. Wang Q.-B., Zheng G., Cheng Q.-L., Wan M., Wang X.-C., *Physica B: Condensed Matter*, 407, 4, 719-723 (2012).
563. Wang Q., Zhou C., *Advance Mater. Res.*, 393-395, 15-19 (2012).
564. Wang Q., Zhou C., *Advance Mater. Res.*, 393-395, 114-118 (2012).
565. Mamouni N., Belaiche M., Benyoussef A., El Kenz A., Ez-Zahraouy H., Loulidi M., Saidi E.H., Hlil E.K., *Chinese Phys. B*, 20, 8, Article Number: 087504 (2011).
566. Chen Y., Zhao G., Ren Y., Wang Z., *Thin Solid Films*, 519, 6, 1985-1988 (2011).
567. Mhamdi, A., Boukhachem, A., Madani, M., Lachheb, H., Boubaker, K. , Amlouk, A., Amlouk, M., *Optik*, 124, 2013, 3764-3770.
568. Mamouni, N., El Kenz, A. , Ez-Zahraouy, H., Loulidi, M., Benyoussef, A., Bououdina, M., *J. Magn. Magn. Mat.*, 340, 2013, 86-90.
569. Gherouel, D., Dabbous, S., Boubaker, K. , Amlouk, M., *Mat. Sci. Semicond. Proc.*, 16, 2013, 1434-1438.
570. Ul Haq, B., Ahmed, R. , Shaari, A., Goumri-Said, S., *J Magn. Magn. Mat.*, 362, 2014, 104-109.
571. Akilan, T., Srinivasan, N. , Saravanan, R., *J. Mat. Sci.*, 25, 2014, 2898-2904.
572. Jayalakshmi, G., Saravanan, K., Balasubramanian, T., *J. Mat. Sci.*, 25, 2014, 2024-2029.
573. Adhyapak, P.V. , Meshram, S.P., Pawar, A.A., Amalnerkar, D.P., Mulik, U.P., Mulla, I.S., *Ceram. Internat.*, 40, 2014, 12105-12115.
574. Akilan, T., Srinivasan, N. , Saravanan, R., Chowdury, P., *Materials and Manufacturing Processes*, Volume 29, Issue 7, 3 July 2014, Pages 780-788.
575. Wan, Z.-Z., Wan, X.-L., Liu, J.-P., Wang, Q.-B., *Journal of Superconductivity and Novel Magnetism*, Volume 27, Issue 8, August 2014, Pages 1945-1950

Nedyalkov N.N., Imamova S.E., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., *Comptes Rend. de L'Acad. Bulg. des Sci.*, 63 (5) 767-774 (2010).

576. Maity, S., Downen, L.N., Bochinski, J.R., Clarke, L.I., *Polymer* 52 (7), 1674-1685 (2011).

Imamova S., Nedyalkov N., Dikovska A., Atanasov P., Sawczak M., Jendrzewski R., Śliwiński G., Obara M., *Appl. Surf. Sci.*, 257 (3), 1075-1079 (2010).

577. Dai Y., He M., Bian H.D., Lu B., Yan X.N., Ma G.H., *Appl. Phys. A-Mater. Sci. & Process.*, 106, 3, 567-574 (2012).
578. Li L., Hong M., Schmidt M., Zhong M., Malshe A., Huis In'Tveld B., Kovalenko V., *CIRP Annals - Manufacturing Technology* 60 (2), 735-755 (2011).
579. Simo A., Joseph V., Fenger R., Kneipp J., Rademann K., *ChemPhysChem*, 12 (9), 1683-1688 (2011).
580. Jia, K., Khaywah, M.Y., Li, Y., Bijeon, J.L., Adam, P.M., D eturche, R., Guelorget, B., Franois, M., Louarn, G., Ionescu, R.E., *ACS Applied Materials and Interfaces*, Volume 6, Issue 1, 8 January 2014, Pages 219-227
- Nedyalkov N.N., Imamova S.E., Atanasov P.A., Tanaka Y., Obara M., *J. of Nanopart. Res.*, 13, 3, 2181-2193 (2011).**
581. Boulais E., Lachaine R., Meunier M., *Nano Lett.*, 12 (9), 4763-4769 (2012).
582. Rosenberg M.; Petrie T.A., *Nanotechnology*, 23, 5, Number: 055103, DOI: 10.1088/0957-4484/23/5/055103 (2012).
583. Heinemann, D., Schomaker, M., Kalies, S., Schieck, M., Carlson, R., Escobar, H.M., Ripken, T., Meyer, H., Heisterkamp, A., *PLoS ONE* 8 (3), 2013, art. no. e58604
584. Delaporte, Ph., Grojo, D., Boarin, L., Charmasson, L., De Le, N., Deepak, K.L.N., Laus, M., Panzarasa, G., P eira, A., Rocci, R., Sparnacci, K., Ut za, O. *Proc. SPIE*, 8770, 2013, art. no. 877002
585. Kalies, S., Heinemann, D., Schomaker, M., Birr, T., Ripken, T., Meyer, H., *Proc. SPIE* 8803, 2013, art. no. 880309
586. Boulais, E., Lachaine, R., Hatf, A., Meunier, M., J. Photochem. Photobiol. C 17, 2013, 26-49.
587. Schomaker, M., Heinemann, D., Kalies, S., Willenbrock, S., Murua Escobar, H., Buch, A., Sodeik, B., Ripken, T., Meyer, H., *Proc. SPIE*, 8972, 2014, Article number 897207.
588. Boutopoulos, C., Fortin-Desch enes, M., Bergeron, E., Meunier, M., *Proc. SPIE*, 8972, 2014, Article number 897208.
589. Shinohara, T., Terakawa, M., *Appl. Phys. A*, Volume 116, Issue 3, September 2014, Pages 1025-1031
590. Boutopoulos C., Kalpyris I., Serpetzoglou E., Zergioti I., *Microfluidics and Nanofluidics*, 16, 3, 493-500 (2014).
- Nedyalkov N.N., Imamova S.E., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., Obara M., *Appl. Surf. Sci.*, 275, 5456-5459 (2011).**
591. Walker J.M., Gou L., Bhattacharyya S., Lindahl S.E., Zaleski J.M., *Chemistry of Materials*, 23 (23), 5275-5281 (2011).
592. Zaarour L., Jradi S., Plain J., *META Conferences, META'12* (2012).
593. Berry Jr K.R., Russell A.G., Blake P.A., Roper D.K., *Nanotechnology*, 23, 37, 375703, doi:10.1088/0957-4484/23/37/375703 (2012).
594. Kalies, S., Birr, T., Heinemann, D., Schomaker, M., Ripken, T., Heisterkamp, A., Meyer, H., *J. Biophot.*, 7, Issue 7, 2014, 474-482
- Nikolov A.S., Nedyalkov N.N., Nikov R.G., Atanasov P.A., Alexandrov M.T., *Appl. Surf. Sci.*, 257, 5278-5282 (2011).**
595. Oseguera-Galindo D.O., Martinez-Benitez A., Chavez-Chavez A., Gomez-Rosas G., Perez-Centeno A., Santana-Aranda M.A., *J. of Nanoparticle Research*, 14, 9, N 1133, DOI 10.1007/s11051-012-1133-9 (2012).
596. De Bonis A., Galasso A., Ibris N., Sansone M., Santagata A., Teghil R., *Surface and Coatings Technology*, 207, 279-285 (2012).
597. Machmudah S., Sato T., Wahyudiono, Sasaki M., Goto M., *High Pressure Research*, 32, 1, 60-66 (2012).
- Dikovska A.Og., Nedyalkov N.N., Atanasov P.A., *Materials Sci. and Engineering B*, 176, 19, 1548-1551 (2011).**
598. Palani I.A., Nakamura D., Okazaki K., Higashihata M., Okada T., *Materials Sci. and Engineering B: Solid-State Mater. for Advanced Tech.*, 176 (18), 1526-1530 (2011).
599. Kim, M.S., Nam, G., Leem, J.-Y., *J. Nanosci. Nanotechnology* 13 (5), 2013, 3582-3585.
600. Alexeevich, A.O., Anatolievich, G.D., Genadievich, Z.E., Michailovich, A.A., Evgenievich, V.Z., Evgenievich, V.D., Vladimirovich, S.A., Nikolaevich, I.M., *Applied Mechanics and Materials*, Volume 481, 2014, Pages 55-59.
- Amoruso S., Nedyalkov N.N., Wang X., Ausanio G., Bruzzese R., Atanasov P.A., "Ultrafast laser ablation of gold thin film targets", *J. Appl. Phys.*, 110, 124303, 1-4 (2011).**
601. Norman G., Starikov, S., Stegailov V., Fortov V., Skobelev I., Pikuz T., Faenov A., Tamotsu S., Kato Y., Ishino M., Tanaka M., Hasegawa N., Nishikino M., Ohba T., Kaihori T., Ochi Y., Imazono T., Fukuda Y., Kando M., Kawachi T., *J. Appl. Phys.*, 112, 1, 013104 (2012).
602. Hastrup, N., O'Connor, G.M., *Appl. Phys. Lett.* 101 (26), 2012, art. no. 263107
603. Murphy, R.D., Abere, M.J., Schrider, K.J., Torralva, B., Yalisove, S.M. *Appl. Phys. Lett.* 103 (9), 2013, art. no. 093113
604. Hastrup, N., O'Connor, G.M., *Appl. Surf. Sci.* 278, 2013, 86-91
605. Yang, Q., Du, G., Chen, F., Wu, Y., Si, J., Hou, X. *Chinese J. Lasers*, Volume 41, Issue 5, May 2014, Article number 0502005
- Obara, G., Maeda, N., Miyanishi, T., Terakawa, M. Nedyalkov, N.N., Obara M., *Opt. Express.* 19, 2011, 19093-19103**
606. Deng, H.-D., Li, G.-C., Dai, Q.-F., Ouyang, M., Lan, S., Gopal, A.V., Trofimov, V.A., Lysak, T.M., *Opt. Express* 20, 2012, 10963-10970
607. Zhang, C.-Y., Yao, J.-W., Liu, H.-Y., Dai, Q.-F., Wu, L.-J., Lan, S., Trofimov, V.A., Lysak, T.M., *Optics Letters* 37, 2012, 1106-1108
608. Hashimoto, S., Werner, D., Uwada, T., *J. Photochem. Photobiology C: Photochemistry Reviews* 13, 2012, 28-54
609. Yao, J.-W., Zhang, C.-Y., Liu, H.-Y., Dai, Q.-F., Wu, L.-J., Lan, S., Gopal, A.V., Lysak, T.M., *Opt. Express* 20, 2012, 905-911
610. Huang, M., Cheng, Y., Zhao, F., Xu, Z., *Annalen der Physik* 525, 2013, 74-86.
611. Zhang, C.-Y., Yao, J.-W., Li, C.-Q., Dai, Q.-F., Lan, S., Trofimov, V.A., Lysak, T.M., *Opt. Express* 21 (4), 2013, 4439-4446.

612. Murphy, R.D., Torralva, B., Adams, D.P., Yalisove, S.M., Appl. Phys. Lett. 102 (21), 2013, art. no. 211101
613. Han, W., Jiang, L., Li, X., Liu, P., Xu, L., Lu, Y., Optics Express 21 (13), 2013, 15505-15513.
614. Shimizu, M., Hashida, M., Miyasaka, Y., Tokita, S., Sakabe, S., Appl. Phys. Lett., 103, 2013, Article number 174106.
615. Murphy, R.D., Torralva, B., Adams, D.P., Yalisove, S.M., 2013 Conference on Lasers and Electro-Optics, CLEO 2013, Article number 6833274
616. Huang, M., Xu, Z., Laser and Phot. Rev., 8, 2014, 633-652
617. Murphy, R.D., Torralva, B., Adams, D.P., Yalisove, S.M., Appl. Phys. Lett., 104, 2014, Article number 231117.
618. Yang, M., Wu, Q., Chen, Z., Zhang, B., Tang, B., Yao, J., Drevensek-Olenik, I., Xu, J., Opt. Lett. 39, 2014, 343-346.
619. Haro-Poniatowski, E., Acosta-Zepeda, C., Mecalco, G., Hernández-Pozos, J.L., Batina, N., Morales-Reyes, I., Bonse, J., J. Appl. Phys. 115, 2014, Article number 224309
- Obara G., Tanaka Y., Nedyalkov N.N., Terakawa M., Obara M., (2011) Appl. Phys. Lett. 99, 2011, 061106**
620. Deng, H.-D., Li, G.-C., Dai, Q.-F., Ouyang, M., Lan, S., Gopal, A.V., Trofimov, V.A., Lysak, T.M., Opt. Express 20, 2012, 10963-10970
621. Zhang, C.-Y., Yao, J.-W., Liu, H.-Y., Dai, Q.-F., Wu, L.-J., Lan, S., Trofimov, V.A., Lysak, T.M., Optics Letters 37, 2012, 1106-1108.
622. Kuladeep, R., Sahoo, C., Narayana Rao, D., Appl. Phys. Lett., 104, 2014, Article number 222103.
623. Hong, L., Ruslia, Wang, X.C., Zheng, H.Y., Wang, H., Yu, H.Y., Appl. Surf. Sci., 297, 2014, 134-138.
624. Chakravarty, U., Naik, P.A., Chakera, J.A., Upadhyay, A., Gupta, P.D., Appl. Phys. A, 115, 2014, 1457-1467.

Grochowska K., Nedyalkov N., Atanasov P., Sliwinski G., 2011, Opto-electronics Review, (3) 327-332

625. Grammatikopoulos, S., Pappas, S.D., Dracopoulos, V., Pouloupoulos, P., Fumagalli, P., Velgakis, M.J., Politis, C., J. Nanopart. Res. 15 (2), 2013, art. no. 1446.
626. Kukreja, L.M., Verma, S., Pathrose, D.A., Rao, B.T., J. Phys. D 47, 2014, Article number 034015

Nedyalkov N.N., Nikov R., Dikovska A.O., Atanasov P.A., Obara G., Obara M., (2012) Appl. Surf. Sci., 258 (23), pp. 9162-9166.

627. Delaporte, Ph., Grojo, D., Boarin, L., Charmasson, L., De Le, N., Deepak, K.L.N., Laus, M., Panzarasa, G., Pereira, A., Rocci, R., Sparnacci, K., Utéza, O., Proc. SPIE 8770, 2013, Article number 877002.

Koleva M.E., Dikovska A.O., Nedyalkov N.N., Atanasov P.A., Bliznakova I.A. (2012) Appl. Surf. Sci., 258 (23), pp. 9181-9185.

628. Bose R.J., Kumar R.V., Sudheer S.K., Reddy V.R., Ganesan V., Mahadevan Pillai V.P., J. Appl. Phys., 112, 2012, Article number 114311
629. Chen, L., Tran, T., Huang, C., Li, J., Yuan, L., Cai, Q., App. Surf. Sci. 273, 2013, 82-88
630. Yun, J., Kim, J., Kojori, H.S., Kim, S.J., Tong, C., Anderson, W.A., J. Nanosci. Nanotechn. 13 (8), 2013, 5547-5551
631. Park, Y.R., Liu, N., Lee, C.J. Current Appl. Phys. 13 (9), 2013, 2026-2032.
632. Xu, L., Zheng, G., Lai, M., Pei, S., J. Alloy. Compo., 583, 2014, 560-565
633. Yan, Y., Zeng, Y., Wu, Y., Zhao, Y., Ji, L., Jiang, Y., Li, N., Opt. Express, Volume 22, Issue 19, 22 September 2014, Pages 23552-23564.
634. Melnikov I.V., Haus J.W., Gromov D., Shuliatyev A., Mironov A., Machnev A., Mitrokhin V., Frontiers in Optics, OSA, FTu1E-6, 1-3 (2014).

Nedyalkov N.N., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., Karashanova D., Proc. SPIE, 8427, 2012, Article number 84272P

635. Zhu, J., Gong, T., Kopwithaya, A., Hu, R., Law, W.-C., Roy, I., Huang, H., Yong, K.-T., RSC Advances, 3 (30), 2013, 12280-12286
- Nikov, R.G., Nikolov, A.S., Nedyalkov, N.N., Dimitrov, I.G., Atanasov, P.A., Alexandrov, M.T., Appl. Surf. Sci. 258, 2012, 9318-9322**
636. Lu, L., Sevonkaev, I., Kumar, A., Goia, D.V., Powder Techn., 261, 2014, 87-97.
- Balansky, R., Longobardi, M., Ganchev, G., Ilcheva, M., Nedyalkov, N., Atanasov, P., Toshkova, R., De Flora, S., Izzotti, A., Mut. Res., 751-752, 2013, Pages 42-48**
637. Kappil, M., Chen, J, Current Opinion in Pediatrics, 26, 2014, 243-251.

Nikolov, A.S., Nedyalkov, N.N., Nikov, R.G., Atanasov, P.A., Alexandrov, M.T., Applied Surface Science 257 (12), pp. 5278-5282, (2011).

638. Lopez-Simeon, R; Abonce-Vazquez, MG; Hernandez-Guerrero, M, Revista mexicana de ingenieria quimica, Volume: 13 Issue: 1 Pages: 291-310 Published: APR 2014.
639. Solati E., Dorranean D., Journal of Cluster Science, DOI 10.1007/s10876-014-0732-2, 1-16 (2014).
- Nikov R.G., Nikolov A.S., Nedyalkov N.N., Dimitrov I.G., Atanasov P. A., and Alexandrov M. T. Applied Surface Science 258 (2012) 9318– 9322.**
640. Lu, L., Sevonkaev, I., Kumar, A., Goia, D.V, Powder Technology, Volume 261, July 2014, Pages 87-97.
641. Solati E., Dorranean D., Journal of Cluster Science, 1-16 (2014).
- A.S. Nikolov, N.N. Nedyalkov, R.G. Nikov, I.G. Dimitrov, P.A. Atanasov, K. Maximova, Ph. Delaporte, A. Kabashin, M.T. Alexandrov, D.B. Karashanova, Applied Surface Science 302 (2014) 243–249.**

642. Fan, Y., Fang, Y., Chen, H., Gao, D., Gaodeng Xuexiao Huaxue Xuebao/Chemical Journal of Chinese Universities, Volume 35, Issue 9, 10 September 2014, Pages 1933-1940.
Nedialkov N.N., Imamova S.E., Atanasov P.A., Berger P., Dausinger F., Appl. Surf. Sci., 247, 243-248 (2005).
643. Nath, A.K., Comprehensive Materials Processing, 9, 2014, 115-175.
644. Menezes, P.L., Lovell, M.R., Avdeev, I.V., Lin, J.S., Higgs Iii, C.F., Int. J. Adv. Manuf. Techn., 70, 2014, 635-648.
Grochowska K., Śliwiński G., Iwulska A., Sawczak M., Nedyalkov N., Atanasov P., Obara G., Obara M., Plasmonics, 8, 1, 105-113 (2013)
645. Kukreja L.M., Verma S., Pathrose D.A., Rao B.T., J. Phys. D: Appl. Phys. 47, 3, 034015 (2014).
Hirano K., Shimizu H., Enami T., Terakawa M., Obara M., Nedyalkov N.N., Atanasov P.A., J. of Nanotechnology in Diagnosis and Treatment, 1, 2-10 (2013).
646. Kukreja L.M., Verma S., Pathrose D.A., Rao B.T., J. Phys. D: Appl. Phys. 47, 3, 034015 (2014).
Amoruso S., Nedyalkov N. N., Wang X., Ausanio G., Bruzzese R., Atanasov P.A., Thin Solid Films, 550, 190-198 (2014).
647. Isac L., Enesca A., Mihoreanu C., Perniu D., Duta A., Sustainable Energy in the Built Environment-Steps Towards nZEB, Springer Intern. Publishing, 279-298 (2014).
648. Kitching M., Ramani M., Marsili E., Microbial biotechnology, DOI: 10.1111/1751-7915.12151 (2014).

Цитати 2015-2019 г

Atanasov P.A., Eugenieva E.D., Nedialkov N.N.. Laser drilling of silicon nitride and alumina ceramics: A numerical and experimental study. Journal of Applied Physics, 89, 2001, 2013.

649. Chen, B.C., Ho, C.Y., Wen, M.Y., Ma, C., Tsai, Y.H., Ultrashort-laser-pulse machining characteristics of aluminum nitride and aluminum oxide, Ceramics International 41 (S1), pp. S191-S196, @2015 1.000
650. Ho, C.-Y., Ku, H.-H., Lee, Y.-C., Tsai, Y.-H., Wen, M.-Y., Prediction of ablated region of ultrafast-pulse laser processing for alumina, Materials Research Innovations 19, pp. S5744-S5747, @2015 1.000
651. Ho, C.-Y., Wen, M.-Y., Tsai, Y.-H., Lee, Y.-C., Ku, H.-H., Analytical study on nanometer-sized ablation of ultrashort-laser-pulse for alumina, Journal of Computational and Theoretical Nanoscience, 12 (5), pp. 809-813, @2015 1.000
652. Sinha, S., Thermal model for nanosecond laser ablation of alumina, Ceramics International 41 (5), pp. 6596-6603, @2015 1.000
653. Aivazi M., hossein Fathi M., Nejatidanesh F., Mortazavi V., Hashemi Beni B., Matinlinna J.P., Savabi O., Lasers in Medical Science, 1-7 (2016)., @2016 1.000
654. Pan, A.F., Wang, W.J., Mei, X.S., Wang, K.D., Zhao, W.Q., Li, T.Q., Appl. Surf. Sci., 375, 90-100, 2016., @2016 1.000
655. Nasrollahi V., Penchev P., Dimov S., Korner L., Leach R., Kim K., Journal of Micro and Nano-Manufacturing, 5(4), 041006 (2017), @2017 1.000
656. Zhao-yan, Sun Ming-ying, Hao Yan-fei, Pang Xiang-yang, Liu Zhi-gang, Zhangy a-nan, Acta Photonica Sinica, 46, 10, 1014003-1-8 (2017), @2017 1.000
657. Burdovitsin, V., Kazakov, A., Medovnik, A., Oks, E., Formation of a Focused High-Current Quasi-Continuous Electron Beam by a Forevacuum Plasma-Cathode Source Based on Cathodic Arc, Proceedings - International Symposium on Discharges and Electrical Insulation in Vacuum, ISDEIV, 2, 8537090, pp. 735-738, @2018 1.000
658. Fan, Z., Lu, M., Huang, H., Selective laser melting of alumina: A single track study, Ceramics International, 44(8), pp. 9484-9493, @2018 1.000
659. Kumbhar, N.N., Mulay, A.V., Post Processing Methods used to Improve Surface Finish of Products which are Manufactured by Additive Manufacturing Technologies: A Review, Journal of The Institution of Engineers: Series C, 99(4), pp. 481-487, @2018 1.000
660. Yamazaki, H., Hu, R., Zhao, Q., Wanunu, M., Photothermally Assisted Thinning of Silicon Nitride Membranes for Ultrathin Asymmetric Nanopores, ACS Nano, 12(12), pp. 12472-12481, @2018 1.000
661. Aras, N., Yalçın, Ş., Investigating silicon wafer based substrates for dried-droplet analysis by Laser-Induced Breakdown Spectroscopy, Spectrochimica Acta - Part B Atomic Spectroscopy, 152, pp. 84-92, @2019
- Atanasov P.A., Eugenieva E.D., Nedyalkov N.N.. Laser drilling of silicon nitride and alumina ceramics: numerical and experimental study. J. Appl. Phys., 89, 4, 2001**
662. Nasrollahi V., Penchev P., Dimov S., Korner L., Leach R., Kim K., Journal of Micro and Nano-Manufacturing, 5(4), 041006 (2017)., @2017 1.000
663. Zhao-yan, Sun Ming-ying, Hao Yan-fei, Pang Xiang-yang, Liu Zhi-gang, Zhangy a-nan, Acta Photonica Sinica, 46, 10, 1014003-1014010 (2017)., @2017 1.000
664. Fan, Z., Lu, M., Huang, H. "Selective laser melting of alumina: A single track study". Ceramics International 44(8), pp. 9484-9493, @2018 1.000
665. Kumbhar, N.N., Mulay, A.V. "Post Processing Methods used to Improve Surface Finish of Products which are Manufactured by Additive Manufacturing Technologies: A Review". Journal of The Institution of Engineers (India): Series C 99(4), pp. 481-487, @2018

Atanasov P, Nedyalkov N., Imamova S, Ruf A, Hugel H, Dausinger F, Berger P. Laser ablation of Ni by ultrashort pulses: molecular dynamics simulation. Appl. Surf. Sci., 186, 2002, 369. ISI IF:3.387

666. Peng E., Bell R., Zuhlke C.A., Wang M., Alexander D.R., Gogos G., Shield J.E., Journal of Applied Physics, 122(13), 133108 (2017), @2017 1.000
667. Peng E., Tsubaki A., Zuhlke C.A., Wang M., Bell R., Lucis M.J., Anderson T.P., Alexander D.R., Gogos G., Shield J.E.,

- Appl. Surf. Sci., 396, 1170-1176 (2017), @2017 1.000
668. Peng E., "Understanding of the formation of micro/nanoscale structures on metal surfaces by ultrafast pulse laser processing", PhD Thesis, The University of Nebraska-Lincoln (2017), @2017
- Nedialkov N.N., Atanasov P.A., Sawczak M., Sliwinski G.. Ablation of ceramics with ultraviolet, visible and infrared nanosecond laser pulses. Proceedings of SPIE, 5120, 2003, 703**
669. Breaban, F., Coutouly, J.F., Braud, F., Deprez, P., Nd:YAG laser beam-material interactions for marking and engraving: Application to alumina and granite, *Lasers in Engineering* 30 (1-2), pp. 1-13, @2015
670. Rihakova, L., Chmelickova, H., Laser micromachining of glass, silicon, and ceramics, *Advances in Materials Science and Engineering*, 2015, 584952, @2015 1.000
671. Gavrilović M.R., Lazic V., Jovičević S., *Journal of Analytical Atomic Spectrometry*, 32, 345-353 (2017),
672. Romoli L., Khan M.M.A., Valentini M., *Optics and Laser Technology*, 90, 1, 113-121 (2017),
673. Sposili R.S., Bovatsek J., Patel R., SPIE LASE, International Society for Optics and Photonics, 100910X-100910X, (2017).
674. Salmatonidis, A., Viana, M., Pérez, N., (...), Sanfélix, V., Monfort, E." Nanoparticle formation and emission during laser ablation of ceramic tiles". *Journal of Aerosol Science* 126, pp. 152-168
- Nedialkov N.N., Imamova S.E., Atanasov P.A.. Ablation of metals by ultrashort laser pulses. Journal of Physics D, 37, 2004, 638.**
675. Hashida, M., Miyasaka, Y., Nishii, T., Inoue, S., Sakabe, S., Threshold fluence of femtosecond laser nano-ablation for metal, *IEEJ Transactions on Fundamentals and Materials*, 135 (10), pp. 575-580.
676. Hashida, M., Miyasaka, Y., Nishii, T., Shimizu, M., Inoue, S., Sakabe, S., *Electronics and Communications in Japan*, 99, 88-95, 2016.,
677. Kanitz A., Hoppius J.S., Gurevich E.L., Ostendorf A., *Physics Procedia*, 83, 114-122 (2016),
678. Marinier S., "Ablation laser femtoseconde de verres métalliques de Cux Zr(1-x): une étude par dynamique moléculaire", PhD Thesis, Université de Montréal (2016), @2016 1.000
679. Gontad F., Cesaria M., Klini A., Manousaki A., Perrone A., Caricato A.P., *Applied Surface Science*, 419, 603-613 (2017),
680. Kanitz A., Hoppius J.S., Fiebrandt M., Awakowicz P., Esen C., Ostendorf A., Gurevich E.L., *Applied Physics A*, 123(11), 674 (2017),
681. Kanitz A., Hoppius J.S., Ostendorf A., Gurevich E.L., *Proc. SPIE*, 10092, 100921D (2017), @2017
682. Kanitz A., Hoppius J.S., Sanz M.D.M., Maicas M., Ostendorf A., Gurevich E.L., *ChemPhysChem.*, 18, 1155-1164 (2017).
683. Russell A.M., Kafka K.R.P., Schumacher D.W., Chowdhury E.A., arXiv preprint arXiv:1704.07482, 1-5 (2017).
684. Schille J., Schneider L., Hartwig L., Loeschner U., MATADOR Conference, Paper No: 3943 - 38th, 1-9 (2017).
685. Gaudiuso, R., Ewusi-Annan, E., Melikechi, N., (...), Campesato, L.F., Merghoub, T."Using LIBS to diagnose melanoma in biomedical fluids deposited on solid substrates: Limits of direct spectral analysis and capability of machine learning". *Spectrochimica Acta - Part B Atomic Spectroscopy* 146, pp. 106-114, @2018
686. Suslova, A., Hassanein, A."Effect of dual ultrashort laser pulses on metal ablation for efficient micromachining" *Journal of Laser Applications* 30(4), 042011, @2018
687. Haasler, D., Finger, J., Investigation of heat accumulation effects during deep hole percussion drilling by high power ultrashort pulsed laser radiation, *Journal of Laser Applications*, 31(2), 022201, @2019
688. Jia, X., Zhao, X., Numerical study of material decomposition in ultrafast laser interaction with metals, *Applied Surface Science*, 463, pp. 781-790, @2019 1.000
689. Kanitz, A., Förster, D.J., Hoppius, J.S., (...), Ostendorf, A., Gurevich, E.L., Pump-probe microscopy of femtosecond laser ablation in air and liquids, *Applied Surface Science* 475, pp. 204-210, @2019
690. Manchee, C.P.K., Möller, J., Miller, R.J.D., Highly stable, 100 W average power from fiber-based ultrafast laser system at 1030 nm based on single-pass photonic-crystal rod amplifier, *Optics Communications*, 437, pp. 6-10, @2019
691. Wei, H., Tan, X., Li, Q., He, W., Study of thermal physical parameters in high energy domain femtosecond laser ablation on Au film, *Optik*, 180, pp. 657-664, @2019
- Nedialkov N, Imamova S, Atanasov P, Heusel G.. Laser ablation of iron by ultrashort laser pulses. Thin Solid Films, 2004, 496.**
692. Shaheen, M.E., Gagnon, J.E., Fryer, B.J., Scanning electron microscope studies on laser ablation of solids, *Laser and Particle Beams*, 37(1), pp. 101-109, @2019
- Nedyalkov N., Imamova S, Atanasov P, Ruf A., Berger P., Dausinger F.. Dynamics of the ejected material in ultrashort laser ablation of metals. Appl. Phys. A, 79, 2004, 1121. ISI IF:1.455**
693. Bilbao-Guillerna A., Axinte D.A., Billingham J., Cadot G.B.J., *Royal Society Open Science*, 4(7), 161031 (2017).
694. Kramer, T., Remund, S., Jäggi, B., Schmid, M., Neuenschwander, B." Ablation dynamics-from absorption to heat accumulation/ultra-fast laser matter interaction". *Advanced Optical Technologies* 7(3), pp. 129-144, @2018
695. Butkus, S., Gaizauskas, E., Mačernyte, L., (...), Paipulas, D., Sirutkaitis, V., Femtosecond beam transformation effects in water, enabling increased throughput micromachining in transparent materials, *Applied Sciences* 9(12), 405, @2019

Amoruso S., Bruzzese R., Vitiello M., Nedialkov N.N., Atanasov P.A.. Experimental and theoretical investigations of femtosecond laser ablation of aluminum in vacuum. J. Appl. Phys., 98, 2005, 044907.

696. Jorgensen, D.J., Titus, M.S., Pollock, T.M., Femtosecond laser ablation and nanoparticle formation in intermetallic NiAl, *Applied Surface Science*, 353, pp. 700-707, @2015 1.000
697. Caricato A.P., Luches A., Martino M., "Laser fabrication of nanoparticles", *Handbook of Nanoparticles*, 407-428 (2016), @2016 1.000
698. E. Rebollar, D. E. Martínez-Tong, M. Sanz, M. Oujja, J. F. Marco, T. A. Ezquerro, M. Castillejo, *Appl. Surf. Sci.*, 387, 1188-1194, 2016., @2016 1.000
699. Roth J., Trebin H-R., Kiselev A., Rapp D-M., *Appl. Phys. A*, 122 (5), 1-13 (2016), @2016 1.000
700. Banerjee S.P., Sarnet T., Siozos P., Loulakis M., Anglos D., Sentis M., *Applied Surface Science*, 418, 542-547 (2017), @2017 1.000
701. Díaz-Núñez P., González-Izquierdo J., González-Rubio G., Guerrero-Martínez A., Rivera A., Perlado J.M., Peña-Rodríguez O., *Applied Sciences*, 7(8), 793 (2017), @2017 1.000
702. Gontad F., Cesaria M., Klini A., Manousaki A., Perrone A., Caricato A.P., *Applied Surface Science*, 419, 603-613 (2017), @2017 1.000
703. Balbus, G.H., Echlin, M.P., Grigorian, C.M., (...), Pollock, T.M., Gianola, D.S. "Femtosecond laser rejuvenation of nanocrystalline metals". *Acta Materialia* 156, pp. 183-195, @2018 1.000
704. Dasallas, L.L., Garcia, W.O. "Numerical simulation of femtosecond pulsed laser ablation of copper for oblique angle of incidence through two-temperature model". *Materials Research Express* 5(1), 016518, @2018
705. Dou, H.-Q., Yao, C.-Z., Liu, H., (...), Yuan, X.-D., Xu, S.-Z. "Femtosecond laser ablation of Al-Mg alloy in vacuum and air". *Applied Surface Science* 447, pp. 388-392, @2018
706. Oujja, M., Izquierdo, J.G., Bañares, L., De Nalda, R., Castillejo, M. "Observation of middle-sized metal clusters in femtosecond laser ablation plasmas through nonlinear optics". *Physical Chemistry Chemical Physics* 20(25), pp. 16956-16965, @2018 1.000
707. Suslova, A., Hassanein, A. "Effect of dual ultrashort laser pulses on metal ablation for efficient micromachining". *Journal of Laser Applications* 30(4), 042011, @2018 1.000
708. Jia, X., Zhao, X., Numerical study of material decomposition in ultrafast laser interaction with metals, *Applied Surface Science*, 463, pp. 781-790, @2019 1.000
709. Waag, F., Li, Y., Ziefuß, A.R., (...), Barcikowski, S., Gökce, B., Kinetically-controlled laser-synthesis of colloidal high-entropy alloy nanoparticles, *RSC Advances* 9(32), pp. 18547-18558, @2019 1.000
- Nedialkov N.N., Imamova S.E., Atanasov P.A., Berger P., Dausinger F.. Mechanism of ultrashort laser ablation of metals: Molecular dynamics simulation. Applied Surface Science, 247, 2005, 243.**
710. Kumar, R., Sedwick, R.J., Despinning orbital debris before docking using laser ablation, *Journal of Spacecraft and Rockets*, 52 (4), pp. 1129-1134, @2015 1.000
711. Meng, X., Zhou, J., Huang, S., Su, C., Yang, X., Molecular dynamics simulation of dislocation development in monocrystalline copper induced by warm laser peening, *Zhongguo Jiguang/Chinese Journal of Lasers*, 42 (7), 0702003, @2015 1.000
712. Marinier S., "Ablation laser femtoseconde de verres métalliques de Cux Zr(1-x): une étude par dynamique moléculaire", PhD Thesis, Université de Montréal (2016), @2016 1.000
713. Markopoulos A.P., Koralli P., Kyriakakis G., Kompitsas M., Manolakos D. E., "1National Technical University of Athens (NTUA), Athens, Greece; 2Theoretical and Physical Chemistry Institute (TPCI), Athens, Greece.", 6, 117-153 (2016),
714. Wang, Q., Luo, S., Chen, Z., *Optics and Laser Technology*, 80, 116-124, 2016.
715. Karkalos N.E., Markopoulos P.A., *Current Nanoscience*, 13(1), 3-20 (2017),
716. Markopoulos A.P., Manolakos D.E., *Proc. of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 231(3), 415-426 (2017).
717. Meng X., Zhou J., Huang S., Su C., Sheng J., *Materials*, 10(1), 73 (2017),
718. Salatić B.M., "Laser modification of aluminum-titanium and nickel-titanium thin layers", PhD Thesis, 149 pgs., University of Belgrade, Faculty of Physics (2017), @2017
719. Dasallas, L.L., Garcia, W.O. "Numerical simulation of femtosecond pulsed laser ablation of copper for oblique angle of incidence through two-temperature model". *Materials Research Express* 5(1), 016518, @2018
720. Dou, H.-Q., Yao, C.-Z., Liu, H., (...), Yuan, X.-D., Xu, S.-Z. "Femtosecond laser ablation of Al-Mg alloy in vacuum and air". *Applied Surface Science* 447, pp. 388-392, @2018
721. James, S., Menon, V.A., Parmar, M. "Molecular dynamics simulation study of liquid-assisted laser beam machining process", *ASME 2018 13th International Manufacturing Science and Engineering Conference, MSEC 2018*, @2018
722. Menon, V., Parmar, M., James, S. "Molecular dynamics simulation study of liquid-assisted laser beam machining process". *ASME 2018 13th International Manufacturing Science and Engineering Conference, MSEC 2018*, @2018
723. Milov, I., Makhotkin, I.A., Sobierajski, R., (...), Enkisch, H., Bijkerk, F. "Mechanism of single-shot damage of Ru thin films irradiated by femtosecond extreme UV free-electron laser". *Optics Express* 26(15), pp. 19665-19685, @2018 1.000
724. Xu, S., Ding, R., Yao, C., (...), Ye, Y., Yuan, X. "Effects of pulse durations and environments on femtosecond laser ablation of stainless steel". *Applied Physics A: Materials Science and Processing* 124(4), 310, @2018 1.000
725. Tan, S., Wu, J.-J., Huang, Q., Zhang, Y., Du, X.-R., A model of femtosecond laser ablation of metal based on dual-phase-lag model, *Acta Physica Sinica* 68(5), 057901, @2019 1.000
- Nedialkov N., Atanasov P., Sawczak M., Śliwiński G.. Deep hole drilling in Fe by ultrashort laser pulses: molecular dynamics simulation study. Proc. SPIE, 5777, 850, 2005, 850.**

726. Gavrilović M.R., Lazic V., Jovičević S., Journal of Analytical Atomic Spectrometry, 2017,32, 345-353 (2017).
Nedyalkov N., Imamova S., Atanasov P., Heusel G., Breitling D., Ruf A., Hugel H., Berger P.. Laser ablation of iron by ultrashort laser pulses. Thin Solid Films, 2005, 496. ISI IF:1.939
727. Kuo, J.-K., Huang, P.-H., Chien, S.-K., Huang, K.-Y., Chen, K.-T. "Molecular Dynamics Simulations of Crater Formation Induced by Laser Ablation on the Surface of α -Fe Substrate". MATEC Web of Conferences 167, 03011, @2018
Imamova S, Atanasov P, Nedyalkov N.. Molecular dynamics simulation using pair and many body interatomic potentials: ultrashort laser ablation of Fe. Nucl. Instr. Meth. Phys. Res. B, 227, 4, 2005, 490.
728. Karkalos E.N., Markopoulos P.A., Current Nanoscience, 13(1), 3-20 (2017), @2017 1.000
729. Markopoulos A.P., Manolakos D.E., Proc. of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 231(3), 415-426 (2017), @2017 1.000
730. Kuo, J.-K., Huang, P.-H., Chien, S.-K., Huang, K.-Y., Chen, K.-T. "Molecular Dynamics Simulations of Crater Formation Induced by Laser Ablation on the Surface of α -Fe Substrate". MATEC Web of Conferences 167, 03011, @2018 1.000
731. Sipkens, T.A., Daun, K.J. "Effect of Surface Interatomic Potential on Thermal Accommodation Coefficients Derived from Molecular Dynamics". Journal of Physical Chemistry C 122(35), pp. 20431-20443, @2018 1.000
Nedyalkov N., Takada H., Obara M.. Nanostructuring of silicon surface by femtosecond laser pulse mediated with enhanced near-field of gold nanoparticles. Appl. Phys. A, 85, 2006, 163.
732. Xue H., Deng G., Feng G., Opt. Lett., 42, 3315-3318 (2017), @2017 1.000
733. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manufac. 61, 2018, 57-63, @2018 1.000
734. Murray, R.A., Escobar, A., Bastús, N.G., (...), Puentes, V., Moya, S.E. "Fluorescently labelled nanomaterials in nanosafety research: Practical advice to avoid artefacts and trace unbound dye". NanoImpact 9, pp. 102-113, @2018 1.000
735. Wang, Y., Zhang, Q., Zhu, Z., (...), Wang, Z., Bao, J. "Laser streaming: Turning a laser beam into a flow of liquid". Science Advances 3(9), 1700555, @2018 1.000
736. BJ Nagy, Z Pápa, L Péter, C Prietl, JR Krenn, P Dombi, Near-Field-Induced Femtosecond Breakdown of Plasmonic Nanoparticle, Plasmonics, <https://doi.org/10.1007/s11468-019-01043-3>, @2019 1.000
Nedyalkov N.N., Atanasov P.A.. Molecular dynamics simulation study of deep hole drilling in iron by ultrashort laser pulses. Applied Surface Science, 252, 2006, 4411.
737. Hrubciak, R., Sinogeikin, S., Rod, E., Shen, G., The laser micro-machining system for diamond anvil cell experiments and general precision machining applications at the High Pressure Collaborative Access Team, Review of Scientific Instruments, 86 (7), 072202, @2015 1.000
738. Markopoulos A.P., Manolakos D.E., Proc. of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 231(3), 415-426 (2017), @2017 1.000
739. Kuo, J.-K., Huang, P.-H., Chien, S.-K., Huang, K.-Y., Chen, K.-T. "Molecular Dynamics Simulations of Crater Formation Induced by Laser Ablation on the Surface of α -Fe Substrate". MATEC Web of Conferences 167, 03011, @2018 1.000
740. Wang, T., Yu, X., Zhu, B., Li, P., Liu, H., 500 Hz, 8 mJ Nd:YAG regenerative amplifier for laser-induced plasma, Proceedings of SPIE - The International Society for Optical Engineering, 11046, 110462F, @2019 1.000
741. Zhao, W., Mei, X., Wang, W., Ultrashort pulse laser drilling of micro-holes (part 1)--theoretical study, Infrared and Laser Engineering 48(1), 0106008, @2019 1.000
Nedyalkov N., Sakai T., Miyanishi T., Obara M.. Near field properties in the vicinity of gold nanoparticles placed on various substrates for precise nanostructuring. J. Phys. D, 23, 2006, 5037.
742. Jiao, Z., He, P., Journal of Nanoscience and Nanotechnology, 16, 8622-8625, 2016., @2016 1.000
743. Hytti, J., Perestjuk, M., Mahler, F., (...), McGlynn, E., Steinmeyer, G. "Field enhancement of multiphoton induced luminescence processes in ZnO nanorods". Journal of Physics D: Applied Physics 51(10), 105306, @2018 1.000
744. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manufac. 61, 2018, 57-63, @2018 1.000
745. Pan, Z., Yu, Y.F., Valuckas, V., (...), Vienne, G.G., Kuznetsov, A.I. "Plasmonic nanoparticle lithography: Fast resist-free laser technique for large-scale sub-50 nm hole array fabrication" Applied Physics Letters 112(22), 223101, @2018 1.000
746. Das, G.M., Dantham, V.R., Arya, A., Plasmonic Properties of Nano- and Microscale Dielectric Substrates-Supported Nanoshell Dimers: Effects of Type and Propagation Direction of Excitation Light, IEEE Photonics Journal, 11(1), 8636948, @2019 1.000
747. Qayyum, H., Ali, R., Rehman, Z.U., (...), Shah, A., Qayyum, A., Synthesis of silver and gold nanoparticles by pulsed laser ablation for nanoparticle enhanced laser-induced breakdown spectroscopy, Journal of Laser Applications, 31(2), 022014, @2019 1.000
748. Zhu, D., Yan, J., Femtosecond pulse laser near-field ablation of Ag nanorods, Applied Sciences, 9(3), 363, @2019 1.000
Nedyalkov N., Sawczak M., Jendrzewski R., Atanasov P., Martin M., Sliwinski G.. Analysis of surface and material modifications caused by laser drilling of AlN ceramics. Applied Surface Science, 254, 2007, 893.

749. Zhang, F.L., Liu, P., Nie, L.P., Wu, S.H., Lin, H.T., A comparison on core drilling of silicon carbide and alumina engineering ceramics with mono-layer brazed diamond tool using surfactant as coolant, *Ceramics International*, 41 (7), pp. 8861-8867, @2015 1.000
750. Hassan N.U., Hussain Z., Naeem M., Shah I.A., Husnain G., Ahmad I., Ullah Z., *Surf. Rev. Lett.*, 24(02), 1750021 (2017), @2017 1.000
751. Kansal H., Jain A., Grover V., *Proc. 4th Nat. Conf. on Advancements in Simulation & Experimental Tech. in Mechanical Engin. (NCASeme-2017)*, 45-49 (2017), @2017 1.000
752. Gautam, G.D., Pandey, A.K. "Pulsed Nd:YAG laser beam drilling: A review". *Optics and Laser Technology* 100, pp. 183-215, @2018 1.000
753. Su, L., Chen, R., Huang, Z., (...), Liao, Z., Lu, T. *Ceramics International* 44(2), pp. 1370-1375, @2018
Sakai T., Nedyalkov N., Obara M.. Friction characteristics of submicrometre-structured surfaces fabricated by particle-assisted near-field enhancement with femtosecond laser. *Journal of Physics D*, 23, 2007, 7485.
754. Chen, T.-H., Tsai, Y.-C., Fardel, R., Arnold, C.B., Elucidating the mechanism of nanocone and nanohole formation on Si by optical trap assisted nanopatterning, *CLEO: Applications and Technology, CLEO-AT 2015, AM2K.6*, @2015 1.000
755. M. Murashima, N. Umehara, H. Kousaka, *Tribology Online*, 11, 159-167, 2016., @2016 1.000
756. Wang B., Feng D., Wang J. Chen D., *Proc. Asia-Pacific Engin. Techn. Conf. (APETC 2017)*, ISBN: 978-1-60595-443-1 (2017), @2017 1.000
757. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, *Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manifact.* 61, 2018, 57-63, @2018 1.000
Nedyalkov N.N., Atanasov P.A., Obara M.. Near-field properties of a gold nanoparticle array on different substrates excited by a femtosecond laser. *Nanotechnology*, 18, 2007, 305703. ISI IF:3.821
758. Schomaker, M., Heinemann, D., Kalies, S., Meyer, H., Heisterkamp, A., Characterization of nanoparticle mediated laser transfection by femtosecond laser pulses for applications in molecular medicine, *Journal of Nanobiotechnology*, 13 (1), 10, @2015 1.000
759. N. Hooshmand, J. A. Bordley, M. A. El-Sayed, *J. Phys. Chem. C*, 120 (8), pp 4564–4570, 2016., @2016
760. Feng, D., Weng, D., Wang, B., Wang, J. "Laser pulse number dependent nanostructure evolution by illuminating self-assembled microsphere array". *Journal of Applied Physics* 122(24), 243102, @2017
761. Huang Y., Ma L., Li J., Zhang Z., *Nanotechnology*, 28(10), 105203 (2017), @2017 1.000
762. JP Walton, PhD Thesis *Plasmonic Stimulation of Electrically Excitable Cells*, University of South Florida, @2017
763. Xue Hongyan, Guoliang Deng, Guoying Feng, Chen Lin, Jiaqi Li, Chao Yang, Shouhuan Zhou, *Optics Letters*, 42(17), 3315-3318 (2017), @2017 1.000
764. Molinaro, C., Marguet, S., Douillard, L., Charra, F., Fiorini-Debuisschert, C. *Physical Chemistry Chemical Physics* 20(17), pp. 12295-12302, @2018 1.000
765. Romano, J.-M., Ahmed, R., Garcia-Giron, A., (...), Werner, C., Dimov, S., *Journal of Micro and Nano-Manufacturing*, 7(1), 010901, @2019 1.000
Nedyalkov N., Miyanishi T., Obara M. Enhanced near field mediated nanohole fabrication on silicon substrate by femtosecond laser pulse. *Appl. Surf. Sci.*, 253, 2007, 6558.
766. Yue J., Hai-Yan T., Bo-Yu J., Xiao-Wei S., Jing-Quan L., *Acta Phys. Sinica*, 66, 144203 (2017),
767. Zandbergen S. R., Gibson R., Amirsolaimani B., Mehravar S., Keiffer P., Azarm A., Kieu Kh., *Opt. Mat. Express* 7, 2102-2110 (2017), @2017 1.000
768. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, , *Prec. Manifact.* 61, 2018, 57-63, @2018 1.000
769. Lasgorceix, M., Ott, C., Boilet, L., (...), Lardot, V., Cambier, F., , *Materials Science and Engineering C*, 95, pp. 371-380, @2019
Atanasov P.A., Takada H., Nedyalkov N.N., Obara M.. Nanohole processing on silicon substrate by femtosecond laser pulse with localized surface plasmon polariton. *Applied Surface Science*, 19, 2007, 8304.
770. Sugioka, K., The state of the art and future prospect of ultrafast laser microprocessing, *Journal of the Japan Society for Precision Engineering*, 81 (8), pp. 709-713, @2015 1.000
771. Boriskina S.V., Cooper T.A., Zeng L., Ni G., Tong J.K., Tsurimaki Y., Chen G., *Advances in Optics and Photonics*, 9(4), 775-827 (2017), @2017 1.000
772. Sugioka K., *Nanophotonics*, 6, 2, 393-413 (2017), @2017 1.000
Nedyalkov N.N., Atanasov P.A., Amoroso S., Bruzzese R., Wang X.. Laser ablation of metals by femtosecond pulses: Theoretical and experimental study. *Applied Surface Science*, 253, 19, 2007, 7761.
773. Mayer, P.N., Mayer, A.E., Model of fracture of metal melts and the strength of melts under dynamic conditions, *Journal of Experimental and Theoretical Physics* 121 (1), pp. 35-47, @2015 1.000
774. Rapp, L., Constantinescu, C., Larmande, Y., Delaporte, P., Alloncle, A.P., Functional multilayered capacitor pixels printed by picosecond laser-induced forward transfer using a smart beam shaping technique, *Sensors and Actuators, A: Physical* 224, pp. 111-118, @2015 1.000
775. Caricato A.P., Luches A., Martino M., "Laser fabrication of nanoparticles", *Handbook of Nanoparticles*, 407-428 (2016),.
776. G. Deng, W. Su, J. Duan, N. Fan, X. Sun, J. Zhou, C. Wang, K. Yin, X. Dong, Y. Hu, *Appl. Phys. A*, 122, 861, 2016.,
777. Gontad F., Cesaria M., Klini A., Manousaki A., Perrone A., Caricato A.P., *Applied Surface Science*, 419, 603–613 (2017),

778. Xiong Q.L., Li Z., Kitamura T., Scientific reports, 7(1), 9218 (2017), @2017 1.000
779. Carrasco-García, I.M., Vadillo, J.M., Laserna, J.J., Spectrochimica Acta - Part B Atomic Spectroscopy, 158, 105634, @2019 1.000
780. Jia, X., Zhao, X., Applied Surface Science, 463, pp. 781-790, @2019 1.000
781. Thomas, J., Joshi, H.C., Kumar, A., Philip, R., Journal of Physics D: Applied Physics 52(13), 135201, @2019 1.000
Sakai T., Nedyalkov N., Obara M. Positive and negative nanohole-fabrication on glass surface by femtosecond laser with template of polystyrene particle array. Journal of Physics D, 40, 2007, 2102. I
 Choi, H.-K., Sohn, I.-B., Noh, Y.-C., Kim, J.-T., Ahsan, M.S., Femtosecond-laser-assisted fabrication of double-layer diffraction gratings inside fused silica glass, Journal of the Korean Physical Society, 66 (1), pp. 55-60, @2015
782. Hernandez-Rueda, J., Götze, N., Siegel, J., Baumert, T., Solis, J., ACS Applied Materials and Interfaces, 7 (12), pp. 6613-6619, @2015 1.000
783. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Prec. Manufact. 61, 2018, 57-63, @2018 1.000
784. He, Y., Zhang, J., Singh, S., (...), Yang, J., Guo, C., Applied Physics Letters 114(13), 133107, @2019

Amoruso S., Bruzzese R., Wang X., Nedialkov N.N., Atanasov P.A. Femtosecond laser ablation of nickel in vacuum. Journal of Physics D, 40, 2007, 331.

785. Attia, Y.A., Flores-Arias, M.T., Nieto, D., De La Fuente, G.F., López-Quintela, M.A., Transformation of Gold Nanorods in Liquid Media Induced by nIR, Visible, and UV Laser Irradiation, Journal of Physical Chemistry C, 119 (23), pp. 13343-13349, @2015 1.000
786. Bashir, S., Khurshid, S., Akram, M., Ahmad, S., Yousaf, D., Pulsed laser ablation of Ni in vacuum and N₂ atmosphere at various fluences, Quantum Electronics, 45 (7), pp. 640-647, @2015 1.000
787. Jorgensen, D.J., Titus, M.S., Pollock, T.M., Femtosecond laser ablation and nanoparticle formation in intermetallic NiAl, Applied Surface Science, 353, pp. 700-707, @2015 1.000
788. Muñeton Arboleda, D., Santillán, J.M.J., Mendoza Herrera, L.J., Schinca, D.C., Scaffardi, L.B., Synthesis of Ni Nanoparticles by Femtosecond Laser Ablation in Liquids: Structure and Sizing, Journal of Physical Chemistry C, 119 (23), pp. 13184-13193, @2015 1.000
789. Shen, Y., Gan, Y., Qi, W., Shen, Y., Chen, Z., Effect of the hot electron blast force on ultrafast laser ablation of nickel thin film, Applied Optics, 54 (7), pp. 1737-1742, @2015 1.000
790. Zhao, X., Shin, Y.C., Laser-plasma interaction and plasma enhancement by ultrashort double-pulse ablation, Applied Physics B: Lasers and Optics, 120 (1), pp. 81-87, @2015 1.000
791. Caricato A.P., Luches A., Martino M., "Laser fabrication of nanoparticles", Handbook of Nanoparticles, 407-428 (2016), @2016 1.000
792. G. Deng, W. Su, J. Duan, N. Fan, X. Sun, J. Zhou, C. Wang, K. Yin, X. Dong, Y. Hu, Appl. Phys. A, 122, 861, 2016.
793. Roth, J., Trebin, H.R., Kiselev, A. Rapp D., Appl. Phys. A, 122, 500, 2016, @2016 1.000
794. Sh. Xu, C. Yao, W. Liao, X. Yuan, T. Wang, X. Zu, Nuclear Instruments and Methods in Physics Research Section B, 385, 46-50, 2016, @2016 1.000
795. Smijesh, N., Rao, K.H., Philip, R. Appl. Phys. A, 122, 460, 2016., @2016 1.000
796. Zh. Fei W. Lei Lei, G. Jinliang, G. Xuebao, Acta Photonica Sinica, 45, 0514002, 2016., @2016 1.000
797. Callahan P.G., Echlin M.P., Pollock T.M., De Graef M., Microscopy and Microanalysis, 23(4), 730-740 (2017).
798. McCann R., Hughes C., Bagga K., Stalcup A., Vázquez M., Brabazon D., Journal of Physics D: Applied Physics, 50(24), 245303 (2017), @2017 1.000
799. Ooi C.R., Sanny A.I., JOSA B, 34(10), 2072-2080 (2017), @2017 1.000
800. Peng E., Bell R., Zuhlke C.A., Wang M., Alexander D.R., Gogos G., Shield J.E., Journal of Applied Physics, 122(13), 133108 (2017), @2017 1.000
801. Ионин А.А., Кудряшов С.И., Левченко А.О., Макаров С.В., Сараева И.Н., Руденко А.А., Буцень А.В., Бураков В.С., Письма в ЖЭТФ, 106(3-4), 247-251 (2017), @2017 1.000
802. Dou, H.-Q., Yao, C.-Z., Liu, H., (...), Yuan, X.-D., Xu, S.-Z. "Femtosecond laser ablation of Al-Mg alloy in vacuum and air" Applied Surface Science 447, pp. 388-392, @2018 1.000
803. Hohnholz, A., Schütz, V., Albrecht, D., (...), Suttman, O., Overmeyer, L. "Simulation of an efficient particle extraction for the detection of explosive materials". Journal of Laser Applications 30(3), 032201, @2018 1.000
804. Kramer, T., Remund, S., Jäggi, B., Schmid, M., Neuenschwander, B. "Ablation dynamics-from absorption to heat accumulation/ultra-fast laser matter interaction". Advanced Optical Technologies 7(3), pp. 129-144, @2018 1.000
805. Mills, B., Heath, D.J., Grant-Jacob, J.A., Eason, R.W. "Predictive capabilities for laser machining via a neural network". Optics Express 26(13), pp. 17245-17253, @2018 1.000
806. Oujja, M., Izquierdo, J.G., Bañares, L., De Nalda, R., Castillejo, M. "Observation of middle-sized metal clusters in femtosecond laser ablation plasmas through nonlinear optics". Physical Chemistry Chemical Physics 20(25), pp. 16956-16965, @2018 1.000
807. Tulej, M., Wiesendanger, R., Riedo, A., Knopp, G., Wurz, P. "Mass spectrometric analysis of the Mg plasma produced by double-pulse femtosecond laser irradiation". Journal of Analytical Atomic Spectrometry 33(8), pp. 1292-1303, @2018 1.000
808. Xu, S., Ding, R., Yao, C., (...), Ye, Y., Yuan, X. "Effects of pulse durations and environments on femtosecond laser ablation of stainless steel" Applied Physics A: Materials Science and Processing 124(4), 310, @2018 1.000
809. Zhang, K., Maurya, S.K., Ganeev, R.A., Rao, K.S., Guo, C. "Ablated nickel nanoparticles: Third harmonic generation and optical nonlinearities", Journal of Optics (United Kingdom) 20(12), 125502, @2018
810. Zhang, Y., Fu, T., Fu, L., Shi, C. "High temperature thermal radiation property measurements on large periodic micro-

- structured nickel surfaces fabricated using a femtosecond laser source". *Applied Surface Science* 450, pp. 200-208, @2018 1.000
811. Thomas, J., Joshi, H.C., Kumar, A., Philip, R., Pulse width dependent dynamics of laser-induced plasma from a Ni thin film, *Journal of Physics D: Applied Physics* 52(13), 135201, @2019 1.000
812. Wang, Z., Fu, W., Zhang, R., Numerical simulation of femtosecond laser multi-pulse ablation of metal iron, *Infrared and Laser Engineering*, 48(7), 0706002, @2019 1.000
- Nedyalkov N., Sakai T, Miyanishi T, Obara M. Near field distribution in two dimensionally arrayed gold nanoparticles on platinum substrate. *Appl. Phys. Lett.*, 90, 2007, 123106.**
813. Yang F., Jiang L., Wang S., Cao Zh., Liu L., Wang M., Lu Y., *Opt. Laser Techn.* 93, 2017, Pages 194-200, @2017 1.000
814. Yeshchenko O. A., Kozachenko V.V., Berezovska N. I., Liakhov Y. F., *Plasmonics* (2017) 1-9, @2017
815. Yue J., Hai-Yan T., Bo-Yu J., Xiao-Wei S., Jing-Quan L., *Acta Physica Sinica*, 66, 144203 (2017).
816. Kim, B., Kwon, J., Yang, J. Adsorption Behavior of Gold Nanoparticles on Amino-terminated Micro Domains Fabricated on Quartz Substrate by Vacuum Ultra-violet Photolithography". *Journal of the Korean Physical Society* 73(5), pp. 574-579, @2018
817. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, *Prec. Manufac.* 61, 2018, 57-63, @2018 1.000
818. Yeshchenko, O.A., Kozachenko, V.V., Berezovska, N.I., Liakhov, Y.F. "Photoluminescence of Fullerene C60 Thin Film in Plasmon-Coupled Monolayer of Au Nanoparticles – C60 Film – Al Film Nanostructure". *Plasmonics* 13(4), pp. 1325-1333, @2018 1.000
819. Yeshchenko, O.A., Kozachenko, V.V., Naumenko, A.P., (...), Haftel, M., Pinchuk, A.O.". Gold nanoparticle plasmon resonance in near-field coupled Au NPs layer/Al film nanostructure: Dependence on metal film thickness". *Photonics and Nanostructures - Fundamentals and Applications* 29, pp. 1-7, @2018
820. Yeshchenko, O.A., Kozachenko, V.V., Tomchuk, A.V. Surface plasmon resonance in "monolayer of ni nanoparticles/dielectric spacer/Au (Ni) film" nanostructure: Tuning by variation of spacer thickness". *Ukrainian Journal of Physics* 63(5), pp. 386-395, @2018 1.000
- Koleva, M.E., Atanasov, P.A., Nedyalkov, N.N., Fukuoka, H., Obara, M.. Role of vanadium content in ZnO thin films grown by pulsed laser deposition. *Applied Surface Science*, 254, 4, 2007, 1228-1231.**
821. García-Hemme, E., Yu, K.M., Wahnon, P., González-Díaz, G., Walukiewicz, W., Effects of the d-donor level of vanadium on the properties of Zn_{1-x}V_xO films, *Applied Physics Letters*, Volume 106, Issue 18, 4 May 2015, Article number 182101.
822. Olive-Méndez, S.F. , Santillán-Rodríguez, C.R., Campos-Venegas, K., Matutes-Aquino, J.A., Espinosa-Magaña, F. Magnetism and decarburization-like diffusion process on V₂O₅-doped ZnO ceramics, *Ceramics International*, Volume 41, Issue 5, 1 June 2015, Pages 6802-6806., @2015 Линк
823. Li, M., He, J., Synthesis and room-temperature ferromagnetism of porous V-doped rutile TiO₂ microspheres, (2016) *Materials Letters*, 174, pp. 48-52., @2016 1.000
824. Medjnoun, K., Djessas, K., Gauffier, J.L., (...), Chehouani, H., Essaleh, L. Growth of nanostructured thin films of Zn_{1-x}V_xO using rf-magnetron sputtering with low and high vanadium loading: Physico-chemical characterization, optical and electrical properties evaluation, *Proceedings of 2016 International Renewable and Sustainable Energy Conference, IRSEC 2016 7984080*, pp. 40-45, @2017 1.000
825. Pandey N.K., Panwar A., Misra S.K., Application of V₂O₅-ZnO Nanocomposite for Humidity Sensing Studies, *International Journal of Materials Science and Applications*, 6(3), 119-125, @2017 1.000
826. Srinivasulu T., Saritha K., Reddy K.R., Synthesis and characterization of Fe-doped ZnO thin films deposited by chemical spray pyrolysis, *Modern Electronic Materials*, 3 (2), 76-85, @2017 1.000
827. Iqbal, A., Mahmood, A., Raza, Q., Shah, A., Rashid, R., Ali, Z., Malik, A., Aziz, U., Photoluminescence and structural analysis of wurtzite (ZnO)_{1-x}(V₂O₅)_x composite, *Journal of Semiconductors* 39(8), 082002, 2018
828. T. Sreenivasulu Reddy, G. Phaneendra Reddy, K.T. Ramakrishna Reddy, Electrical and Photoluminescence Properties of Mo-doped ZnO Films Deposited by Spray Pyrolysis, *Material science research India*, open access.
829. Tirumalareddygari, S.R., Guddeti, P.R., Ramakrishna Reddy, K.T., A critical study of the optical and electrical properties of transparent and conductive Mo-doped ZnO films by adjustment of Mo concentration, *Applied Surface Science* 458, pp. 333-343, @2018
830. Minchola Sanchez, Javier, "Efecto de la concentración de Fe en la estructura y propiedades ópticas de las películas delgadas de ZnO crecidas por rociado pirolítico" Tesis de Doctorado, 2019, @2019
- Atanasov P, Nedyalkov N., Sakai T, Obara M. Localization of the electromagnetic field in the vicinity of gold nanoparticles: Surface modification of different substrates. *Appl. Surf. Sci.*, 254, 2007, 794.**
831. Huang Y., Ma L., Li J., Zhang Z., *Nanotechnology*, 28(10), 105203 (2017), @2017 1.000
832. Jiao Yue, Tao Hai-Yany, Ji Bo-Yu, Song Xiao-Weiz, Lin Jing-Quan, *Acta Phys. Sin.*, 66, No. 14, 144203 (2017).
833. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, *Prec. Manufac.* 61, 2018, 57-63, @2018 1.000
- Atanasov P.A., Takada N., Nedyalkov N.N., Obara M.. Nanohole processing on silicon substrate by femtosecond laser pulse with localized surface plasmon polariton. *Appl. Surf. Sci.*, 253, 2007, 8304-8308.**
834. Boriskina S.V., Cooper T.A., Zeng L., Ni G., Tong J.K., Tsurimaki Y., Chen G., *Advances in Optics and Photonics*, 9(4),

- 775-827 (2017)., @2017 1.000
- 835.Sugioka K., Nanophotonics, 6, 2, 393-413 (2017)., @2017 1.000
- 836.LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manufac. 61, 2018, 57-63, @2018 1.000
- Amoruso S., Bruzzese R., Wang X, Nedyalkov N., Atanasov P.. An analysis of the dependence on photon energy of the process of nanoparticle generation by femtosecond laser ablation in a vacuum. Nanotechnology, 14, 2007.**
- 837.Förster, G.D., Lewis, L.J." Numerical study of double-pulse laser ablation of Al".Physical Review B 97(22), 224301, @2018
- Atanasov P., Nedyalkov N., Amoruso S., Bruzzese R., Wang X. Ultrashort laser ablation of nickel in vacuum. Material relaxation and nanoparticles generation. Comptes Rendus de L'Academie Bulgare des Sciences, 2008, 863.**
- 838.Tulej, M., Wiesendanger, R., Riedo, A., Knopp, G., Wurz, P.Mass spectrometric analysis of the Mg plasma produced by double-pulse femtosecond laser irradiation.Journal of Analytical Atomic Spectrometry 33(8), pp. 1292-1303, @2018 1.000
- Sakano T., Tanaka Y., Nishimura R., Nedyalkov N.N., Atanasov P.A., Saiki T., Obara M.. Surface enhanced Raman scattering properties using Au-coated ZnO nanorods grown by two-step, off-axis pulsed laser deposition. Journal of Physics D, 41, 2008, 235304.**
- 839.Taleb, A., Mesguich, F., Onfroy, T., Yanpeng, X. , Design of TiO₂/Au nanoparticle films with controlled crack formation and different architectures using a centrifugal strategy, RSC Advances, 5 (10), pp. 7007-7017 , @2015 1.000
- 840.Chen H.C., Mai F.D., Yang K.H., Tsai H.Y., Yang C.P., Chen C.C., Chen C.H., Liu Y.C., Green Chemistry, 18(10), 3098-3105 (2016)., @2016 1.000
- 841.Chun-Li Luo, Wei-Guo Yan, J. Han, W. Chen, J. Zhao, X. Wei, J. Qi, Zh. Liu, Plasmonics, 11, 131, 2016.,
- 842.Hou S., Lei H., Zeng Z., RSC Adv., 6, 59, 54371-54376 (2016).,
- 843.Sun X., Li H., Current Nanoscience, 12(2), 175-183 (2016).,
- 844.Zhao Q., Hermg T.S., Guo C.X., Zhao D., Ding J., Lu X., RSC Advances, 6(19), 15731-15734 (2016).,
- 845.Jia Xu, "Synthesis and functionalization of zinc oxide nanowires", PhD Thesis, Arizona State University, 126 pgs (2017),
- 846.Kaleh Z., Geißen S.U., Journal of Environmental Chemical Engineering, 5, 1219–1226 (2017),
- 847.Saleh S.M., Soliman A.M., Sharaf M.A., Kale V., Gadgil B., Journal of Environmental Chemical Engineering, 5, 1, 1219-1226 (2017),
- 848.Xia, M."2D materials-coated plasmonic structures for SERS applications'.Coatings 8(4), 137, @2018
- 849.Quoc Khoa Doan, Manh Hong Nguyen, Cong Doanh Sai, Van Thanh Pham, Hong Hanh Mai, Nguyen Hai Pham, Thanh Cong Bach, Viet Tuyen Nguyen, Trong Tam Nguyen, Khac Hieu Ho, Th iHa Tran, , Appl. Surf. Scie. in press, @2019
- Tanaka Y., Nedyalkov N., Obara M.. Enhanced near-field distribution inside substrates mediated with gold particle: Optical vortex and bifurcation. Appl. Phys. A, 2009, 91-98.**
- 850.LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manufac. 61, 2018, 57-63, @2018 1.000
- 851.Nikolskiy, V.P., Stegailov, V.V."Graphics-processing-unit-accelerated finite-difference time-domain simulation of the interaction between ultrashort laser pulses and metal nanoparticles". Journal of Physics: Conference Series 946(1), 012011, @2018 1.000
- Miyanishi T., Sakai T., Nedyalkov N., Obara M.. Femtosecond-laser nanofabrication onto silicon surface with near-field localization generated by plasmon polaritons in gold nanoparticles with oblique irradiation. 2009, 843-850.**
- 852.Yang, Y."Fabrication of the graphene nano devices by the top-down nanolithography techniques , Advances in Nanotechnology 18, pp. 227-253, @2017 1.000
- 853.LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, , Prec. Manufac. 61, 2018, 57-63, @2018
- Sakai T., Miyanishi T., Nedyalkov N., Nishizawa Y., Obara M.. Nano-dimple processing of silicon surfaces by femtosecond laser irradiation with dielectric particle templates in the Mie scattering domain. Journal of Physics D, 42, 2009, 025502.**
- 854.Ulmeanu, M., Petkov, P., Ursescu, D., Brousseau, E., Ashfold, M.N.R., Pattern formation on silicon by laser-initiated liquid-assisted colloidal lithography, Nanotechnology 26 (45), 455303 , @2015 1.000
- 855.Feng, D., Weng, D., Wang, B., Wang, J."Laser pulse number dependent nanostructure evolution by illuminating self-assembled microsphere array".Journal of Applied Physics 122(24), 243102, @2017
- 856.LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, Prec. Manufac. 61, 2018, 57-63, @2018 1.000
- 857.Tong, Y., Yang, N., Han, K., (...), Li, W., Xudong, R.Surface morphology of titanium alloy with monolayer microparticles under different single pulse laser energy'. Optik 174, pp. 766-775, @2018 1.000

Nedyalkov N.N., Imamova S.E., Atanasov P.A., Obara M.. Near field localization mediated by a single gold nanoparticle embedded in transparent matrix: Application for surface modification. Applied Surface Science, 255, 2009, 5125.

858. Grochowska, K., Siuzdak, K., Sliwiński, G., Properties of an indium tin oxide electrode modified by a laser nanostructured thin Au film for biosensing, *European Journal of Inorganic Chemistry*, 2015 (7), pp. 1275-1281
859. Huang Y., Ma L., Li J., Zhang Z., *Nanotechnology*, 28(10), 105203 (2017), @2017
- Tanaka Y., Obara G., Zenidaka A., Nedyalkov N.N., Terakawa M., Obara M.. Near-field interaction of two-dimensional high-permittivity spherical particle arrays on substrate in the Mie resonance scattering domain. Optics Express, 26, 2010, 27226.**
860. Yu. E. Geints, A. A. Zemlyanov, E.K. Panina, *Quantum Electronics* 46, 236, 2016, @2016 1.000
861. Yu. E. Geints, A. A. Zemlyanov, *J. Appl. Phys.* 119, 153101, 2016., @2016 1.000
862. Yu. E. Geints, A. A. Zemlyanov, *Quantum Electronics* 46, 644, 2016., @2016 1.000
863. Liu, C.-Y., Minin, O.V., Minin, I.V. "First experimental observation of array of photonic jets from saw-tooth phase diffraction grating". *EPL* 123(5), 54003, @2018 1.000
864. Liu, X., Wang, J., Li, L., (...), Huang, Z., Pan, R. "Fabrication of hexagonal star-shaped and ring-shaped patterns arrays by Mie resonance sphere-lens-lithography". *Applied Surface Science* 440, pp. 378-385, @2018 1.000
865. Sakamoto, M., Saitow, K.-I., Field enhancement of MoS₂: Visualization of the enhancement and effect of the number of layers, *Nanoscale* 10(47), pp. 22215-22222, @2018 1.000
866. Song, H., Tan, S., Emara, E.M., (...), Li, Y., Liu, H. "Effect of metal surface morphology on nano-structured patterns induced by a femtosecond laser pulse and its experimental verification". *Chinese Optics Letters* 16(7), 073202, @2018
867. Yoshihara, K., Sakamoto, M., Tamamitsu, H., Arakawa, M., Saitow, K.-I. "Extraordinary Field Enhancement of TiO₂ Porous Layer up to 500-Fold". *Advanced Optical Materials* 6(22), 1800462, @2018 1.000
868. EA Dawi, A Abdel Kade, *Assembly and Optical Properties of Metal Nanoparticles, Solid State Phenomena*, 249, 2019, 3-10, @2019 1.000
869. Geints, Yu.E., Zemlyanov, A.A., Panina, E.K., Peculiarities of the formation of an ensemble of photonic nanojets by a micro-assembly of conical particles, *Quantum Electronics* 49(3), pp. 210-215, @2019
870. Yuanwei Zheng, Gang Chen, Duli Mao, Dyson H. Tai, Lequn Liu, Resonant-filter image sensor and associated fabrication method, , @2019 1.000
- A.Og. Dikovska, G. B. Atanasova, N.N. Nedyalkov, P.K. Stefanov, P.A. Atanasov, E.I. Karakoleva, Ts.A. Andreev. Optical sensing of ammonia using ZnO nanostructure grown on a side-polished optical-fiber. Sensors and Actuators B: Chemical, 146, 2010, DOI:DOI: 10.1016/j.snb.2010.02.018, 331-336.**
871. Chen, T.-Y., Chen, H.-I., Hsu, C.-S., (...), Chou, P.-C., Liu, W.-C. Characteristics of ZnO nanorods-based ammonia gas sensors with a cross-linked configuration, *Sensors and Actuators, B: Chemical*, Volume 221, 2015, Pages 491-498
872. Dar G.N., "Metal oxide nanostructures and their applications", PhD thesis, University of Patras, Greece, 173 pages, @2015 1.000
873. M Eisa Abaker Adam "Semiconductor Nanostructures for Device Applications", PhD thesis, University of Patras, Greece, 2015,
874. Ong Y.S., Kam W., Harun S.W., Zakaria R., Mohammed W.S., "Low-Cost Transducer Based On Surface Scattering Using Side-Polished D-Shaped Optical Fibers ", *Photonics Journal, IEEE*, 7(5), 1-10,
875. Sharifpour-Boushehri, S., Hosseini-Golgoob, S.M., Sheikhi, M.-H. A low cost and reliable fiber optic ethanol sensor based on nano-sized SnO₂, *Optical Fiber Technology*, Volume 24, 2015, Pages 93-99.
876. Ahmad, R., Tripathy, N., Khan, M.Y., (...), Ahn, M.-S., Hahn, Y.-B., "Ammonium ion detection in solution using vertically grown ZnO nanorod based field-effect transistor", *RSC Advances* 6 (60), pp. 54836-54840, @2016
877. Liu, D., Han, W., Mallik, A.K., (...), Semenova, Y., Wu, Q., "High sensitivity sol-gel silica coated optical fiber sensor for detection of ammonia in water", *Optics Express* 24 (21), pp. 24179-24187, @2016
878. Rahman, M.M., Hussein, M.A., Alamry, K.A., Al Shehry, F.M., Asiri, A.M., "Sensitive methanol sensor based on PMMA-G-CNTs nanocomposites deposited onto glassy carbon electrodes", *Talanta* 150, pp. 71-80, @2016
879. Wang, Jian et. al. "Humidity sensor base on the ZnO nanorods and fiber modal interferometer", *Proceedings Volume 9685, 8th International Symposium on Advanced Optical Manufacturing and Testing Technologies: Design, Manufacturing, and Testing of Micro- and Nano-Optical Devices and Systems; and Smart Structures and Materials; 968516*, 2016, @2016 1.000
880. Zakaria, R., Mezher, M.H., Chong, W.Y., "Investigation of nonlinear optical properties on structures of silver micro-flowers", *Applied Physics A: Materials Science and Processing* 122 (7), 664, @2016 1.000
881. Zhong, Yongchun et. al. "High-sensitivity optical sensing of temperature based on side-polished fiber with polymer nanoporous cladding", *Optical Engineering*, 55(10), 106123, 2016, @2016 1.000
882. Chen, Huey-Ing. Hsiao, Cheng-Yu. Chen, Wei-Cheng. Chang, Ching-Hong. Liu, ChoubI-Ping. Kun-WeiLin, Liu, Tzu-Chieh. Wen-Chau. "Characteristics of a Pt/NiO thin film-based ammonia gas sensor". *Sensors and Actuators B: Chemical*, 2017, @2017
883. Del Villar, Ignacio J. Arregui, Francisco. Zamarreño, Carlos R. Corres, Jesus. Barriain, Candido M. Goicoechea, Javier. Elosua, Cesar. Hernaez, Miguel. Rivero, Pedro J. Socorro, Abian B. Urrutia, Aitor. Sanchez, Pedro. Zubiarte, Pablo. Lopez, Diego. De Acha, Nerea. Ascorbe, Joaquin. Matias, Ignacio R. "Optical sensors based on lossy-mode resonances". *Sensors and Actuators B: Chemical* 240. 174-185, 2017, @2017
884. Devendiran, S. Sastikumar, D. "Gas sensing based on detection of light radiation from a region of modified cladding (nanocrystalline ZnO) of an optical fiber". *Optics & Laser Technology* 89. 186-19, 2017, @2017
885. Fallah, Hoorieh. Afra, Mahmood. Mohajerani, Ezeddin. Mohammad, Waleed S. "Utilization of ZnO nanorods growth on a tip of plastic optical fiber toward the realization of low-cost CO and CO₂ gas sensor". *J of Nanophotonics*. 11(3).

- 036023, 2017, @2017
- 886.Kaur, P. Shenoy, M. R. "Design and Simulation of a Highly Sensitive Refractive Index Sensor based on Grating-assisted Strip Waveguide Directional Coupler". *Applied Physics*, 2017, @2017
- 887.Liu, Dejun. Lian, Xiaokang. Mallik, Arun Kumar. Han, Wei. Wei, Fangfang. Yuan, Jinhui. Yu, Chongxiu. Farrell, Gerald. Semenova, Yuliya. Wu, Qiang. "Detection of volatile organic compounds using an optical fiber sensor coated with a sol-gel silica layer containing immobilized Nile red". *Optical Fiber Sensors Conference*, 2017,
- 888.Narasimman, S. Balakrishnan, L. Meher, S.R. Sivacoumar, R. Alex, Z.C. "Influence of surface functionalization on the gas sensing characteristics of ZnO nanorhombuses". *Journal of Alloys and Compounds*. Volume 706. 186-197, 2017, @2017
- 889.Ozcariz, Aritz. Zamarreño, Carlos R. Zubiarte, Pablo. Arregui, Francisco J. "Is there a frontier in sensitivity with Lossy mode resonance (LMR) based refractometers?". *Scientific Reports* 7. 10280, 2017,
- 890.Tang, Jieyuan. Zhou, Junjie. Guan, Junwen. Long, Shun. Yu, Jianhui. Guan, Heyuan. Lu, Huihui. Luo, Yunhan. Zhang, Jun. Chen, Zhe. "Fabrication of Side-Polished Single Mode-Multimode-Single Mode Fiber and Its Characteristics of Refractive Index Sensing". *IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS* 23, 2017, @2017
- 891.Wang, Min. Liu, Fu-Fei. Zhou, Xian. Dai, Yu-Tang. Yang, Ming-Hong. "Optical fiber sensing technologies based on femtosecond laser micromachining and sensitive films". *Acta Phys Sin* Vol. 66. No. 7. 070703, 2017,
- 892.Chen, H.-I. Hsiao, C.-Y. Chen, W.-C. Chang, C.-H. Chou, T.-C. Liu, I.-P. Lin, K.-W. Liu, W.-C. "Characteristics of a Pt/NiO thin film-based ammonia gas sensor". *Sens & Act B: Chemical* 256. 962-967, 2018, @2018 1.000
- 893.Kaur, P. Shenoy, M. R. "Highly Sensitive Refractive Index Sensor based on Silicon Nitride Strip Waveguide Directional Coupler". *IEEE Sensors Letters* 2(1). art. num. 3500503, 2018, @2018 1.000
- 894.Lee, S. Kim, J.T. Song, Y.-W. "Graphene-Incorporated Soft Capacitors for Mechanically Adjustable Electro-Optic Modulators". *ACS Applied Materials and Interfaces* 10(47). 40781-40788, 2018,
- 895.Liu, D. Kumar, R. Wei, F. Han, W. Mallik, A.K. Yuan, J. Wan, S. He, X. Kang, Z. Li, F. Yu, C. Farrell, G. Semenova, Y. Wu, Q. "High sensitivity optical fiber sensors for simultaneous measurement of methanol and ethanol". *Sensors and Actuators B: Chemical* 271. 1-8, 2018, @2018 1.000
- 896.Zhang, W. Li, J.-Y. Xie, J. "High sensitivity refractive index sensor based on metamaterial absorber". *Progress In Electromagnetics Research M* 71. 107-115, 2018, @2018 1.000
- 897.Zhu, Y. Fu, H. Ding, J. Zhang, M. Zhang, J. Liu, Y. "Fabrication of three-dimensional zinc oxide nanoflowers for high-sensitivity fiber-optic ammonia gas sensors". *Applied Optics* 57(27). 7924-7930, 2018,
- 898.Aarya, S., Kumar, Y., Chahota, R.K., "Recent Advances in Materials, Parameters, Performance and Technology in Ammonia Sensors: A Review", *Journal of Inorganic and Organometallic Polymers and Materials*, @2019 1.000
- 899.Sun, L.-P., Yuan, Z., Huang, T., (...), Li, J., Guan, B.-O., "Ultrasensitive sensing in air based on Sagnac interferometer working at group birefringence turning point", *Optics Express* 27(21), pp. 29501-29509, @2019
- Atanasov P, Nedyalkov N., Imamova S, Miyanishi T, Obara M. Substrate nanomodification based on heating and near field properties of gold nanoparticles. *Int. J. Nanoparticles*, 3, 2010, 206.**
- 900.Boriskina S.V., Cooper T.A., Zeng L., Ni G., Tong J.K., Tsurimaki Y., Chen G., *Advances in Optics and Photonics*, 9(4), 775-827 (2017), @2017 1.000
- Nedyalkov N, Imamova S, Atanasov P, Obara M. Gold nanoparticles as nanoheaters and nanolenses in the processing of different substrate surfaces. *J. Phys. Conf. Series*, 2010**
- 901.He, Y., Li, L., Heat Transfer and Phase Change of Laser Irradiated Gold Particle with Scattering Effect, *Chinese Journal of Computational Physics* 36(2), pp. 182-188, @2019
- 902.He, Y., Li, L., Influence of particle size on the laser sintering under scattering effects, *Journal of University of Shanghai for Science and Technology*, 41(3), pp. 224-230, @2019 1.000
- Naydenova, T., Atanasov, P., Koleva, M., Nedialkov, N., Perriere, J., Defourneau, D., Fukuoka, H., Obara, M., Baumgart, C., Zhou, S., Schmidt, H.. Influence of vanadium concentration on the microstructure and magnetic properties of V-doped ZnO thin films. *Thin Solid Films*, 518, 19, 2010, 5505-5508.**
- 903.Liu, La, Min, Ma, Liu, F., Yin, H., Zhang, Y., Qiu, G., Influence of vanadium doping on the supercapacitance performance of hexagonal birnessite, *Journal of Power Sources* Volume 277, 1 March 2015, Pages 26-35
- 904.Parmod Kumar, Rahul Joshi, Anurag Gaur, Lalit Kumar and K Asokan, Impact of sintering temperature on structural, optical and ferroelectric properties of V-doped ZnO, *Materials Research Express*, Volume 2, Number 4 (2015), @2015
- Линк
- 905.Rayees Ahmad Zargar, Manju Arora, Masroor Ahmad, and Aurangzeb Khurram Hafiz, Synthesis and Characterization of Vanadium Doped Zinc Oxide Thick Film for Chemical Sensor Application, *Hindawi, Journal of Materials* Volume 2015 (2015), Article ID 196545, 6 pages, @2015 1.000
- 906.Watanabe, A. , Chiba, H. , Kawashima, T., Effect of vanadium doping on amorphization of ZnO thin films on c-plane sapphire substrate, (2016) *Thin Solid Films*, 605, pp. 73-76., @2016 1.000
- 907.Wu, J. , Li, T. , Qi, T., The microstructure, stoichiometric ratio and room temperature ferromagnetic properties of V-doped ZnO films deposited at different substrate temperatures, (2016) *Journal of Materials Science: Materials in Electronics*, 27 (1), pp. 163-170., @2016 1.000
- 908.Ilkhechi N.N., Ghobadi N., Yahyavi F., Enhanced optical and hydrophilic properties of V and La co-doped ZnO thin films, *Optical and Quantum Electronics*, 49(1), 39, @2017 1.000

909. Medjnoun K., Djessas K., Gauffier J.L., Grillo S., Solhy A., Chehouani H., Essaleh L., , Proceedings of 2016 International Renewable and Sustainable Energy Conference, IRSEC 2016 18 July 2017, Article number 7984080, Pages 40-45,
910. Mhamdi, A. , Saafi, I. , Hendi, A.A. , Lattice-related understanding regarding V-doping induced ZnO n-to-p type shift within LCT scope, (2017) Journal of Alloys and Compounds, 691, 545-553 (2017)., @2017
911. El khalidi, Z., Comini, E., Hartiti, B., Moumen, A., Munasinghe Arachchige, H.M.M., Fadili, S., Thevenin, P., Kamal, A., Effect of vanadium doping on ZnO sensing properties synthesized by spray pyrolysis, Materials and Design, 139, pp. 56-64., 2018
912. Elkar, T., Mzabi, N., Ben hassine, M., Gemeiner, P., Dkhil, B., Guerhazi, S., Guerhazi, H., Superlattices and Microstructures, 122, pp. 349-361., @2018
913. N Mamouni, J Judith Vijaya, A Benyoussef, A El Kenz, M Bououdina, Electronic structure and magnetic studies of V-doped ZnO: ab initio and experimental investigations, Bull Mater Sci (2018) 41: 87.
Imamova S., Nedyalkov N., Dikovska A., Atanasov P., Sawczak M., Jendrzejewski R., Sliwinski G., Obara M.. Near field properties of nanoparticle arrays fabricated by laser annealing of thin Au and Ag films. Applied Surface Science, 257, 3, 2010, 1075.
914. Panagiotopoulos, N.T., Kalfagiannis, N., Vasilopoulos, K.C., (...), Karakassides, M.A., Patsalas, P., , Nanotechnology 26 (20), 205603, @2015 1.000
915. Shu, H., Chang, G., Wang, Z., Zhang, Y., He, Y., Pulse laser deposition fabricating gold nanoclusters on a glassy carbon surface for nonenzymatic glucose sensing, Analytical Sciences, 31 (7), pp. 609-616 , @2015 1.000
916. Maurya S.K., Uto Y., Kashihara K., Yonekura N., Nakajima T., Applied Surface Science, 427, 961-965, 2018
917. Ma, C., Fu, K., Trujillo, M.J., (...), Bohn, P.W., Camden, J.P." In Situ Probing of Laser Annealing of Plasmonic Substrates with Surface-Enhanced Raman Spectroscopy". Journal of Physical Chemistry C 122(20), pp. 11031-11037, @2018 1.000
918. Faniayeu, I., Ishimatsu, Y., Nakajima, T., Surface plasmon resonance tuning of Ag nanoisland films using a CO2 laser, Journal of Physics D: Applied Physics 52(29), 295103, @2019 1.000
Imamova S., Dikovska A., Nedyalkov N., Atanasov P., Sawczak M., Jendrzejewski R., Sliwinski G., Obara M.. Laser nanostructuring of thin Au films for application in surface enhanced Raman spectroscopy. Journal of Optoelectronics and Advanced Materials, 12, 3, 2010, 500. ISI IF:0.429
919. Lorenz, P., Klöppel, M., Ehrhardt, M., Zimmer, K., Schwaller, P., Nanosecond laser-induced nanostructuring of thin metal layers and dielectric surfaces, Proceedings of SPIE 9351, 93511T, @2015
920. Lorenz, P., Klöppel, M., Smausz, T., Zimmer, K., Hopp, B., Time dependency of the laser-induced nanostructuring process of chromium layers with different thicknesses on fused silica, Applied Surface Science, 336, pp. 176-181 , @2015 1.000
921. Lorenz, P., Grüner, C., Ehrhardt, M., Bayer, L., Zimmer, K. , "Nanostructuring of fused silica assisted by laser-shaped metal triangles using a nanosecond laser", Physics Procedia 83, pp. 62-73, @2016 1.000
922. P. Lorenz, J. Zajadacz, M. Ehrhardt, L. Bayer, K. Zimmer, "Pattern transfer, self-organized surface nanostructuring, and nanodrilling of sapphire using nanosecond laser irradiation", Proc. SPIE 9736, 97361K, 2016, @2016 1.000
923. Lorenz, P. Grüner, C. Frost, F. Ehrhardt, M. Zimmer, K. "Nanosecond laser nanostructuring of fused silica surfaces assisted by a chromium triangle template". Applied Surface Science 418 B. 481-486, 2017, @2017 1.000
924. Lorenz, P. Zagoranskiy, I. Ehrhardt, M. Bayer, L. Zimmer, K. "Nanostructuring of sapphire using time-modulated nanosecond laser pulses". SPIE LASE Intern Soc for Optics and Photonics. 100921P-100921P, 2017, @2017 1.000
925. Lorenz, P. Zhao, X. Ehrhardt, M. Zagoranskiy, I. Zimmer, K. Han, B. "Nano- and micro-structuring of fused silica using time-delay adjustable double flash ns-laser radiation". Proceedings of SPIE 10520. 105201K, 2018, @2018 1.000
926. Lorenz, P., Zagoranskiy, I., Ehrhardt, M., Zimmer, K., Laser-induced large area sub- μm and nanostructuring of dielectric surfaces and thin metal layer, Proceedings of SPIE - The International Society for Optical Engineering, 10906, 109060T, @2019
A. S. Nikolov, N.N. Nedyalkov, R.G. Nikov, P.A. Atanasov, M.T. Alexandrov. Characterization of Ag and Au nanoparticles created by nanosecond pulsed laser ablation in double distilled water. Applied Surface Science, 257, 12, Elsevier, 2011, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2010.10.146, 5278-5282. SJR:0.913, ISI IF:2.103
927. Comparison Between Silver and Gold Nanoparticles Prepared by Pulsed Laser Ablation in Distilled Water, Elmira Solati, Davoud Dorrnian, Journal of Cluster Science, May 2015, Volume 26, Issue 3, pp 727-742.,
928. Controlled Migration of Cells on Mechanically, Physically and Chemically Patterned Biomaterials, G de Vicente Lucas, Berlin 2015 магистърска Дипломна работа, @2015 Линк
929. Laser ablation of titanium alloy under a thin and flowing water layer, Tangwarodomnukun, V. , Likhitangsuwat, P., Tevinpibanphan, O., Dumkum, C. International Journal of Machine Tools and Manufacture, Volume 89, February 2015, Pages 14-28., @2015
930. Metal-core@metal oxide-shell nanomaterials for gas-sensing applications: a review, A Mirzaei, K Janghorban, B Hashemi, G Neri, Journal of Nanoparticle Research, September 2015, 17:371., @2015
931. Synthesis and characterization of PVK/AgNPs nanocomposites prepared by laser ablation, Abd El-kader, F.H., Hakeem, N.A., Elashmawi, I.S., Menazea, A.A., Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, Volume 138, 5 March 2015, Pages 331-339., @2015
932. Synthesis of silver nanoparticles by laser ablation in ethanol: A pulsed photoacoustic study, M.A. Valverde-Alva, T.

- García-Fernández, M. Villagrán-Muniz, C. Sánchez-Aké, R. Castañeda-Guzmán, E. Esparza-Alegria, C.F. Sánchez-Valdés, J.L. Sánchez Llamazares, C.E. Márquez Herrera, *Applied Surface Science* 355 (2015) 341–349.
933. Investigation on the influence of underwater laser assisted micromachining process of NiTi (sheet) shape memory alloy, M.Tech.Thesis, Jitesh Vitthal Bhojar, 2016.
934. Lárez, J., Castell, R., Rojas, C., "Colloids and composite materials Au/PVP and Ag/PVP generated by laser ablation in polymeric liquid environment", *Revista Mexicana de Física*, Volume 62, Issue 3, 2016, Pages 188-192.
935. Mahdiah, Mohammad Hossein, Mozaffari, Hossein, "Characteristics of colloidal aluminum nanoparticles prepared by nanosecond pulsed laser ablation in deionized water in presence of parallel external electric field", *PHYSICS LETTERS A* Volume: 381 Issue: 38, 3314-3323, 2017,
936. Mirzaei, A., Janghorban, K., Hashemi, B. et al., "Characterization and optical studies of PVP-capped silver nanoparticles", *JOURNAL OF NANOSTRUCTURE IN CHEMISTRY* Volume: 7 Issue: 1, Pages: 37-46, Published: MAR 2017, @2017
937. Moura, C.G., Pereira, R.S.F., Andritschky, M., Lopes, A.L.B., Grilo, J.P.D., do Nascimento, R.M., Silva, F.S., "Effects of laser fluence and liquid media on preparation of small Ag nanoparticles by laser ablation in liquid", *OPTICS AND LASER TECHNOLOGY* 97, 20-28, 2017, DOI: 10.1016/j.optlastec.2017.06.007, @
938. Obaid, N.M., Al-Dahash, G., Majeed, H.A., Hayder, A.M., "Behavior of localized surface plasmon resonance with shape, size, liquid medium and magnetic field in Au:Ag Alloy", *Journal of Engineering and Applied Sciences* 13(18), pp. 7583-7589 (2018), @2018
939. Sportelli, M.C., Izzi, M., Volpe, A., Clemente, M., Picca, R.A., Ancona, A., Lugarà, P.M., Palazzo, G., Cioffi, N., "The pros and cons of the use of laser ablation synthesis for the production of silver nano-antimicrobials", *Antibiotics* (Review) (Open Access) Volume 7, Issue 3, September 2018, Article number 67, @2018 Линк
940. Hilario Martines-Arano, Blanca Estela García-Pérez, Mónica Araceli Vidales-Hurtado, Martín Trejo-Valdez, Luis Héctor Hernández-Gómez and Carlos Torres-Torres, "Chaotic Signatures Exhibited by Plasmonic Effects in Au Nanoparticles with Cells", *Sensors* 19(21), 4728 (2019), @2019 Линк
941. Villegas Borrero, N., Clemente da Silva Filho, J., Ermakov, V., & Marques, F. (n.d.). Silver nanoparticles produced by laser ablation for a study on the effect of SERS with low laser power on N719 dye and Rhodamine-B. *MRS Advances*, 4 (11-12) (2019) 723-731., @
Tanaka Y., Terakawa M., Obara M., Nedyalkov N., Atanasov P.. Plasmonic nanopatterning of the material surface mediated with gold nanoparticles excited by a femtosecond laser pulse. Nova publishing, 2011
942. Thambiraj, S., Hema, S., Shankaran, D.R. "An overview on applications of gold nanoparticle for early diagnosis and targeted drug delivery to prostate cancer". *Recent Patents on Nanotechnology* 12(2), pp. 110-131, @2018 1.000
Amoruso S., Nedyalkov N.N., Wang X., Ausanio G., Bruzzese R., Atanasov P.. Ultrafast laser ablation of gold thin film targets. J. Appl. Phys., 110, 2011, 12430. ISI IF:2.1
943. Caricato A.P., Luches A., Martino M., "Laser fabrication of nanoparticles", *Handbook of Nanoparticles*, 407-428 (2016), @2016 1.000
944. St. Scaramuzza, M. Zerbetto, V. Amendola, *J. Phys. Chem. C*, 2016, 120 (17), pp 9453–9463, @2016 1.000
945. Hartley N.J., Ozaki N., Matsuoka T., Albertazzi B., Faenov A., Fujimoto Y., Habara H., Harmand M., Inubushi Y., Katayama T., Koenig M., *Applied Physics Letters*, 110(7), 071905 (2017), @2017 1.000
946. Wang X.W., Kuchmizhak A.A., Li X., Juodkasis S., Vitrik O.B., Kulchin Y.N., Zhakhovsky V.V., Danilov P.A., Ionin A.A., Kudryashov S.I., Rudenko A.A., *Physical Review Applied*, 8(4), 044016 (2017), @2017 1.000
Grochowska K., Nedyalkov N., Atanasov P., Sliwinski G.. Nanostructuring of thin Au films by means of short UV laser pulses. 3, Opto-electronics Review, 2011, 327. ISI IF:1.667
947. Z. A. Said Mahraz, M.R. Sahar, S.K. Ghoshal, , *Materials Science Forum*, 846, 85-90, 2016, @2016 1.000
Obara G., Tanaka Y., Nedyalkov N.N., Terakawa M., Obara M.. Direct observation of surface plasmon far field for regular surface ripple formation by femtosecond laser pulse irradiation of gold nanostructures on silicon substrates. Applied Physics Letters, 99, 2011, 061106. ISI IF:3.142
948. Y. Zhu, J. Fu, Ch. Zheng, Zh. Ji, *Optics & Laser Technology*, 83, 21–27, 2016., @2016 1.000
949. Goodarzi, R., Hajiesmaeilbaigi, F. "Circular ripple formation on the silicon wafer surface after interaction with linearly polarized femtosecond laser pulses in air and water environments". *Optical and Quantum Electronics* 50(7), 299, @2018 1.000
950. Oh, H., Lee, J., Seo, M., (...), Byun, J.Y., Lee, M. "Laser-Induced Dewetting of Metal Thin Films for Template-Free Plasmonic Color Printing" *ACS Applied Materials and Interfaces* 10(44), pp. 38368-38375, @2018 1.000
951. Fuentes-Edfuf, Y., Sánchez-Gil, J.A., Florian, C., (...), Solis, J., Siegel, J., *Surface Plasmon Polaritons on Rough Metal Surfaces: Role in the Formation of Laser-Induced Periodic Surface Structures*, *ACS Omega*, 4(4), pp. 6939-6946, @2019 1.000
952. Rudenko, A., Mauclair, C., Garrelie, F., Stoian, R., Colombier, J.P., *Light absorption by surface nanoholes and nanobumps*, *Applied Surface Science*, 470, pp. 228-233, @2019 1.000
Dikovska A. Og., Nedyalkov N.N., Atanasov P.A.. Fabrication of ZnO nanorods using metal nanoparticles as growth nuclei. 176, Elsevier, 2011, DOI:DOI: 10.1016/j.mseb.2011.02.030, 1548-1551. ISI IF:1.518

953. Kilic M.E., "Structural properties of binary ZnO alloy nanosystems: molecular-dynamics simulations", PhD Thesis, Middle East Technical Uni., Turkey, 227 pgs., @2015 1.000
954. de Mesa, J.A., Amo, A.M., Miranda, J.J.C., (...), Sarmago, R.V., Garcia, W.O., "Effects of deposition pressure and target-substrate distance on growth of ZnO by femtosecond pulsed laser deposition", *Journal of Laser Micro Nanoengineering* 11 (1), pp. 21-24, @2016 1.000
- Obara G., Maeda N., Miyanishi T., Terakawa M., Nedyalkov N.N., Obara M. Plasmonic and Mie scattering control of far-field interference for regular ripple formation on various material substrates. *Optics Express*, 19, 2011, 19093. ISI IF:3.488**
955. Bonse, J., Koter, R., Hartelt, M., Spaltmann, D., Pentzien, S., Höhm, S., Rosenfeld, A., Krüger, J, Tribological performance of femtosecond laser-induced periodic surface structures on titanium and a high toughness bearing steel, *Applied Surface Science* 336, pp. 21-27, @2015 1.000
956. Ji, X., Jiang, L., Li, X., Wang, A., Lu, Y., Femtosecond laser-induced cross-periodic structures on a crystalline silicon surface under low pulse number irradiation, *Applied Surface Science* 326, pp. 216-221, @2015 1.000
957. Dvořák P., Édes Z., Kvapil M., Šamořil T., Ligmajer F., Hrtoň M., Kalousek R., Křápek V., Dub P., Spousta J., Varga P., Šíkola T., *Optics Express* 25, 16560-16573 (2017), @2017 1.000
958. Havryliuk O.O., Semchuk O.Yu., *Ukr. J. Phys.* 62 20-32 (2017), @2017 1.000
959. Song, H., Tan, S., Emara, E.M., (...), Li, Y., Liu, H. "Effect of metal surface morphology on nano-structured patterns induced by a femtosecond laser pulse and its experimental verification". *Chinese Optics Letters* 16(7), 073202, 2018
960. Li, Y., Wu, Q., Li, Q., (...), Yao, J., Xu, J., Analysis on the evolution of subwavelength ripples fabricated by ultrafast laser pulses on lithium niobate crystal surface, *Proceedings of SPIE - The International Society for Optical Engineering*, 10842, 108420A, @2019 1.000
961. Rudenko, A., Mauclair, C., Garrelie, F., Stoian, R., Colombier, J.P., Light absorption by surface nanoholes and nanobumps, *Applied Surface Science*, 470, pp. 228-233, @2019 1.000
- Nedyalkov N.N., Imamova S., Atanasov P.A., Tanaka Y., Obara M. Interaction between ultrashort laser pulses and gold nanoparticles: Nanoheater and nanolens effect. *Journal of Nanoparticle Research*, 5, 2011, 2181. ISI IF:2.184**
962. Boutopoulos, C., Hatef, A., Fortin-Deschênes, M., Meunier, M., Dynamic imaging of a single gold nanoparticle in liquid irradiated by off-resonance femtosecond laser, *Nanoscale* 7 (27), pp. 11758-11765, @2015 1.000
963. Schomaker, M., Heinemann, D., Kalies, S., Meyer, H., Heisterkamp, A., Characterization of nanoparticle mediated laser transfection by femtosecond laser pulses for applications in molecular medicine, *Journal of Nanobiotechnology* 13 (1), 10, @2015 1.000
964. Schomaker, M., Killian, D., Willenbrock, S., Escobar, H.M., Heisterkamp, A., Biophysical effects in off-resonant gold nanoparticle mediated (GNOME) laser transfection of cell lines, primary- and stem cells using fs laser pulses, *Journal of Biophotonics*, 8 (8), pp. 646-658, @2015 1.000
965. J. Krawinkel, M. Leilani Torres-Mapa, K. Werelius, Al. Heisterkamp, St. Rüttermann, G. E. Romanos, S. Gerhardt-Szép, *Materials*, 9, 397, 2016., @2016 1.000
966. L. Li, L. Zhou, Y. Shan, M. Yang, *Journal Numerical Heat Transfer A*, 69, 859-873, 2016., @2016 1.000
967. V. K. Pustovalov, *RSC Adv.*, 6, 81266-81289, 2016, @2016 1.000
968. Marsico A.L.M., "Analysis of gold nanoparticles and their use with laser desorption/ionization mass spectrometry", PhD Thesis, Uni. of Massachusetts, 134 pgs. (2017), @2017 1.000
969. LOU Qianfeng, LIU Ziyuan, XUE Lei, TAO Haiyan, LIN Jingquan, Femtosecond Laser Near-Field Process by Nanospheres Beyond Diffraction Limit: Theoretical and Experimental Development, *Prec. Manuf.* 61, 2018, 57-63, @2018 1.000
970. Magnozzi, M., Ferrera, M., Mattera, L., Canepa, M., Bisio, F., Plasmonics of Au nanoparticles in a hot thermodynamic bath, *Nanoscale*, 11(3), pp. 1140-1146, @2019 1.000
971. Magnozzi, M., Proietti Zaccaria, R., Catone, D., (...), Canepa, M., Bisio, F., Interband Transitions Are More Efficient Than Plasmonic Excitation in the Ultrafast Melting of Electromagnetically Coupled Au Nanoparticles, *Journal of Physical Chemistry C* 123(27), pp. 16943-16950, @2019 1.000
- Nedyalkov N.N., Imamova S.E., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., Obara M. Interaction of gold nanoparticles with nanosecond laser pulses: Nanoparticle heating. *Applied Surface Science*, 275, 2011, 5456. ISI IF:2.711**
972. Attia, Y.A., Flores-Arias, M.T., Nieto, D., De La Fuente, G.F., López-Quintela, M.A., Transformation of Gold Nanorods in Liquid Media Induced by nIR, Visible, and UV Laser Irradiation, *Journal of Physical Chemistry C*, 119 (23), pp. 13343-13349, @2015 1.000
973. Haas, K.M., Lear, B.J., Billion-fold rate enhancement of urethane polymerization via the photothermal effect of plasmonic gold nanoparticles, *Chemical Science* 6 (11), pp. 6462-6467, @2015 1.000
974. Vedova, P.D., Ilieva, M., Zhurbenko, V., Dufva, M., Hansen, O., Gold nanoparticle-based sensors activated by external radio frequency fields, *Small*, 11 (2), pp. 248-256, @2015 1.000
975. Jiao, Z., He, P., *J. Nanosci. Nanotechnol.*, 16 (8), pp. 8622-8625, 2016, @2016 1.000
976. Carrillo-Cazares, A., Jiménez-Mancilla, N.P., Luna-Gutiérrez, M.A., Isaac-Olivé, K., Camacho-López, M.A. "Study of the Optical Properties of Functionalized Gold Nanoparticles in Different Tissues and Their Correlation with the Temperature Increase". *Journal of Nanomaterials* 2017, 3628970, @2017 1.000
977. Larson C., Li Y., Wu W., Reisler H., Wittig C., *The Journal of Physical Chemistry A*, 121 (26), 4968-4981 (2017),

@2017 1.000

978. Marsico A.L.M., "Analysis of gold nanoparticles and their use with laser desorption/ionization mass spectrometry", PhD Thesis, Uni. of Massachusetts, 134 pgs. (2017), @2017 1.000
979. Bisoyi, H.K., Urbas, A.M., Li, Q. "Soft Materials Driven by Photothermal Effect and Their Applications". *Advanced Optical Materials* 6(15), 1800458, @2018 1.000
980. Cesca, T., Perotto, G., Pellegrini, G., (...), Kalinic, B., Mattei, G. "Rare-earth fluorescence thermometry of laser-induced plasmon heating in silver nanoparticles arrays". *Scientific Reports* 8(1), 13811, @2018 1.000
981. Darvot, C., Hardy, P., Meunier, M., Laser-induced plasmon-mediated treatment of retinoblastoma in viscous vitreous phantom, *Journal of Biophotonics* <https://doi.org/10.1002/jbio.201900193>, 2019
982. Rajabpour, A., Seif, R., Arabha, S., (...), Merabia, S., Hassanali, A., Thermal transport at a nanoparticle-water interface: A molecular dynamics and continuum modeling study, *Journal of Chemical Physics*, 150(11), 114701, @2019

R.G. Nikov, A. S. Nikolov, N.N. Nedyalkov, I.G. Dimitrov, P.A. Atanasov, M.T. Alexandrov. Stability of contamination-free gold and silver nanoparticles produced by nanosecond laser ablation of solid targets in water. *Applied Surface Science*, 258, 23, Elsevier, 2012, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2011.12.040, 9318-9322. SJR:0.913, ISI IF:2.827

983. Lu, L., Sevonkaev, I., Kumar, A., Goia, D.V., "Strategies for tailoring the properties of chemically precipitated metal powders", *Powder Technology*, Volume 261, July 2014, Pages 87-97., @2014
984. Elmira Solati, Davoud Dorrani, "Comparison Between Silver and Gold Nanoparticles Prepared by Pulsed Laser Ablation in Distilled Water", *Journal of Cluster Science*, May 2015, Volume 26, Issue 3, pp 727-742., @2015
985. H. Qi, D. Liu, F. Luo, L. Teng, F. Sun, "Controllable Synthesis of PS@Au Core-Shell Composite Particles and the Effect of Diameter on Catalytic Performance", *RARE METAL MATERIALS AND ENGINEERING* 44(4):887-891, April 2015.
986. Kassavetis, S., Kaziannis, S., Pliatsikas, N., Avgeropoulos, A., Karantzalis, A.E., Kosmidis, C., Lidorikis, E., Patsalas, P., "Formation of plasmonic colloidal silver for flexible and printed electronics using laser ablation", *Applied Surface Science*, Volume 336, 1 May 2015, Pages 262-266.,
987. Zhao Wang, Yu Zhu, "A simple plasma reduction for synthesis of Au and Pd nanoparticles at room temperature", *Chinese Journal of Chemical Engineering*, Volume 23, Issue 6, June 2015, Pages 1060-1063.,
988. Abdulateef, S.A., Matjafri, M.Z., Seeni, A., Omar, A.F., Ahmed, N.M., Mutter, K.N., "Study of laser intensity on gold nano-particles preparation in a harsh environment", 2016 IEEE 6th International Conference on Photonics, ICP 2016, 12 July 2016, Article number 7510008.
989. Abubaker Hassan Hamad, Khawla Salah Khashan, Aseel Abdulkreem Hadi, "Laser Ablation in Different Environments and Generation of Nanoparticles", "Applications of Laser Ablation - Thin Film Deposition, Nanomaterial Synthesis and Surface Modification", December 21, 2016 under CC BY 3.0 license.
990. Annette Barchanski, "Laser-Generated Functional Nanoparticle Bioconjugates Design for Application in Biomedical Science and Reproductive Biology", Springer Spektrum, Hannover, Germany 2016.
991. Çiftçi, H., Alver, E., Çelik, F., Metin, A.Ü., Tamer, U., "Non-enzymatic sensing of glucose using a glassy carbon electrode modified with gold nanoparticles coated with polyethyleneimine and 3-aminophenylboronic acid", *Microchimica Acta*, Volume 183, Issue 4, 1 April 2016, Pages 1479-1486.,
992. Lárez, J., Castell, R., Rojas, C., "Colloids and composite materials Au/PVP and Ag/PVP generated by laser ablation in polymeric liquid environment", *Revista Mexicana de Física*, Volume 62, Issue 3, 2016, Pages 188-192.
993. Aroca R.F., "Plasmon-enhanced luminescence with shell-Isolated nanoparticles" in *Surface Plasmon Enhanced, Coupled and Controlled Fluorescence*, Willey (2017).
994. Bao H., Zhang H., Zhou L., Liu G., Li Y., Cai W., "Ultrathin Oxide Layer-Wrapped Noble Metal Nanoparticles via Colloidal Electrostatic Self-Assembly for Efficient and Reusable Surface Enhanced Raman Scattering Substrates" *Langmuir* 33 (45), 12934 - 12942, (2017).
995. Haoming Bao, Hongwen Zhang, Guangqiang Liu and Weiping Cai, "Ultrathin Oxide Wrapping of Plasmonic Nanoparticles via Colloidal Electrostatic Self-Assembly and their Enhanced Performances", <http://dx.doi.org/10.5772/intechopen.79573> *Langmuir* 33(45) · October 2017.
996. Haoming Bao, Yingying Wanga, Hongwen Zhanga, Qian Zhao, Guangqiang Liu, Weiping Cai, "Ultrathin tin oxide layer-wrapped gold nanoparticles induced by laser ablation in solutions and their enhanced performances", *Journal of Colloid and Interface Science*, Volume 489, 1 March 2017, Pages 92-99.,
997. Yang, H., Chen, C., Zhang, G., Lan, S., Chen, H., Guo, T., "Solution-processed organic thin-film transistor arrays with the assistance of laser ablation", *ACS Applied Materials and Interfaces* Volume 9, Issue 4, 1 February 2017, Pages 3849-3856.,
998. A. Timoszyk, "A review of the biological synthesis of gold nanoparticles using fruit extracts: scientific potential and application", *Bulletin of Materials Science* (2018) 41:154.
999. R.E. Góes, Detection of glyphosate in water by pattern recognition in laser ablated silver nanoparticles assisted spectroscopy, DOCTORATE THESIS (2018), @2018
1000. W. Aldama-Reyna, Jhenry F. Agreda-Delgado, M. A. Valverde-Alva and Luis M. Angelats-Silva, "Photoacoustic study of Changes in Optical Properties of Colloids with Silver Nanoparticles Produced by Laser Ablation", *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 13, Number 2 (2018) pp. 1408-1414,
1001. Monireh Ganjali, Mansoureh Ganjali, Somayeh Asgharpour, Recent Advances in the Design of Nanocomposite Materials via Laser Techniques for Biomedical Applications, in *Advances in Nanostructured Composites: Volume 2:*

Applications of Nanocomposites, CRC Press, (2019).

Nedyalkov, N. N., Nikov, Ru., Dikovska, A. O., Atanasov, P. A., Obara, G., Obara, M.. Laser annealing of bimetal thin films: A route of fabrication of composite nanostructures. Applied Surface Science, 258, 23, Elsevier, 2012, ISSN:0169-4332, DOI:10.1016/j.apsusc.2011.12.023, 9162-9166. SJR:0.913, ISI IF:2.711

1002. Зленко, В.О. "Структурні характеристики і магнітооптичні властивості масивів наночастинок Co і Ni, ортиманих методом термодиспергування". Суми 2014,
1003. Monitoring Cluster Ions Derived from Aptamer-Modified Gold Nanofilms under Laser Desorption/Ionization for the Detection of Circulating Tumor Cells, Wei-Jane Chiu, Tsung-Kai Ling, Hai-Pang Chiang, Han-Jia Lin, Chih-Ching Huang, ACS Applied Materials & Interfaces, 7(16), 8622–8630, 2015
1004. Heinz, Maximilian. "Formation of bimetallic gold-silver nanoparticles in glass by UV laser irradiation". J. Alloy. Comp. 767. 1253-1263, 2018,
1005. Maurya, Sandeep Kumar. "Rapid formation of nanostructures in Au films using a CO2 laser". Applied Surface Science 427 Part B. 961-965, 2018,
Nedyalkov, N. N., Dikovska, A., Dimitrov, I., Nikov, R., Atanasov, P. A., Toshkova, R. A., Gardeva, E. G., Yossifova, L. S., Alexandrov, M. T.. Far- and near-field optical properties of gold nanoparticle ensembles. Quantum Electronics, 42, 12, Turpion Ltd., 2012, ISSN:1063-7818, DOI:10.1070/QE2012v042n12ABEH014932, 1123-1127. SJR:0.509, ISI IF:0.978
1006. Optical Detection of core-gold nanoshells inside biosystems, M. D'Acunto, S. Dinarelli, A. Cricenti, M. Luce, Nanospectroscopy, 1, 97–105, 2015, @2015
1007. Theory of near-field detection of core-gold nanoshells inside biosystems, M D'Acunto, A Cricenti, M Luce, S Dinarelli, COMPUTER MODELLING & NEW TECHNOLOGIES, 19(1A), 29-34, 2015, @2015
1008. Ultra small clusters of gold nanoshells detected by SNOM, A. Cricenti, M. Luce, D. Moroni, O. Salvetti, M. D'Acunto, Opto-Electronics Review, 23, 39-45, 2015,
1009. Two-Photon Luminescence of Single Colloidal Gold Nanorods: Revealing the Origin of Plasmon Relaxation in Small Nanocrystals, C. Molinaro, Y. El Harfouch, E. Palleau, F. Eloi, S. Marguet, L. Douillard, F. Charra, C. Fiorini-Debuisschert, J. Phys. Chem. C, 120 (40), 23136–23143, 2016,
A.O. Dikovska, N.N. Nedyalkov, S.E. Imamova, G.B. Atanasova, P.A. Atanasov. Au-coated ZnO nanostructures for surface enhanced Raman spectroscopy applications. Quantum Electronics, 3, 2012, DOI:DOI: 10.1070/QE2012v042n03ABEH014761, 258-261. ISI IF:0.897
1010. Jayram, N.D., Sonia, S., Poongodi, S., (...), Ponpandian, N., Viswanathan, C. Superhydrophobic Ag decorated ZnO nanostructured thin film as effective surface enhanced Raman scattering substrates, RSC Advances, Volume 5, Issue 66, 2015, Pages 53524-53528.,
1011. Zhao, K., Lin, J., Guo, L. ZnO/Ag porous nanosheets used as substrate for surface-enhanced Raman scattering to detect organic pollutant, Applied Surface Science, Volume 355, 15 November 2015, Pages 969-977.
1012. Shaik, U.P., Hamad, S., Mohiddon, Md.A., Soma, V.R., Ghanashyam Krishna, M., "Morphologically manipulated Ag/ZnO nanostructures as surface enhanced Raman scattering probes for explosives detection", Journal of Applied Physics 119 (9), 093103, @2016
A.S. Nikolov, N.N. Nedyalkov, R.G. Nikov, P.A. Atanasov, M.T. Alexandrov, D.B. Karashanova. Investigation of Ag nanoparticles produced by nanosecond pulsed laser ablation in water. Applied Physics A: Materials Science and Processing, 109, 2, Springer Heidelberg, 2012, ISSN:0947-8396, DOI:DOI: 10.1007/s00339-012-7094-0, 315-322. SJR:0.582, ISI IF:1.545
1013. Synthesis of TiO2@Ag nano-composite particles using pulsed laser gas phase evaporation-liquid collection, Chen, S.Y., Wang, J.H., Zhou, X., Liang, J., Liu, C.S., Applied Mechanics and Materials, Volume 670-671, 2014, Pages 22-25.,
1014. Chen, S., Wang, T., Li, Y., Liang, J., Wellburn, D., Liu, C., „The structure and magnetic properties of Ag-Ni-SiO2 nanocomposite particles produced by pulsed laser control synthesis”, MATERIALS RESEARCH EXPRESS 2 (1), Article number 015018, Published: JAN 2015,
1015. Laser-Generated Bimetallic Ag-Au and Ag-Cu Core-Shell Nanoparticles for Refractive Index Sensing, M. P. Navas & R. K. Soni, Plasmonics, June 2015, Volume 10, Issue 3, pp 681-690
1016. McLeod, O., Dunér, P., Samnegård, A., Tornvall, P., Nilsson, J., Hamsten, A., Bengtsson, E., “Autoantibodies against basement membrane collagen type IV are associated with myocardial infarction”, IJC HEART & VASCULATURE 6, 42–47 Published: 2015,
1017. Preparation of Silver Nanoparticles and Study the Optical and Antibacterial Properties, A kadhim AL-Ogaili, AK Ali, TH Ali, Eng. & Tech. Journal Vol.33, Part (B), No.3, 478-487, 2015.,
1018. Brunella Perito Emilia Giorgetti, Paolo Marsili, and Maurizio Muniz-Miranda, "Antibacterial activity of silver nanoparticles obtained by pulsed laser ablation in pure water and in chloride solution", Beilstein Journal of Nanotechnology, Volume 7, Issue 1, 2016, Pages 465-473. DOI: 10.3762/bjnano.7.40.
1019. Galindo, D., Utrera, O., Mejía, R., Aranda, M., “Silver Nanoparticles by Laser Ablation Confined in Alcohol Using an Argon Gas Environment”, JOURNAL OF LASER MICRO NANOENGINEERING 11.2 , 158-163, Published: Jul 2016,
1020. M. C. Sportely, M. Clemente, M. Izzi, A. Volpe, A. Ancona, R. A. Picca, G. Palazzo, N. Cioffi, “Exceptionally stable silver nanoparticles synthesized by laser ablation in alcoholic organic solvent”, Colloids and Surfaces A 559

(2018) 148–158.,

1021. Sportelli, M.C., Izzi, M., Volpe, A., Clemente, M., Picca, R.A., Ancona, A., Lugarà, P.M., Palazzo, G., Cioffi, N., "The pros and cons of the use of laser ablation synthesis for the production of silver nano-antimicrobials", *Antibiotics* (Review) (Open Access) Volume 7, Issue 3, September 2018, Article number 67,
1022. W. Aldama-Reyna, Jhenry F. Agreda-Delgado, M. A. Valverde-Alva and Luis M. Angelats-Silva, "Photoacoustic study of Changes in Optical Properties of Colloids with Silver Nanoparticles Produced by Laser Ablation", *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 13, Number 2 (2018) pp. 1408-1414,
1023. Fawaz M. Abdullah, Abdulrahman M. Al-Ahmari, Saied Darwish, "Applications of Nanoparticles via Laser Ablation in Liquids: a review", *Proceedings of the International Conference on Industrial Engineering and Operations Management* Volume 2019, Issue MAR, 2019, Pages 2043-2053.
1024. R.M. Baice, Generation of ultra-fine nanoparticles by laser ablation in liquid, Doctoral thesis, (2019),
1025. Rui Zhou, Yuanchao Yin, Deng Long, Jingqin Cui, Huangping Yan, Wanshan Liu, Jia Hong Pan, "PVP-assisted laser ablation growth of Ag nanocubes anchored on reduced graphene oxide (rGO) for efficient photocatalytic CO₂ reduction", *Progress in Natural Science: Materials International* 29(6), 660-666, 2019, <https://doi.org/10.1016/j.pnsc.2019.11.001>.
- Koleva, M.E., Dikovska, A.O., Nedyalkov, N.N., Atanasov, P.A. Structural and photoluminescent properties of Ag/ZnO nanocomposite heterostructures. Journal of Physics: Conference Series, 356, 1, IOP, 2012, ISSN:17426588, DOI:10.1088/1742-6596/356/1/012002**
1026. Zhao, Y., Li, S., Zeng, Y., Jiang, Y. Synthesis and properties of Ag/ZnO core/shell nanostructures prepared by excimer laser ablation in liquid, *APL Materials* Volume 3, Issue 8, 1 August 2015, Article number 086103.,
1027. Durso, L., Santangelo, S., Spadaro, S., Scibilia, S., Mezzasalma, A.M., Neri, F., Fazio, E., (2016) *Journal of Luminescence*, 178, pp. 204-209.,
1028. Sharma, S.K., Blanton, T., Weston, J., Sharp blue emission of ZnO crystals by supercritical CO₂ processing, (2016), *Journal of Supercritical Fluids*, Volume 110, April 2016, Pages 176-182.
1029. Elemike, E.E., Onwudiwe, D.C., Wei, L., Lou, C., Zhao, Z., Synthesis of nanostructured ZnO, AgZnO and the composites with reduced graphene oxide (rGO-AgZnO) using leaf extract of *Stigmaphyllon ovatum*, 2019, *Journal of Environmental Chemical Engineering*, 7(3), 103190.,
- M.E. Koleva, A.Og. Dikovska, N.N. Nedyalkov, P.A. Atanasov, I.A. Bliznakova. Enhancement of ZnO photoluminescence by laser nanostructuring of Ag underlayer. 258, 23, Elsevier, 2012, ISSN:01694332, DOI:10.1016/j.apsusc.2012.01.052, 9181-9185. SJR:0.913, ISI IF:3.781**
1030. Han, F., Yang, S.a, Jing, W., Wang, L., Li, L., Jiang, Z., Gao, F., Effect of Ag thin films on the photoluminescence of ZnO films, *Journal of Nanoscience and Nanotechnology* Volume 15, Issue 5, 1 May 2015, Pages 3796-3801.,
1031. Machnev, A.A., Shuliatjev, A.S., Mironov, A.E., Gromov, D.G., Mitrokhin, V., Mel'nikov, I.V., Haus, J.W., Anomalous transmission of Ag/ZnO nanocomposites prepared by a magnetron sputtering, *Proceedings of SPIE - The International Society for Optical Engineering* Volume 9364, 2015, Article number 936420, 390.
- Shulyat'ev, A.S., Machnev, A.A., Gromov, D.G.a Trifonov, A.Y., Mitrokhin, V.P., Mel'nikov, I.V., Anomalous transmission of disordered arrays of silver nanoclusters in the near- and mid-IR region, *Technical Physics Letters*, Volume 41, Issue 5, 17 May 2015, Pages 425-428,
1032. Thirumala Rao, G., Babu, B., Joyce Stella, R., Pushpa Manjari, V., Venkata Reddy, C., Shim, J., Ravikumar, R.V.S.S.N., Synthesis and characterization of VO₂⁺ doped ZnO-CdS composite nanopowder, *Journal of Molecular Structure*, Volume 1081, 5 February 2015, Pages 254-259,
1033. Touam, T., Boudjouan, F., Chelouche, A., Khodja, S., Dehimi, M., Djouadi, D., Solard, J., Fischer, A., Boudrioua, A., Effect of silver doping on the structural, morphological, optical and electrical properties of sol-gel deposited nanostructured ZnO thin films, *Optik*, Volume 126, Issue 24, December 2015, Pages 5548-5552.,
1034. L. D'Urso, S. Santangelo, S. Spadaro, S. Scibilia, A.M. Mezzasalma, F. Neri, E. Fazio, "Enhanced optical response of ZnO/Ag nanocolloids prepared by a picosecond laser", Vol. 178, *Journal of Luminescence*, @2016
1035. Lixue Yang, Yinzhou Yan, Qiang Wang, Yong Zeng, Feifei Liu, Lin Li, Yan Zhao, and Yijian Jiang, "Sandwich-structure-modulated photoluminescence enhancement of wide bandgap semiconductors capping with dielectric microsphere arrays", *Optics Express* Vol. 25, Issue 6, pp. 6000-6014, @2017 1.000
1036. P.Dhatshanamurthi, M.Shanthi, "Enhanced photocatalytic degradation of azo dye in aqueous solutions using Ba@Ag@ZnO nanocomposite for self-sensitized under sunshine irradiation", *International Journal of Hydrogen Energy*, Volume 42, Issue 8, Pages 5523-5536, @2017 1.000
1037. R.Sreej, Sreedharan, R.Reshmi Krishnan, G.Sanal Kumar, V.S.Kavitha, S.R.Chalana, R.Jolly, Bose, S.Suresh, R.Vinodkumara, S.K.Sudheer, V.P.Mahadevan Pillai, "Bright visible luminescence from highly textured, transparent Dy³⁺ doped RF sputtered zinc oxide films", *Journal of Alloys and Compounds*, Volume 721, Pages 661-673, @2017 1.000
1038. Swapn Kumar Ghosh and Sujoy Pal, "Growth Promotion and Fusarium Wilt Disease Management Ecofriendly in Chickpea by *Trichoderma asperellum*", *International Journal of Current Research and Academic Review* ISSN: 2347-3215 (Online), Volume 5, Number 1, @2017
1039. Heintzkill, Reed T., "Fabrication of Silver-doped Zinc Oxide Thin Films Through Optimized Sol-Gel Deposition and Nanoparticle Wetting Process" (2018). Theses and Dissertations.,
1040. Yan, Y., Liu, J., Xing, C., Wang, Q., Zeng, Y., Zhao, Y., Jiang, Y. Parametric study on photoluminescence

- enhancement of high-quality zinc oxide single-crystal capping with dielectric microsphere array *Applied Optics*, 57 (27), pp. 7740-7749. , @2018
1041. Zhang, K.-X., Wen, X., Yao, C.-B., Li, J., Zhang, M., Li, Q.-H., Sun, W.-J., Wu, J.-D. Synthesis, structural and optical properties of silver nanoparticles uniformly decorated ZnO nanowires, *Chemical Physics Letters*, 698, pp. 147-151.,2018
1042. Hamid RezaYousefi, Babak Hashemi, "Photocatalytic properties of Ag@Ag-doped ZnO core-shell nanocomposite", *Journal of Photochemistry and Photobiology A: Chemistry*, Volume 375, 15 April 2019, Pages 71-76, 2019,
1043. Yujie Zhang, Yinzhou Yan, Lixue Yang, Cheng Xing, Yong Zeng, Yan Zhao, and Yijian Jiang, "Ultraviolet luminescence enhancement of planar wide bandgap semiconductor film by a hybrid microsphere cavity/dual metallic nanoparticles sandwich structure ", *OSA Publishing > Optics Express > Volume 27 > Issue 11 > Page 15399* , 2019, **A.Og. Dikovska, N. Ts. Tsankov, R. Toshkova, E. Gardeva, L. Yossifova, N.N. Nedyalkov, P.A. Atanasov. Fabrication of ZnO nanostructures and their application in biomedicine. Proc. SPIE, 8424, 2012, DOI:10.1117/12.922406, 84242Q -1-84242Q -7**
1044. Belka, R., KÄczkowska, J., Kasińska, J. , "Optical characterization of pure and Al-doped ZnO prepared by sol-gel method", *Proceedings of SPIE - The International Society for Optical Engineering* 10031, 1003106, @2016 **Ru. Nikov, N. Nedyalkov, P.A. Atanasov, M. Terakawa, H. Shimizu, M. Obara. Tuning the optical properties of gold nanostructures fabricated on flexible substrates. Applied Surface Science, 264, Elsevier, 2013, ISSN:0169-4332, DOI:http://dx.doi.org/10.1016/j.apsusc.2012.10.125, 779-782. SJR:0.913, ISI IF:2.711**
1045. M. Shaba Effect of pore thickness and the state of polarization on the optical properties of hexagonal nanoarray of Au/nanoporous anodic alumina membrane, *J. Nanomat.* 2015, <https://doi.org/10.1155/2015/347486>
1046. Sh. Y. L. Liew, Low Temperature Fabrication of an Indium-Free Dye-Sensitized Solar Cell: Based on Commercially Available Polymer Substrates, PhD thesis
1047. M. Saban, Morphological and Optical Characterization of High Density Au/PAA Nanoarrays, *Journal of Spectroscopy* Volume 2016, Article ID 5083482
1048. T. Baba et al, Triple-walled gold surfaces with small-gaps for nonresonance surface enhanced Raman scattering of rhodamine 6G molecules, *Journal of Vacuum Science & Technology B* 34(1) · January 2016, DOI: 10.1116/1.4938483
1049. Suresh, Vignesh. "Fabrication of Large Area Flexible SERS Substrates by Nanoimprint Lithography". *ACS Appl. Nano Mater.* 1. 886–893, 2018,
1050. "Emerging Applications of Atomic Layer Deposition for the Rational Design of Novel Nanostructures for Surface Enhanced Raman Scattering", J. Prakash, H.C. Swart, G. Zhang, S. Sun, *Journal of Materials Chemistry C* 7, pp. 1447-1471 (2019), **Nikov, R.G., Nikolov, A.S., Nedyalkov, N.N., Atanasov, P.A., Alexandrov, M.T., Karashanova, D.B. Processing condition influence on the characteristics of gold nanoparticles produced by pulsed laser ablation in liquids. Applied Surface Science, 274, Elsevier, 2013, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2013.02.118, 105-109. SJR:0.913, ISI IF:2.827**
1051. Characterization of silver nanoparticles prepared by laser ablation in distilled water, Alireza Hojabri, Fatemeh Hajakbari, Maryam Debashi Shoreh, *Nanocon 2014*, Nov 5th–7th, Brno, Czech Republic, EU.,
1052. Haustrup, Natalie "Wavelength dependence of femtosecond laser ablation of thin gold films", Thesis · June 2014 DOI: 10.13140/RG.2.2.33104.40966
1053. Jimenez-Ruiz A, Perez-Tejeda P, Grueso E, Castillo PM, Prado-Gotor, "Nonfunctionalized Gold Nanoparticles: Synthetic Routes and Synthesis Condition Dependence", Jimenez-Ruiz A, Perez-Tejeda P, Grueso E, Castillo PM, Prado-Gotor R, *CHEMISTRY-A EUROPEAN JOURNAL* 21 (27), 9596-9609, 2015 DOI: 10.1002/chem.201405117,
1054. M.A. Valverde-Alva, T. García-Fernández, M. Villagrán-Muniz, C. Sánchez-Aké, R. Castañeda-Guzmán, E. Esparza-Alegria, C.F. Sánchez-Valdés, J.L. Sánchez Llamazares, C.E. Márquez Herrera, "Synthesis of silver nanoparticles by laser ablation in ethanol: A pulsed photoacoustic study", *Applied Surface Science* 355, 341–349, 2015,
1055. Jiménez Ruiz, Aila, "Reacciones electroquimioluminiscentes y parámetros de interacción de especies biomédicas en dendrímeros y nanopartículas", 2016, Tesis Doctoral,
1056. Rivera, Jesus , et al. "Amplitud fotoacústica en función de la concentración de coloides con nanopartículas de oro obtenidos por ablación láser". *Revista Ciencia y Tecnología*, 12(2), 77-89 (2016).,
1057. Rafique, M., Rafique, M.S., Butt, S.H., Kalsoom, U., Afzal, A., Anjum, S., Usman, A., "Dependence of the structural optical and thermo-physical properties of gold nano-particles synthesized by laser ablation method on the nature of laser", *Optik-International J. for Light and Electron Optics*, Volume 134, Pages 140-148 (2017)., @2017
1058. Marzieh Esmailzadeh, Hossein dizaj ghorbani, Hajar Azadi, A Gharleghi, Samad Moemen Bellah, Rasoul Malekfar, "Synthesis of Titanium Nitride Nanoparticles by Pulsed Laser Ablation in Toluene", *Proceedings of the 7th International Conference on Nanostructures (ICNS7)* 27Feb- 1 Mar2018, Tehran, Iran, 103-115, May 2018,
1059. Ziyu Liu, Jian Cai, Qian Wang, Lei Liu, Guisheng Zou, "Modified pulse laser deposition of Ag nanostructure as intermediate for low temperature Cu-Cu bonding", *Applied Surface Science*, Volume 445, 2018, Pages 16-23.,
1060. Abdullah, F.M., Al-Ahmari, A.M., Darwish, S., Rafaqat, M., "Applications of Nanoparticles via Laser Ablation in Liquids: a review", *Proceedings of the International Conference on Industrial Engineering and Operations Management* Volume 2019, Issue MAR, 2019, Pages 2043-2053.,

1061. J.R. Esteban, C.A. Reyna, Efecto de post irradiación láser pulsada en función del plasmón en los coloides con nanopartículas de oro, *Rev. Tayacaja* 2(2) 129 - 149, 2019.,
1062. Naser, H., Alghoul, M.A., Hossain, M.K., Asim, N., Abdullah, M. F., Ali, M.S., Alzubi, F.G., Amin, N., "The role of laser ablation technique parameters in synthesis of nanoparticles from different target types". *J Nanopart Res* (2019) 21: 249.,
M. E. Koleva, A.Og. Dikovska, N.N. Nedyalkov, P.A. Atanasov, G.B. Atanasova. Ag/ZnO nanocomposites prepared by laser methods. Proceedings of SPIE, 8770, SPIE, 2013, ISSN:0277786X, DOI:10.1117/12.2013424, 877007. SJR:0.212
1063. A. S. Shulyat'ev, A. A. Machnev, D. G. Gromov, A. Yu. Trifonov, V. P. Mitrokhin, and I. V. Mel'nikov, Anomalous transmission of disordered arrays of silver nanoclusters in the near- and mid-IR regions, *Technical Physics Letters*, 2015, Vol. 41, No. 5, pp. 425–428,
Nikolov, A.S., Nikov, R.G., Nedyalkov, N.N., Dimitrov, I.G., Atanasov, P.A., Alexandrov, M.T., Karashanova, D.B.. Modification of the silver nanoparticles size-distribution by means of laser light irradiation of their water suspensions. Applied Surface Science, 280, Elsevier, 2013, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2013.04.079, 55-59. SJR:0.212, ISI IF:2.538
1064. Chen, J., Li, S.M., Du, J., Liu, J.H., Yu, M., Meng, S.M., Wang, B., „Superior methanol electrooxidation activity and CO tolerance of mesoporous helical nanospindle-like CeO₂ modified Pt/C”, *RSC Adv.*, 2015,5, 64261-64267.
1065. He, H., Li, H., Xia, W., Shen, X., Zhou, M., Han, J., Zeng, X., Cai, W., "Electrophoretic fabrication of silver nanostructure/zinc oxide nanorod heterogeneous arrays with excellent SERS performance", *Journal of Materials Chemistry C* 3 (8), 1724-1731, 2015.
1066. Jaewon Lee and Du-Jeon Jang, "Laser-induced fabrication of Ag@SiO₂@Ag sandwich nanostructures having enhanced catalytic performances" *RSC Adv.* 5(79), 64268-64273, 2015,
1067. Juan Du, Xiaoguang Li, Huanxin Zhao, Yuqi Zhou, Lulu Wang, Shushu Tian, Yancai Wang, "Nanosuspensions of poorly water-soluble drugs prepared by bottom-up technologies", *International Journal of Pharmaceutics* 495 (2), 738–749, 2015,
1068. Kassavetis, S., Kaziannis, S., Pliatsikas, N., Avgeropoulos, A., Karantzalis, A.E., Kosmidis, C., Lidorikis, E., Patsalas, P., "Formation of plasmonic colloidal silver for flexible and printed electronics using laser ablation", *Applied Surface Science* 336, 262-266, 2015.
1069. Jingxia Wang, Hao Chen, Zhuping Chen, Yuheng Chen, Dan Guo, Maojun Ni, Siyang Liu, Chaorong Peng, "In-situ formation of silver nanoparticles on poly (lactic acid) film by γ -radiation induced grafting of N-vinyl pyrrolidone", *Materials Science and Engineering C* 63, 142–149, 2016,
1070. Moura, Caroline Gomes; Floriani Pereira, Rafael Santiago; Andritschky, Martin; et al. "Effects of laser fluence and liquid media on preparation of small Ag nanoparticles by laser ablation in liquid", *OPTICS AND LASER TECHNOLOGY* 97, 20-28, 2017 DOI: 10.1016/j.optlastec.2017.06.007, 2017.
1071. Ganjaboy S. Boltaev, Rashid Ganeev, P. S. Krishnendu, S. K. Maurya, P. V. Redkin, Konda Srinivasa Rao, K. Zhang, and Chunlei Guo, "Strong third-order optical nonlinearities of Ag nanoparticles synthesized by laser ablation of bulk silver in water and air", *Applied Physics A* 124(11), November 2018 DOI: 10.1007/s00339-018-2195-z,
1072. W. Aldama-Reyna, Jhenry F. Agreda-Delgado , M. A. Valverde-Alva and Luis M. Angelats-Silva, "Photoacoustic study of Changes in Optical Properties of Colloids with Silver Nanoparticles Produced by Laser Ablation", *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 13, Number 2 (2018) pp. 1408-1414,
1073. Rivera-Esteban, Jesus M.; Valverde-Alva, Miguel A.; Aldama-Reyna, Claver W., *Momento-revista de fisica* Issue: 59, 35-48, 2019.,
Balansky R., Longobardi M, Ganchev G., Ilcheva M., Nedyalkov N., Atanasov P., Toshkova R., Izzotti A.. Transplacental clastogenic and epigenetic effects of gold nanoparticles in mice. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1, 2013, 42-48. ISI IF:3.68
1074. Cabuzu, D., Cirja, A., Puiu, R., Grumezescu, A.M. , Biomedical applications of gold nanoparticles, *Current Topics in Medicinal Chemistry*, 15 (16), pp. 1605-1613 , @2015
1075. Cyto- and genotoxicity assessment of Gold nanoparticles obtained by laser ablation in A549 lung adenocarcinoma cells, *Journal of Nanoparticle Research*, 17 (5) , @2015
1076. Goodson, W.H., Lowe, L., Carpenter, D.O., (...), Chen, Z., Hu, Z., Assessing the carcinogenic potential of low-dose exposures to chemical mixtures in the environment: The challenge ahead, *Carcinogenesis*, 36, pp. S254-S296 , @2015 1.000
1077. B. Smolkova et al, Nanoparticles in food: Epigenetic changes induced by nanomaterials and possible impact on health, *Food and Chemical Toxicology*, 77, pp. 64-73 , @2015
1078. Shyamasundar, S., Ng, C.T., Lanry Yung, L.Y., Dheen, S.T., Bay, B.H., Epigenetic mechanisms in nanomaterial-induced toxicity, *Epigenomics*, 7 (3), pp. 395-411 , @2015
1079. J. A Keelan et al, Therapeutic and safety considerations of nanoparticle-mediated drug delivery in pregnancy , *Nanomedicine*, 10 (14), pp. 2229-2247 , @2015
1080. Vrijens, K., Bollati, V., Nawrot, T.S., MicroRNAs as potential signatures of environmental exposure or effect: A systematic review, *Environmental Health Perspectives* 123 (5), pp. 399-411 , @2015 1.000
1081. Iavicoli, V. Leso, P. A. Schulte, *Toxicology and Applied Pharmacology*, 299, 2016, 112–124, @2016 1.000

1082. L. Gonzalez, M. Kirsch-Volders, *Mutation Research/Reviews in Mutation Research*, 768, 2016, 14–26, @2016 1.000
1083. M. Ema, M. Gamo, K. Honda, *Toxicology and Applied Pharmacology*, 299, 2016, 47–52., @2016 1.000
1084. Ng C.T., Li J.E.J., Balasubramanian S.K., You F., Yung L.Y.L., Bay B.H., *ACS Biomaterials Science & Engineering*, in press (2016), @2016 1.000
1085. Patil N.A., Gade W.N., Deobagkar D.D., *International Journal of Nanomedicine*, 11, 4509 (2016)., @2016 1.000
1086. Teng C., Wang Z., Yan B., *Birth Defects Research Part C: Embryo Today: Reviews*, in press (2016)., @2016 1.000
1087. W. Qi Lim, Zh. Gao, *Nanotoday*, 11, 2016, 168–188, @2016 1.000
1088. X. Lu, Is. R. Miousse, S. V. Pirela, St. Melnyk, I. Koturbash, Ph. Demokritou, *Nanotoxicology*, 10, 2016, 140-150, @2016 1.000
1089. Y. Zou, Q. Li, L. Jiang, C. Guo, Y. Li, Y. Yu, Y. Li, J. Duan, Zh. Sun, *PLoS ONE* 11(6): e0158475. doi:10.1371/journal.pone.0158475, 2016., @2016 1.000
1090. Dimitriou N.M., Tsekenis G., Balanikas E.C., Pavlopoulou A., Mitsiogianni M., Mantso T., Panayiotidis M.I., *Pharmacology & Therapeutics*, 2017, 178:1-17
1091. Dusinska M., Tulinska J., El Yamani N., Kuricova M., Liskova A., Rollerova E., Ruden-Pran E., Smolkova B., *Food and Chemical Toxicology*, <http://hdl.handle.net/11250/2479711> (2017),
1092. Ema M., Okuda H., Gamo M., Honda K., *Reproductive Toxicology*, 67, 149-164 (2017),
1093. Ghosh M., Oner D., Duca R.C., Cokic S., Seys S., Kerkhofs S., Van Landuyt K., Hoet P., Godderis L., *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 796, 1-12 (2017).
1094. Joshi, M.D." Drug delivery during pregnancy: How can nanomedicine be used?". *Therapeutic Delivery* 8(12), pp. 1023-1025, @2017 1.000
1095. Pandey R.K., Prajapati V.K., *International Journal of Biological Macromolecules*, 2017, 107(Pt A):1278-1293
1096. Smolkova B., Dusinska M., Gabelova A., *Food and Chemical Toxicology*, 109, 780-796 (2017).
1097. Wong B.S.E., Hu Q., Baeg G.H., *Food and Chemical Toxicology*, 109, 746, 2017
1098. Zakhidov S.T., Mudzhiri N.M., Rudoy V.M., Dement'eva O.V., Makarov A.A., Zelenina I.A., Marshak T.L., *Biology Bulletin*, 44(3), 233-236 (2017), @2017 1.000
1099. Zhang, Y., Wu, J., Feng, X., (...), Chen, A., Shao, L."Current understanding of the toxicological risk posed to the fetus following maternal exposure to nanoparticles". *Expert Opinion on Drug Metabolism and Toxicology* 13(12), pp. 1251-1263, @2017 1.000
1100. Mudzhiri, N.M., Zakhidov, S.T., Rudoy, V.M., (...), Andreeva, L.E., Marshak, T.L."Cytogenetic Activity of Gold Nanoparticles in Germ and Somatic Cells of 129 Mice with a Nonsense Mutation in the DNA Polymerase Iota Gene". *Biology Bulletin* 45(2), pp. 119-125, @2018 1.000
1101. Pandey, R.K., Prajapati, V.K."Molecular and immunological toxic effects of nanoparticles", *International Journal of Biological Macromolecules* 107(PartA), pp. 1278-1293, @2018 1.000
1102. Yang, L., Kuang, H., Zhang, W., Wei, H., Xu, H., "Quantum dots cause acute systemic toxicity in lactating rats and growth restriction of offspring"*Nanoscale* 10(24), pp. 11564-11577, @2018 1.000
1103. МУДЖИРИ Н.М., ЗАХИДОВ С.Т., РУДОЙ В.М., ДЕМЕНТЬЕВА О.В., МАКАРОВ А.А., МАКАРОВА И.В., ЗЕЛЕНИНА И.А., АНДРЕЕВА Л.Е., МАРШАК Т.Л., ЦИТОГЕНЕТИЧЕСКАЯ АКТИВНОСТЬ НАНОЧАСТИЦ ЗОЛОТА В ПОЛОВЫХ И СОМАТИЧЕСКИХ КЛЕТКАХ МЫШЕЙ ЛИНИИ 129 С НОНСЕНС-МУТАЦИЕЙ В ГЕНЕ ДНК-ПОЛИМЕРАЗЫ ЙОТА, *ИЗВЕСТИЯ РОССИЙСКОЙ АКАДЕМИИ НАУК. СЕРИЯ БИОЛОГИЧЕСКАЯ* 2, 2018, 137, @2018 1.000
1104. Ali, G.E., Ibrahim, M.A., El-Deeb, A.H., Amer, H., Zaki, S.M., Pulmonary deregulation of expression of miR-155 and two of its putative target genes; PROS1 and TP53INP1 associated with gold nanoparticles (AuNPs) administration in rat, *International Journal of Nanomedicine*, 14, pp. 5569-5579, @2019 1.000
1105. Brzóska, K., Gradzka, I., Kruszewski, M., Silver, gold, and iron oxide nanoparticles alter miRNA expression but do not affect DNA methylation in HepG2 cells, *Materials* 12(7), 1038, @2019 1.000
1106. Carneiro, M.F.H., Machado, A.R.T., Antunes, L.M.G., (...), Pereira, M.C., Barbosa, F., Gold-Coated Superparamagnetic Iron Oxide Nanoparticles Attenuate Collagen-Induced Arthritis after Magnetic Targeting, *Biological Trace Element Research*, in press, @2019 1.000
1107. Gedda, M.R., Babele, P.K., Zahra, K., Madhukar, P., Epigenetic aspects of engineered nanomaterials: Is the collateral damage inevitable?, *Frontiers in Bioengineering and Biotechnology*, 7(SEP), 228, @2019
1108. Hathaway, Q.A., Durr, A.J., Shepherd, D.L., (...), Nurkiewicz, T.R., Hollander, miRNA-378a as a key regulator of cardiovascular health following engineered nanomaterial inhalation exposure, *Nanotoxicology*, 13(5), pp. 644-663, @2019 1.000
1109. Hu, M., Jovanović, B., Palić, D., In silico prediction of MicroRNA role in regulation of Zebrafish (*Danio rerio*) responses to nanoparticle exposure, *Toxicology in Vitro* 60, pp. 187-202, @2019 1.000
1110. Lavigne, E., Lima, I., Hatzopoulou, M., (...), Walker, M., Weichenthal, S., Spatial variations in ambient ultrafine particle concentrations and risk of congenital heart defects, *Environment International* 130, 104953, @2019 1.000
1111. Patil, Y.M., Rajpathak, S.N., Deobagkar, D.D., Characterization and DNA methylation modulatory activity of gold nanoparticles synthesized by Pseudoalteromonas strain, *Journal of Biosciences*, 44(1), 15, @2019 1.000
- Grochowska K., Sliwinski G., Iwulska A., Sawczak M., Nedyalkov N., Atanasov P., Obara G., Obara M.. Engineering Au Nanoparticle Arrays on SiO2 Glass by Pulsed UV Laser Irradiation. Plasmonics, 1, 2013, 105-113. ISI IF:2.238**

1112. De Vreede, L.J., Van Den Berg, A., Eijkel, J.C.T., Nanopore fabrication by heating Au particles on ceramic substrates, *Nano Letters*, 15 (1), pp. 727-731, @2015 1.000
1113. Siozios, A., et al, Laser-matter interactions, phase changes and diffusion phenomena during laser annealing of plasmonic AlN:Ag templates and their applications in optical encoding, *Journal of Physics D: Applied Physics*, 48 (28), 285306, @2015 1.000
1114. J. Prakash, V. Kumar, R. E. Kroon, K. Asokan, V. Rigato, K. H. Chae, S. Gautam, H. C. Swart, *Phys. Chem. Chem. Phys.*, 2016, 18, 2468-2480., @2016 1.000
1115. Rudenko, J. Colombier, T. E. Itina, *Proc. SPIE* 9737, 97370L, 2016, doi:10.1117/12.2217900, @2016 1.000
1116. Ebrahimpour Z., Mansour N., *Applied Surface Science*, 394, 240-247 (2017), @2017 1.000
1117. Ebrahimpour Z., Mansour N., *Plasmonics*, 1-8 (2017), @2017 1.000
1118. Lee S.K., Sori Hwang, Yoon-Kee Kim, Yong-Jun Oh, Beilstein J. *Nanotechnol.*, 8, 1049-1055 (2017), @2017 1.000
1119. Ebrahimpour, Z., Mansour, N. "Plasmonic Near-Field Effect on Visible and Near-Infrared Emissions from Self-Assembled Gold Nanoparticle Films." *Plasmonics* 13(4), pp. 1335-1342, @2018 1.000
1120. Heinz, M., Srabionyan, V.V., Avakyan, L.A., Bugaev, A.L., Skidanenko, A.V., Pryadchenko, V.V., Ihlemann, J., Meinertz, J., Patzig, C., Dubiel, M., Bugaev, L.A, *Journal of Alloys and Compounds*, 736, (2018), 152 - 162, @2018 1.000
1121. Pálincás, A., Kun, P., Koós, A.A., Osváth, Z. "Dynamic strain in gold nanoparticle supported graphene induced by focused laser irradiation". *Nanoscale* 10(28), pp. 13417-13425, @2018 1.000

Grochowska K., Siuzdak K., Bittencourt C, Atanasov P.A, Dikovska A, Nedyalkov N., Sliwinski G.. Properties of plasmonic arrays produced by pulsed-laser nanostructuring of thin Au films. *Beilstein Journal of Nanotechnology*, 1, 2014, 2102. ISI IF:2.78

1122. S. Hihath, M. K. Santala, G. Campbell, K. van Benthem, *J. Appl. Phys.* 120, 2016, 085301., @2016 1.000
1123. Khan H.I. Khalid M.U. Abdullah A. Ali A. Bhatti A.S. Khan S.U. Ahmed W. "Facile synthesis of gold nanostars over a wide size range and their excellent surface enhanced Raman scattering and fluorescence quenching properties". *Journal of Vacuum Science & Technology B* 36(3). 03E101, 2017, @2017 1.000
1124. Censabella, M. Ruffino, F. Zimbone, M. Bruno, E. Grimaldi, M.G. "Self-Organization Based Fabrication of Bimetallic PtPd Nanoparticles on Transparent Conductive Oxide Substrates". *Physica Status Solidi (A) Applications and Mater Sci* 215(3). 1700524, 2018, @2018 1.000
1125. Khan, H.I. Khalid, M.U. Abdullah, A. Ali, A. Bhatti, A.S. Khan, S.U. Ahmed, W. "Facile synthesis of gold nanostars over a wide size range and their excellent surface enhanced Raman scattering and fluorescence quenching properties". *J Vacuum Sci and Technol B: Nanotechnol and Microelectronics* 36(3). 03E101, 2018, @2018 1.000
1126. Khatoun, N. Yasin, H.M. Younus, M. Ahmed, W. Rehman, N.U. Zakauallah, M. Iqbal, M.Z. "Synthesis and spectroscopic characterization of gold nanoparticles via plasma-liquid interaction technique". *AIP Advances* 8(1). 015130, 2018, @2018 1.000
- Atanasov, P. A., Nedyalkov, N. N., Dikovska, A. O., Nikov, Ru., Amoroso, S., Wang, X., Bruzzese, R., Hirano, K., Shimizu, H., Terakawa, M., Obara, M.. Noble metallic nanostructures: Preparation, properties, applications. *Journal of Physics: Conference Series*, 514, 012024, IOP Publishing Ltd, 2014, ISSN:1742-6588, DOI:10.1088/1742-6596/514/1/012024, 012024-1-012024-8. SJR:0.217, ISI IF:0.303**
1127. Direct femtosecond laser ablation of copper with an optical vortex beam, K. K. Anoop, R. Fittipaldi, A. Rubano, X. Wang, D. Paparo, A. Vecchione, L. Marrucci, R. Bruzzese, S. Amoroso, *J. Appl. Phys.*, 116, 113102, 2014,
1128. Laser-induced surface structures on gold-coated polymers: Influence of morphology on surface-enhanced Raman scattering enhancement, *Journal of Applied Polymer Science*, Esther Rebollar, Margarita Hernández, Mikel Sanz, Susana Pérez, Tiberio A. Ezquerro, Marta Castillejo, 132, 42770-6, 2015,
1129. Performance Characteristics of Bio-Inspired Metal Nanostructures as Surface-Enhanced Raman Scattered (SERS) Substrates, H.I. Areizaga-Martinez, I. Kravchenko, N.V. Lavrik, M.J. Sepaniak, S.P. Hernández-Rivera, M.A. De Jesús, *Applied Spectroscopy*, 70(9), 1432-1445, 2016,
1130. Ageev E.I., Aminov I.R., Baranov M.A., Golubev Y.D., Odintsova G.V., Varlamov P.V., "Evolution of thin silver films under exposure to laser pulses in the air". *Optical and Quantum Electronics*, 49(2), 56 (2017), @2017 1.000
1131. Mehra, Rajesh. "Signal amplification in solution-based plasmonic specific-binding partner assays US Patent 9,835,622, 2017
1132. Anjami, Arash. "Thermodynamic stability, half-metallic and optical nature of graphene-like Mn₂ZrZ (Z = Ge, Si): Ab initio study". *International Journal of Modern Physics B*, 32, art. num. 1850324, 2018,
1133. Urrutia, Aitor. "Optical fiber sensors based on gold nanorods embedded in polymeric thin films". *Sensors and Actuators B: Chemical* 255 Part 2. 2105-2112, 2018,
1134. "Signal amplification in plasmonic specific-binding partner assays", R.K. Mehra, V. Chiang, K.P. Aron, A. Krell US201462037071P 20140813, 2019
- A Og Dikovska, M E Koleva, G B Atanasova, T R Stoyanchoy, N N Nedyalkov, P A Atanasov. PLD fabrication of ZnO nanostructures on metal-coated substrates. *Journal of Physics: Conference Series*, 514, IOP Publishing, 2014, ISSN:17426588, DOI:doi:10.1088/1742-6596/514/1/012032, 012032-1-012032-4. SJR:0.211**
1135. Kasar, C.K., Sonawane, U.S., Bange, J.P., Patil, D.S., "Blue luminescence from Ba_{0.05}Zn_{0.95}O nanostructure", *Journal of Materials Science: Materials in Electronics* 27 (8), pp. 8126-8130, @2016 1.000

Nedyalkov, N., Nikolov, A., Atanasov, P., Alexandrov, M., Terakawa, M., Shimizu, H.. Nanostructured Au film produced by pulsed laser deposition in air at atmospheric pressure. OPTICS AND LASER TECHNOLOGY, 64, Elsevier Ltd, 2014, ISSN:0030-3992, DOI:10.1016/j.optlastec.2014.03.022, 41-45. SJR:0.695, ISI IF:1.649

1136. Chang, Y.-J., Ho, C.-C., Hsu, J.-C., Hwang, T.-Y., Kuo, C.-L., "Atmospheric dual laser deposited dielectric coating on electrodes for electrochemical micromachining", JOURNAL OF MATERIALS PROCESSING TECHNOLOGY 226, 205-213, Article number 14475, Published: AUG 11 2015 ,
1137. Wu, C. Y., Mao, D., Liu, Z., Liang, Q., Chen, S. R., Yu, Y. Q., Wang, L., Luo, L. B., Xu, J., "n-type In₂S₃ films deposited by pulsed laser deposition: effect of laser power on the properties of the films", MATERIALS RESEARCH EXPRESS 2 (5), Article Number: 056401, DOI: 10.1088/2053-1591/2/5/056401, Published: MAY 2015,
1138. Khan T.M., Mujawar M.A., Siewerska K.E., Pokle A., Donnelly T., McEvoy N., Lunney J.G., "Atmospheric pulsed laser deposition and thermal annealing of plasmonic silver nanoparticle films", Nanotechnology, 28(44), 445601 (2017),
1139. McCann R., Hughes C., Bagga K., Stalcup A., Vázquez M., Brabazon D., "Pulsed laser deposition of plasmonic nanostructured gold on flexible transparent polymers at atmospheric pressure", Journal of Physics D: Applied Physics, 50(24), 245303 (2017),.
1140. Singh K.S., Khare A., Sharma A.K., "Effect of uniform magnetic field on laser-produced Cu plasma and the deposited particles on the target surface", Laser and Particle Beams, 1-10 (2017),
1141. Assaf, Y., Forstmann, G., Kietzig, A.-M. "Wettability modification of porous PET by atmospheric femtosecond PLD", Applied Surface Science 436, pp. 1075-1082, 2018,
1142. Atwee T., Khedr, M. A., Fathy N., and Badr, Y., "Effect of Incident FS Laser Power onto Gold Thin Films Deposited by PLD Techniques", J. Adv. Chem. Eng. 8:2, 1-5, 2018 DOI: 10.4172/2090-4568.1000190,
1143. Fominski, V.Y., Romanov, R.I., Fominski, D.V., Dzhumaev, P.S., Troyan, I.A. "Normal and grazing incidence pulsed laser deposition of nanostructured MoS_x hydrogen evolution catalysts from a MoS₂ target", Optics and Laser Technology 102, pp. 74-84, 2018.
1144. Khan, T.M., Pokle, A., Lunney, J.G. "Atmospheric pulsed laser deposition of plasmonic nanoparticle films of silver with flowing gas and flowing atmospheric plasma", Applied Physics A: Materials Science and Processing 124(4), 336 2018,
1145. Khan, T., Lunney, J. G., O'Rourke, D., Meyer, M.-C., Creel, J. R., K. E. Siewierska, "Various pulsed laser deposition methods for preparation of silver-sensitized glass and paper substrates for surface-enhanced Raman spectroscopy", Applied Physics A 125(9):659, August 2019, DOI: 10.1007/s00339-019-2968-z,
1146. Taj Muhammad Khan , Morten-Christian Meyer, "What's new in laser based nanofabrication for the fast uptake in industrial application", Materials Science: Materials Review Volume 2 Issue 3, March 2019, DOI: 10.18063/msmr.v3i1.955, LicenseCC BY-NC 4.0,
Atanasov P.A., Nedyalkov N.N., Valova E.I., Georgieva Zh.S., Arnyanov S.A., Kolev K.N., Amoruso S., Wang X., Bruzzese R., Sawczak M., Śliwiński G.. Fs-laser processing of polydimethylsiloxane and metallization. Journal of Applied Physics, 116, 2, AIP, 2014, 023104
1147. B. Farshchian J. R.Gatabi St. M.Bernick, S. Park G.-H. Lee R. Droopad, N. Kim, Applied Surface Science 396, 359-365, 2017.
Koleva M.E., Nedyalkov N.N.. Effect of the plasmon-exciton coupling on the optical response of a ZnO/Ag/ZnO nanocomposite. Journal of Physics: Conference Series, 514, 1, 2014, 012031. SJR:0.21
1148. Čiegis, A. , Kopustinskias, V. , Meškiniš, Š., Optical properties of DLC:SiO_x and ag multilayer films: Surface plasmon resonance effect, (2016) Medziagotyra, Volume 22, Issue 4, 2016, Pages 481-485.
1149. Durso, L. , Santangelo, S. , Spadaro, S., Enhanced optical response of ZnO/Ag nanocolloids prepared by a picosecond laser, (2016) Journal of Luminescence, 178, pp. 204-209.
1150. Sardar D., Maity J., Ghosalya M.K., Gopinath C.S., Bala T., Materials Research Express, 4(5), 055011, @2017 1.000
Amoruso, S., Nedyalkov, N.N., Wang, X., Ausanio, G., Bruzzese, R., Atanasov, P.A.. Ultrashort-pulse laser ablation of gold thin film targets: Theory and experiment. Thin Solid Films, 550, 2014, ISI IF:1.759
1151. Fungal biosynthesis of gold nanoparticles: Mechanism and scale up , Microbial Biotechnology, 8 (6), pp. 904-917 , @2015
1152. The dynamics of femtosecond pulsed laser removal of 20nm Ni films from an interface, Applied Physics Letters, 107 (12), 124101 , @2015 1.000
1153. M. Girault, J.-L. Le Garrec, J.B.A. Mitchell, J.-M. Jouvard, E. Carvou, J. Menneveux, J. Yu, F.-X. Ouf, S. Carles, V. Potin, G. Pillon, S. Bourgeois, J. Perez, M.C. Marco de Lucas, L. Lavissee, Appl. Surf. Sci., 374, 2016, 132–137., @2016 1.000
1154. St. Scaramuzza, M. Zerbetto, V. Amendola, J. Phys. Chem. C, 2016, 120 (17), pp 9453–9463, @2016 1.000
1155. Gontad F., Caricato A. P., Cesaria M., Resta V., Taurino A., Colombelli A., Leo C., Klini A., Manousaki A., Convertino A., Rella R., Martino M., Perrone A., Applied Surface Science, 418, Part B, 430–436 (2017), @2017 1.000
1156. Karkalos N.E., Markopoulos P.A., Current Nanoscience, 13(1), 3-20 (2017), @2017 1.000
1157. Wang, X.W., Kuchmizhak, A.A., Li, X., (...), Rudenko, A.A., Inogamov, N.A."Laser-Induced Translative Hydrodynamic Mass Snapshots: Noninvasive Characterization and Predictive Modeling via Mapping at Nanoscale". Physical Review Applied 8(4), 044016, @2017 1.000

A.S. Nikolov, N.N. Nedyalkov, R.G. Nikov, I.G. Dimitrov, P.A. Atanasov, K. Maximova, Ph. Delaporte, A. Kabashin, M.T. Alexandrov, D.B. Karashanova. Processing conditions in pulsed laser ablation of gold in liquid for fabrication of nanowire networks. Applied Surface Science, 302, Elsevier, 2014, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2014.02.010, 243-249. SJR:0.913, ISI IF:2.827

1158. Preparation, SERS and catalytic properties of Au nano-network based on poly(conjugated linoleic acid), Fan, Y., Fang, Y., Chen, H., Gao, D., Gaodeng Xuexiao Huaxue Xuebao/Chemical Journal of Chinese Universities, Volume 35, Issue 9, 10 September 2014, Pages 1933-1940.,
1159. Atomic-scale tomography of semiconductor nanowires, Jiangtao Qu, Simon Ringer, Rongkun Zheng, Materials Science in Semiconductor Processing, Volume 40, December 2015, Pages 896–909.,
1160. M.I. Mendivil Palma, Synthesis and characterization of metal nanoparticles by pulsed laser ablation in liquid media (PLAL), Doctoral thesis, (2015).,
1161. Investigation of factors affecting the synthesis of nano-cadmium sulfide by pulsed laser ablation in liquid environment, Ayman M. Darwish, Wael H. Eisa, Ali A. Shabaka, Mohamed H. Talaat, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 153, 15 January 2016, Pages 315–320
1162. The effect of magnetic fields on the products of laser ablation, Musaev, O.R., Sutter, E.A., Wrobel, J.M., Kruger, M.B., Applied Physics A: Materials Science and Processing, Volume 122, Issue 2, Article number 95, Pages 1-5 (2016).,
1163. Jiangtao Qu, "Atom-Scale Insights into III-V Semiconductor Nanowires" PhD Thesis, 2017.
Koleva, M.E., Nedyalkov, N.N., Atanasov, P.A., Fukata, N., Dutta, M.. Optical properties of Ag-ZnO nanostructures. Proceedings of SPIE, 9447, 2015, ISSN:0277786X, DOI:10.1117/12.2087769, 94470E-1-94470E-7. SJR:0.212
1164. Durso, L., Santangelo, S., Spadaro, S., Enhanced optical response of ZnO/Ag nanocolloids prepared by a picosecond laser, (2016) Journal of Luminescence 178, pp. 204-209.
1165. Lv, Z., Zhong, Q., Ou, M., Utilizing peroxide as precursor for the synthesis of CeO₂/ZnO composite oxide with enhanced photocatalytic activity, (2016) Applied Surface Science 376, pp. 91-96.
1166. Antimycotic activity of zinc oxide decorated with silver nanoparticles against Trichophyton mentagrophytes, Patiño-Herrera, R., Catarino-Centeno, R., Robles-Martínez, M., Zarate, M.G.M., Flores-Arriaga, J.C., Pérez, E., Power Techn 327, 381-391., 2018
N.E. Stankova, P.A. Atanasov, N.N. Nedyalkov, T.R. Stoyanov, K.N. Kolev, E.I. Valova, J.S. Georgieva, St.A. Armyanov, S. Amoroso, X. Wang, R. Bruzzese, K. Grochowska, G. Sliwiński, K. Baert, A. Hubin, M.P. Delplancke, J. Dille. fs- and ns-laser processing of polydimethylsiloxane (PDMS) elastomer: Comparative study. Applied Surface Science, 336, Elsevier, 2015, ISSN:01694332, DOI:http://dx.doi.org/10.1016/j.apsusc.2014.12.121, 321-328. SJR (Scopus):0.913, JCR-IF (Web of Science):4.281
1167. ANIKÓ METZINGER, "Method development for the analysis of liquid and solid samples by laser-induced breakdown spectroscopy". University of Szeged, Faculty of Natural Sciences and Informatics, Department of Inorganic and Analytical Chemistry, Szeged. PhD dissertation, 2016.
1168. Moraczewski, Krzysztof, et al. "Laser modification of polylactide surface layer prior autocatalytic metallization". Surface and Coatings Technology, 304 (2016) 68-75.,
1169. S L Marasso, et al. "A novel graphene based nanocomposite for application in 3D flexible micro-supercapacitors", Mater. Res. Express, 3 (6), 065001 (2016).,
1170. Zheng, B., Wang, W., Jiang, G. et al. "Fabrication of broadband antireflective black metal surfaces with ultra-light-trapping structures by picosecond laser texturing and chemical fluorination". Appl. Phys. B, 122 (6), 180, 2016.,
1171. B Antoszewski, S Tofil, M Scendo, W Tarelnik, "Utilization of the UV laser with picosecond pulses for the formation of surface microstructures on elastomeric plastics". IOP Conf. Series: Materials Science and Engineering 233 (2017) 012036.,
1172. E. Iordanova, et al. "Surface Modification of Different Materials by fs-Laser Irradiation". Bulg. J. Phys. 44 (2017) 133–144,
1173. Farshchian, Bahador, et al. "Laser-induced superhydrophobic grid patterns on PDMS for droplet arrays formation". Appl. Surf. Sci. 396 (2017) 359-365.,
1174. Antoszewski, B., Tofil, S., Mulczyk, K., "Machining properties of UV laser marker in shaping surface structures on plastic elements", Proceedings of SPIE - The International Society for Optical Engineering, 10974 (2018) 109740O.,
1175. Deng, Y; Hong, WS; He, JF; Guo, ZN; Chen, Y; Huang, ZG, "Micro-cracks on crosslinked Poly(dimethylsiloxane) (PDMS) surface treated by nanosecond laser irradiation", Appl. Surf. Sci. 445 (2018) 488-495.,
1176. Gesuele, F; Nivas, JJJ; Fittipaldi, R; Altucci, C; Bruzzese, R; Maddalena, P; Amoroso, S., "Analysis of nascent silicon phase-change gratings induced by femtosecond laser irradiation in vacuum", Scientific Reports, 8, 12498, 2018.
1177. Sola, D; Lavieja, C; Orera, A; Clemente, MJ, "Direct laser interference patterning of ophthalmic polydimethylsiloxane (PDMS) polymers", Optics and Lasers in Engineering, 106, 139-146, 2018,
1178. Wang, Z; Luo, Y; Zheng, F; Zhang, N ; Yin, CS; Li, JJ; He, CQ; Peng, XY; Huang, Z; Fang, PF , "Study on surface structure of plasma-treated polydimethylsiloxane (PDMS) elastomer by slow positron beam", Surface and Interface Analysis, 50 (8), 819-826, 2018.,
1179. Peng Chen and Masahiro Tsukamoto, "Surface Modification with Femtosecond Laser", In: Setsuhara Y., Kamiya T., Yamaura S. (eds) Novel Structured Metallic and Inorganic Materials. Springer, Singapore pp 469-483, 2019.

Print ISBN 978-981-13-7610-8,

1180. Truong-Son Dinh Le, Jianing An, Yi Huang, Quoc Vo, Jeeranan Boonruangkan, Tuan Tran, Seung-Woo Kim, Gengzhi Sun, Young-Jin Kim, "Ultrasensitive Anti-Interference Voice Recognition by Bio-Inspired Skin-Attachable Self-Cleaning Acoustic Sensors", *ACS Nano* 2019, 13, 11, 13293-13303. <https://doi.org/10.1021/acsnano.9b06354>, **Nedyalkov, N., Nikov, R., Koleva, M., Atanasov, P.A., Constantinescu, C., Delaporte, P., Grojo, D. Nanoparticle-decorated ceramic as substrate in surface enhanced Raman spectroscopy. *Appl. Surf. Sci.*, 336, Elsevier, 2015, 16-20. ISI IF:2.711**
1181. Park, Jay Hoon. "A facile precursor route to highly loaded metal/ceramic nanofibers as a robust surface-enhanced Raman template". *Applied Surface Science* 416. 742-750, 2017,
1182. Hou, Xu. "Periodic silver nanocluster arrays over large-area silica nanosphere template as highly sensitive SERS substrate". *Applied Surface Science* 437. 92-97, 2018,
1183. "Au nanoparticle-decorated aragonite microdumbbells for enhanced antibacterial and anticancer activities", A. Samanta, S. Podder, M. Kumarasamy, C.K. Ghosh, D. Lahiri, P. Roy, S. Bhattacharjee, J. Ghosh, A.K. Mukhopadhyay, *Materials Science and Engineering C103*, 109734 (2019),
1184. "In situ assembly of well-dispersed Ag nanoparticles on the surface of polylactic acid-Au@polydopamine nanofibers for antimicrobial applications", Q. Zhang, Y. Wang, W. Zhang, M.E. Hickey, Z. Lin, Q. Tu, J. Wang, *Colloids and Surfaces B: Biointerfaces* 184, 110506 (2019),
A.Og. Dikovska, G.B. Atanasova, G.V. Avdeev, N.N. Nedyalkov. SYNTHESIS AND CHARACTERIZATION OF ZnO NANOSTRUCTURES ON NOBLE-METAL COATED SUBSTRATES. *Applied Surface Science*, 374, Elsevier, 2016, DOI:doi:10.1016/j.apsusc.2015.09.141, 65-70. ISI IF:3.387
1185. Hong, K.-S. Kim, J.W. Bae, J.-S. (...), Ha, M.G. Kim, J.-P. "Structure, chemical bonding states, and optical properties of the hetero-structured ZnO/CuO prepared by using the hydrothermal and the electrospinning methods". *Physica B: Condensed Matter*. 504. 103-108, 2017,
1186. Jin, C. Peterson, G. Zhu, K. Jian, Z. Wei, Y. Ge, C. "One-step synthesis and scale-dependent luminescence properties of 1D Zn_{0.9}Cd_{0.1}S nanostructures prepared by PVD", *Journal of Physics D: Applied Physics* 50 (12), 125301, 2017,
1187. Jin, Changqing. Zhang, Z. Jian, Z. "Phase controlled synthesis and cathodoluminescence properties of ZnS nanobelts synthesized by PVD". *Solid State Communications*. 269. 1-5, 2018, @2018 1.000
1188. Aziz, W.J., "Synthesis of CdSe and CdSe:Ga nanostructures for antibacterial application", *Bulletin of Materials Science* 42(4), 148 (2019).,
Terakawa M., Nedyalkov N.. Near-Field Optics for Nano Processing. *Advanced Optical Technologies*, 5, 2016, 17. ISI IF:1.39
1189. Sivaguru M., Kabir M.M., Gartia M.R., Biggs D. S.C., Sivaguru B.S., Sivaguru V.A., Friedl G.A., Liu G.L., Sadayappan S., Toussaint Jr K.C., *J. Microscopy*, 267, 397-408 (2017).
1190. Nikolskiy, V.P., Stegailov, V.V. "Graphics-processing-unit-accelerated finite-difference time-domain simulation of the interaction between ultrashort laser pulses and metal nanoparticles". *Journal of Physics: Conference Series* 946(1), 012011, @2018 1.000
1191. Tong, Y., Yang, N., Han, K., (...), Li, W., Xudong, R."Surface morphology of titanium alloy with monolayer microparticles under different single pulse laser energy", *Optik*, 174 (2018), 766-775
1192. A. Zawadzka, K. Indykiewicz, R. Paszkiewicz, SIMULATION OF NEAR FIELD EXPOSITION IN UV LITHOGRAPHY, Proc. 2018 International Students and Young Scientists Workshop, @2019 1.000
1193. C.Sánchez-Akéa, T.Cescab, O.KolokoltsevaI, G.Balasab, J.A.Reyes-Esquadac, G.Mattei, Buffer-layer-assisted morphological manipulation of metal nanoparticle arrays by laser irradiation, *Applied Surface Science*, 487, 2019, 726-733, @2019 1.000
1194. Liu Lu, Ruifa Tan, Daifen Chen, Yanqun Tong, Xiaohong Yan, Maogang Gong, Judy Z Wu, Surface plasmon assisted laser ablation of stainless steel, *Nanotechnology* 30 305401, @2019 1.000
1195. Sushant P. Sahu Amirreza Mahigir Benjamin Chidester Georgios Veronis Manas Ranjan Gartia, Ultrasensitive Three-Dimensional Orientation Imaging of Single Molecules on Plasmonic Nanohole Arrays Using Second Harmonic Generation, *Nano Lett.* 2019, 19, 9, 6192-6202 *, @2019 1.000
1196. Yizhuo He, Jihua Zhang, Subhash Singh, Erik Garcell, Anatoliy Y. Vorobyev, Billy Lam, Zhibing Zhan, Jianjun Yan, Chunlei Guo, Maskless laser nano-lithography of glass through sequential activation of multi-threshold ablation, *Appl. Phys. Lett.* 114, 133107, @2019 1.000
Terakawa M., Torres-Mapa M., Takami A., Heinemann D., Nedyalkov N., Nakajima Y., Hördt A., Meyer H., Ripken T., Heisterkamp Al. Femtosecond laser direct writing of metal microstructure in stretchable poly(ethylene glycol) diacrylate (PEGDA) hydrogel. *Optics Letters*, 41, 2016, 1392. ISI IF:3.04
1197. Lee M.R., Lee H.K., Yang Y., Koh Ch.Sh. L., Lay Ch.L., Lee Y.H., Phang I.Y., Ling X.Y., *ACS Appl. Mater. Interfaces*, 2017, 29, 16, 6563-6577
1198. Yang R., Zhan Zh., Xu L., Jiao Sh.Li.Y., Zhang H., Chen M., *Chinese Phys. B* 26 076102 (2017), @2017 1.000
1199. Santos, M.V., Santos, S.N.C., Martins, R.J., (...), Ribeiro, S.J.L., Mendonça, C.R., Femtosecond direct laser writing of silk fibroin optical waveguides, *Journal of Materials Science: Materials in Electronics*, 30(18), pp. 16843-16848, @2019 1.000

N.Nedyalkov, M. Koleva, R. Nikov, P. Atanasov, Y. Nakajima, A. Takami, A. Shibata, M.Terakawa. Laser nanostructuring of ZnO thin films. Applied Surface Science, 374, Elsevier, 2016, ISSN:0169-4332, 172-176. SJR:0.913, ISI IF:2.711

1200. Parellada-Monreal, Laura. "Study of sputtered ZnO modified by Direct Laser Interference Patterning: Structural characterization and temperature simulation". *Applied Surface Science* 441. 331-340, 2018,
1201. E. Yarali, C. Koutsiaki, H. Faber, K. Tetzner, E. Yengel, P. Patsalas, N. Kalfagiannis, D.C. Koutsogeorgis, T.D. Anthopoulos, "Recent Progress in Photonic Processing of Metal-Oxide Transistors", *Advanced Functional Materials*, 1906022 (2019),
1202. L. Yang, J. Wei, Z. Ma, P. Song, J. Ma, Y. Zhao, Z. Huang, M. Zhang, F. Yang, X. Wang, "The Fabrication of Micro/Nano Structures by Laser Machining", *Nanomaterials* 9, 1789 (2019)
M.E. Koleva, N.N. Nedyalkov, P.A. Atanasov. Porous plasmonic nanocomposites for SERS substrates fabricated by two-step laser method. Journal of Alloys and Compounds, 665, Elsevier, 2016, DOI:http://dx.doi.org/10.1016/j.jallcom.2016.01.034, 282-287. ISI IF:3.014
1203. L. D'Urso, S. Santangelo, S. Spadaro, S. Scibilia, A.M. Mezzasalma, F. Neri, E. Fazio, "Enhanced optical response of ZnO/Ag nanocolloids prepared by a picosecond laser", *Journal of Luminescence*, Volume 178, October 2016, Pages 204–209., 566. Yong Wei, Yan-ying Zhu, Ming-li Wang, "Surface-enhanced Raman spectroscopy of gastric cancer serum with gold nanoparticles/silicon nanowire arrays", *Optik - International Journal for Light and Electron Optics*, Volume 127, Issue 19, October 2016, Pages 7902–7907.,
1204. Chen Y., Ge F., Guang S., Cai Z., *Journal of Alloys and Compounds*, 726, 484-489, @2017
1205. Han Q., Yan L., Zhang C., Zhang M., Zhang T., Zheng H., *Journal of Alloys and Compounds*, 715, 322-328, @2017 1.000
1206. Huang Qing-Li, Li Jing, Wei Wen-Xian, *Chinese J. of Inorganic Chemistry*, 33, 8, 1365-1373, @2017.
1207. Jiang T., Wang X., Tang J., *Optik-International Journal for Light and Electron Optics*, 150, 88-93, @2017
1208. Bispo-Jr, A.G., Shinohara, G.M.M., Pires, A.M., Cardoso, C.X. Red phosphor based on Eu³⁺-doped Y₂(MoO₄)₃ incorporated with Au NPs synthesized via Pechini's method 2018) *Optical Materials*, 84, pp. 137-145.
1209. Liang, A., Li, X., Zhang, X., Wen, G., Jiang, Z. A sensitive SERS quantitative analysis method for Ni²⁺ by the dimethylglyoxime reaction regulating a graphene oxide nanoribbon catalytic gold nanoreaction (2018) *Luminescence*, 33 (6), pp. 1033-1039.
1210. Tong, Q., Wang, W., Fan, Y., Dong, L. Recent progressive preparations and applications of silver-based SERS substrates (2018) *TrAC - Trends in Analytical Chemistry*, 106, pp. 246-258., @2018
1211. Verma, A.K., Das, R., Soni, R.K. Laser fabrication of periodic arrays of microsquares on silicon for SERS application (2018) *Applied Surface Science*, 427, pp. 133-140.,
1212. Feng, X., Li, C., Liang, A., Luo, Y., Jiang, Z. "Doped N/Ag carbon dot catalytic amplification SERS strategy for acetamiprid coupled aptamer with 3, 3' -Dimethylbiphenyl-4, 4' -diamine oxidizing reaction", *Open Access*, 2019 *Nanomaterials* 9(3), 480, 2019.
1213. Huang, T., Cao, L., Zhang, X., Xiong, X., Xu, J., Xiao, R. "A facile method to fabricate a novel 3D porous silicon/gold architecture for surface enhanced Raman scattering", *Journal of Alloys and Compounds*, 790, pp. 127-133, 2019, @2019 1.000
1214. Singh, J., Sahu, K., Mohapatra, S. "Ion beam engineering of morphological, structural, optical and photocatalytic properties of Ag-TiO₂ -PVA nanocomposite thin film". *Ceramics International* 45(6), pp. 7976-7983, 2019, @2019 1.000
P A Atanasov, N E Stankova, N N Nedyalkov, T R Stoyanov, Ru G Nikov, N Fukata, J W Gerlach, D Hirsch, B Rauschenbach. Properties of ns-laser processed polydimethylsiloxane (PDMS). Journal of Physics: Conference Series, 700, IOP Publishing, 2016, DOI:10.1088/1742-6596/700/1/012023, 012023-1-012023-6. SJR (Scopus):0.276
1215. Farsheian, Bahador, et al. "Laser-induced superhydrophobic grid patterns on PDMS for droplet arrays formation". *Appl. Surf. Sci.* 396 (2017) 359-365., @2017 Линк
1216. Yao, Junru. "Magnet-induced aligning magnetorheological elastomer based on ultra-soft matrix". *Composites Science and Technology* 162. 170-179, 2018, @2018 Линк
1217. A.R. Hlil, B.C. Lima, J. Thomas, J.-S. Boisvert, H. Iden, Y. Garcia-Puente, L.J.Q. Maia, Y. Ledemi, Y. Messaddeq, A.S.L. Gomes, R. Kashyap, "Rare earth doped PDMS elastomeric random lasers", *Optical Materials* 97, 109387 (2019) <https://doi.org/10.1016/j.optmat.2019.109387>,
Atanasov P.A., Stankova N.E., Nedyalkov N.N., Fukata N., Hirsch D., Rauschenbach B., Amoroso S., Wang X., Kolev K.N., Valova E.I., Georgieva J.S., Arnyanov St.A.. Fs-laser processing of medical grade polydimethylsiloxane (PDMS). Applied Surface Science, 374, Elsevier, 2016, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2015.11.175, 229-234. SJR (Scopus):0.958, JCR-IF (Web of Science):4.281
1218. A. Francis, R. Detsch, A. R. Boccaccini, "Fabrication and Cytotoxicity Assessment of Novel Polysiloxane/Bioactive Glass Films for Biomedical Applications". *Ceramics International*, 42(14) (2016) 15442-15448.,

1219. Moraczewski, Krzysztof, et al. "Laser modification of polylactide surface layer prior autocatalytic metallization" *Surface and Coatings Technology*, 304 (2016) 68-75.,
1220. E. Iordanova, G. Yankov, K. Garasz, "Surface Modification of Different Materials by fs-Laser Irradiation", *Bulg. J. Phys.* 44 (2017) 133–144.,
1221. Farshchian, Bahador, et al. "Laser-induced superhydrophobic grid patterns on PDMS for droplet arrays formation", *Appl. Surf. Sci.* 396 (2017) 359-365.,
1222. A Francis, "Progress in polymer-derived functional silicon-based ceramic composites for biomedical and engineering applications", *Mater. Res. Express*, 5(6), 062003, 2018,
1223. Gao-Qiang S., Gao-Xing L., Xi-Wei C., Jiang-Lin T., Meng-Long L., Teng-Fei L., Xiao-Rong X., Jun W., "A novel 3D printed biomimicry, made from oil infused layer on poly (dimethylsiloxane), promotes infected wound healing through antifouling and antimicrobial activity", *Medical Journal of Chinese People's Liberation Army*, 43 (10), Article number 0577-7402(2018)10-0840-09, Pages 840-848, 2018.
1224. Yu Deng, Wensheng Hong, Junfeng He, Zhongning Guo, Ying Chen, Zhigang Huang, "Micro-cracks on crosslinked Poly(dimethylsiloxane) (PDMS) surface treated by nanosecond laser irradiation", *Appl. Surf. Sci.*, 445, 488-495, 2018.,
1225. Zheng Wang, Yi Luo, Feng Zheng, Ni Zhang, Chongshan Yin, Jingjing Li, Chunqing He, Xiangyang Peng, Zhen Huang, Pengfei Fang, "Study on surface structure of plasma - treated polydimethylsiloxane (PDMS) elastomer by slow positron beam", *Surface and Interface Analysis*, 50 (8), 819-826, 2018. <https://doi.org/10.1002/sia.6484>,
1226. Caterina Tomba, Tatiana Petithory, Riccardo Pedron, Aissam Airoudj, Ilaria Di Meglio, Aurélien Roux, Valeriy Luchnikov, "Laser-Assisted Strain Engineering of Thin Elastomer Films to Form Variable Wavy Substrates for Cell Culture", *Small*, 15 (21), Article number 1900162, 2019, <https://doi.org/10.1002/smll.201900162>,
1227. Djen Timo Kuhnel, "Additive Manufacturing of Soft, Functional Structures for Next-Generation Soft Robotics", <https://pdfs.semanticscholar.org/756b/edd6be270876b771a582d187468e3c5ac927.pdf> A dissertation submitted to the University of Bristol in accordance with the requirements for award of the degree of DOCTOR OF PHILOSOPHY in the Faculty of Engineering. JUNE 2019,
1228. Gaoqiang Shi, Yitian Wang, Soroosh Derakhshanfar, Kaige Xu, Wen Zhong, Gaoxing Luo, Tengfei Liu, Ying Wang, Jun Wu, Malcolm Xing, "Biomimicry of oil infused layer on 3D printed poly(dimethylsiloxane): Non-fouling, antibacterial and promoting infected wound healing", *Materials Science and Engineering C* 100, 2019, DOI: 10.1016/j.msec.2019.03.058
1229. Qaiser Zaman, Khalid Mahmood Zia, Mohammad Zuber, Yahia Nasser Mabkhot, Faisal Almalki & Taibi Ben Hadda, "A comprehensive review on synthesis, characterization, and applications of polydimethylsiloxane and copolymers", *International Journal of Plastics Technology* (2019), <https://doi.org/10.1007/s12588-019-09259-y>,
Bialous A., Gazda M., Grochowska K., Atanasov, P., Dikovska A., Nedyalkov N.. Nanoporous TiO2 electrode grown by laser ablation of titanium in air at atmospheric pressure and room temperature. *Thin Solid Films*, 601, 2016, 41-44. ISI IF:1.879
1230. Russo P., Liang R., He R.X., Zhou Y.N., *Nanoscale*, 9(18), 6167-6177, @2017 1.000
1231. Saquilayan G.M.Q., Wada M., *Japanese Journal of Applied Physics*, 57(1S), 01AA01, @2017 1.000
1232. Glynnis Mae Q. Saquilayan and Motoi Wada "Ion propagation in an aluminum hollow cylinder target laser ion source, *Jap.J. Appl. Phys.*, 2018, @2018 1.000
Nikov, Ru. G., Nedyalkov, N. N., Atanasov, P. A., Hirsch, D., Rauschenbach, B., Grochowska, K., Sliwinski, G.. Characterization of Ag nanostructures fabricated by laser-induced dewetting of thin films. *Applied Surface Science*, 374, Elsevier, 2016, ISSN:0169-4332, DOI:10.1016/j.apsusc.2015.09.004, 36-41. SJR:0.913, ISI IF:2.711
1233. Contreras-Cuevas, Humberto. "Obtención de un substrato para medición SERS". ICM, 2017,
1234. Owusu-Ansah, Ebenezer. "Applications of Nanosecond Pulsed Lasers: Electronic Transitions of Atomic Si to Dewetting of Pt and Ag Metal Thin Films". 2017, PhD Thesis
1235. Single-pulse transformation of Ag thin film into nanoparticles via laser-induced dewetting Yoonseok Oh, Myeongkyu Lee, *Applied Surface Science* 399, 555-564, 2017,
1236. Estrada-Moreno, I.A. "Fabrication of a SERS Substrate of Gold Nanoparticles by Dewetting". *Proceedings of Microscopy & Microanalysis* 24. 1742-1743, 2018,
1237. Feng, Xiaofang. "Understanding the temperature and size dependence of the contact angle of Cu/Si(1 1 1): A molecular dynamics study". *Computational Materials Science* 150. 222–229, 2018
1238. Hong, Ruijin. "Laser irradiation induced tunable localized surface plasmon resonance of silver thin film". *Optical Materials* 77. 198-203, 2018,
1239. Hong, Ruijin. "The influence of dielectric environment on the localized surface plasmon resonance of silver-based composite thin films". *Optical Materials* 83. 212–219, 2018,
1240. Oh, Yoonseok. "Fabrication of Ag-Au bimetallic nanoparticles by laser-induced dewetting of bilayer films". *Applied Surface Science* 434. 1293–1299, 2018,
1241. Prakash, Jai. "Noble metals-TiO2 nanocomposites: From fundamental mechanisms to photocatalysis, surface enhanced Raman scattering and antibacterial applications". *Applied Materials Today* 11. 82–135, 2018
1242. Self-Organization Based Fabrication of Bimetallic PtPd Nanoparticles on Transparent Conductive Oxide Substrates, Maria Censabella, Francesco Ruffino, Massimo Zimbone, Elena Bruno, Maria G. Grimaldi, *Phys. Status Solidi A* 2017, 1700524-6,
1243. "Al-induced tunable surface plasmon resonance of Ag thin film by laser irradiation", R. Hong, W. Sun, Q. Liu, Z. Li, C. Tao, D. Zhang, *D. Zhang, Applied Physics Express* 12(8), 085503 (2019),

1244. "High-resolution large-scale plasmonic laser color printing for jewelry applications", G.V. Odintsova, E.A. Vlasova, Y.M. Andreeva, M.K. Moskvina, A.S. Krivonosov, E.V. Gorbunova, D.V. Pankin, O.S. Medvedev, M.M. Sergeev, N.N. Shchedrina, D.S. Lutoshina, V.P. Veiko, *Optics Express* 27(3), pp. 3672-3681 (2019),
1245. "Laser dewetting behaviors of Ag and Au thin films on glass and Si substrates: Experiments and theoretical considerations", H. Oh, A. Pyatenko, M. Lee, *Applied Surface Science* 475, pp. 740-747 (2019),
1246. "Nanostructuring of thin metal films by pulsed laser irradiations: A review", F. Ruffino, M.G. Grimaldi, *Nanomaterials* 9(8), 1133 (2019),
N.E. Stankova, P.A. Atanasov, Ru.G. Nikov, R.G. Nikov, N.N. Nedyalkov, T.R. Stoyanchoy, N. Fukata, K.N. Kolev, E.I. Valova, J.S. Georgieva, St.A. Armyanov. Optical properties of polydimethylsiloxane (PDMS) during nanosecond laser processing. Applied Surface Science, 374, Elsevier, 2016, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2015.10.016, 96-103. SJR (Scopus):0.958, JCR-IF (Web of Science):4.281
1247. Druval Santos de Sa. "Prototipagem de dispositivos micro- e mesofluidicos para a fotodegradacao de compostos organicos em fluxo catalisados com TiO2". Thesys (Disertacao de Messtrado). Pontifica Universidade Catolica, Rio de Janeiro, Marco de 2016.,
1248. Krzysztof, Moraczewski; Mroz, Waldemar; Budner, Boguslaw; et al. "Laser modification of polylactide surface layer prior autocatalytic metallization". *Surface and Coatings Technology*, 304, (2016) 68-75.,
1249. M. Planes, J. Brand, S. Lewandowski, St. Remaury, St. Solé, C. Le Coz, St. Carlotti, G. Sèbe. "Improvement of the Thermal and Optical Performances of Protective Polydimethylsiloxane Space Coatings with Cellulose Nanocrystal Additives". *ACS Appl. Mater. Interfaces*, 8 (41) (2016) 28030–28039.,
1250. Siwei Zhao, Ying Chen, Benjamin P. Partlow, Anne S. Golding, Peter Tseng, Jeannine Coburn, Matthew B. Applegate, Jodie E. Moreau, Fiorenzo G. Omenetto, David L. Kaplan, "Bio-functionalized silk hydrogel microfluidic systems". *Biomaterials*, 93 (2016) 60-70.,
1251. Bahador Farshchian, J.R. Gatabi, St.M. Bernick, S. Park, G. Hyoung Lee, R. Droopad, N. Kim, "Laser-induced superhydrophobic grid patterns on PDMS for droplet arrays formation", *Appl. Surf. Sci.* 396 (2017) 359-365.,
1252. E. Iordanova, G. Yankov, K. Garasz. "Surface Modification of Different Materials by fs-Laser Irradiation". *Bulg. J. Phys.* 44 (2017) 133–144.,
1253. Hojun Shin, Hyojae Kim, Yeongseok Jang, Jinmu Jung, and Jonghyun Oh. "Femtosecond Laser-Inscribed Direct Ultrafast Fabrication of a DNA Distributor Using Microfluidics", *Appl. Sci.-Basel* 7(10) (2017) 1083
1254. M. Planes, C. Le Coz, S. Lewandowski, S. Remaury, S.Solé, V. Rejsek-Riba, A.Soum, S.Carlotti. "Rhodium and platinum hydrosilylation catalysts for increasing UV stability of poly(dimethylsiloxane) in geostationary environment", *Polymer Degradation and Stability*, 142 (2017) 111-116.,
1255. Q. Humayun, U. Hashim, C. M. Ruzaidi, and N. Z. Noriman. "A strategy for design and fabrication of low cost microchannel for future reproductivity of bio/chemical lab-on-chip application". *AIP Conference Proceedings* 1808, 020022 (2017).,
1256. Yenny Meliana, Andinnie Juniarsih, Juvitha Anggraini, "KARAKTERISASI SIFAT TERMAL DAN OPTIK POLYDIMETHYLSILOXANE SEBAGAI LENS INVERS", *Jurnal Sains, Materi, Indonesia*, Volume 18, No 4, 2017, 155-161.,
1257. Choung, T., Lim, J., Won, D.-J., Kim, J., "Chamber/Capsule-Integrated Self-Healing Coating on Glass for Preventing Crack Propagation", *Macromolecular Materials and Engineering* 303(4), 1800041, 2018.
1258. Gao-Qiang S., Gao-Xing L., Xi-Wei C., Jiang-Lin T., Meng-Long L., Teng-Fei L., Xiao-Rong X., Jun W. "A novel 3D printed biomimicry, made from oil infused layer on poly (dimethylsiloxane), promotes infected wound healing through antifouling and antimicrobial activity" *Medical Journal of Chinese People's Liberation Army*, 43 (10), Article number 0577-7402(2018)10-0840-09, Pages 840-848, 2018.,
1259. Hedieh Pazokian; Mitra Vesal; Sahar Sohrabi, Mahmoud Mollabashi, "Fabrication of multiscale structures on polymethylmethacrylate following pulsed CO2 laser irradiation". *Optical Engineering* 57(12), 125103, 2018,
1260. Li, WZ., Kong, J., Wu, TT., Gao, LH., Ma, Z., Liu, YB., Wang, FC., Wei, CH., Wang, LJ., "Characterization, optical properties and laser ablation behavior of epoxy resin coatings reinforced with high reflectivity ceramic particles", *Materials Research Express* 5(4), 046202, 2018.,
1261. Martin Andersson, "Microfluidics at High Pressures: Understanding, Sensing, and Control", Doctoral thesis – 2018 Uppsala University, Disciplinary Domain of Science and Technology, Technology, Department of Engineering Sciences, Microsystems Technology. ORCID iD: 0000-0002-3966-0220,
1262. Shin, Jae-Hyeon; Kim, Nahae; Kim, Juyoung; "Preparation of PDMS Surface Modifier Using Silane-Functionalized Polymer Precursor Manufacture and Their Properties", *Journal of Adhesion and Interface* Volume 19 Issue 4 / Pages.154-162 / 2018 /
1263. Sola, D., Lavieja, C., Orera, A., Clemente, M.J., "Direct laser interference patterning of ophthalmic polydimethylsiloxane (PDMS) polymers", *Optics and Lasers in Engineering* 106, pp. 139-146, 2018.,
1264. Töpfer, T.; Osmani, B.; Müller, B., "Polydimethylsiloxane films engineered for smart nanostructures", *Microelectronic Engineering* 194, pp. 1-7, 2018.,
1265. Wolf, M.P., Salieb-Beugelaar, G.B., Hunziker, P., "PDMS with designer functionalities - Properties, modifications strategies, and applications", *Progress in Polymer Science* 83, pp. 97-134, 2018.,
1266. Caterina Tomba, Tatiana Petithory, Riccardo Pedron, Aissam Airoudj, Ilaria Di Meglio, Aurélien Roux, Valeriy Luchnikov, "Laser - Assisted Strain Engineering of Thin Elastomer Films to Form Variable Wavy Substrates for Cell Culture", *Small*, 15 (21), Article number 1900162, 2019 <https://doi.org/10.1002/sml.201900162>
1267. Gaoqiang Shi, Yitian Wang, Soroosh Derakhshanfar, Kaige Xu, Wen Zhong, Gaoxing Luo, Tengfei Liu, Ying Wang, Jun Wu, Malcolm Xing, "Biomimicry of oil infused layer on 3D printed poly(dimethylsiloxane): Non-fouling,

- antibacterial and promoting infected wound healing", *Materials Science and Engineering C*, 100, Pages 915-927, 2019, <https://doi.org/10.1016/j.msec.2019.03.058>.
1268. Kavand H., Van Lintel H., Bakhshi Sichani S., Bonakdar S., Kavand H., Koohsorkhi J., Renaud P. "Cell-Imprint Surface Modification by Contact Photolithography-Based Approaches: Direct-Cell Photolithography and Optical Soft Lithography Using PDMS Cell Imprints", *ACS Applied Materials and Interfaces*, 11 (11), 10559-10566, 2019 <https://doi.org/10.1021/acsami.9b00523>
1269. Lukáš Děkanovský Roman Elashnikov Markéta Kubiková Barbora Vokatá Václav Švorčík Oleksiy Lyutakov, "Dual-Action Flexible Antimicrobial Material: Switchable Self-Cleaning, Antifouling, and Smart Drug Release", *Advanced Functional Materials*, 29 (31), Article number 1901880, 2019, <https://doi.org/10.1002/adfm.201901880>,
1270. Nicholas Cheng Yang Tham, Pankaj K. Sahoo, Young-Jin Kim, and Vadakke Matham Murukeshan, "Ultrafast volume holography for stretchable photonic structures", *Optics Express*, 27 (9), 12196-12212, 2019. <https://doi.org/10.1364/OE.27.012196>,
1271. Scott McCormick, Louise E. Smith, Amy M. Holmes, Ziqiu Tong, Enzo Lombi, Nicolas H. Voelcker and Craig Priest, "Multiparameter toxicity screening on a chip: Effects of UV radiation and titanium dioxide nanoparticles on HaCaT cells" *Biomicrofluidics*, 13 (4), Article number 044112, 2019 <https://doi.org/10.1063/1.5113729>,
1272. SHUZHE WANG, "Photo-Thermal Application of a Polydimethylsiloxane Foam Embedded with Carbon Nanoparticles for Interfacial Solar Water Evaporation" *MECHANICAL ENGINEERING YORK UNIVERSITY TORONTO, ONTARIO JUNE 2019*,
1273. Yves De Deene, "A benchtop UV irradiator for 3D dosimetry laboratories with dose considerations in a spinning NMR test tube", *Journal of Physics: Conference Series*, Volume 1305, 012069, 2019, doi:10.1088/1742-6596/1305/1/012069,
1274. Zaman Q., Zia K.M., Zuber M., Mabkhot Y.N., Almalki F., Hadda T.B., "A comprehensive review on synthesis, characterization, and applications of polydimethylsiloxane and copolymers" *International Journal of Plastics Technology*, 2019, <https://doi.org/10.1007/s12588-019-09259-y>
Nedyalkov N., Y. Nakajima, M. Terakawa. Magnetic nanoparticle composed nanowires fabricated by ultrashort laser ablation in air. *Appl. Phys. Lett.*, 108, 2016, 04310. ISI IF:3.14
1275. Krajewski, M. "Magnetic-field-induced synthesis of magnetic wire-like micro- and nanostructures". *Nanoscale* 9(43), pp. 16511-16545, @2017 1.000
1276. Ekeröth, S., Mürnger, E.P., Boyd, R., (...), Brenning, N., Helmersson, U. "Catalytic Nanotruss Structures Realized by Magnetic Self-Assembly in Pulsed Plasma". *Nano Letters* 18(5), pp. 3132-3137, @2018 1.000
1277. Wen, T., Zhang, X., Zhang, D., (...), Zhang, H., Zhong, Z. "Simulation of Batch Nanoparticle Growth by the Generalized Diffusional Model". *Journal of Physical Chemistry C* 2018, 122, 47, 27070–27081.
Nedyalkov N., Nakajima Y., Takami A., Koleva M., Karashanova D., Terakawa M.. Laser induced morphological and optical properties changes in Au doped aluminum oxide and silicon oxide thin films. *Optics and Laser Technology*, 79, 2016, 179. ISI IF:1.88
1278. L. Bao, X. Qi, Tana, L. Chao, O. Tegus, *Phys. Chem. Chem. Phys.*, 2016, 18, 19165-19172, @2016 1.000
1279. Ren Y., Qi H., Yu X., *Opt. Commun.*, 389, 258-264 (2017), @2017 1.000
- Nikolov A. S., Nikov R.G., Nedyalkov N.N., Atanasov P. A., Alexandrov M. T., Karashanova D. B., Marinkov N. E., Dimitrov I. Z., Boevski I. I., Visan A., Mihailescu I. N.. Influence of the liquid level and ablation process duration on the characteristics of nanostructures created by nanosecond laser ablation of Ag in water. *Proceedings of SPIE*, 10226, 102260C, SPIE, 2017, ISSN:0277-786X, DOI:doi:10.1117/12.2262450, SJR:0.212**
1280. Rui Zhou, Yuanchao Yin, Deng Long, Jingqin Cui, Huangping Yan, Wanshan Liu, Jia Hong Pan, "PVP-assisted laser ablation growth of Ag nanocubes anchored on reduced graphene oxide (rGO) for efficient photocatalytic CO₂ reduction", *Progress in Natural Science: Materials International* 29(6), 660-666, 2019, <https://doi.org/10.1016/j.pnsc.2019.11.001>,
Nikov R. G., N. N. Nedyalkov, P. A. Atanasov, D. B. Karashanova. Laser-assisted fabrication and size distribution modification of colloidal gold nanostructures by nanosecond laser ablation in different liquids. *Applied Physics A: Materials Science and Processing*, 123, 490, Springer Berlin Heidelberg, 2017, ISSN:0947-8396, DOI:<https://doi.org/10.1007/s00339-017-1105-0>, JCR-IF (Web of Science):1.604
1281. I. Levchenko, K. Bazaka, O. Baranov, R. Mohan Sankaran, A. Nomine, T. Belmonte, S. Xu, "Lightning under water: Diverse reactive environments and evidence of synergistic effects for material treatment and activation". *Applied Physics Reviews* 5(2):021103, 2018.,
1282. M. Mardis, N. Takada Wahyudiono, H. Kanda, M. Goto, "Consideration Of Au-Carbon nanoparticles by laser ablation under supercritical CO₂", *ARPN Journal of Engineering and Applied Sciences* 13(20), 8343-8347., 2018
1283. R. Luo, Z. Xu, X. Lin, Preparation and characterisation of silver nanoparticles in an aqueous suspension of TETA modified graphene oxide and their antibacterial activity, *Micro & Nano Letters* 13 (3) 369–373 (2018).,
1284. Hossein Dizajghorbani-Aghdam, Thomas S. Miller, Rasoul Malekfar, Paul F. McMillan. "SERS-Active Cu Nanoparticles on Carbon Nitride Support Fabricated Using Pulsed Laser Ablation". *Nanomaterials* 9(9), 1223, 2019

Nikov Ru. G., A. Og. Dikovska, N. N. Nedyalkov, P. A. Atanasov, G. Atanasova, D. Hirsh, B. Raushenbach. ZnO nanostructures produced by pulsed laser deposition in open air. Applied Physics A, 123, 657, Springer, 2017, DOI:10.1007/s00339-017-1276-8, ISI IF:1.604

1285. Gopalakrishnan, Sankarasubramanian. "DFT/TD-DFT study on the electronic and spectroscopic properties of hollow cubic and hollow spherical (ZnO) m quantum dots interacting with CO, NO₂ and SO₃ molecules". Applied Physics A 124. art. num. 280, 2018,
1286. Vlad, A. "Pulsed laser deposition of functionalized Mg–Al layered double hydroxide thin films". Applied Physics A 124. art. num. 152, 2018.
- Nikolov, A. S., Balchev, I. I., Nedyalkov, N. N., Kostadinov, I. K., Karashanova, D. B., Atanasova, G. B.. Influence of the laser pulse repetition rate and scanning speed on the morphology of Ag nanostructures fabricated by pulsed laser ablation of solid target in water. APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 123, 11, SPRINGER, 233 SPRING ST, NEW YORK, NY 10013 USA, 2017, DOI:10.1007/s00339-017-1328-0, ISI IF:1.604**
1287. Xiaoxia Xu , Lei Gao and Guotao Duan. "The Fabrication of Au@C Core/Shell Nanoparticles by Laser Ablation in Solutions and Their Enhancements to a Gas Sensor". Micromachines, 9, 278, 2018,
1288. Alexander Letzel, Marco Santoro, Julia Frohleiks, Anna R. Ziefuß, Stefan Reich, Anton Plech, Enza Fazio, Fortunato Neri, Stephan Barcikowski, Bilal Gökce, "How the re-irradiation of a single ablation spot affects cavitation bubble dynamics and nanoparticles properties in laser ablation in liquids", Applied Surface Science, Vol. 473, 828-837, 2019,
1289. Baiee, Raid "Generation of ultra-fine nanoparticles by laser ablation in liquid". The University of Manchester, 2019,
1290. Gemishev, O. T., Panayotova, M. I, Mintcheva, N. N., Djerahov, L. P., Tyuliev, G. T. and Gicheva, G. D., "A green approach for silver nanoparticles preparation by cell-freeextract fromTrichoderma reeseifungi and their characterization", Mater. Res. Express 6 095040 (2019),
1291. Jurkevičiūtė, A., Klimaitė, G., Tamulevičius, T., Fiutowski, J., Rubahn, H., Tamulevičius, S., "Tailoring of Silver Nanoparticle Size Distributions in Hydrogenated Amorphous Diamondlike Carbon Nanocomposite Thin Films by Direct Femtosecond Laser Interference Patterning", Advanced Engineering Materials (2019) doi:10.1002/adem.201900951 (2019).
- Nakajima Y, Nedyalkov N., Takami A, Terakawa M.. Fabrication of isolated platinum nanowire gratings and nanoparticles on silica substrate by femtosecond laser irradiation. Appl. Surf. Sci., 394, 2017, 108. ISI IF:3.387**
1292. Jin, T., Chen, J., Wang, J., Zhao, Q., Material Removal Mechanism of Nanotwinned Cubic Boron Nitride by Femtosecond Laser Ablation, Journal of Mechanical Engineering 55(9), pp. 198-205, @2019
1293. Ruffino, F., Grimaldi, M.G., Nanostructure of thin metal films by pulsed laser irradiations: A review, Nanomaterials, 9(8), 1133, @2019 1.000
- Koleva, N., Nedyalkov, N., Fukata, N., Jevasuwan, W., Amoruso, S., Koutzarova, T., Avdeev, G.V., Georgieva, B., Karashanova, D.. Laser-assisted approach for synthesis of plasmonic Ag/ZnO nanostructures. Superlattices and Microstructures, 109, Elsevier B.V., 2017, ISSN:0749-6036, DOI:https://doi.org/10.1016/j.spmi.2017.06.007, 886-896. ISI IF:2.099**
1294. Jeon, J.-W., Yoon, S., Choi, H.W., Kim, J., Farson, D.Cho, S.-H., "The effect of laser pulse widths on laser-Ag nanoparticle interaction: Femto- to nanosecond lasers", Applied Sciences 8(1), 112, @2018
1295. Yarali, E., Koutsiaki, C., Faber, H., (...), Koutsogeorgis, D.C., Anthopoulos, T.D. "Recent Progress in Photonic Processing of Metal-Oxide Transistors" Advanced Functional Materials, 1906022, Article in Press, 2019
- Sawczak M, Zyskowski M, Karczewski J, Atanasov P, Nedyalkov N., Nikov Ru, Stankova N, Sliwinski G. Nanoparticle Over Mirror plasmonic structures prepared with use of Au colloid produced by laser ablation in water. Proc. SPIE, 10226, 2017, 102260G-1. SJR:0.2**
1296. Huang Y., Ma L., Li J., Zhang Z., 69. "Nanoparticle-on-mirror cavity modes for huge and/or tunable plasmonic field enhancement". Nanotechnology, 28(10), 105203 (2017),
- Dikovska A. Og., Pallotti D, Lettieri S, Atanasova G. B., Avdeev G. V., Maddalena P., Amoruso S., Nedyalkov N. N.. Growth mechanism of ZnO nanostructures produced by ultraviolet and visible laser ablation. Applied Surface Science, 423, Elsevier, 2017, DOI:10.1016/j.apsusc.2017.06.331, 977-982. ISI IF:4.439**
1297. Fiaschi, G. Mirabella, S. Franzò, G. Maiolo, L. Chitu, A. Komem, Y. Shacham-Diamand, Y. "Effect of laser annealing on ZnO nanorods grown by chemical bath deposition on flexible substrate". Applied Surface Science. 458. 800-804, 2018,
1298. Ganesh, R.S. Mani, G.K. Elayaraja, R. Durgadevi, E. Navaneethan, M. Ponnusamy, S. Tsuchiya, K. Muthamizhchelvan, C. Hayakawa, Y. "Surfactant free controllable synthesis of 2D – 1D ZnO hierarchical nanostructure and its gas sensing properties". Applied Surface Science. 449. 838-845, 2018, @2018 1.000
1299. Sang, D. Wang, Q. Wang, Q. Zhang, D. Hu, H. Wang, W. Zhang, B. Fan, Q. Li, H. "Improved electrical transport properties of an n-ZnO nanowire/p-diamond heterojunction". RSC Advances. 8(50). 28804-28809, 2018, @2018 1.000

1300. Abdullayeva, N., Altaf, C.T., Mintas, M., (...), Kurt, H., Sankir, N.D., "Investigation of Strain Effects on Photoelectrochemical Performance of Flexible ZnO Electrodes", *Scientific Reports* 9(1), 11006 (2019).
1301. Salah, M. Azizi, S. Boukhachem, A. Khaldi, C. Amlouk, M. Lamloumi, J. "Effects of lithium doping on: microstructure, morphology, nanomechanical properties and corrosion behaviour of ZnO thin films grown by spray pyrolysis technique". *J Mater Sci: Mater Electron*, DOI: 10.1007/s10854-018-0449-3, 2018,
1302. Shetti, N.P., Bukkitgar, S.D., Reddy, K.R., Reddy, C.V., Aminabhavi, T.M., "ZnO-based nanostructured electrodes for electrochemical sensors and biosensors in biomedical applications", *Biosensors and Bioelectronics*, 141, 111417 (2019).
- Nikov R.G., N. Nedyalkov, P.A. Atanasov, D. B. Karashanova. Characterization of colloidal silver nanostructures produced by pulsed laser ablation in different liquids. Proceedings of SPIE - The International Society for Optical Engineering, 10226, 102260E, SPIE, 2017, ISSN:0277-786X, DOI:doi:10.1117/12.2261813, SJR:0.216**
1303. C. G. Moura et al Effects of laser fluence and liquid media on preparation of small Ag nanoparticles by laser ablation in liquid, *Opt. Las. Techn*, 2017, <https://doi.org/10.1016/j.optlastec.2017.06.007>
1304. Mansoureh Ganjali, Parisa Vahdatkhah, Synthesis of metal nanoparticles using laser ablation technique, In book: *Emerging Applications of Nanoparticles and Architecture Nanostructures*, 2018.
- Nikov Rumen G., Anna Og. Dikovska, Nikolay N. Nedyalkov, Georgi V. Avdeev, Petar A. Atanasov. Au nanostructure fabrication by pulsed laser deposition in open air: Influence of the deposition geometry. Beilstein Journal of Nanotechnology, 8, 2017, DOI:10.3762/bjnano.8.242, 2438-2445. SJR:3.13, ISI IF:2.968**
1305. Barimah, Eric. "Erbium-doped glass nanoparticle embedded polymer thin films using femtosecond pulsed laser deposition". *Optical Materials Express* 8. 1997-2007, 2018,
1306. Hughes, Cian. "Modelling and optimisation of single-step laser-based gold nanostructure deposition with tunable optical properties". *Optics & Laser Technology* 108. 295-305, 2018,
1307. "Disk-based one-dimensional photonic crystal slabs for label-free immunosensing", G. Sancho-Fornes, M. Avella-Oliver, J. Carrascosa, E. Fernandez, E.M. Brun, Á. Maquieira, *Biosensors and Bioelectronics* 126, pp. 315-323 (2019),
- Nedyalkov, N., Dikovska, A, Nikov, R., Atanasov, P., Sliwinski, G., Hirsch, D., Rauschenbach, B.. Laser-induced nanoparticle fabrication on paper. App. Phys. A, 123, 2017, 570. ISI IF:1.604**
1308. "Numerical simulation on nanosecond laser ablation of titanium considering plasma shield and evaporation-affected surface thermocapillary convection", Z. Yan, X. Mei, W. Wang, A. Pan, Q. Lin, C. Huang, *Optics Communications* 453, 124384 (2019),
- Nedyalkov N., Nikov Ru, Dikovska A., Atanasova G., Nakajima Y., Terakawa M.. Gold nanostructure deposition by laser ablation in air using nano- and femtosecond laser pulses. Appl. Phys. A, 123, 2017, 306. ISI IF:1.604**
1309. Fu, X." Autofocus system for invisible pulsed laser". *Optics and Precision Engineering* 25. 12-19, 2017,
- Rumen G. Nikov, Anna Og. Dikovska, Genoveva B. Atanasova, Georgi V. Avdeev, Nikolay N. Nedyalkov. Magnetic-field-assisted formation of oriented nanowires produced by pld in open air. Applied Surface Science, 458, Elsevier, 2018, ISSN:0169-4332, 273-280. SJR (Scopus):1.093, JCR-IF (Web of Science):5.155**
1310. "Multifunctional Magnetic Nanowires: Design, Fabrication, and Future Prospects as Cancer Therapeutics", A.B.A. Nana, T. Marimuthu, P.P.D. Kondiah, Y.E. Choonara, L.C. Du Toit, V. Pillay, *Cancers* 11, 1956 (2019)
1311. "Pulsed laser deposition of nanostructured MgO film: Effect of laser fluence on the structural and optical properties", R.A. Ismail, A.M. Mousa, S.S. Shaker, *Materials Research Express* 6, 075007 (2019),
- Nedyalkov N., Stankova N, Koleva M, Nikov R, Grozeva M, Iordanova K, Yankov G, Aleksandrov L, Iordanova R, karashanova D. Optical properties modification of gold doped glass induced by nanosecond laser radiation and annealing. Opt. mat, 75, 2018, DOI:https://doi.org/10.1016/j.optmat.2017.10.032, 646-653. SJR (Scopus):0.59, JCR-IF (Web of Science):2.687**
1312. Aparimita, A., Sripan, C., Ganesan, R., Jena, S., Naik, R., "Influence of thermal annealing on optical and structural properties change in Bi-doped Ge30 Se70 thin films", *Phase Transitions* 91(8), (2018) 872-886.,
1313. Fu, X., Li, Y., Li, X., Tian, R., Yin, L., Zhang, J., "Laser bonding of glass and glass with constant temperature output", *Proceedings - 2018 19th International Conference on Electronic Packaging Technology, ICEPT (2018)* 8480752, 1084-1088.,
1314. Moriceau, J., Houizot, P., Lorenc, M., Rouxel, T., Healing of cracks by green laser irradiation in a nanogold particles glass matrix composite, *Journal of Non-Crystalline Solids* 503-504, pp. 115-119, @2019 1.000
- Atanasov P.A., N Nedyalkov, R. Nikov, N. Fukata, W. Jevasuwan, T. Subramani, D. Hirsch, B. Rauschenbach. SERS analyses of thiamethoxam assisted by Ag films and nanostructures produced by laser techniques. J. Raman Spectrosc, 2018, JCR-IF (Web of Science):2.879**
1315. "Biomimetic synthesis of 3D Au-decorated chitosan nanocomposite for sensitive and reliable SERS detection", F. Fu, B. Yang, X. Hu, H. Tang, Y. Zhang, X. Xu, Y. Zhang, S.S.B. Touhid, X. Liu, Y. Zhu, J. Zhou, J. Yao, *Chemical Engineering Journal*, 123693 (2019),
1316. "Raman and SERS spectra of thiamethoxam and the Ag3-thiamethoxam complex: an experimental and

- theoretical investigation”, Y. Gao, M.-L. Xu, J. Xiong, *Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes* 54, pp. 665-675 (2019),
1317. “Rapidly fabricating a large area nanotip microstructure for high-sensitivity SERS applications”, J. Ma, W. Liu, Z. Ma, P. Song, Y. Zhao, F. Yang, X. Wang, *Nanoscale* 11, pp. 20194-20198 (2019),
1318. “Recent advances in linear and nonlinear Raman spectroscopy. Part XIII”, L.A. Nafie, *J. Raman Spectrosc.* 50, pp. 1783-1806 (2019),
R. G. Nikov, N. N. Nedyalkov, Ru. G. Nikov, D. B. Karashanova. Nanosecond laser ablation of Ag–Au films in water for fabrication of nanostructures with tunable optical properties. *Applied Physics A: Materials Science & Processing*, 124, 847, Springer Berlin Heidelberg, 2018, ISSN:1432-0630 (Online), 0947-8396 (Print), DOI:<https://doi.org/10.1007/s00339-018-2272-3>, SJR (Scopus):0.421, JCR-IF (Web of Science):1.784
1319. Yutong Wang, Changjun Ke, Tianhao Wu, Xiaoran Zhao, Ran Wang, "Nanosecond laser texturing with hexagonal honeycomb micro-structure on Titanium for improved wettability and optical properties". *Optik*, Volume 192, 2019, 162953.,
Nedyalkov N., Stankova, N.E., Koleva, M.E., Nikov R.. Optical properties modification induced by laser radiation in noble-metal-doped glasses. *Journal of Physics: Conference Series*, 992, 1, IOP Science, 2018, ISSN:Journal of Physics: Conference Series, DOI:10.1088/1742-6596/992/1/012047, 012047-1-012047-6. SJR (Scopus):0.221, JCR-IF (Web of Science):0.454
1320. Machida, M., Niidome, T., Onoe, H., Heisterkamp, A., Terakawa, M. "Spatially-targeted laser fabrication of multi-metal microstructures inside a hydrogel" *Optics Express* 27 (10), 14657-14666, 2019,
R G Nikov, N N Nedyalkov, P A Atanasov, D B Karashanova. Synthesis of bimetallic nanostructures by nanosecond laser ablation of multicomponent thin films in water. *Journal of Physics: Conference Series*, 992, 012046, IOP Publishing, 2018, ISSN:Online ISSN: 1742-6596, Print ISSN: 1742-6588, DOI:doi :10.1088/1742-6596/992/1/012046, SJR (Scopus):0.221
1321. T.A. El-Dessouky, Y.A. Badr, S.E.S.A El-Ghany, A. Ammar, Effect of pulsed laser damage on the thermal properties of metal film on substrate, *IOSR Journal of Applied Chemistry* 12 (2) Ser. I (2019) 61-64
M.E. Koleva, N.N. Nedyalkov. Modification of plasmon resonance properties of noble metal nanoparticles inside the glass matrices. *Applied Surface Science*, 475, Elsevier, 2019, ISSN:01694332, DOI:<https://doi.org/10.1016/j.apsusc.2019.01.051>, 974-981. JCR-IF (Web of Science):5.155
1322. Amir Zada, Pir Muhammad, Waqas Ahmad, Zahid Hussain, Sharafat Ali, Maaz Khan, Qasim Khan, Muhammad Maqbool, *Surface Plasmonic - Assisted Photocatalysis and Optoelectronic Devices with Noble Metal Nanocrystals: Design, Synthesis, and Applications, Advanced Functional Materials*, 1906744, 2019
<https://doi.org/10.1002/adfm.201906744>
1323. Sharifi, M., Attar, F., Saboury, A.A., Akhtari, K., Hooshmand, N., Hasan, A., El-Sayed, M.A., Falahati, M. "Plasmonic gold nanoparticles: Optical manipulation, imaging, drug delivery and therapy". *Journal of Controlled Release*, 311-312, 170-189, 2019,
Nedyalkov N., Koleva, M.E., Nikov R., Stankova N.E.. Tuning optical properties of noble metal nanoparticle-composed glasses by laser radiation. *Applied Surface Science*, 463, Elsevier, 2019, ISSN:01694332, DOI:<https://doi.org/10.1016/j.apsusc.2018.09.024>, 968-975. SJR (Scopus):1.115, JCR-IF (Web of Science):4.439
1324. Alluhaybi, H.A., Ghoshal, S.K., Alsobhi, B.O., Wan Shamsuri, W.N., Visible photoluminescence from gold nanoparticles: A basic insight, *Optik* 192, 162936, @2019 1.000
1325. Chauhan, P., Chaudhary, S., Role of surface modification on selenium nanoparticles: Enumerating the optical, thermal and structural properties, *Optical Materials* 97, 109380, @2019
1326. Chenthamara, D., Subramaniam, S., Ramakrishnan, S.G., S. Krishnaswamy. M. M. Essa, Lin, F.-H., Qoronfleh, M.W. "Therapeutic efficacy of nanoparticles and routes of administration". *Biomaterials Research* 23(1), 20, 2019,
1327. Khan, M., Mishra, S., Ratna, D., Sonawane, S., Shimpi, N.G.. "Investigation of thermal and mechanical properties of styrene-butadiene rubber nanocomposites filled with SiO₂-polystyrene core-shell nanoparticles", *Journal of Composite Materials*, 2019 <https://doi.org/10.1177/0021998319886618>.
1328. Meng, G., Wang, X., Hu, H., (...), Ren, Y., Lu, C., Cu₂O-Ag nanocomposites with tunable optical property, *Materials Research Express* 6(10), 105080, @2019
1329. Saleh, T.A., Fadillah, G., Saputra, O.A., Nanoparticles as components of electrochemical sensing platforms for the detection of petroleum pollutants: A review, *TrAC - Trends in Analytical Chemistry*, 118, pp. 194-206, @2019
- Nedyalkov N, Stankova N, Koleva M, Nikov R, Aleksandrov L, Iordanova R, Atanasova G., Iordanova E, Yankov G. Laser processing of noble metal doped glasses by femto- and nanosecond laser pulses. *Appl. Surf. Sci*, 475, 2019, 479. JCR-IF (Web of Science):5.155**
1330. Bubli, I., Ali, S., Ali, M., (...), Haq, A.U., Cattaruzza, E., Enhancement of solar cell efficiency via luminescent downshifting by an optimized coverglass, *Ceramics International* DOI: 10.1016/j.ceramint.2019.09.193, 2019
1331. Zaguliaev, D., Konovalov, S., Ivanov, Y., Gromov, V., Effect of electron-plasma alloying on structure and mechanical properties of Al-Si alloy, *Applied Surface Science* 498, 143767, @2019

Atanasov P, Nedyalkov N, Fukata N, Jevasuwan W, Subramani T, Terakawa M, Nakajima Y. Surface-Enhanced Raman Spectroscopy (SERS) of Mancozeb and Thiamethoxam Assisted by Gold and Silver Nanostructures Produced by Laser Techniques on Paper. Appl. Spectroscopy, 73, 2019, 313. JCR-IF (Web of Science):2.064

1332. Gao, Y., Xu, M.-L., Xiong, J., Raman and SERS spectra of thiamethoxam and the Ag₃-thiamethoxam complex: an experimental and theoretical investigation, *Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes*, 54(8), pp. 665-675, @2019 1.000
1333. Kung, C.-T., Hou, C.-Y., Wang, Y.-N., Fu, L.-M., Microfluidic paper-based analytical devices for environmental analysis of soil, air, ecology and river water, *Sensors and Actuators, B: Chemical*, 301, 126855, @2019
1334. Pham, X.-H., Hahm, E., Huynh, K.-H., (...), Jeong, D.H., Jun, B.-H., 4-Mercaptobenzoic acid labeled gold-silver-alloy-embedded silica nanoparticles as an internal standard containing nanostructures for sensitive quantitative thiram detection, *International Journal of Molecular Sciences*, 20(19), 4841, @2019 1.000
- Ru.G. Nikov, A.Og. Dikovska, G.V. Avdeev, S. Amoruso, G. Ausanio, N.N. Nedyalkov. PLD fabrication of oriented nanowires in magnetic field. Applied Surface Science, 471, Elsevier, 2019, DOI:10.1016/j.apsusc.2018.12.030, 368-374. ISI IF:4.439**
1335. "Multifunctional Magnetic Nanowires: Design, Fabrication, and Future Prospects as Cancer Therapeutics", A.B.A. Nana, T. Marimuthu, P.P.D. Kondiah, Y.E. Choonara, L.C. Du Toit, V. Pillay, *Cancers* 11, 1956 (2019), **G. Atanasova, A. Og. Dikovska, T. Dilova, B. Georgieva, G.V. Avdeev, P. Stefanov, N. N. Nedyalkov. Metal-oxide nanostructures produced by PLD in open air for gas sensor applications. Applied Surface Science, 470, Elsevier, 2019, DOI:10.1016/j.apsusc.2018.11.178, 861-869. ISI IF:4.439**
1336. Rydosz, A., Brudnik, A., Staszek, K., "Metal oxide thin films prepared by magnetron sputtering technology for volatile organic compound detection in the microwave frequency Range", *Materials* 12(6), 877 (2019),
1337. Saleh, T.A., Fadillah, G., Saputra, O.A., "Nanoparticles as components of electrochemical sensing platforms for the detection of petroleum pollutants: A review", *TrAC - Trends in Analytical Chemistry* 118, pp. 194-206 (2019),
1338. Yan, S., Zhang, J., Huang, Y., Lu, Y., "Preparation of Coral-like SnO₂ Hierarchical Nanostructures and Its Application in Ethanol Gas-sensing Performance", *IOP Conference Series: Materials Science and Engineering* 611 (1), 012039 (2019),
- Atanasov P.A., Eugenieva E.D., Nedyalkov N.N.. Laser drilling of silicon nitride and alumina ceramics: A numerical and experimental study. Journal of Applied Physics, 89, 2001, 2013. ISI IF:2.183**
1339. Kazakov, A.V., Medovnik, A.V., Oks, E.M. Generation of focused high-current electron beam with millisecond pulse duration by a forevacuum plasma-cathode electron source based on cathodic arc 2019 *Journal of Physics: Conference Series* 1393(1), 012044, @2020 1.000
1340. Mei, X., Yang, Z., Zhao, W. Laser Hole Drilling on Surface of Electronic Ceramic Substrates 2020 *Chinese Journal of Lasers* 47(5), 0500011, @2020 1.000
1341. Tanaka, S., Yamada, S., Komurasaki, K., Koizumi, H. Laser spot size and preheating effects on alumina reduction using laser ablation 2020 *Journal of Thermophysics and Heat Transfer* 34(4), pp. 733-740, @2020 1.000
1342. A.R., Sangam, S.S., Shreyas, S., Shankar, S.B.A review on the challenges in machining of ceramics Bharathi, V., Anilchandra, 2021 *Materials Today: Proceedings* 46, pp. 1451-1458, @2021 1.000
1343. Mishra P., Sood S., Pandit M., Khanna P., *Advanced Engineering Forum*, 39, 21-42 (2021), @2021 1.000
1344. Yan, S., Wei, C., Zou, H., (...), Sui, T., Lin, B. Fabrication and tribological characterization of laser textured engineering ceramics: Si₃N₄, SiC and ZrO₂ 2021 *Ceramics International*, 47(10), pp. 13789-13805, @2021 1.000
1345. Zhao, W., Mei, X., Yang, Z. Simulation and experimental study on group hole laser ablation on AL₂O₃ ceramics 2021 *Ceramics International*, <https://doi.org/10.1016/j.ceramint.2021.10.233>, @2021 1.000
1346. Zhao, W., Mei, X. Optimization of trepanning patterns for holes ablated using nanosecond pulse laser in al₂o₃ ceramics substrate, . 2021 *Materials* 14(14), 3834, @2021 1.000
1347. A critical review on sintering and mechanical processing of 3Y-TZP ceramics Yin, Y., Xu, J., Ji, M., Li, L., Chen, M. 2022 *Ceramics International*, @2022 1.000
1348. Jia, X., Chen, Y., Liu, L., Wang, C., Duan, J. Advances in Laser Drilling of Structural Ceramics 2022 *Nanomaterials*, 12(2), 230, @2022 1.000
1349. Zhao, H.R., Chen, M.X., Peng, Y., (...), Kang, M., Cao, L. HTXV Technology: The cornerstone of 3D system-in-packaging . 2022 *Science China Technological Sciences* 65(9), pp. 2031-2050, @2022 1.000
1350. Zhao, W., Mei, X., Yang, Z. Simulation and experimental study on group hole laser ablation on AL₂O₃ ceramics 2022 *Ceramics International* 48(4), pp. 4474-4483, @2022 1.000
1351. Liang, C., Li, Z., Wang, C., (...), Xiang, Y., Jia, X. "Laser drilling of alumina ceramic substrates: A review". *Optics and Laser Technology* 167, 109828, @2023 1.000
1352. Yin, Y., Xu, J., Ji, M., Li, L., Chen, M. "A critical review on sintering and mechanical processing of 3Y-TZP ceramics". *Ceramics International* 49(2), pp. 1549-1571, @2023 1.000
- Atanasov P, Nedyalkov N., Imamova S, Ruf A, Hugel H, Dausinger F, Berger P. Laser ablation of Ni by ultrashort pulses: molecular dynamics simulation. Appl. Surf. Sci., 186, 2002, 369. ISI IF:3.387**
1353. Mao, L.-B., Yang, W.-M., Tan, J., Cheng, L.-S. Reactive molecular dynamics simulation of the laser-induced carbonization of pre-oxidized polyacrylonitrile fibers Y 2020 *New Carbon Materials* 35(2), pp. 176-183, @2020 1.000

1354. Xuefeng, W., Sanlin, M. Research progress in femtosecond laser machining mechanism and simulation analysis | 2021 Laser and Optoelectronics Progress, 58(19), 1900005, @2021 1.000
1355. Zhang, Z., Yang, Z., Wang, C., (...), Zheng, S., Xu, W. Mechanisms of femtosecond laser ablation of Ni3Al: Molecular dynamics study 2021 Optics and Laser Technology 133, 106505, @2021 1.000
1356. Dong, Y., Ye, Q., Li, Q., (...), Zhang, S., Hou, N. Numerical Simulation and Validation of Multiscale 3D Laser Spiral Machining of Microholes, 2022 Laser and Particle Beams 2022, 2455226, @2022 1.000
- Imamova S, Nedyalkov N, Atanasov P, Ruf A, Berger P, Dausinger F. Ultrashort Laser ablation of iron: molecular dynamics simulation. Proceedings of SPIE, 5226, 2003, 347. SJR (Scopus):0.227**
1357. Alaghemandi M., Salehi L., Samolis P., Trachtenberg B.T., Turnali A., Sander M.Y., Sharifzadeh S., Nano Select., 1-10 (2021), @2021 1.000
- Nedialkov N.N., Atanasov P.A., Sawczak M., Sliwinski G.. Ablation of ceramics with ultraviolet, visible and infrared nanosecond laser pulses. Proceedings of SPIE, 5120, 2003, 703**
1358. Soltani, B., Hojati, F., Daneshi, A., Azarhoushang, B. Simulation of the laser-material interaction of ultrashort pulse laser processing of silicon nitride workpieces and the key factors in the ablation process, 2021 International Journal of Advanced Manufacturing Technology, 114(11-12), pp. 3719-3738, @2021 1.000
1359. Ruiz, S., Yoo, Y., Wadle, L., (...), Wiesner, V., Cui, B. "Laser ablative patterning of B4C and MoAlB ceramics for hydrophobic surfaces". Journal of the American Ceramic Society 106(10), pp. 5712-5722, @2023 1.000
- Nedialkov N.N., Imamova S.E., Atanasov P.A.. Ablation of metals by ultrashort laser pulses. Journal of Physics D, 37, 2004, 638. ISI IF:2.721**
1360. Berczeli, M., Tajti, F. Optimization of material removal parameters by femtosecond laser pulses 2020 IOP Conference Series: Materials Science and Engineering 903(1), 012026, @2020 1.000
1361. Lei, S., Zhao, X., Yu, X., (...), Lawrence Yao, Y., Shin, Y.C. Ultrafast Laser Applications in Manufacturing Processes: A State-of-the-Art Review 2020 Journal of Manufacturing Science and Engineering, Transactions of the ASME 142(3), 031005-1, @2020 1.000
1362. Xiao, Q., Xu, R. Research Progress in Surface Micro-nano Structure of Materials Prepared by Ultrafast Laser 2020 China Surface Engineering 33(1), pp. 1-17, @2020 1.000
1363. Förster, D.J., Jäggi, B., Michalowski, A., Neuenschwander, B. Review on experimental and theoretical investigations of ultra-short pulsed laser ablation of metals with burst pulses 2021 Materials, 14(12), 3331, @2021 1.000
1364. Irimiciuc, S.A., Agop, M. Multifractal model for transient phenomena analysis in laser produced plasmas, 2021 Symmetry 13(10), 1968, @2021 1.000
1365. Irimiciuc, S.A., Chertopalov, S., Novotný, M., Craciun, V., Lancok, J. On the dynamics of transient plasmas generated by nanosecond laser ablation of several metals, 2021 Materials, 14(23), 7336, @2021 1.000
1366. Xie, X., Zhu, Y., Huang, Y., (...), Wang, P., Long, J. Debris-free Femtosecond Laser Micromachining of Stainless Steel Vascular Stent 2021, Journal of Mechanical Engineering, 57(5), pp. 251-261, @2021 1.000
1367. Zhang, Z., Xu, Z., Wang, C., (...), Zhang, Q., Xu, W. Molecular dynamics-guided quality improvement in the femtosecond laser percussion drilling of microholes using a two-stage pulse energy process 2021 Optics and Laser Technology, 139, 106968, @2021 1.000
1368. Amini, S., Seche, W., May, N., (...), Tavousi, P., Shahbazmohamadi, S. Femtosecond laser hierarchical surface restructuring for next generation neural interfacing electrodes and microelectrode arrays, 2022 Scientific Reports 12(1), 13966, @2022 1.000
1369. Chen, Z., Yang, J., Liu, H., Zhao, Y., Pan, R. A short review on functionalized metallic surfaces by ultrafast laser micromachining 2022 International Journal of Advanced Manufacturing Technology 119(11-12), pp. 6919-6948, @2022 1.000
1370. Geng, L., Cheng, S., Fu, Q., Li, H. Laser ablation behavior and mechanism of carbon/carbon composites 2022 Acta Materialiae Compositae Sinica, 39(9), pp. 4337-4343, @2022 1.000
1371. Miloshevsky, G. Ultrafast laser matter interactions: modeling approaches, challenges, and prospects 2022 Modelling and Simulation in Materials Science and Engineering 30(8), 083001, @2022 1.000
1372. Yoshida, M., Nishibata, I., Matsuda, T., (...), Hirose, A., Sano, T. Influence of pulse duration on mechanical properties and dislocation density of dry laser peened aluminum alloy using ultrashort pulsed laser-driven shock wave 2022 Journal of Applied Physics 132(7), 075101, @2022 1.000
1373. Zhang, H., Zu, J., Deng, D., Xu, H., Chen, J. Yb-Doped Fiber Chirped Pulse Amplification System Delivering 1 mJ, 231 fs at 1 kHz Repetition Rate, 2022 Photonics 9(2), 67, @2022 1.000
1374. Choi, J., Cho, S.-H. "A Study of Ultrafast Ablation on ITO Thin Films with Wavelengths of 513 and 1026 nm for High Resolution Patterning". International Journal of Precision Engineering and Manufacturing, @2023 1.000
1375. Das, S., Kumar, A., Singh, J., Kumar, M. "Fabrication and modeling of laser ablated NiO nanoparticles decorated SnO2 based formaldehyde sensor". Sensors and Actuators B: Chemical 387, 133824, @2023 1.000
1376. Du, X., Yu, X. "Maximizing scanning speed in the ultrafast laser cutting of thin materials". Optics Express 31(6), pp. 9750-9759, @2023 1.000
1377. Kumar Singh, B., Kapil, S., Joshi, S.N. "Numerical modeling of phase prediction and geometry evolution of micro-drilling using single pulse laser". Materials Today: Proceedings 90, pp. 262-266, @2023 1.000
1378. Peng, L., Li, M., Wang, P., (...), Zhang, H., Chen, S. "Numerical simulation and investigation of ultra-short pulse laser ablation on Ti6Al4V and stainless steel". AIP Advances 13(6), 065018, @2023 1.000
1379. Qiu, P., Guo, Y., Huang, L., (...), Zhang, Z., Xu, S. "Patterned Laser Ablation of Microgrooves with Controllable Cross-Sections". Advanced Materials Technologies, @2023 1.000
1380. Zhang, Y., Wu, D., Zhang, Y., (...), Chu, J., Hu, Y. "Femtosecond laser direct writing of functional stimulus-

responsive structures and applications". *International Journal of Extreme Manufacturing* 5(4), 042012, @2023 1.000

Nedialkov N, Imamova S, Atanasov P, Heusel G.. Laser ablation of iron by ultrashort laser pulses. *Thin Solid Films*, 2004, 496. JCR-IF (Web of Science):1.6

1381. Metzner, D., Olbrich, M., Lickschat, P., Horn, A., Weißmantel, S. Experimental and Theoretical Determination of the Effective Penetration Depth of Ultrafast Laser Radiation in Stainless Steel 2020 *Lasers in Manufacturing and Materials Processing* 7(4), pp. 478-495, @2020 1.000
1382. Nyenhuis, F., Michalowski, A., L'Huillier, J. Surface treatment with GHz bursts 2020 *Proceedings of SPIE - The International Society for Optical Engineering* 11268, 112680B, @2020 1.000
1383. Chen, Z., Zhao, C., Zhou, X., (...), Li, Z., Zhang, Y. "A Review of Top-Down Strategies for the Production of Quantum-Sized Materials". *Small Science* 3(12), 2300086, @2023 1.000

Nedyalkov N., Imamova S, Atanasov P, Ruf A., Berger P., Dausinger F.. Dynamics of the ejected material in ultra-short laser ablation of metals. *Appl. Phys. A*, 79, 2004, 1121. ISI IF:1.455

1384. Metzner, D., Olbrich, M., Lickschat, P., Horn, A., Weißmantel, S. Experimental and Theoretical Determination of the Effective Penetration Depth of Ultrafast Laser Radiation in Stainless Steel . 2020 *Lasers in Manufacturing and Materials Processing* 7(4), pp. 478-495, @2020 1.000

Amoruso S., Bruzzese R., Vitiello M., Nedialkov N.N., Atanasov P.A.. Experimental and theoretical investigations of femtosecond laser ablation of aluminum in vacuum. *J. Appl. Phys.*, 98, 2005, 044907. ISI IF:2.183

1385. Stepanov, M.E., Kulish, M.I., Karabulin, A.V., Matyushenko, V.I. Pyrometric investigation of nanoparticles condensation process in gaseous and superfluid helium, 2020 *Journal of Physics: Conference Series*, 1686(1), 012078, @2020 1.000
1386. Somr J., "Porous bioactive materials functionalized by nanoparticles deposited by laser ablation", MS Thesis, 76 pgs., ZČU - FST – KMM (2021)., @2021 1.000
1387. Arora, G., Thomas, J., Joshi, H.C. On the delayed emission from a laser-produced aluminum plasma under an argon environment, 2022 *Journal of Analytical Atomic Spectrometry* pp. 65-71, @2022 1.000
1388. Sharma, S.P., Vilar, R. Effect of the Medium on the Laser Ablation Characteristics of Aluminum Irradiated by Femtosecond Laser Pulses 2022 *Lasers in Manufacturing and Materials Processing*, 9(4), pp. 622-639, @2022 1.000
1389. Protim Hazarika, M., Tripathi, A., Nath Chakraborty, S. "Two-temperature molecular dynamics simulation study of copper thin film irradiation with femtosecond and picosecond laser pulses". *Journal of Laser Applications* 35(2), 022005, @2023 1.000
1390. Sano, T., Matsuda, T., Hirose, A., (...), Ozaki, N., Kodama, R. "X-ray free electron laser observation of ultrafast lattice behaviour under femtosecond laser-driven shock compression in iron". *Scientific Reports* 13(1), 13796, @2023 1.000
1391. Yin, Z., Ni, C., Wu, S., Lao, Z. "Femtosecond laser direct writing processing of SERS substrates and applications". *Guangdian Gongcheng/Opto-Electronic Engineering* 50(3), 220322, @2023 1.000

Nedialkov N.N., Imamova S.E., Atanasov P.A., Berger P., Dausinger F.. Mechanism of ultrashort laser ablation of metals: Molecular dynamics simulation. *Applied Surface Science*, 247, 2005, 243. ISI IF:2.711

1392. Balena, A., Bianco, M., Pisano, F., (...), De Vittorio, M., Pisanello, F. Two-photon fluorescence-assisted laser ablation of non-planar metal surfaces: Fabrication of optical apertures on tapered fibers for optical neural interfaces 2020 *Optics Express* 28(15), pp. 21368-21381, @2020 1.000
1393. Lei, S., Zhao, X., Yu, X., (...), Lawrence Yao, Y., Shin, Y. Ultrafast Laser Applications in Manufacturing Processes: A State-of-the-Art Review . 2020 *Journal of Manufacturing Science and Engineering, Transactions of the ASME* 142(3), 031005-1, @2020 1.000
1394. Liu, H., Hu, J., Jiang, L., (...), Xu, Z., Lu, Y. Ultrabroad antireflection urchin-like array through synergy of inverse fabrications by femtosecond laser-tuned chemical process 2020 *Applied Surface Science* 528, 146804, @2020 1.000
1395. Stavropoulos, P., Papacharalampopoulos, A., Athanasopoulou, L. A molecular dynamics based digital twin for ultrafast laser material removal processes 2020 *International Journal of Advanced Manufacturing Technology* 108(1-2), pp. 413-426, @2020 1.000
1396. Xuefeng, W., Sanlin, M. Research progress in femtosecond laser machining mechanism and simulation analysis | 2021 *Laser and Optoelectronics Progress* 58(19), 1900005, @2021 1.000
1397. Yu, Z., Duan, M., Hu, J., Yang, H. Preparation of graphene oxide coatings on textured Ti6Al4V by laser micromachining and electrophoretic deposition for improved biocompatibility . 2022 *Optics and Laser Technology*, 154, 108342, @2022 1.000

Nedyalkov N, Atanasov P, Sawczak M., Sliwinski G.. Laser drilling of AlN ceramics using nanosecond pulses. *Proceedings of SPIE*, 2005, 850. SJR (Scopus):0.22

1398. Mei, X., Yang, Z., Zhao, W. Laser Hole Drilling on Surface of Electronic Ceramic Substrates 2020 *Chinese Journal of Lasers* 47(5), 0500011, @2020 1.000

Nedyalkov N, Atanasov P, Breitling D., Heusel G, Dausinger F. Ablation of metals by ultrashort laser pulses. *Proceedings of SPIE*, 80-84, 2005, SJR (Scopus):0.227

1399. Evens, T., Malek, O., Castagne, S., Seveno, D., Van Bael, A. Controlling the geometry of laser ablated microneedle cavities in different mould materials and assessing the replication fidelity within polymer injection moulding, 2021 *Journal of Manufacturing Processes* 62, pp. 535-545, @2021 1.000
1400. Ren, X., Cui, J., Lu, Y., Mei, X. Research Progress on Electrical/Mechanical Properties of Interconnection

- Structures Based on Nanowelding 2021 Chinese Journal of Lasers 48(8), 0802021, @2021 1.000
1401. Zhang, W., Zhang, P., Yan, H., (...), Luo, Z., Tian, Y. "Research status of femtosecond lasers and nanosecond lasers processing on bulk metallic glasses (BMGs)". Optics and Laser Technology 167, 109812, @2023 1.000
- Imamova S, Atanasov P, Nedyalkov N.. Molecular dynamics simulation using pair and many body interatomic potentials: ultrashort laser ablation of Fe. Nucl. Instr. Meth. Phys. Res. B, 227, 4, 2005, 490. ISI IF:1.109**
1402. Pham, K.H., Thuy Giap, T.T. The liquid-amorphous phase transition, slow dynamics and dynamical heterogeneity for bulk iron: A molecular dynamics simulation 2021 RSC Advances, 11(51), pp. 32435-32445, @2021 1.000
1403. 2006
- Nedyalkov N., Takada H., Obara M.. Nanostructuring of silicon surface by femtosecond laser pulse mediated with enhanced near-field of gold nanoparticles. Appl. Phys. A, 85, 2006, 163. ISI IF:1.455**
1404. Nagy, B.J., Pápa, Z., Péter, L., (...), Krenn, J.R., Dombi P., Near-Field-Induced Femtosecond Breakdown of Plasmonic Nanoparticles 2020 Plasmonics 15(2), pp. 335-340, @2020 1.000
1405. Stuchebryukov, S.D., Sukhov, V.M. Spectral Dependence of the Maximum Near-Field Efficiency for Spherical Gold Nanoparticles 2020 Protection of Metals and Physical Chemistry of Surfaces 56(2), pp. 459-467, @2020 1.000
1406. Benedek Nagy, Ultrafast damage processes of laser mirrors and plasmonic nanostructures, PhD, @2022 1.000
1407. Boneberg, J., Scheer, E., Leiderer, P. "Optical Nanostructuring by Near-Field Laser Ablation". Springer Series in Optical Sciences 239, pp. 411-445, @2023 1.000
- Nedyalkov N.N., Atanasov P.A.. Molecular dynamics simulation study of deep hole drilling in iron by ultrashort laser pulses. Applied Surface Science, 252, 2006, 4411. ISI IF:2.711**
1408. Lei, S., Zhao, X., Yu, X., (...), Lawrence Yao, Y., Shin, Y.C. Ultrafast Laser Applications in Manufacturing Processes: A State-of-the-Art Review 2020 Journal of Manufacturing Science and Engineering, Transactions of the ASME 142(3), 031005-1, @2020 1.000
1409. Li, X., Guan, Y. Theoretical fundamentals of short pulse laser-metal interaction: A review 2020 Nanotechnology and Precision Engineering 3(3), pp. 105-125, @2020 1.000
1410. Zhang, Z., Xu, Z., Wang, C., (...), Zhang, Q., Xu, W. Molecular dynamics-guided quality improvement in the femtosecond laser percussion drilling of microholes using a two-stage pulse energy process 2021 Optics and Laser Technology, 139, 106968, @2021 1.000
1411. Zhang, Z., Yang, Z., Wang, C., (...), Zheng, S., Xu, W. Mechanisms of femtosecond laser ablation of Ni₃Al: Molecular dynamics study 2021 Optics and Laser Technology 133, 106505, @2021 1.000
1412. Kaligar, A.B., Kumar, H.A., Ali, A., (...), Abed, F., Alnaser, A.S. Femtosecond Laser-Based Additive Manufacturing: Current Status and Perspectives, 2022 Quantum Beam Science, 6(1), 5, @2022 1.000
1413. Ai, S., Xiao, G., Deng, Z., (...), Lin, O., Song, S. "Surface integrity of drilling Ti-6Al-4V micro-holes using the ultrashort pulse laser with different three-dimensional paths planning". Journal of Manufacturing Processes 102, pp. 244-258, @2023 1.000
- Hirayama Y., Atanasov P, Obara M, Nedyalkov N, Imamova S. Femtosecond laser ablation of crystalline iron: Experimental investigation and molecular dynamics simulation. Japanese Journal of Applied Physics, 2A, 2006, 792. JCR-IF (Web of Science):1.376**
1414. Yang, Z., Ji, P., Zhang, Z., (...), Wang, C., Xu, W. Fundamental 3D simulation of the femtosecond laser ablation for cooling hole drilling on Ni and Fe based aero-engine components 2020 Optics Communications 475, 126237, @2020 1.000
1415. Dong, Y., Guo, X., Xu, B., (...), Hou, N., Yin, C. Spatiotemporal evolution of the morphology of multi-pulse laser ablated metals considering plasma shielding, 2022 Optical Materials Express, 12(4), pp. 1564-1580, @2022 1.000
1416. Dong, Y., Ye, Q., Li, Q., (...), Zhang, S., Hou, N. Numerical Simulation and Validation of Multiscale 3D Laser Spiral Machining of Microholes, 2022 Laser and Particle Beams 2022, 2455226, @2022 1.000
- Nedyalkov N., Sakai T., Miyanishi T., Obara M.. Near field properties in the vicinity of gold nanoparticles placed on various substrates for precise nanostructuring. J. Phys. D, 23, 2006, 5037. ISI IF:2.772**
1417. Cong Wang, Haiyan Tao* Near-Field Properties of a Single Gold Nanoparticle Placed on Various Substrate Surfaces Applied Physics 2020, 10(2), 147-152 DOI: 10.12677/app.2020.102018, @2020 1.000
1418. Hong, J.Y., Wei, P.S., Chou, M.F., Fu, T.C. Energy generation on an array of nanoparticles on a surface. 2020 Proceedings of SPIE - The International Society for Optical Engineering 11267, 112670J, @2020 1.000
1419. Kuppe, C., Rusimova, K.R., Ohnoutek, L., Slavov, D., Valev, V.K. "Hot" in Plasmonics: Temperature-Related Concepts and Applications of Metal Nanostructures 2020 Advanced Optical Materials 8(1), 1901166, @2020 1.000
1420. Fujimoto, T., Kawamoto, M., Higashihata, M., Nakamura, D., Ikenoue, H., Formation of twisted Au microstructures by optical vortex pulse irradiation 2021 Proceedings of SPIE - The International Society for Optical Engineering 11674, 1167410, @2021 1.000
1421. Choudhary, A., Biradar, A.M. Dielectric behavior of ferroelectric liquid crystals with gold nanoparticles, water, and ethanol for innovative electro-optical applications (Book Chapter) 2022 An Introduction to Permittivity pp. 165-217, @2022 1.000
1422. Johannes Boneberg and Paul Leiderer, Optical near-field imaging and nanostructuring by means of laser ablation, Opto-Electronic Science, 2022, Vol. 1, No. 1, @2022 1.000
1423. Boneberg, J., Scheer, E., Leiderer, P. "Optical Nanostructuring by Near-Field Laser Ablation". Springer Series in Optical Sciences 239, pp. 411-445, @2023 1.000

Nedyalkov N., Sawczak M., Jendrzewski R., Atanasov P., Martin M., Sliwinski G.. Analysis of surface and

material modifications caused by laser drilling of AlN ceramics. Applied Surface Science, 254, 2007, 893. ISI IF:2.711

1424. Mei, X., Yang, Z., Zhao, W. Laser Hole Drilling on Surface of Electronic Ceramic Substrates 2020 Chinese Journal of Lasers, 47(5), 0500011, @2020 1.000
1425. Wang, L., Zhao, W., Mei, X., (...), Shen, X., Liu, H. Improving quality and machining efficiency of hole during AlN trepanning with nanosecond pulse laser. 2020 Ceramics International, 46(15), pp. 24018-24028, @2020 1.000
1426. Knežević, D.M., Radojković, B.M., Ristić, S.S., (...), Tomić, L.D., Jegdić, B.V., MONITORING OF A CERAMIC SURFACE TEMPERATURE FIELD INDUCED BY PULSED Nd:YAG LASER, 2021 Thermal Science, 25(1 Part B), pp. 567-578, @2021 1.000
1427. Simulation and experimental study on group hole laser ablation on AL₂O₃ ceramics Zhao, W., Mei, X., Yang, Z. 2021 Ceramics International, <https://doi.org/10.1016/j.ceramint.2021.10.233>, @2021 1.000
1428. Zhao, W., Mei, X. Optimization of trepanning patterns for holes ablated using nanosecond pulse laser in al₂o₃ ceramics substrate, 2021 Materials 14(14), 3834, @2021 1.000
1429. Jia, X., Chen, Y., Liu, L., Wang, C., Duan, J. Advances in Laser Drilling of Structural Ceramics 2022 Nanomaterials, 12(2), 230, @2022 1.000
1430. Zhao, H.R., Chen, M.X., Peng, Y., (...), Kang, M., Cao, L.H. 2022 TXV Technology: The cornerstone of 3D system-in-packaging, Science China Technological Sciences 65(9), pp. 2031-2050, @2022 1.000
1431. Zhao, W., Mei, X., Wang, L. Competitive mechanism of laser energy and pulses on holes ablation by femtosecond laser percussion drilling on AlN ceramics 2022 Ceramics International 48(24), pp. 36297-36304, @2022 1.000
1432. Zhao, W., Mei, X., Yang, Z. Review on Morphological Features and Process Control of Holes Drilled by Pulsed Laser on Surface of Electronic Ceramic Substrates 2022 Chinese Journal of Lasers, 49(10), 1002403, @2022 1.000
1433. Zhao, W., Mei, X., Yang, Z. Simulation and experimental study on group hole laser ablation on AL₂O₃ ceramics 2022 Ceramics International 48(4), pp. 4474-4483, @2022 1.000
1434. Gopal, P.M., Kavimani, V., Gupta, K., Marinkovic, D. "Laser-Based Manufacturing of Ceramics: A Review". Micromachines 14(8), 1564, @2023 1.000
1435. Liang, C., Li, Z., Wang, C., (...), Xiang, Y., Jia, X. "Laser drilling of alumina ceramic substrates: A review". Optics and Laser Technology 167, 109828, @2023 1.000

Sakai T., Nedyalkov N., Obara M. Friction characteristics of submicrometre-structured surfaces fabricated by particle-assisted near-field enhancement with femtosecond laser. Journal of Physics D, 23, 2007, 7485. ISI IF:2.721

1436. Yoo, D., Choi, H.-K., Sung, J.H., (...), Kim, Y.-H., Ahsan, M.S. Fabrication of breathable film using diffractive multi-beam nanosecond laser patterning of polypropylene film, 2020 Journal of Laser Micro Nanoengineering 15(2), pp. 104-110, @2020 1.000
1437. Zhang, P., Wen, Q., Jiang, F., Shen, S., Lu, J. Research Progress in Machining Technology of Nanohole Arrays, 2020 Journal of Mechanical Engineering 56(9), pp. 223-233, @2020 1.000
1438. McDonnell, M.D.T., Arnaldo, D., Pelletier, E., (...), Eason, R.W., Mills, B. Machine learning for multi-dimensional optimisation and predictive visualisation of laser machining, 2021 Journal of Intelligent Manufacturing, 32(5), pp. 1471-1483, @2021 1.000
1439. Miao, W., Yang, Y., Zhao, J., (...), Wang, R., Zhu, Y. "Fabrication of Au/AAO/Au nanopore arrays based on induced excitation SPPs for the fabrication of nanopores on silicon surfaces". Materials Today Communications 35, 105953, @2023 1.000

Nedyalkov N.N., Atanasov P.A., Obara M. Near-field properties of a gold nanoparticle array on different substrates excited by a femtosecond laser. Nanotechnology, 18, 2007, 305703. ISI IF:3.821

1440. Cong Wang, Haiyan Tao*, Near-Field Properties of a Single Gold Nanoparticle Placed on Various Substrate Surfaces Applied Physics 2020, 10(2), 147-152, DOI: 10.12677/app.2020.102018, @2020 1.000
1441. Hong, J.Y., Wei, P.S., Chou, M.F., Fu, T.C. Energy generation on an array of nanoparticles on a surface. 2020 Proceedings of SPIE - The International Society for Optical Engineering, 11267, 112670J, @2020 1.000
1442. Stuchebryukov, S.D., Sukhov, V.M. Spectral Dependence of the Maximum Near-Field Efficiency for Spherical Gold Nanoparticles 2020 Protection of Metals and Physical Chemistry of Surfaces, 56(2), pp. 459-467, @2020 1.000
- Nedyalkov N., Miyanishi T., Obara M. Enhanced near field mediated nanohole fabrication on silicon substrate by femtosecond laser pulse. Appl. Surf. Sci., 253, 2007, 6558. ISI IF:3.387**
1443. Zhang, P., Wen, Q., Jiang, F., Shen, S., Lu, J. Research Progress in Machining Technology of Nanohole Arrays, 2020 Journal of Mechanical Engineering 56(9), pp. 223-233, @2020 1.000
1444. Wen, Q., Wei, X., Zhang, P., (...), Jiang, F., Lu, X. Enhanced microsphere-assisted picosecond laser processing for nanohole fabrication on silicon via thin gold coating, 2021 Micromachines, 12(6), 611, @2021 1.000
1445. Miao, W., Yang, Y., Zhao, J., (...), Wang, R., Zhu, Y. "Fabrication of Au/AAO/Au nanopore arrays based on induced excitation SPPs for the fabrication of nanopores on silicon surfaces". Materials Today Communications 35, 105953, @2023 1.000

Nedyalkov N.N., Atanasov P.A., Amoroso S., Bruzzese R., Wang X. Laser ablation of metals by femtosecond pulses: Theoretical and experimental study. Applied Surface Science, 253, 19, 2007, 7761. ISI IF:2.711

1446. Deng, J., Qi, H., Zhao, L., (...), Chen, Z., Hu, Z. Control of ablation morphology on Cu film with tailored femtosecond pulse trains 2020 Applied Physics A: Materials Science and Processing 126(6), 425, @2020 1.000
1447. Li, X., Guan, Y. Theoretical fundamentals of short pulse laser-metal interaction: A review 2020 Nanotechnology

- and Precision Engineering, 3(3), pp. 105-125, @2020 1.000
1448. Rajan, R.A., Ngo, C.-V., Yang, J., (...), Rao, K.S., Guo, C. Femtosecond and picosecond laser fabrication for long-term superhydrophilic metal surfaces 2021 Optics and Laser Technology, 143, 107241, @2021 1.000
1449. Xuefeng, W., Sanlin, M. Research progress in femtosecond laser machining mechanism and simulation analysis 2021 Laser and Optoelectronics Progress 58(19), 1900005, @2021 1.000
1450. Zhou, Y., Wu, D., Luo, G., Hu, Y., Qin, Y. Efficient modeling of metal ablation irradiated by femtosecond laser via simplified two-temperature model coupling molecular dynamics 2022 Journal of Manufacturing Processes 77, pp. 783-793, @2022 1.000
1451. Aeaby, C., Ray, A. "Two-temperature model for ultrafast melting of Au-based bimetallic films interacting with single-pulse femtosecond laser: Theoretical study of damage threshold". Physical Review B 107(19), 195402, @2023 1.000
1452. Szabó, P.I., Ugi, D., Gilicze, B., (...), Homik, Z., Tóth, Z. "Micromachining using the high energy flat-top beam of a femtosecond pulse UV laser system: micropillar prefabrication". @2023 1.000
- Sakai T., Nedyalkov N., Obara M. Positive and negative nanohole-fabrication on glass surface by femtosecond laser with template of polystyrene particle array. Journal of Physics D, 40, 2007, 2102. ISI IF:2.721**
1453. Jin Zhang, Sumei Wang, Lan Jiang, Mengmeng Wang, Zhuyuan Chu, Weihua Zhu, Xin Li, Morphology control of nanostructure using microsphere-assisted femtosecond laser double-pulse ablation and chemical etching, Appl. Surf. Scie., 502, 144272, @2020 1.000
1454. Zhang, J., Cong, C., Guo, C. Single-step maskless nano-lithography on glass by femtosecond laser processing 2020 Journal of Applied Physics 127(16), 163102, @2020 1.000
1455. Zhang, P., Wen, Q., Jiang, F., Shen, S., Lu, J. Research Progress in Machining Technology of Nanohole Arrays 2020 Journal of Mechanical Engineering 56(9), pp. 223-233, @2020 1.000
1456. Wen, Q., Wei, X., Zhang, P., (...), Jiang, F., Lu, X. Enhanced microsphere-assisted picosecond laser processing for nanohole fabrication on silicon via thin gold coating, 2021 Micromachines, 12(6), 611, @2021 1.000
- Amoruso S., Bruzzese R., Wang X., Nedialkov N.N., Atanasov P.A.. Femtosecond laser ablation of nickel in vacuum. Journal of Physics D, 40, 2007, 331. ISI IF:2.721**
1457. Boltaev, G.S., Abbasi, N.A., Kim, V.V., (...), Gancev, R.A., Alnaser, A.S. Third and fifth harmonics generation in air and nanoparticle-containing plasmas using 150-kHz fiber laser 2020 Applied Physics B: Lasers and Optics 126(5), 76, @2020 1.000
1458. Cheng, J., Cao, J., Huang, Y., (...), Dearden, G., Liu, D. Metal ablation study with a 10 picosecond laser under low and median fluence 2020 Optics and Laser Technology 121, 105792, @2020 1.000
1459. Cheng, K., Cao, K., Zhang, Y., (...), Sun, Z., Jia, T. Ultrafast dynamics of subwavelength periodic ripples induced by single femtosecond pulse: From noble to common metals 2020 Journal of Physics D: Applied Physics 53(28), 285102, @2020 1.000
1460. Donnelly, T., O'connell, G., Lunney, J.G. Metal nanoparticle film deposition by femtosecond laser ablation at atmospheric pressure 2020 Nanomaterials 10(11), 2118, pp. 1-13, @2020 1.000
1461. Genieys, T., Sentis, M., Utéza, O. Investigation of ultrashort laser excitation of aluminum and tungsten by reflectivity measurements 2020 Applied Physics A: Materials Science and Processing 126(4), 263, @2020 1.000
1462. Gordon, E.B., Kulish, M.I., Stepanov, M.E., Matyushenko, V.I., Karabulin, A.V. Experimental research of condensation processes occurring under laser ablation in superfluid helium and vacuum 2020 Low Temperature Physics 46(9), pp. 896-900, @2020 1.000
1463. Gordon, E.B., Kulish, M.I., Stepanov, M.E., Matyushenko, V.I., Karabulin, A.V. Experimental research of condensation processes occurring under laser ablation in superfluid helium and vacuum | [Експериментальне дослідження процесів конденсації, які відбуваються при лазерній абляції у надплинному гелії та вакуумі] 2020 Fizika Nizkikh Temperatur 46(9), pp. 1062-1067, @2020 1.000
1464. Von Der Heide, C., Grein, M., Bräuer, G., Dietzel, A. Methodology of selective metallic thin film ablation from susceptible polymer substrate using pulsed femtosecond laser 2020 Optics Express 28(22), pp. 33413-33432, @2020 1.000
1465. Yang, Z., Ji, P., Zhang, Z., (...), Wang, C., Xu, W. Fundamental 3D simulation of the femtosecond laser ablation for cooling hole drilling on Ni and Fe based aero-engine components 2020 Optics Communications 475, 126237, @2020 1.000
1466. Wang, Q., Chen, A., Zeng, X., (...), Gao, X., Jin, M. Influence of spark discharge on Al(i) and AlO spectra in femtosecond laser-induced aluminum plasmas 2021 Journal of Analytical Atomic Spectrometry, 36(6), pp. 1112-1117, @2021 1.000
1467. Takenaka, K., Hashida, M., Sakagami, H., (...), Sato, Y., Tsukamoto, M. Uniformity evaluation of laser-induced periodic surface structures formed by two-color double-pulse femtosecond laser irradiation 2022 Review of Scientific Instruments 93(9), 093001, @2022 1.000
1468. Zhou, Y., Wu, D., Luo, G., Hu, Y., Qin, Y. Efficient modeling of metal ablation irradiated by femtosecond laser via simplified two-temperature model coupling molecular dynamics 2022 Journal of Manufacturing Processes 77, pp. 783-793, @2022 1.000
1469. Havelka, O., Abdallah, S., Braun, J., (...), Cvek, M., Torres-Mendieta, R. "Reactive laser ablation in acetone towards phase-controlled nonequilibrium Iron- and Nickel-Bi₂O₃ nanoalloys". Applied Surface Science 641, 158503, @2023 1.000
1470. Lord, M.-P., Olivier, M., Bernier, M., Vallée, R. "Visible femtosecond fiber laser". Optics Letters 48(14), pp. 3709-3712, @2023 1.000
1471. Lorusso, A., Kovács, Z., Gilicze, B., (...), Perrone, A., Szörényi, T. "Sub-ps Laser Deposited Copper Films for

- Application in RF Guns". *Materials* 16(3), 1267, @2023 1.000
1472. Martins, M.A., Müller, D.W., Schmauch, J., (...), Mücklich, F., Pauly, C. "Effects of Ultrashort Pulsed Direct Laser Writing on Ni/Al Reactive Multilayer Foils". *Applied Sciences (Switzerland)* 13(7), 4313, @2023 1.000
1473. Parmar, V., Singh, S., Singh, A., Kumar, S., Kalyanasundaram, D. "Hybrid thermo-physical modelling and experimentation of ultrafast laser-based fabrication of polycrystalline core–amorphous shell nitinol nanoparticles". *Optics and Laser Technology* 165, 109575, @2023 1.000
1474. Yin, Z., Ni, C., Wu, S., Lao, Z. "Femtosecond laser direct writing processing of SERS substrates and applications". *Guangdian Gongcheng/Opto-Electronic Engineering* 50(3), 220322, @2023 1.000
- Nedyalkov N., Sakai T, Miyanishi T, Obara M. Near field distribution in two dimensionally arrayed gold nanoparticles on platinum substrate. *Appl. Phys. Lett.*, 90, 2007, 123106. ISI IF:3.4**
1475. Stoian, R., Colombier, J.-P. Advances in ultrafast laser structuring of materials at the nanoscale 2020 *Nanophotonics* 9(16), pp. 4665-4688, @2020 1.000
1476. Yu, Y., Da, H. Broadband and perfect absorption of monolayer MoS₂ with Octonacci quasi-photonic crystal 2020 *Physica B: Condensed Matter* 412684, @2020 1.000
1477. Yu, Y., Da, H., Broadband and perfect absorption of monolayer MoS₂ with Octonacci quasi-photonic crystal 2021 *Physica B: Condensed Matter* 604, 412684, @2021 1.000
1478. Johannes Boneberg and Paul Leiderer, Optical near-field imaging and nanostructuring by means of laser ablation, *Opto-Electronic Science*, 2022, Vol. 1, No. 1, @2022 1.000
1479. Boneberg, J., Scheer, E., Leiderer, P. "Optical Nanostructuring by Near-Field Laser Ablation". *Springer Series in Optical Sciences* 239, pp. 411-445, @2023 1.000
- Koleva, M.E., Atanasov, P.A., Nedyalkov, N.N., Fukuoka, H., Obara, M.. Role of vanadium content in ZnO thin films grown by pulsed laser deposition. *Applied Surface Science*, 254, 4, Elsevier, 2007, ISSN:01694332, DOI:10.1016/j.apsusc.2007.07.180, 1228-1231. ISI IF:2.71**
1480. Goma, M.M., Sayed, M.H., Chikoidze, E., Dumont, Y., Boshta, M., "V-doped ZnO diluted magnetic semiconductor prepared by chemical spray pyrolysis" 2020 *Materials Science in Semiconductor Processing* 109, 104944, @2020 Линк
1481. Smaali, A., Abdelli-Messaci, S., Lafane, S., A.Mavlonov, J.Lenzner, S.Richter, M.Kechouane, Nemraoui, O., Ellmer, K., "Pulsed laser deposited transparent and conductive V-doped ZnO thin films" 2020 *Thin Solid Films* 700, 137892, @2020 Линк
1482. 1.000
1483. Jian Liu, Yanmin Du, Chunsheng Fang, Shengcan Ma, Xiaohua Luo, Changcai Chen, Jianli Wang, "The "nonmagnetic" V doping effect on the magnetic transition and magnetocaloric properties in TbCo₂ system", SSRN, @2023 Линк
- Atanasov P, Nedyalkov N., Sakai T, Obara M. Localization of the electromagnetic field in the vicinity of gold nanoparticles: Surface modification of different substrates. *Appl. Surf. Sci.*, 254, 2007, 794. ISI IF:3.387**
1484. Otomalo, T.O., Mayran de Chamisso, F., Palpant, B. Complex-conjugate Pole-residue Pair-Based FDTD Method for Assessing Ultrafast Transient Plasmonic Near Field 2020 *Plasmonics*, 15(2), pp. 495-505, @2020 1.000
1485. Stuchebryukov, S.D., Sukhov, V.M. Spectral Dependence of the Maximum Near-Field Efficiency for Spherical Gold Nanoparticles 2020 *Protection of Metals and Physical Chemistry of Surfaces*, 56(2), pp. 459-467, @2020 1.000
- Nedyalkov N, Imamova S, Atanasov P, Obara M. Formation and initial evolution of nanoparticles at ultrashort laser ablation of gold: molecular dynamics simulation. *Proceedings of SPIE*, 7027, 2008, 702709. SJR (Scopus):0.227**
1486. Tingyuan Wang Yuyan Song Chuqian Liu Nan Zhang Femtosecond laser ablation of metal targets: The physical origin of the power law size distribution of nanoparticles 2021 *OPT LASER TECHNOL.* 134:106651, @2021 1.000
- Sakano T., Tanaka Y., Nishimura R., Nedyalkov N.N., Atanasov P.A., Saiki T., Obara M.. Surface enhanced Raman scattering properties using Au-coated ZnO nanorods grown by two-step, off-axis pulsed laser deposition. *Journal of Physics D*, 41, 2008, 235304. ISI IF:2.721**
1487. Chou, C.-M., Thi, L.T.T., Nhu, N.T.Q., (...), Hung, L.V.T., Hsiao, V.K.S. Zinc oxide nanorod surface-enhanced raman scattering substrates without and with gold nanoparticles fabricated through pulsed-laser-induced photolysis, 2020 *Applied Sciences* 10(14), 5015, @2020 1.000
1488. Cong Wang, Haiyan Tao* Near-Field Properties of a Single Gold Nanoparticle Placed on Various Substrate Surfaces *Applied Physics*, 2020, 10(2), 147-152, DOI: 10.12677/app.2020.102018, @2020 1.000
1489. Doan, Q.K., Nguyen, M.H., Sai, C.D., (...), Ho, K.H., Tran, T.H. Enhanced optical properties of ZnO nanorods decorated with gold nanoparticles for self cleaning surface enhanced Raman applications 2020 *Applied Surface Science* 505, 144593, @2020 1.000
1490. Elzein, B., Yao, Y., Barham, A.S., Dogheche, E., Jabbour, G.E. Toward the growth of self-catalyzed ZnO nanowires perpendicular to the surface of silicon and glass substrates, by pulsed laser deposition 2020 *Materials* 13(19), 4427, pp. 1-14, @2020 1.000
1491. Feng, H., Yang, F., Dong, J., Liu, Q. Ag@BiOCl super-hydrophobic nanostructure for enhancing SERS detection sensitivity, 2020 *RSC Advances* 10(20), pp. 11865-11870, @2020 1.000
- Kang, Y., Xue, X., Wang, W., (...), Zhao, F., Zhang, Z. Design of Armrest Ag Nanorod Arrays with High SERS Performance for Sensitive Biomolecule Detection 2020 *Journal of Physical Chemistry C*, 124(38), pp. 21054-21062, @2020 1.000
1492. Sun, Q., Zhang, Q.Y., Zhou, N., (...), Hu, Q., Ma, C.Y. FDTD simulation of Ag-decorated ZnO nanorods for

- optimization of 3D SERS substrates 2021 Applied Surface Science 565, 150524, @2021 1.000
1493. Q.Sun, Q.W.Sun, Q.Y.Zhang, N.Zhou, L.Y.Zhang, Q.Hu, Effects of chloride ions on flower-like Ag-coated ZnO nanorod arrays and the Raman enhancement, Applied Surface Science Volume 578, 15 March 2022, 152082, @2022 1.000
1494. Yang Liu, RuiruiLi, Na Zhou, Mao Li Chengjun Huang, Haiyang Mao, Recyclable 3D SERS devices based on ZnO nanorod-grafted nanowire forests for biochemical sensing, Applied Surface Science, Volume 582, 30 April 2022, 152336, @2022 1.000
- Tanaka Y., Nedyalkov N., Obara M.. Enhanced near-field distribution inside substrates mediated with gold particle: Optical vortex and bifurcation. Appl. Phys. A, 2009, 91-98. ISI IF:1.604**
1495. Li, R., Zou, T., Li, X., Yu, Z., Yang, J. "Development of periodically concentric rings within microcavity upon femtosecond laser irradiation". Optics Express 31(11), pp. 17836-17847, @2023 1.000
- Miyanishi T., Sakai T., Nedyalkov N., Obara M.. Femtosecond-laser nanofabrication onto silicon surface with near-field localization generated by plasmon polaritons in gold nanoparticles with oblique irradiation. 2009, 843-850. ISI IF:1.604**
1496. Qiao, M., Wang, H., Lu, H., (...), Jiang, L., Lu, Y. Micro/nano processing of natural silk fibers with near-field enhanced ultrafast laser, 2020 Science China Materials 63(7), pp. 1300-1309, @2020 1.000
1497. Zhang, P., Wen, Q., Jiang, F., Shen, S., Lu, J. Research Progress in Machining Technology of Nanohole Arrays 2020 Jixie Gongcheng Xuebao/Journal of Mechanical Engineering 56(9), pp. 223-233, @2020 1.000
1498. Wen, Q., Wei, X., Zhang, P., (...), Jiang, F., Lu, X. Enhanced microsphere-assisted picosecond laser processing for nanohole fabrication on silicon via thin gold coating, 2021 Micromachines, 12(6), 611, @2021 1.000
- Sakai T., Miyanishi T., Nedyalkov N., Nishizawa Y., Obara M.. Nano-dimple processing of silicon surfaces by femtosecond laser irradiation with dielectric particle templates in the Mie scattering domain. Journal of Physics D, 42, 2009, 025502. ISI IF:2.721**
1499. Hong, Q., Zhang, J., Wang, S., (...), Sun, J., Guo, Q. Nanopatterning of silicon via the near-field enhancement effect upon double-pulse femtosecond laser exposure 2021 Applied Optics, 60(25), pp. 7790-7797, @2021 1.000
1500. Kunyan Ding, Kainan Zhou, Guoying Feng, Jinghua Han, Na Xie, Zeyu Huang, Guorui Zhou Mechanism and conditions for laser cleaning of micro and nanoparticles on the surface of transparent substrate, Vacuum, Volume 200, June 2022, 110987, @2022 1.000
- A.Og. Dikovska, I. G. Dimitrov, M. T. Alexandrov, N. N. Nedyalkov, P. A. Atanasov. Silver nanoparticles produced by PLD in vacuum. 7751, Proc. SPIE, 2010, DOI:10.1117/12.882081, 775120. SJR (Scopus):0.26**
1501. Feizi Mohazzab, B., Jaleh, B., "Recent applications of pulsed Nd: YAG laser and its harmonics in material processing and chemistry", Nd:YAG Lasers: Technology and Applications pp. 91-112, 2020, @2020 ЛИНК
- Nedyalkov N, Imamova S, Atanasov P, Toshkova R.. Nanosecond laser heating of gold nanoparticles. Application in photothermal cancer cell therapy. Comptes Rendus de L'Academie Bulgare des Sciences, 5, 2010, 767. JCR-IF (Web of Science):0.343**
1502. Kohmura, Y., Igami, N., Tatsuno, I., Hasegawa, T., Matsumoto, T. Transient photothermal inactivation of Escherichia coli stained with visible dyes by using a nanosecond pulsed laser 2020 Scientific Reports, . 10(1), 17805, @2020 1.000
1503. Tatsuno, I., Niimi, Y., Tomita, M., (...), Hasegawa, T., Matsumoto, T. Mechanism of transient photothermal inactivation of bacteria using a wavelength-tunable nanosecond pulsed laser 2021 Scientific Reports, 11(1), 22310, @2021 1.000
- Tanaka Y., Obara G., Zenidaka A., Nedyalkov N.N., Terakawa M., Obara M.. Near-field interaction of two-dimensional high-permittivity spherical particle arrays on substrate in the Mie resonance scattering domain. Optics Express, 26, 2010, 27226. ISI IF:3.148**
1504. Hanatani, K., Yoshihara, K., Sakamoto, M., Saitow, K.-I. Nanogap-Rich TiO₂ Film for 2000-Fold Field Enhancement with High Reproducibility 2020 Journal of Physical Chemistry Letters, 11(20), pp. 8799-8809, @2020 1.000
1505. Huang, C.-H., Kudo, T., Bresolí-Obach, R., (...), Sugiyama, T., Masuhara, H. Surface plasmon resonance effect on laser trapping and swarming of gold nanoparticles at an interface 2020 Optics Express 28(19), pp. 27727-27735, @2020 1.000
1506. Yanagita, T., Onodera, T., Sato, R., Takeda, Y., Oikawa, H. Fluorescence properties of hybridized thin films consisting of organic dye J-aggregates and titanium oxide nanoparticles 2020 Optical Materials Express 10(12), pp. 3268-3276, @2020 1.000
1507. Yuanwei Zheng Gang Chen Duli Mao Dyson H. Tai Lequn Liu, Resonant-filter image sensor and associated fabrication method, US10566364B2, @2020 1.000
1508. E A Dawi, E Mustafa, T Siahaan, Anisotropic deformation of colloidal particles under 4 MeV Cu ions irradiation, 2022 Mater. Res. Express 9 086506, @2022 1.000
1509. Huan Liu, YuXuan Du, XingTian Yin, MinYu Bai, WeiGuo Liu, Micro/Nanostructures for Light Trapping in Monocrystalline Silicon Solar Cells, Journal of Nanomaterials, Article ID 8139174, 2022, @2022 1.000
1510. Shohei Murayama, Kien Vu Trung Nguyen, Masateru Anzai, Hideyuki Magara, Takahiro Nakamura, Mizue Mizoshiri, 2022 Jpn. J. Appl. Phys. 61 SD1032, @2022 1.000
1511. Xue Ma, Yang Fu, Arsenii Portniagin, Ning Yang, Danjun Liu, Andrey L. Rogach, Jian-Guo Dai, Dangyuan Lei, Effects of Stokes shift and Purcell enhancement on fluorescence-assisted radiative cooling, J. Mater. Chem. A, 2022, 10, 19635-19640, @2022 1.000

1512. B.Wuad, H.Zhuad, B.Zhanga, F.Renb, S.Juodkazisc, F.Chen, Plasmon guided assembly of nanoparticles in solids, *Materials Today Nano* Volume 21, March 2023, 100299, @2023 1.000
A.Og. Dikovska, G. B. Atanasova, N.N. Nedyalkov, P.K. Stefanov, P.A. Atanasov, E.I. Karakoleva, Ts.A. Andreev. Optical sensing of ammonia using ZnO nanostructure grown on a side-polished optical-fiber. *Sensors and Actuators B: Chemical*, 146, 2010, DOI:DOI: 10.1016/j.snb.2010.02.018, 331-336. ISI IF:3.368
1513. Aarya, S., Kumar, Y., Chahota, R.K., "Recent Advances in Materials, Parameters, Performance and Technology in Ammonia Sensors: A Review", *Journal of Inorganic and Organometallic Polymers and Materials*, 30(2), pp. 269-290, 2020, @2020 Линк
1514. Beaula Ruby Kamalam, M., Inbanathan, S.S.R., Renganathan, B., Sethuraman, K., "Enhanced sensing of ethanol gas using fiber optics sensor by hydrothermally synthesized GO-WO₃ nanocomposites". *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, 263, 114843, 2021, @2021 Линк
1515. KUZNETSOV, P.I., SUDAS, D.P., YAPASKURT, V.O., SAVELYEV, E.A. "Lossy mode resonance fiber-optic sensors based on niobium pentoxide thin film". *Optical Materials Express* 11(8), pp. 2650-2664, 2021, @2021 Линк
1516. Lee, S., Song, H., Ahn, H., Kim, S., Choi, J.-R., Kim, K. "Fiber-optic localized surface plasmon resonance sensors based on nanomaterials". *Sensors (Switzerland)* 21(3), 819, pp. 1-22, 2021, @2021 Линк
1517. 1.000
 Srisuai, N., Chananonawathorn, C., Seeleang, B., Tantiwanichapan, K., Lertvanithpol, T., Sathukarn, A., Pogfay, T., Jaruwongrungrsee, K., Horprathum, M., Boonruang, S., A "Nanocolumnar Tantalum Oxide-Guided Mode Resonance Sensor for Volatile Organic Compounds". *ACS Applied Nano Materials* 4(9), pp. 9665-9672, 2021, @2021 Линк
1518. Vitoria, I., Zamarreño, C.R., Ozcariz, A., Matias, I.R. "Fiber optic gas sensors based on lossy mode resonances and sensing materials used therefor: A comprehensive review". *Sensors (Switzerland)* 21(3), 731, pp. 1-26, 2021, @2021 Линк
1519. Zhuo, L., Tang, J., Zhu, W., Zheng, H., Lu, H., Guan, H., Luo, Y., Zhong, Y., Yu, J., Zhang, J., Chen, Z., Review of Sensing Technology Research Based on Side Polished Fiber | [基于侧边抛磨光纤的传感技术研究综述], 2021 *Yingyong Kexue Xuebao/Journal of Applied Sciences* 39(5), pp. 733-746, 2021, @2021 Линк
1520. Chauhan, M., Singh, V.K. "ZnO nanostructures coated no-core fiber refractive index sensor". *Materials Science in Semiconductor Processing* 147, 106757, 2022, @2022 1.000
1521. Niu, J.-S., Huang, C.-H., Shao, W.-C., Tsai, J.-H., Liu, W.-C. "Pd Nanoparticle/Pd/Al₂O₃ Resistive Sensor for Hydrogen Detection in a High-Temperature Environment". *ECS Journal of Solid State Science and Technology* 11(6), 067003, 2022, @2022
1522. Prabhu, N.N., Jagadeesh Chandra, R.B., Rajendra, B.V., Gibin, G., Mourad, A.-H.I., Shivamurthy, B., *Engineered Science* 19, pp. 59-82, 2022, @2022 1.000
1523. Luo, T., Huang, Y., Deng, C., (...), Zhang, X., Wang, T. "Ammonia Gas Sensor Based on No-Core Fiber Coated with Zinc Oxide". *Zhongguo Jiguang/Chinese Journal of Lasers* 50(10), 1006006, @2023 1.000
1524. Sharma, S., Paliwal, A., Kumar, P., Saxena, N. "II–VI Semiconductor-Based Optical Gas Sensors". *Handbook of II-VI Semiconductor-Based Sensors and Radiation Detectors: Sensors, Biosensors and Radiation Detectors: Vol. 3*, pp. 307-333, @2023 1.000
1525. Yue, Q., Ma, D., Wang, Y., Liao, C., Wang, Y. "A probe-type fiber-optic ultraviolet photodetector". *Proceedings of SPIE - The International Society for Optical Engineering* 12643, 126430Q, @2023 1.000
1526. Zhuo, L., Tang, J., Zhu, W., (...), Yu, J., Chen, Z. "Side Polished Fiber: A Versatile Platform for Compact Fiber Devices and Sensors". *Photonic Sensors* 13(1), 230120, @2023 1.000
Atanasov P, Nedyalkov N., Imamova S, Miyanishi T, Obara M. Substrate nanomodification based on heating and near field properties of gold nanoparticles. *Int. J. Nanoparticles*, 3, 2010, 206. SJR:0.15
1527. Zhang, E., Duan, Q., Wang, J., Zhao, Y., Feng, Y. Experimental and numerical analysis of the energy performance of building windows with solar NIR-driven plasmonic photothermal effects 2021 *Energy Conversion and Management* 245, 114594, @2021 1.000
1528. Khanam, S., Rout, S.K. A Photocatalytic Hydrolysis and Degradation of Toxic Dyes by Using Plasmonic Metal–Semiconductor Heterostructures: A Review, 2022 *Chemistry* 4(2), pp. 454-479, @2022 1.000
Naydenova, T., Atanasov, P., Koleva, M., Nedialkov, N., Perriere, J., Defourneau, D., Fukuoka, H., Obara, M., Baumgart, C., Zhou, S., Schmidt, H.. Influence of vanadium concentration on the microstructure and magnetic properties of V-doped ZnO thin films. *Thin Solid Films*, 518, 19, Elsevier, 2010, ISSN:00406090, DOI:10.1016/j.tsf.2010.04.034, 5505-5508. ISI IF:1.76
1529. A.Smaali, S.Abdelli-Messaci, S.Lafane, A.Mavlonov, J.Lenzner, S.Richter, M.Kechouane, O.Nemraoui, K.Ellmer "Pulsed laser deposited transparent and conductive V-doped ZnO thin films", 2020 *Thin Solid Films* 700, 137892, @2020 Линк
1530. Romain Magnan, "Oxyde transparent conducteur de ZnO : V à partir d'une cible de nanoparticules : de l'ablation par laser pulsé à un procédé de décharge à barrière diélectrique double fréquence à pression atmosphérique", @2020 Линк
1531. Kondala Rao, T. Synthesis and characterization of zinc oxide @ silver ferrite multiferroic nanocomposite (2021) *Materials Today: Proceedings*, 46, pp. 10747-10751., @2021 Линк

1532. Seol, W., Anoop, G., Park, H., Shin, C.W., Lee, J.Y., Kim, T.Y., Kim, W.S., Joh, H., Samanta, S., Jo, J.Y. Ferroelectricity in solution-processed V-doped ZnO thin films (2021) *Journal of Alloys and Compounds*, 853, art. no. 157369.,
1533. Mrabet S.;Ihzaz N.;Alshammari M.;Khlifi N.;Ba M.;Bessadok M.N.;Mejri I.H.;El Mir L., "Structural, optical, and magnetic properties of V-doped ZnO nanoparticles and the onset of ferromagnetic order", *Journal of Alloys and Compounds*, 9205 , 165920, 2022, @2022 Линк
1534. Nistor, Magdalena, M.;Gherendi, Florina;Perrière, Jacques, "Tailorable properties of Nd-doped ZnO epitaxial thin films for optoelectronic and plasmonic devices", *Optical Materials* 126 , 112154, 2022., @2022 Линк
1535. L. Derbali, F. Bouhjar, and A. Derbali, "Photocurrent performance and enhancement of opto-electronic properties of spray pyrolysis deposited ZnO thin films via V-doping", *Modern Physics Letters B*, Vol. 38, No. 09, 2450060, @2023 Линк
1536. Zhou, J., Ou, K., Zhang, W., (...), Shu, L., Wang, H."Preparation of Zn_xVyO/ZnO heterojunction for enhanced photocatalytic activity". *Thin Solid Films* 778, 139890, @2023 1.000

Imamova S., Nedyalkov N., Dikovska A., Atanasov P., Sawczak M., Jendrzewski R., Sliwinski G., Obara M. Near field properties of nanoparticle arrays fabricated by laser annealing of thin Au and Ag films. *Applied Surface Science*, 257, 3, 2010, 1075. ISI IF:2.711

1537. Naser, H., Hassan, Z., Mohammad, S.M., Shanshool, H.M., Al-Hazeem, N.Z. "Parameters Influencing the Absorbance of Gold-Silver Alloy Nanomaterials Using the Pulsed Laser Ablation in Liquid (PLAL) Approach: a Review". *Brazilian Journal of Physics* 52(3), 100, 2022, @2022 1.000
1538. Boneberg, J., Scheer, E., Leiderer, P. "Optical Nanostructuring by Near-Field Laser Ablation". *Springer Series in Optical Sciences* 239, pp. 411-445, @2023 1.000

S. Nikolov, N.N. Nedyalkov, R.G. Nikov, P.A. Atanasov, M.T. Alexandrov. Characterization of Ag and Au nanoparticles created by nanosecond pulsed laser ablation in double distilled water. *Applied Surface Science*, 257, 12, Elsevier, 2011, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2010.10.146, 5278-5282. SJR:0.913, ISI IF:2.103

1539. Ibtisam Jaafar, Azher Abdul Wahab Habieb, Abbas Mohsin Ali, Adel H. Omran Alkhayatt, "Influence of Laser Wavelength and Solution Type on the Optical Absorbance of Colloidal Ag Nanoparticles Synthesized by Laser Ablation", *NeuroQuantology* 18(3):28 (2020),
1540. Luis Enrique Iniesta Piña, "Obtención de nanopartículas fotoluminiscentes de carbono a partir de la fragmentación de negro de carbono utilizando pulsos láser", Tesis, 2020, @2020 Линк
1541. Nishijima, Y., Enomonoto, K., Okazaki, S., Arakawa, T., Balčytis, A., Juodkazis, S., "Pulsed laser deposition of Pt-WO₃ of hydrogen sensors under atmospheric conditions" *Applied Surface Science* 534 (2020) art. no. 147568.,
1542. Yunyu Cai, Yajun Zhang, Sihan Ji, Yixing Ye, Shouliang Wu, Jun Liu, Shaopeng Chen, Changhao Liang, Laser ablation in liquids for the assembly of Se@Au chain-oligomers with long-term stability for photothermal inhibition of tumor cells, *Journal of Colloid and Interface Science* 566, 284-295, 2020., @2020 Линк
1543. Iqbal, M., ul Hassan, S. S., Abbas, M., & Ahmad, H. (2021). The Validation and Development of Analytical Technique for the Fast and Economical Evaluation of Amoxicillin in Solid Dosage form Through UV/Visible Spectroscopy. *RADS Journal of Pharmacy and Pharmaceutical Sciences*, 9(1), 7-17., @2021 Линк
1544. Tommalieh, M.J., Awwad, N.S., Ibrahim, H.A., Menazea, A.A., "Characterization and electrical enhancement of PVP/PVA matrix doped by gold nanoparticles prepared by laser ablation", *Radiation Physics and Chemistry* 179 (2021) art. no. 109195., @2021 Линк
1545. Zulfajri, M., Huang, W.-J., Huang, G.-G., Chen, H.-F., "Effects of different surfactant charges on the formation of gold nanoparticles by the lasis method", (2021) *Materials*, 14 (11), art. no. 2937 ., @2021 Линк
1546. He, N., Wei, S., Hu, T., Ye, Y., Cai, Y., Liu, J., Li, P., Liang, C., "Surface-Plasmon-Mediated Alloying for Monodisperse Au-Ag Alloy Nanoparticles in Liquid", (2022) *Inorganic Chemistry*, 61 (31) 12449-12457., @2022
1547. Ibrahim, N., Akindoyo, J.O., Mariatti, M., "Recent development in silver-based ink for flexible electronics", *Journal of Science: Advanced Materials and Devices*, (2022) *Journal of Science: Advanced Materials and Devices*, 7 (1), art. no. 100395., @2022 Линк
1548. Sreenilayam, S.P., McCarthy, É., McKeon, L., Ronan, O., McCann, R., Fleischer, K., Freeland, B., Nicolosi, V., Brabazon, D., "Additive-free silver nanoparticle ink development using flow-based Laser Ablation Synthesis in Solution and Aerosol Jet printing", (2022) *Chemical Engineering Journal*, 449, art. no. 137817., @2022 Линк
1549. Acharya, T.R., Jang, M., Lee, G.J., Choi, E.H. "A comprehensive study on the synthesis, characteristics, and catalytic applications of submerged hydrogen-mixed argon plasma-synthesized silver nanoparticles". *Current Applied Physics* 56, pp. 36-46, @2023 1.000
1550. Demishkevich, E., Zyubin, A., Seteikin, A., (...), Choi, E.H., Lee, G.J."Synthesis Methods and Optical Sensing Applications of Plasmonic Metal Nanoparticles Made from Rhodium, Platinum, Gold, or Silver." *Materials* 16(9), 3342, @2023 1.000
- Amoruso S., Nedyalkov N.N., Wang X., Ausanio G., Bruzzese R., Atanasov P.. Ultrafast laser ablation of gold thin film targets. *J. Appl. Phys.*, 110, 2011, 12430. ISI IF:2.1**
1551. Jeun, J., Park, M., Han, G., (...), Roh, C., Grigoropoulos, C.P.Femtosecond laser induced ablation dynamics probing by emission and scattering spectroscopy under various vacuum conditions 2020 *Proceedings of SPIE - The International Society for Optical Engineering*, 11268, 112680E, @2020 1.000
1552. Batool, A., Bashir, S., Hayat, A., (...), Irfan, Z., Dawood, A.Time of flight measurements of energy and density

- of laser induced Mg plasma ions and investigation of ablated surface morphology 2021 *Physics of Plasmas*, 28(1), 013113, @2021 1.000
1553. Nastulyavichus, A., Kudryashov, S., Ionin, A., Gonchukov, S. Optimization of nanoparticle yield for biomedical applications at femto-, pico- and nanosecond laser ablation of thin gold films in water 2022 *Laser Physics Letters*, 19(4), 045603, @2022 1.000
- Obara G., Tanaka Y., Nedyalkov N.N., Terakawa M., Obara M. Direct observation of surface plasmon far field for regular surface ripple formation by femtosecond laser pulse irradiation of gold nanostructures on silicon substrates. *Applied Physics Letters*, 99, 2011, 061106. ISI IF:3.142**
1554. Xu, S., Fan, H., Xu, S.-J., (...), Wang, L., Song, J.-F. High-efficiency fabrication of geometric phase elements by femtosecond-laser direct writing 2020 *Nanomaterials* 10(9), 1737, pp. 1-8, @2020 1.000
1555. Zhao, Z., Xia, C., Yang, J. Regular nanowire formation on Fe-based metal glass by manipulation of surface waves, 2021 *Nanomaterials* 11(9), 2389, @2021 1.000
- Obara G., Maeda N., Miyanishi T., Terakawa M., Nedyalkov N.N., Obara M. Plasmonic and Mie scattering control of far-field interference for regular ripple formation on various material substrates. *Optics Express*, 19, 2011, 19093. ISI IF:3.488**
1556. Huang, C.-H., Kudo, T., Bresolí-Obach, R., (...), Sugiyama, T., Masuhara, H. Surface plasmon resonance effect on laser trapping and swarming of gold nanoparticles at an interface, 2020 *Optics Express* 28(19), pp. 27727-27735, @2020 1.000
1557. Zhao, Z., Zhao, B., Lei, Y., Yang, J., Guo, C. Laser-induced regular nanostructure chains within microgrooves of Fe-based metallic glass 2020 *Applied Surface Science* 529, 147156, @2020 1.000
1558. Zhao, Z., Xia, C., Yang, J. Regular nanowire formation on Fe-based metal glass by manipulation of surface waves, 2021 *Nanomaterials* 11(9), 2389, @2021 1.000
1559. Anubhab Sahoo, P P Rajeev and Sivarama Krishnan, All-optical investigations of intense femtosecond pulse ionization in transparent dielectrics with applications, 2022 *J. Opt.* 24 064004, @2022 1.000
1560. Jiao Geng, Liping Shi, Xiaoyu Sun, Wei Yan, Min Qiu, Artificial Seeds-Regulated Femtosecond Laser Plasmonic Nanopatterning, *Las. and Phot. Reviews*, Volume16, Issue11, November 2022, @2022 1.000
1561. Li, R., Zou, T., Li, X., Yu, Z., Yang, J. "Development of periodically concentric rings within microcavity upon femtosecond laser irradiation". *Optics Express* 31(11), pp. 17836-17847, @2023 1.000
1562. Rudenko, A., Colombier, J.-P. "How Light Drives Material Periodic Patterns Down to the Nanoscale". *Springer Series in Optical Sciences* 239, pp. 209-255, @2023 1.000
- Nedyalkov N.N., Imamova S., Atanasov P.A., Tanaka Y., Obara M. Interaction between ultrashort laser pulses and gold nanoparticles: Nanoheater and nanolens effect. *Journal of Nanoparticle Research*, 5, 2011, 2181. ISI IF:2.184**
1563. McGraw, E., Dissanayaka, R.H., Vaughan, J.C., (...), Laurent, G.M., Avila, L.A. Laser-Assisted Delivery of Molecules in Fungal Cells 2020 *ACS Applied Bio Materials* 3(9), pp. 6167-6176, @2020 1.000
1564. Ren, X., Li, X., Wei, F., Yin, H., Wen, Y. Electric field simulation of Ag nanoparticles induced by Femtosecond laser in welding process 2020 *Ferroelectrics* 563(1), pp. 1-11, @2020 1.000
1565. Heinemann, D., Zabic, M., Terakawa, M., Boch, J. Laser-based molecular delivery and its applications in plant science, 2022 *Plant Methods* 18(1), 82, @2022 1.000
1566. Yao, C., Liang, X.-X., Wang, S., (...), Zhang, L., Zhang, Z. "Optical Theranostics Based on Gold Nanoparticles". *Biomedical Photonic Technologies* pp. 245-284, @2023 1.000
- Nedyalkov N.N., Imamova S.E., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., Obara M. Interaction of gold nanoparticles with nanosecond laser pulses: Nanoparticle heating. *Applied Surface Science*, 275, 2011, 5456. ISI IF:2.711**
1567. Chu, Y.-M., Khan, U., Shafiq, A., Zaib, A. Numerical Simulations of Time-Dependent Micro-Rotation Blood Flow Induced by a Curved Moving Surface Through Conduction of Gold Particles with Non-uniform Heat Sink/Source 2020 *Arabian Journal for Science and Engineering*, @2020 1.000
1568. Obaid, N.M., Al-Dahash, G., Tuema, R. A simple new method for purifying grain size by pulse laser ablation 2020 *NeuroQuantology* 18(2), pp. 32-36, @2020 1.000
1569. Ren, X., Li, X., Wei, F., Yin, H., Wen, Y. Thermal Field Simulation of Ag Nanoparticles Induced by Femtosecond Laser 2020 *Integrated Ferroelectrics* 208(1), pp. 128-137, @2020 1.000
1570. Chu, Y.-M., Khan, U., Shafiq, A., Zaib, A. Numerical Simulations of Time-Dependent Micro-Rotation Blood Flow Induced by a Curved Moving Surface Through Conduction of Gold Particles with Non-uniform Heat Sink/Source 2021 *Arabian Journal for Science and Engineering*, 46(3), pp. 2413-2427, @2021 1.000
1571. Gao, H., Wu, P., Song, P., (...), Xu, J.-J., Chen, H.-Y. The video-rate imaging of sub-10 nm plasmonic nanoparticles in a cellular medium free of background scattering, 2021 *Chemical Science*, 12(8), pp. 3017-3024, @2021 1.000
1572. Kim, B.-S., Kumar, D., Park, C.H., Kim, C.S. HSPA1A-siRNA nucleated gold nanorods for stimulated photothermal therapy through strategic heat shock to HSP70 2021 *Materials Chemistry Frontiers* 5(17), pp. 6461-6470, @2021 1.000
1573. Liu, W., Wu, Y., Hong, Y., (...), Zhang, J., Yue, Y. Full-spectrum thermal analysis in twisted bilayer graphene 2021 *Physical Chemistry Chemical Physics* 23(35), pp. 19166-19172, @2021 1.000
1574. Huang, W., Lai, S.K., Liang, K., (...), Chen, Y., Ng, K.-M. "Near-Field-Induced Ionization on Photo-Excited Gold Nanoparticles". *Journal of Physical Chemistry C* 127(22), pp. 10508-10514, @2023 1.000

1575. Jing, W., Ma, F.-Q. "Applications of Ultra-fast Pulse-controlled PCR (upPCR) | [超快脉冲控制 PCR (upPCR) 技术及应用]". *Progress in Biochemistry and Biophysics* 50(11), pp. 2649-2662, @2023 1.000
1576. Liu, J., Xiong, K., Zhang, H., Nie, H., Yan, Q.-L. "The effect of alumina as an interfacial layer on the reactivity of Al/PTFE energetic composites". *Journal of Materials Research and Technology* 24, pp. 3033-3047, @2023 1.000
1577. Park, C., Lim, J.M., Hong, S.-C., Cho, M. "Two-color infrared photothermal microscopy". *Analyst* 148(10), pp. 2395-2402, @2023 1.000

R.G. Nikov, A. S. Nikolov, N.N. Nedyalkov, I.G. Dimitrov, P.A. Atanasov, M.T. Alexandrov. Stability of contamination-free gold and silver nanoparticles produced by nanosecond laser ablation of solid targets in water. *Applied Surface Science*, 258, 23, Elsevier, 2012, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2011.12.040, 9318-9322. SJR:0.913, ISI IF:2.827

1578. Ghaem, E.N., Dorrnian, D., Sari, A. H., "Characterization of cobalt oxide nanoparticles produced by laser ablation method: Effects of laser fluence", *Physica E: Low-dimensional Systems and Nanostructures*, Volume 115, article id. 113670 (2020),
1579. Romany Onsi, Khaled Easawi, Said Abdallah, Sohair Negm and Hassan Talaat, "Preparation of Silver Nanoparticles Dispersed in Almond Oil Using Laser Ablation Technique", *IOP Conf. Series: Materials Science and Engineering* 762 (2020) 012005. doi:10.1088/1757-899X/762/1/012005,
1580. Fomina, S.A., Petrovskaya, A.A., Volkova, A.A., Melnikov, D.M., "Study of stability of colloid solutions of gold nanoparticles obtained by laser ablation in liquids", (2021) *AIP Conference Proceedings*, 2318, art. no. 090001.,
1581. Tao, X., Wang, J., Duan, X., Zou, M., Du, J., Zhang, J., Lu, G., "Interactions between polycyclic aromatic hydrocarbons (Pahs)-degrading strain *sp. gy2b* and nano bamboo charcoal", (2021) *Desalination and Water Treatment*, 211, 221-228., @2021 Линк
1582. Melnikov, D., Lutikova, O., Gubareva, P., Melnikova, M., Fomichenko, K. "Production of Au Nanoparticles by Laser Ablation in Liquids". *Lecture Notes in Networks and Systems* 510, pp. 369-377, @2023 1.000
1583. Petrikaitė, V., Skapas, M., Stankevičius, E. "Generation of gold and silver nanoparticles using laser ablation of thin bimetallic films and bulk targets in water". *Optical Materials* 137, 113535, @2023 1.000

Nedyalkov, N. N., Dikovska, A., Dimitrov, I., Nikov, R., Atanasov, P. A., Toshkova, R. A., Gardeva, E. G., Yossifova, L. S., Alexandrov, M. T.. Far- and near-field optical properties of gold nanoparticle ensembles. *Quantum Electronics*, 42, 12, Turpion Ltd., 2012, ISSN:1063-7818, DOI:10.1070/QE2012v042n12ABEH014932, 1123-1127. SJR:0.509, ISI IF:0.978

1584. Rastogi, R., Dogbe Foli, E.A., Vincent, R., Poovathingal, S., Adam, P.-M., Krishnamoorthy, S. "Hierarchically Structured Plasmonic Nanoparticle Assemblies with Dual-Length Scale Electromagnetic Hot Spots for Enhanced Sensitivity in the Detection of (Bio)Molecular Analytes." *Journal of Physical Chemistry C*, 125(16), 2021, pp. 8647-8655., @2021 Линк
1585. Bhardwaj, A., Verma, S.S. "Simulations of optical properties of gallium alloy nanorods based on aspect ratio and shell thickness". *Materials Today Communications* 37, 107135, @2023 1.000

A.O. Dikovska, N.N. Nedyalkov, S.E. Imamova, G.B. Atanasova, P.A. Atanasov. Au-coated ZnO nanostructures for surface enhanced Raman spectroscopy applications. *Quantum Electronics*, 3, 2012, DOI:DOI: 10.1070/QE2012v042n03ABEH014761, 258-261. ISI IF:0.897

1586. Saikam, L., Arthi, P., Senthil, B., Shanmugam, M. "A review on exfoliated graphite: Synthesis and applications". *Inorganic Chemistry Communications* 152, 110685, @2023 1.000

A.S. Nikolov, N.N. Nedyalkov, R.G. Nikov, P.A. Atanasov, M.T. Alexandrov, D.B. Karashanova. Investigation of Ag nanoparticles produced by nanosecond pulsed laser ablation in water. *Applied Physics A: Materials Science and Processing*, 109, 2, Springer Heidelberg, 2012, ISSN:0947-8396, DOI:DOI: 10.1007/s00339-012-7094-0, 315-322. SJR:0.582, ISI IF:1.545

1587. Valverde-Alva, M.A., Agreda-Delgado, J.F., Vega-González, J.A., Rodríguez-Soto, J.C., Idrogo-Córdova, J.C., Angelats-Silva, L.M., Aldama-Reyna, C.W., "Effect of the magnetic field on the synthesis of colloidal silver and gold nanoparticles by laser ablation in bidestilled water" [Efecto del campo magnético en la síntesis de nanopartículas de oro y plata coloidal por ablación láser en agua bidestilada], (2021) *Momento*, 2021 (63) 1-11., @2021 Линк
1588. Balachandran, A., Sreenilayam, S.P., Madanan, K., Thomas, S., Brabazon, D., "Nanoparticle production via laser ablation synthesis in solution method and printed electronic application - A brief review", (2022) *Results in Engineering*, 16, art. no. 100646., @2022 1.000

M.E. Koleva, A.Og. Dikovska, N.N. Nedyalkov, P.A. Atanasov, I.A. Bliznakova. Enhancement of ZnO photoluminescence by laser nanostructuring of Ag underlayer. 258, 23, Elsevier, 2012, ISSN:01694332, DOI:10.1016/j.apsusc.2012.01.052, 9181-9185. SJR:0.913, ISI IF:3.781

1589. Han, Y., Yao, C.-B., Cai, Y., Bao, S.-B., Jiang, G.-Q., "Copper decorated ZnO nanowires material: Growth, optical and photoelectrochemical properties", 2020 *Journal of Alloys and Compounds* 835, 155339, @2020 Линк
1590. Tong, C., Kumar, M., Yun, J.-H., Kim, J., Kim, S.J., "High-quality ITO/Al-ZnO/n-Si heterostructures with junction engineering for improved photovoltaic performance", 2020 *Applied Sciences (Switzerland)* 10(15), 5285, @2020 Линк
1591. Akkari, M., Bardaoui, A., Djebbi, M.A., Amara, A.B.H., Chtourou, R., Hydrothermal synthesis of Ag-doped

- ZnO/sepiolite nanostructured material for enhanced photocatalytic activity 2022 Environmental Science and Pollution Research 29(44), pp. 67159-67169, @2022 Линк
1592. MB Chabalala, SA Zikalala, L Ndlovu, G Mamba, Bh. Mamba, Ed. Nxumalo, "A green synthetic approach for the morphological control of ZnO-Ag using β -cyclodextrin and honey for photocatalytic degradation of bromophenol blue", Chemical Engineering Research and Design, Vol. 197, 2023, @2023 Линк
- A.Og. Dikovska, N. Ts. Tsankov, R. Toshkova, E. Gardeva, L. Yossifova, N.N. Nedyalkov, P.A. Atanasov. Fabrication of ZnO nanostructures and their application in biomedicine. Proc. SPIE, 8424, 2012, DOI:10.1117/12.922406, 84242Q -1-84242Q -7**
1593. Qu, S., Hadjittofis, E., Malaret, F., (...), Smith, R., Campbell, K.S."Controlling simonkolleite crystallisation via metallic Zn oxidation in a betaine hydrochloride solution".Nanoscale Advances 5(9), pp. 2437-2452, @2023 1.000
- Ru. Nikov, N. Nedyalkov, P.A. Atanasov, M. Terakawa, H. Shimizu, M. Obara. Tuning the optical properties of gold nanostructures fabricated on flexible substrates. Applied Surface Science, 264, Elsevier, 2013, ISSN:0169-4332, OI:http://dx.doi.org/10.1016/j.apsusc.2012.10.125, 779-782. SJR:0.913, ISI IF:2.711**
1594. Solis-Tinoco, V., Acevedo-Barrera, A., Vazquez-Estrada, O., Munguia-Cervantes, J., Hernandez-Como, N., Olguin, L.F., Garcia-Valenzuela, A. "Fast and accurate optical determination of gold-nanofilms thickness." Optics & Laser Technology, 134, 2021, art. no. 106604 ., @2021 Линк
- Nikov, R.G., Nikolov, A.S., Nedyalkov, N.N., Atanasov, P.A., Alexandrov, M.T., Karashanova, D.B.. Processing condition influence on the characteristics of gold nanoparticles produced by pulsed laser ablation in liquids. Applied Surface Science, 274, Elsevier, 2013, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2013.02.118, 105-109. SJR:0.913, ISI IF:2.827**
1595. Naser, H., Shanshool, H.M., Imhan, K.I., "Parameters Affecting the Size of Gold Nanoparticles Prepared by Pulsed Laser Ablation in Liquid", (2021) Brazilian Journal of Physics, 51 (3) 878-898., @2021 Линк
1596. RIVERA-ESTEBAN, Jesús Manuel; OLIVAS-ALVAREZ, Agustin Benigno. Estudio fotoacústico de nanopartículas de oro por ablación láser. Revista Tecnología en Marcha, 2021, ág. 96-108., @2021 Линк
1597. Attallah, A.H., Abdulwahid, F.S., Ali, Y.A., Haider, A.J."Effect of Liquid and Laser Parameters on Fabrication of Nanoparticles via Pulsed Laser Ablation in Liquid with Their Applications: A Review". Plasmonics, @2023 1.000
- Ru. G. Nikov, N. N. Nedyalkov, P. A. Atanasov, K. Grochowska, A. Iwulska, G. Sliwinski. Laser nanostructuring of Au/Ag and Au/Ni films for application in SERS. Proceedings of SPIE, 8770, 87700D, SPIE, 2013, ISSN:0277-786X, DOI:10.1117/12.2014758, 87700D-1-87700D-7. SJR:0.212, ISI IF:0.279**
1598. "Magnetic-plasmonic Ni@Au core-shell nanoparticle arrays and their SERS properties" L. Wang, Z. Wang L. Li, J. Zhang, J. Liu, J. Hu, X. Wu, Z. Weng, X. Chu, J. Lie, Z. Qiao, RSC Adv. 10, pp. 2661-2669 (2020), @2020 Линк
1599. Simonenko, N.P., Musaev, A.G., Simonenko, T.L., Gorobtsov, P.Yu., Volkov, I.A., Gulin, A.A., Simonenko, E.P., Sevastyanov, V.G., Kuznetsov, N.T., Hydrothermal synthesis of Ag thin films and their SERS application, (2022) Nanomaterials, 12 (1), art. no. 136, @2022 1.000
- Nikolov, A.S., Nikov, R.G., Nedyalkov, N.N., Dimitrov, I.G., Atanasov, P.A., Alexandrov, M.T., Karashanova, D.B.. Modification of the silver nanoparticles size-distribution by means of laser light irradiation of their water suspensions. Applied Surface Science, 280, Elsevier, 2013, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2013.04.079, 55-59. SJR:0.212, ISI IF:2.538**
1600. Konda, S.R., Maurya, S.K., Ganeev, R.A., Lai, Y.H., Guo, C., Li, W., "Third-order nonlinear optical effects of silver nanoparticles and third harmonic generation from their plasma plumes", (2021) Optik, 245, art. no. 167680., @2021 Линк
- Balansky R., Longobardi M, Ganchev G., Iltcheva M., Nedyalkov N., Atanasov P., Toshkova R., Izzotti A.. Transplacental clastogenic and epigenetic effects of gold nanoparticles in mice. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1, 2013, 42-48. ISI IF:3.68**
1601. Barbato, V., Talevi, R., Gualtieri, R., (...), Catapano, G., Capriglione, TPolystyrene nanoparticles may affect cell mitosis and compromise early embryo development in mammals 2020 Theriogenology 145, pp. 18-23, @2020 1.000
1602. Bicho, R.C., Roelofs, D., Mariën, J., Scott-Fordsmand, J.J., Amorim, M.J.B.Epigenetic effects of (nano)materials in environmental species – Cu case study in Enchytraeus crypticus 2020 Environment International 136, 105447, @2020 1.000
1603. Carneiro, M.F.H., Machado, A.R.T., Antunes, L.M.G., (...), Pereira, M.C., Barbosa, F.Gold-Coated Superparamagnetic Iron Oxide Nanoparticles Attenuate Collagen-Induced Arthritis after Magnetic Targeting 2020 Biological Trace Element Research 194(2), pp. 502-513, @2020 1.000
1604. Comparative toxicity of green and chemically synthesized CuO NPs during pregnancy and lactation in rats and offspring: Part I -hepatotoxicity Naz, S., Nasir, B., Ali, H., Zia, M. 2020 Chemosphere 128945, @2020 1.000
1605. Falagan-Lotsch, P., Murphy, C.J.Network-based analysis implies critical roles of microRNAs in the long-term cellular responses to gold nanoparticles 2020 Nanoscale 12(41), pp. 21172-21187, @2020 1.000
1606. Hussain, Z., Thu, H.E., Elsayed, I., (...), Sarfraz, R.M., Farooq, M.ANano-scaled materials may induce severe neurotoxicity upon chronic exposure to brain tissues: A critical appraisal and recent updates on predisposing factors, underlying mechanism, and future prospects . 2020 Journal of Controlled Release 328, pp. 873-894, @2020 1.000

1607. Natasha Pritchard, Tu'uhevaha Kaitu'u-Lino, Lynda Harris, Stephen Tong, Natalie Hannan Nanoparticles in pregnancy: the next frontier in reproductive therapeutics, *Human Reproduction Update*, dmaa049, <https://doi.org/10.1093/humupd/dmaa049>, @2020 1.000
1608. N'Dea S. Irvin-Choy, a Katherine M. Nelson, b Jason P. Gleghornac and Emily S. Day Design of nanomaterials for applications in maternal/fetal medicine *J. Mater. Chem. B*, 2020, 8, 6548-6561, @2020 1.000
1609. Wang, Y., Zhang, H., Shi, L., (...), Duan, G., Yang, H. A focus on the genotoxicity of gold nanoparticles, 2020 *Nanomedicine* 15(4), pp. 319-323, @2020 1.000
1610. Yu, J., Loh, X.J., Luo, Y., (...), Fan, X., Ruan, J. Insights into the epigenetic effects of nanomaterials on cells 2020 *Biomaterials Science* 8(3), pp. 763-775, @2020 1.000
1611. Zhang, W., Liu, S., Han, D., He, Z. Engineered nanoparticle-induced epigenetic changes: An important consideration in nanomedicine 2020 *Acta Biomaterialia* 117, pp. 93-107, @2020 1.000
1612. Moreira, L., Costa, C., Pires, J., Teixeira, J.P., Fraga, S. How can exposure to engineered nanomaterials influence our epigenetic code? A review of the mechanisms and molecular targets 2021 *Mutation Research - Reviews in Mutation Research* 788, 108385, @2021 1.000
1613. Naz S., Nasir B., Ali H., Zia M., *Chemosphere*, 266, 128945 (2021)., @2021 1.000
1614. Pritchard N., Kaitu'u-Lino T.U., Harris L., Tong S., Hannan N., *Human Reproduction Update*, 27(2), 280-304 (2021)., @2021 1.000
1615. Shukla, R.K., Badiye, A., Vajpayee, K., Kapoor, N. Genotoxic Potential of Nanoparticles: Structural and Functional Modifications in DNA, 2021 *Frontiers in Genetics* 12, 728250, @2021 1.000
1616. Teng, C., Jiang, C., Gao, S., Liu, X., Zhai, S. Fetotoxicity of nanoparticles: Causes and mechanisms, 2021 *Nanomaterials* 11(3), 791, pp. 1-25, @2021 1.000
1617. Yang, B.-Y., Qu, Y., Guo, Y., (...), Liu, X., Dong, G.-H. Maternal exposure to ambient air pollution and congenital heart defects in China, 2021 *Environment International* 153, 106548, @2021 1.000
1618. Elettra Musolino, Christina Pagiatakis, Simone Serio, Marina Borgese, Federica Gamberoni, Rosalba Gornati, Giovanni Bernardini Roberto Papait, The Yin and Yang of epigenetics in the field of nanoparticles, *Nanoscale Adv.*, 2022, 4, 979-994, @2022 1.000
1619. Gail M. Nelson, Brian N. Chorley, Micro RNA s as Non-invasive Biomarkers of Toxicity and Chemical Hazard, in *Genomic and Epigenomic Biomarkers of Toxicology and Disease: Clinical and Therapeutic Actions*, @2022 1.000
1620. Iman Zare, Mohammad Tavakkoli Yarak, Giorgio Speranza, Alireza Hassani Najafabadi, Alireza Shourangiz-Haghighi, Amirala Bakhshian Nik, Bella B. Manshian, Cláudia Saraiva, Stefaan J. Soenen, I Marcelo J. Kogan Jee Woong Lee, Nicholas V. Apollo, Liliana Bernardino, Eyleen Araya, Dirk Mayer, Guangzhao Mao and Michael R. Hamblin Gold nanostructures: synthesis, properties, and neurological applications, *Chem. Soc. Rev.*, 2022, 51, 2601-2680, @2022 1.000
1621. Jabulile Happiness Xulu, Tanaka Ndongwe, Kenneth M. Ezealisiji, Vuyelwa J. Tembu Nontobeko P. Mncwangi, Bwalya A. Witika Xavier Siwe-Noundou, The Use of Medicinal Plant-Derived Metallic Nanoparticles in Theranostics, *Pharmaceutics* 2022, 14(11), 2437, @2022 1.000
1622. Manosij Ghosh, Lode Godderis, Peter Hoet, *Advances in Experimental Medicine and Biology book series (AEMB, volume 1357)*, @2022 1.000
1623. Niloofar Jamshidinia, Fatemeh Mohammadipanah, Nanomaterial-Augmented Formulation of Disinfectants and Antiseptics in Controlling SARS CoV-2, *Food and Environmental Virology* volume 14, pages 105–119 (2022), @2022 1.000
1624. Himič, V., Syrmos, N., Ligarotti, G.K.I., Ganau, M. "Latest insights on genomic and epigenomic mechanisms of nanotoxicity". *Impact of Engineered Nanomaterials in Genomics and Epigenomics* pp. 397-417, @2023 1.000
1625. Letelier, P., Saldías, R., Loren, P., Riquelme, I., Guzmán, N. "MicroRNAs as Potential Biomarkers of Environmental Exposure to Polycyclic Aromatic Hydrocarbons and Their Link with Inflammation and Lung Cancer". *International Journal of Molecular Sciences* 24(23), 16984, @2023 1.000
1626. Nguyen, N.H.A., Falagan-Lotsch, P. "Mechanistic Insights into the Biological Effects of Engineered Nanomaterials: A Focus on Gold Nanoparticles". *International Journal of Molecular Sciences* 24(4), 4109, @2023 1.000
1627. Shekh, K., Ansari, R.A., Omid, Y., Shakil, S.A. "Molecular impacts of advanced nanomaterials at genomic and epigenomic levels". *Impact of Engineered Nanomaterials in Genomics and Epigenomics* pp. 5-39, @2023 1.000
1628. Tang, M., Zhang, X., Fei, W., (...), Zheng, C., Sun, D. "Advance in placenta drug delivery: concern for placenta-originated disease therapy"., @2023 1.000
1629. Zhang, Y., Alshammari, E., Yonis, N., Yang, Z. "Adverse epigenetic effects of environmental engineered nanoparticles as drug carriers". *Impact of Engineered Nanomaterials in Genomics and Epigenomics* pp. 251-281, @2023

Atanasov, P. A., Nedyalkov, N. N., Dikovska, A. O., Nikov, Ru., Amoruso, S., Wang, X., Bruzzese, R., Hirano, K., Shimizu, H., Terakawa, M., Obara, M.. Noble metallic nanostructures: Preparation, properties, applications. *Journal of Physics: Conference Series*, 514, 012024, IOP Publishing Ltd, 2014, ISSN:1742-6588, DOI:10.1088/1742-6596/514/1/012024, 012024-1-012024-8. SJR:0.217, ISI IF:0.303

1630. Shahraki, A.T., Gol, H.A.S., Kimiagar, S., Dehnavi, N.Z. "The Hydrogen Effect on the Electronic and Optical Behavior of SiC:Mn(5, 0) NT: by DFT". *Silicon* 12, 339–346, 2020, @2020 Линк

Nedyalkov, N., Nikolov, A., Atanasov, P., Alexandrov, M., Terakawa, M., Shimizu, H.. Nanostructured Au film produced by pulsed laser deposition in air at atmospheric pressure. *OPTICS AND LASER TECHNOLOGY*, 64,

1631. Donnelly, T., O'connell, G., Lunney, J.G. Metal nanoparticle film deposition by femtosecond laser ablation at atmospheric pressure 2020 *Nanomaterials* 10(11), 2118, pp. 1-13, @2020 1.000
1632. Khan, T. M., Khan, S. U., Khan, S. U., Ahmad, A., Abbasi, S. A., Khan, E. M., & Mehigan, S. , "Silver nanoparticle films by flowing gas atmospheric pulsed laser deposition and application to surface - enhanced Raman spectroscopy", *International Journal of Energy Research*, 1-10 (2020) doi:10.1002/er.5767, @2020 Линк
1633. Wei Liu, Kai Zhu, Chunqing Wang*, Zhen Zheng**, Rong An, Wei Zhang, Minxi Zhu, Zhicheng Wen, Xinming Wang, Yubin Liu, Yanhong Tian, "Laser induced forward transfer of brittle Cu₃Sn thin film", *Journal of Manufacturing Processes* 60, December 2020, Pages 48-53, @2020 Линк
1634. Bonjakhi, M., Mahdiah, M.H. Fabrication of silver nanoparticle films by pulsed laser deposition in flowless open air and studying the effects of laser fluence and number of pulses 2021 *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 626, 126990, @2021 1.000
1635. In situ collection of nanoparticles during femtosecond laser machining in air Joy, N., Kietzig, A.-M. 2021 *Nanomaterials* 11(9), 2264, @2021 1.000
1636. Jing, Y., Wang, R., Wang, Q., (...), Gu, H., Wang, X. An overview of surface-enhanced Raman scattering substrates by pulsed laser deposition technique: fundamentals and applications 2021 *Advanced Composites and Hybrid Materials*, 4, pages 885-905, @2021 1.000
1637. Han, Z., Weng, Z., Cao, L., (...), Li, J., Wang, Z. Laser interference induced backward transfer to prepare silver micro-stripe structure 2022 *Optics and Precision Engineering* 30(9), pp. 1029-1037, @2022 1.000
1638. Mika Tei, Tatsumi Kawafuchi, Kiminori Washika, Hitoshi Ozaki, Norihito Mayama, Katsuji Fukumoto, Masahiro Yamashita, Yosuke Kawahito, Laser-and-catalysis-assisted direct bonding of metal and non-reactive polymer for industrially durable multimaterial manufacturing, <https://doi.org/10.21203/rs.3.rs-1883998/v1>, @2022 1.000
1639. Bonjakhi, M., Mahdiah, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
1640. Khan, T.M., Aslam, N., Iqbal, A., Abbasi, S.A., Ali, D. " Cold Plasma Jet Coupled Nanosecond Laser Ablation Scheme For Plasmonic Nanostructured Surfaces". *Advanced Materials Interfaces* 10(21), 2300280, @2023 1.000

Atanasov P.A., Nedyalkov N.N., Valova E.I., Georgieva Zh.S., Armanyanov S.A., Kolev K.N., Amoroso S., Wang X., Bruzzese R., Sawczak M., Śliwiński G.. Fs-laser processing of polydimethylsiloxane and metallization. *Journal of Applied Physics*, 116, 2, AIP, 2014, 023104

1641. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M. "3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures". *Advanced Electronic Materials*, @2023 1.000
- Koleva M.E., Nedyalkov N.N.. Effect of the plasmon-exciton coupling on the optical response of a ZnO/Ag/ZnO nanocomposite. *Journal of Physics: Conference Series*, 514, 1, 2014, 012031. SJR:0.21**
1642. Wang, J., Yang, P., "Building an Efficient Optoelectronic Property at the AZO/Cu/AZO Heterogeneous Interface with Copper Intercalation", *Crystal Growth and Design* 23(10), pp. 7403-7411, @2023 Линк

Amoroso, S., Nedyalkov, N.N., Wang, X., Ausanio, G., Bruzzese, R., Atanasov, P.A.. Ultrashort-pulse laser ablation of gold thin film targets: Theory and experiment. *Thin Solid Films*, 550, 2014, ISI IF:1.759

1643. Xie, J., Yan, J., Zhu, D. Atomic simulation of irradiation of Cu film using femtosecond laser with different pulse durations 2020 *Journal of Laser Applications* 32(2), 022016, @2020 1.000
1644. Dotan, T., Berg, Y., Migliorini, L., (...), Milani, P., Shacham-Diamand, Y. Soft and flexible gold microelectrodes by supersonic cluster beam deposition and femtosecond laser processing 2021 *Microelectronic Engineering* 237, 111478, @2021 1.000
1645. Lei, S., Wang, X., Larsen, J.T. Numerical modeling and simulation of ultrafast laser-matter interaction with aluminum thin film, 2022 *Procedia CIRP* 111, pp. 571-575, @2022 1.000
1646. Nastulyavichus, A., Kudryashov, S., Ionin, A., Gonchukov, S. Optimization of nanoparticle yield for biomedical applications at femto-, pico- and nanosecond laser ablation of thin gold films in water . 2022 *Laser Physics Letters*, 19(4), 045603, @2022 1.000
1647. Nastulyavichus, A., Kudryashov, S., Tolordava, E., (...), Ionin, A., Yushina, Y. Generation of silver nanoparticles from thin films and their antibacterial properties 2022 *Laser Physics Letters*, 19(7), 075603, @2022 1.000
1648. Protim Hazarika, M., Tripathi, A., Nath Chakraborty, S. "Two-temperature molecular dynamics simulation study of copper thin film irradiation with femtosecond and picosecond laser pulses". *Journal of Laser Applications* 35(2), 022005, @2023 1.000

A.S. Nikolov, N.N. Nedyalkov, R.G. Nikov, I.G. Dimitrov, P.A. Atanasov, K. Maximova, Ph. Delaporte, A. Kabashin, M.T. Alexandrov, D.B. Karashanova. Processing conditions in pulsed laser ablation of gold in liquid for fabrication of nanowire networks. *Applied Surface Science*, 302, Elsevier, 2014, ISSN:0169-4332, DOI:doi:10.1016/j.apsusc.2014.02.010, 243-249. SJR:0.913, ISI IF:2.827

1649. Jin, J., Liu, C., Zhang, Y., Liu, G., Chu, Z., Li, G., "Preparation and Application in Sensing Fields of Gold Nanowires", *Cailiao Daobao/Materials Reports* 34 (3) (2020) 05085-05095., @2020 Линк
1650. Yunyu Cai, Yajun Zhang, Sihan Ji, Yixing Ye, Shouliang Wu, Jun Liu, Shaopeng Chen, Changhao Liang, Laser ablation in liquids for the assembly of Se@Au chain-oligomers with long-term stability for photothermal inhibition of tumor cells, *Journal of Colloid and Interface Science* 566, 284-295, 2020., @2020 Линк

1651. Tommalieh, M.J., Awwad, N.S., Ibrahim, H.A., Menazea, A.A., "Characterization and electrical enhancement of PVP/PVA matrix doped by gold nanoparticles prepared by laser ablation", *Radiation Physics and Chemistry* 179 (2021) art. no. 109195., @2021 [Линк](#)
1652. He, N., Wei, S., Hu, T., Ye, Y., Cai, Y., Liu, J., Li, P., Liang, C., "Surface-Plasmon-Mediated Alloying for Monodisperse Au-Ag Alloy Nanoparticles in Liquid", (2022) *Inorganic Chemistry*, 61 (31), pp. 12449-12457., @2022 [Линк](#)
1653. R. S. Ghalot, L. Lazov, "Obtaining Nanoparticles by Underwater Laser Ablation – A Brief Review, " 2022 Seventh Junior Conference on Lighting (Lighting), 2022, pp. 1-14., @2022 [Линк](#)
- Koleva, M.E., Nedyalkov, N.N., Atanasov, P.A., Fukata, N., Dutta, M.. Optical properties of Ag-ZnO nanostructures. Proceedings of SPIE, 9447, 2015, ISSN:0277786X, DOI:10.1117/12.2087769, 94470E-1-94470E-7. SJR:0.212**
1654. Patiño-Herrera, E. F. Aguilar-Rodríguez, M. Robles-Martínez, E. Pérez-López, *Actividad Antimicótica del Óxido de Zinc decorado con Nanopartículas de Plata contra Trichophyton Mentagrophytes, Circuitos y Sistemas Multidisciplinar Vol.*, 121., @2021 [Линк](#)
1655. Saeed Farhang Sahlevani, Thangaraj Pandiyarajan, Arunachalam Arulraj, Héctor Valdés, Felipe Sanhueza, David Contreras, M.A. Gracia-Pinilla, Ramalinga Viswanathan Mangalaraja, Tailored engineering of rod-shaped core@shell ZnO@CeO₂ nanostructures as an optical stimuli-responsive in sunscreen cream", *Materials Today Communications*, 38, 107959, @2023 [Линк](#)
- N.E. Stankova, P.A. Atanasov, N.N. Nedyalkov, T.R. Stoyanov, K.N. Kolev, E.I. Valova, J.S. Georgieva, St.A. Arnyanov, S. Amoroso, X. Wang, R. Bruzzese, K. Grochowska, G. Śliwiński, K. Baert, A. Hubin, M.P. Delplancke, J. Dille. fs- and ns-laser processing of polydimethylsiloxane (PDMS) elastomer: Comparative study. Applied Surface Science, 336, Elsevier, 2015, ISSN:01694332, DOI:http://dx.doi.org/10.1016/j.apsusc.2014.12.121, 321-328. SJR (Scopus):0.913, JCR-IF (Web of Science):4.281**
1656. Antoszewski, B., Tofil, S., Mulczyk, K. "The efficiency of UV picosecond laser processing in the shaping of surface structures on elastomers" (Article)(Open Access) *Polymers Open Access Volume 12, Issue 9, September 2020, Article number 2041*, @2020 [Линк](#)
1657. Antoszewski, Bogdan, Szymon Tofil, and Krystian Mulczyk. "The Efficiency of UV Picosecond Laser Processing in the Shaping of Surface Structures on Elastomers." *Polymers*, (2020), 12, no. 9: 2041., @2020 [Линк](#)
1658. Sunderlal Singh, S., Khare, A., Joshi, S.N., "Fabrication of microchannel on polycarbonate below the laser ablation threshold by repeated scan via the second harmonic of Q-switched Nd:YAG laser" (Article) *Journal of Manufacturing Processes Volume 55, July 2020, Pages 359-372*, @2020
1659. TOFI Szymon, *The Micro Machining of Polypropylene by UV Laser – the Influence of Laser Operating Parameters, Materials Research Proceedings, 2020, Vol. 17, pp 126-131.*, @2020 [Линк](#)
1660. Hayashi, Shuichiro, Fumiya Morosawa, and Mitsuhiro Terakawa. "Laser Direct Writing of Highly Crystalline Graphene on Polydimethylsiloxane for Fingertip - Sized Piezoelectric Sensors." *Advanced Engineering Materials* 23.10 (2021): 2100457.,
1661. Huang CH, Wu HC, Chen BF, Li YC. Graphene/Silver Nanowires/Graphene Sandwich Composite for Stretchable Transparent Electrodes and Its Fracture Mechanism. *Micromachines*. 2021 May;12(5):512., @2021
1662. Razavi, M., Primavera, R., Vykunta, A., Thakor, A.S. "Silicone-based bioscaffolds for cellular therapies" (Review) *Materials Science and Engineering C Volume 119, February 2021, Article number 111615*, @2021 [Линк](#)
1663. Stroj, S., Plank, W., Muendlein, M., "Ultrashort-pulsed laser separation of glass-silicone-glass substrates: influence of material properties and laser parameters on dicing process and cutting edge geometry" (Article)(Open Access) *Applied Physics A: Materials Science and Processing Volume 127, Issue 1, January 2021, Article number 7*,
1664. Xu, J., Rong, Y., Liu, W., Zhang, T., Xin, G., Huang, Y., & Wu, C. (2021). Temperature Field-Assisted Ultraviolet Nanosecond Pulse Laser Processing of Polyethylene Terephthalate (PET) Film. *Micromachines*, 2021, 12(11), 1356,
1665. Zhang, Wangyang, Weishan Yan, Haonian Zheng, Chaopeng Zhao, and Duo Liu. "Laser-Engineered Superhydrophobic Polydimethylsiloxane for Highly Efficient Water Manipulation." *ACS Appl. Mater. Interfaces* 2021, 13, 40, 48163–48170, @2021 [Линк](#)
1666. Jun Xu, Guojun Zhang, Congyi Wu, Weinan Liu, Tian Zhang, Yu Huang, Youmin Rong. "Micro-Swelling and penetration assisted laser Processing: A doping and laser processing method for polydimethylsiloxane films based on swelling and penetration behavior". *Optics & Laser Technology*, 2022, Volume 152, 108097, @2022 [Линк](#)
1667. Longsheng Lu, Duankang Zhang, Yingxi Xie, Hengfei He, Wentao Wang. "Laser Induced Graphene/Silicon Carbide: Core–Shell Structure, Multifield Coupling Effects, and Pressure Sensor Applications." *Advanced Materials Technologies*, 2022, Volume 7, Issue 12 December 2022 2200441, @2022 [Линк](#)
1668. Ogawa, H., Shibuya, T., Moriai, Y. et al. "Correlation between chemical structural changes and laser fluence in femtosecond laser processing of polydimethylsiloxane." *Appl. Phys. A*, 2022, 128, 841., @2022 [Линк](#)
1669. Penghai Li, Juanjuan Huang, Mingji Li, Hongji Li. "Evaluation of flexible multi-claw and multi-channel semi-dry electrodes for evoked electroencephalography recording." *Sensors and Actuators A: Physical*, 2022, Volume 340, 113547,
1670. Xiaoyun Sun, Wenjun Wang, Xuesong Mei, Aifei Pan, Yuhu Chen, Jianlei Cui, "High capacity color code prepared on titanium alloy using femtosecond laser." *Optics & Laser Technology*, 2022, Volume 145, 107521, @2022

1671. Yaqiang Ji, Yuxuan Liao, Haihui Li, Yuhang Cai, Dongliang Fan, Qian Liu, Shubin Huang, Renjie Zhu, Shuai Wang, Hongqiang Wang, and Liang Guo. "Flexible Metal Electrodes by Femtosecond Laser-Activated Deposition for Human–Machine Interfaces". *ACS Appl. Mater. Interfaces* 2022, 14, 9, 11971–11980, @2022 [Линк](#)
1672. Huize Wang, "Laser Patterned N-doped Carbon: Preparation, Functionalization and Selective Chemical Sensors", Eingereicht an der Mathematisch-Naturwissenschaftlichen Fakultät - Institut für Chemie der Humboldt-Universität zu Berlin, 2023-07-03, Dissertation, @2023 [Линк](#)
1673. Lu, Ya, Chaoran Lin, Minghui Guo, Youmin Rong, Yu Huang, and Congyi Wu. 2023. "Effects of Ambient Temperature on Nanosecond Laser Micro-Drilling of Polydimethylsiloxane (PDMS)". *Micromachines*, 14 (1), 90, 2023, @2023 [Линк](#)
1674. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M. "3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures". *Advanced Electronic Materials*, 2300705 Version of Record online: 10 December 2023, @2023 [Линк](#)
1675. X. Xia, X. Ding, L. Zhang, Z. Hou and Y. Cao, "Laser Direct Writing Inkless Flexible Sensor, " in *IEEE Sensors Journal*, 2023, @2023 [Линк](#)
1676. Xu, J., Zhang, G., Rong, Y., Huang, Y. "Study on the ultraviolet nanosecond laser ablation and heat-affected zone of polydimethylsiloxane films based on comprehensive surface analysis". *Optics and Laser Technology* 167, 109769, 2023, @2023 [Линк](#)

Terakawa M., Nedyalkov N.. Near-Field Optics for Nano Processing. Advanced Optical Technologies, 5, 2016, 17. ISI IF:1.39

1677. Polushkin, N.I., Möller, T.B., Bunyaev, S.A., (...), Boneberg, J., Kakazei, G.N. Simulation of Chemical Order-Disorder Transitions Induced Thermally at the Nanoscale for Magnetic Recording and Data Storage 2020 *ACS Applied Nano Materials* 3(8), pp. 7668-7677, @2020 1.000
1678. Chu, Z., Guo, Q., Tian, F. Fabrication of morphology controllable silicon nanostructure array by chemical etching assisted femtosecond laser near-field modification 2021 *Proceedings of SPIE - The International Society for Optical Engineering* 11885, 1188518, @2021 1.000
1679. Wang, X.-J., Fang, H.-H., Sun, F.-W., Sun, H.-B. Laser Writing of Color Centers, 2021 *Laser and Photonics Reviews*, <https://doi.org/10.1002/lpor.202100029>, @2021 1.000
1680. Johannes Boneberg and Paul Leiderer, Optical near-field imaging and nanostructuring by means of laser ablation, *Opto-Electronic Science*, 2022, Vol. 1, No. 1, @2022 1.000
1681. Xiao-Jie Wang, Hong-Hua Fang, Fang-Wen Sun, Hong-Bo Sun, Laser Writing of Color Centers, *Las. Phot. Rev* Volume16, Issue1, January 2022, 2100029, @2022 1.000
1682. Boneberg, J., Scheer, E., Leiderer, P. "Optical Nanostructuring by Near-Field Laser Ablation". *Springer Series in Optical Sciences* 239, pp. 411-445, @2023 1.000
1683. Chen, Z., Wang, J., Zhou, H., (...), Wang, S.-B., Jiang, N. "Janus Nano-Micro Structure-Enabled Coupling of Photothermal Conversion, Heat Localization and Water Supply for High-Efficiency Solar-Driven Interfacial Evaporation". *Advanced Functional Materials*, @2023 1.000
- Terakawa M., Torres-Mapa M., Takami A., Heinemann D., Nedyalkov N., Nakajima Y., Hördt A., Meyer H., Ripken T., Heisterkamp Al. Femtosecond laser direct writing of metal microstructure in stretchable poly(ethylene glycol) diacrylate (PEGDA) hydrogel. Optics Letters, 41, 2016, 1392. ISI IF:3.04**
1684. Chen, T., Zhao, P., Li, K., (...), Gao, Y., Hou, X. Fabrication of three-dimensional metal structures embedded in hydrogel by using femtosecond laser ablation and electroplating. 2020 *Optics Letters* 45(22), pp. 6286-6289, @2020
1685. Liang, W., Liu, L., Wang, J., (...), Li, W.J., Yang, W. A review on optoelectrokinetics-based manipulation and fabrication of micro/nanomaterials, 2020 *Micromachines* 11(1), 78, @2020 1.000
1686. Liang Yang, Aso Rahimzadegan, Vincent Hahn, Eva Blasco, Carsten Rockstuhl, Martin Wegener, In Situ Diagnostics and Role of Light-Induced Forces in Metal Laser Nanoprinting, *Las. Phot. Rev.*, Volume16, Issue3, 2022, 2100411, @2022 1.000
1687. Pingping Zhao, Jian Hu, Tao Chen, Jinhai Si, Jingping Wu, Yu Zhang, Kaidi Li, Xun Hou, Formation of silver wires embedded in hydrogels using femtosecond laser ablation and electroplating for strain sensing, 2022 *J. Micromech. Microeng.* 32 125005, @2022 1.000
1688. Saunders, J., Elbestawi, M., Fang, Q. "Ultrafast Laser Additive Manufacturing: A Review". *Journal of Manufacturing and Materials Processing* 7(3), 89, @2023 1.000
- N.Nedyalkov, M. Koleva, R. Nikov, P. Atanasov, Y. Nakajima, A. Takami, A. Shibata, M. Terakawa. Laser nanostructuring of ZnO thin films. Applied Surface Science, 374, Elsevier, 2016, ISSN:0169-4332, 172-176. SJR:0.913, ISI IF:2.711**
1689. E. Yarali, C. Koutsiaki, H. Faber, K. Tetzner, E. Yengel, P. Patsalas, N. Kalfagiannis, D.C. Koutsogeorgis, T.D. Anthopoulos, "Recent Progress in Photonic Processing of Metal-Oxide Transistors", *Advanced Functional Materials* 30, 1906022, 2020, @2020 [Линк](#)
1690. Havlová, Š., Novotný, M., Fitl, P., More-Chevalier, J., Remsa, J., Kiisk, V., Kodu, M., Jaaniso, R., Hruška, P., Lukáč, F., Bulíř, J., Fekete, L., Volfová, L., Vondráček, M., Vrňata, M., Lančok, J. "Effect of pulsed laser annealing on optical and structural properties of ZnO:Eu thin film." *Journal of Materials Science*, 56(19), 2021, pp. 11414-11425., @2021 [Линк](#)
1691. Novotný, M., Remsa, J., Havlová, Š., More-Chevalier, J., Irimiciuc, S.A., Chertopalov, S., Písařík, P., Volfová, L., Fitl, P., Kmječ, T., Vrňata, M., Lančok, J. "In Situ Monitoring of Pulsed Laser Annealing of Eu-Doped Oxide Thin Films." *Materials*, 14, 2021, art. no. 7576., @2021 [Линк](#)

1692. Wenisch, C., Engel, S., Gräf, S., Müller, F.A. "Dual laser beam processing of semiconducting thin films by excited state absorption." *Materials*, 14(5), 2021, art. no. 1256., @2021 Линк
1693. Jamaatisomarin, F., Chen, R., Hosseini-Zavareh, S., Lei, S. "Laser Scribing of Photovoltaic Solar Thin Films: A Review". *Journal of Manufacturing and Materials Processing* 7(3), 94, @2023 1.000
M.E. Koleva, N.N. Nedyalkov, P.A. Atanasov. Porous plasmonic nanocomposites for SERS substrates fabricated by two-step laser method. Journal of Alloys and Compounds, 665, Elsevier, 2016, DOI:http://dx.doi.org/10.1016/j.jallcom.2016.01.034, 282-287. ISI IF:3.014
1694. Alemayehu Nana Koya, Plasmonic Nanoarchitectures for Single-Molecule Explorations: An Overview, *Adv. Photonics Res.*2021, 2100325., @2021 Линк
1695. Koya, A.N., Zhu, X., Ohannesian, N., Yanik, A.A., Alabastri, A., Proietti Zaccaria, R., Krahne, R., Shih, W.-C., Garoli, D. Nanoporous Metals: From Plasmonic Properties to Applications in Enhanced Spectroscopy and Photocatalysis (2021) *ACS Nano*, 15 (4), pp. 6038-6060., @2021 Линк
1696. Alemayehu Nana Koya, Plasmonic Nanoarchitectures for Single-Molecule Explorations: An Overview, *Adv. Photonics Res.*2022, 3, 2100325, DOI: 10.1002/adpr.202100325, @2022 Линк
1697. Du, B., Tan, J., Ji, C. et al. Study of thermoelectric enhanced SERS and photocatalysis with ZnO-metal nanorod arrays. *Nano Res.* (2022). <https://doi.org/10.1007/s12274-022-5253-y>, @2022 Линк
1698. Naqvi, S.M.Z.A., Zhang, Y., Ahmed, S., (...), Tahir, M.N., Raghavan, V., Applied surface enhanced Raman Spectroscopy in plant hormones detection, annexation of advanced technologies: A review 2022 *Talanta* 236, 122823, 1699.
- D Ntemogiannis, M Tsarmopoulou, A Stamatelatos Spyridon Grammatikopoulos 2, *, Vagelis Karoutsos, Dimitrios I. Anyfantis, Alexandros Barnasas, Vasilis Alexopoulos, Konstantinos Giantzelidis, Emanuel A. Ndoj, Mihail Sigalas and Panagiotis Pouloupoulos, ZnO Matrices as a Platform for Tunable Localized Surface Plasmon Resonances of Silver Nanoparticles, *Coatings* 14.1 (2024): 69.,
1700. Du, B., Tan, J., Ji, C., (...), Man, B., Li, Z. "Study of thermoelectric enhanced SERS and photocatalysis with ZnO-metal nanorod arrays". *Nano Research* 16(4), pp. 5427-5435, @2023 1.000
P A Atanasov, N E Stankova, N N Nedyalkov, T R Stoyanchov, Ru G Nikov, N Fukata, J W Gerlach, D Hirsch, B Rauschenbach. Properties of ns-laser processed polydimethylsiloxane (PDMS). Journal of Physics: Conference Series, 700, IOP Publishing, 2016, DOI:10.1088/1742-6596/700/1/012023, 012023-1-012023-6. SJR (Scopus):0.276
1701. Hlil, A.R., Thomas, J., Garcia-Puente, Y., (...), Messaddeq, Y., Kashyap, R. "Structural and optical properties of Nd:YAB-nanoparticle-doped PDMS elastomers for random lasers." *Sci. Rep.*, 11, 2021, art. no. 16803., @2021
1702. Mo, S., Mei, J., Liang, Q., Li, Z. "Repeatable oil-water separation with a highly-elastic and tough amino-terminated polydimethylsiloxane-based sponge synthesized using a self-foaming method." *Chemosphere*, 271, 2021, art. no. 129827.,
1703. Ogawa, H., Shibuya, T., Moriai, Y. et al. Correlation between chemical structural changes and laser fluence in femtosecond laser processing of polydimethylsiloxane. *Appl. Phys. A* 128, 841 (2022)., @2022 Линк
1704. Xie, Kaiwu; Li, Zebin; Deng, Yu; Zhang, Qiu; Zhong, Shiyu; Cai, Junjin; Chang, Leixin "Stress-Laser Composite Fabrication of Right-Angle Microgrooves on Polydimethylsiloxane Flexible Substrate". *Gaofenzi Cailiao Kexue Yu Gongcheng/Polymeric Materials Science and Engineering*, 38 (3), pp. 106-112 and 121, March 2022,
1705. Antsar Rih Hlil, "Photosensitization of elastomeric polymers based on pdms for photonics and laser applications", *Universite LAVAL, Québec, Canada, 2023, Thesis*, @2023 Линк
1706. Devi, M., Wang, H., Moon, S., Sharma, S., Strauss, V. "Laser-Carbonization – A Powerful Tool for Micro-Fabrication of Patterned Electronic Carbons". *Advanced Materials* 35(38), 2211054, 2023, @2023 Линк
1707. Y. Chen et al., "Highly Stable Flexible Thin-Film Transistors in Harsh Environments by Superhydrophobic Passivations," in *IEEE Transactions on Electron Devices*, vol. 70, no. 12, pp. 6387-6392, Dec. 2023, @2023 Линк
1708. Zhao, W., Zhang, J., Yu, Z., Hu, J. "Effects of bioinspired leaf vein structure on biological properties of UV laser patterned titanium alloy". *Surfaces and Interfaces*, 38, 102785, 2023, @2023 Линк
- Atanasov P.A., Stankova N.E., Nedyalkov N.N., Fukata N., Hirsch D., Rauschenbach B., Amoroso S., Wang X., Kolev K.N., Valova E.I., Georgieva J.S., Armyanov St.A.. Fs-laser processing of medical grade polydimethylsiloxane (PDMS). Applied Surface Science, 374, Elsevier, 2016, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2015.11.175, 229-234. SJR (Scopus):0.958, JCR-IF (Web of Science):4.281**
1709. Bing, W., Cai, Y., Jin, H., Tian, L., Tian, L., Yin, Y., Teng, Y., Wang, P., Hou, Z., Bai, X. "An antiadhesion and antibacterial platform based on parylene F coatings" *Progress in Organic Coatings*, 2021, Volume 151, 106021,
1710. Razavi, M.a, b, Primavera, R.a, Vyunkta, A.a, Thakor, A.S. "Silicone-based bioscaffolds for cellular therapies" (Review) *Materials Science and Engineering C* Volume 119, February 2021, Article number 111615, @2021 Линк
1711. Terakawa, Mitsuhiro. "Laser-Induced Carbonization and Graphitization." In *Handbook of Laser Micro- and Nano-Engineering*, pp. 857-878. Cham: Springer International Publishing, 2021., @2021 Линк
1712. Chen, X., Wang, H. & Zhang, W. "Theoretical research on multi-coordinate transformation modeling and its application in computer-aided manufacturing of five-axis laser machining system". *Int J Adv Manuf Technol*, 2022, 123, 1037–1058, @2022 Линк
1713. Lung-Hao Hu, Jia-Hao Fan. "Surface mechanical and electrochemical properties of zirconium oxide embedded silicon carbonitride ceramic composite film by polysilazane preceramic precursor". *Journal of Alloys and Compounds*, 2022, Volume 922, 166290., @2022 Линк
1714. Devi, M., Wang, H., Moon, S., Sharma, S., Strauss, V. "Laser-Carbonization – A Powerful Tool for Micro-Fabrication of Patterned Electronic Carbons". *Advanced Materials* 35(38), 2211054, 2023, @2023 Линк

1715. Huize Wang, "Laser Patterned N-doped Carbon: Preparation, Functionalization and Selective Chemical Sensors", Eingereicht an der Mathematisch-Naturwissenschaftlichen Fakultät - Institut für Chemie der Humboldt-Universität zu Berlin, 2023-07-03, Dissertation, @2023 [Линк](#)
1716. Lu, Ya, Chaoran Lin, Minhui Guo, Youmin Rong, Yu Huang, and Congyi Wu. "Effects of Ambient Temperature on Nanosecond Laser Micro-Drilling of Polydimethylsiloxane (PDMS)". *Micromachines* 14 (1), 90, 2023, @2023 [Линк](#)
1717. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M. "3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures". *Advanced Electronic Materials*, Advanced Electronic Materials, Early View, 2300705, 2023,
1718. X. Xia, X. Ding, L. Zhang, Z. Hou and Y. Cao, "Laser Direct Writing Inkless Flexible Sensor, " in *IEEE Sensors Journal*, 2023, @2023 1.000
1719. Zhao, W., Zhang, J., Yu, Z., Hu, J. "Effects of bioinspired leaf vein structure on biological properties of UV laser patterned titanium alloy". *Surfaces and Interfaces*, 38, 102785, 2023, @2023 [Линк](#)
- Bialous A., Gazda M., Grochowska K., Atanasov, P., Dikovska A., Nedyalkov N.. Nanoporous TiO₂ electrode grown by laser ablation of titanium in air at atmospheric pressure and room temperature. *Thin Solid Films*, 601, 2016, 41-44. ISI IF:1.879**
1720. Khan, T.M., Khan, S.U.-D., Khan, S.U.-D., (...), Khan, E.M., Mehigan, S., "Silver nanoparticle films by flowing gas atmospheric pulsed laser deposition and application to surface-enhanced Raman spectroscopy", *International Journal of Energy Research* 44(14), pp. 11443-11452, 2020, @2020 [Линк](#)
1721. Khan, T.M., Aslam, N., Iqbal, A., Abbasi, S.A., Ali, D. "Cold Plasma Jet Coupled Nanosecond Laser Ablation Scheme For Plasmonic Nanostructured Surfaces". *Advanced Materials Interfaces* 10(21), 2300280, @2023 1.000
Nikov, Ru. G., Nedyalkov, N. N., Atanasov, P. A., Hirsch, D., Rauschenbach, B., Grochowska, K., Sliwinski, G.. Characterization of Ag nanostructures fabricated by laser-induced dewetting of thin films. *Applied Surface Science*, 374, Elsevier, 2016, ISSN:0169-4332, DOI:10.1016/j.apsusc.2015.09.004, 36-41. SJR:0.913, ISI IF:2.711
1722. Hong, R., Shi, J., Li, Z., Liao, J., Tao, C., Wang, Q., Lin, H., Zhang, D. "Surface enhanced Raman scattering of defective TiO₂ thin film decorated with silver nanoparticles by laser ablation". *Optical Materials* 109, 110338, 2020,
1723. Lin, H.K., Wang, Y.T., Chuang, W.S., Chou, H.S., Huang, J.C. "Surface resonance properties of pure Cu and Cu₈₀Zr₂₀ metallic glass films with nanoparticles induced by pulsed-laser dewetting process". *Applied Surface Science* 507, 145185, 2020, @2020 [Линк](#)
1724. Sun, W., Hong, R., Tao, C., Zhang, D. "Pulsed-Laser-Modified Plasmon Properties of Metal Nanofilms". *Zhongguo Jiguang/Chinese Journal of Lasers* 47, 0103001, 2020, @2020 [Линк](#)
1725. Zakaria, M.A., Menazea, A.A., Mostafa, A.M., Al-Ashkar, E.A. "Ultra-thin silver nanoparticles film prepared via pulsed laser deposition: synthesis, characterization, and its catalytic activity on reduction of 4-nitrophenol". *Surfaces and Interfaces* 19, 100438, 2020, @2020 [Линк](#)
1726. Deng, Z., Jia, Q., Feng, B., Liu, L. "Research progress on fabrication and applications of high-performance films by pulsed laser deposition | [脉冲激光沉积高性能薄膜制备及其应用研究进展]." *Zhongguo Jiguang/Chinese Journal of Lasers*, 48(8), 2021, art. no. 0802010., @2021 [Линк](#)
1727. Hwang, J.S., Park, J.-E., Kim, G.W., Nam, H., Yu, S., Jeon, J.S., Kim, S., Lee, H., Yang, M. "Recycling silver nanoparticle debris from laser ablation of silver nanowire in liquid media toward minimum material waste." *Scientific Reports*, 11(1), 2021, art. no. 2262., @2021 [Линк](#)
1728. Liao, J., Zhan, Y., Liu, Q., Hong, R., Tao, C., Wang, Q., Lin, H., Han, Z., Zhang, D. "Tunable surface plasmon resonance of Al-Cu bimetallic nanoparticles thin films induced by pulsed-laser." *Applied Surface Science*, 540, 2021, art. no. 148397., @2021 [Линк](#)
1729. Ly, L.Q., Fulton, A.J., Bonvicini, S.N., Shi, Y. "Pulsed laser-induced dewetting and thermal dewetting of Ag thin films for the fabrication of Ag nanoparticles." *Nanotechnology*, 32(33), 2021, art. no. 335301., @2021 [Линк](#)
1730. Oh, H., Pyatenko, A., Lee, M. "A hybrid dewetting approach to generate highly sensitive plasmonic silver nanoparticles with a narrow size distribution." *Applied Surface Science*, 542, 2021, art. no. 148613., @2021 [Линк](#)
1731. Zhao, Z.-R., Zhang, S., Jing, R.-P., Kang, H.-S., Ding, S.-J., Ma, L. , Synthesis of Magnetic Plasmonic Au/AgAu Heterostructures with Tunable Gap Width for Enhancing Raman Performance, (2022) *Plasmonics*, @2022
1732. Ji, J., Li, Z. "Thermally generated Au–Ag nanostructures with tunable localized surface plasmon resonance as SERS activity substrates". *Heliyon* 9(7), e17749, @2023 1.000
1733. Kim, J.H., Lee, J.-H. "The Effect of Ni Interlayer Formation Plating Bath on the Suppression of Oxidation of Ag-Coated Cu Flakes | [Ag] 코팅 Cu 플레이크의 산화억제에 미치는 Ni interlayer 형성 도금액의 영향". *Journal of Korean Institute of Metals and Materials* 61(10), pp. 748-759, @2023 1.000
1734. Ntemogiannis, D., Floropoulos, P., Karoutsos, V., (...), Pouloupoulos, P., Alexandropoulos, D. "Plasmonic Nanostructuring by Means of Industrial-Friendly Laser Techniques". *Photonics* 10(4), 384, @2023 1.000
1735. Zhao, Z.-R., Zhang, S., Jing, R.-P., (...), Ding, S.-J., Ma, L. "Synthesis of Magnetic Plasmonic Au/AgAu Heterostructures with Tunable Gap Width for Enhancing Raman Performance. *Plasmonics* 18(1), pp. 283-289, @2023 1.000

N.E. Stankova, P.A. Atanasov, Ru.G. Nikov, R.G. Nikov, N.N. Nedyalkov, T.R. Stoyanchov, N. Fukata, K.N.

Kolev, E.I. Valova, J.S. Georgieva, St.A. Armanov. Optical properties of polydimethylsiloxane (PDMS) during nanosecond laser processing. Applied Surface Science, 374, Elsevier, 2016, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2015.10.016, 96-103. SJR (Scopus):0.958, JCR-IF (Web of Science):4.281

1736. Akshara Adike, 2020 University of Victoria "Spectroscopic Analysis of Samples in Aqueous Environments using a Hollow Core Fiber" A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of MASTER OF APPLIED SCIENCE in the Department of Electrical and Computer Engineering, @2020 [Линк](#)
1737. Arkadiusz A. Leniart, Przemyslaw Pula, Andrzej Sitkiewicz, and Pawel W. Majewski, "Macroscopic Alignment of Block Copolymers on Silicon Substrates by Laser Annealing" ACS Nano 2020, 14, 4, 4805–4815, @2020 [Линк](#)
1738. Baczyński, S., Sobotka, P., Marchlewicz, K., Dybko, A., Rutkowska, K. "Low-cost, widespread and reproducible mold fabrication technique for PDMS-based microfluidic photonic systems" (Article) (Open Access) Photonics Letters of Poland Open Access Volume 12, Issue 1, 2020, Pages 22-24, @2020 1.000
1739. Bruijns, B., Tiggelaar, R., Gardeniers, H. "A microfluidic approach for biosensing DNA within forensics" (Article)(Open Access) Applied Sciences (Switzerland)Open Access Volume 10, Issue 20, 2 October 2020, Article number 7067, Pages 1-16, @2020 [Линк](#)
1740. Francis, G., Stuart, B.W., Assender, H.E. "Selective ozone treatment of PDMS printing stamps for selective Ag metallization: A new approach to improving resolution in patterned flexible/stretchable electronics" (Article) Journal of Colloid and Interface Science Volume 568, 15 May 2020, Pages 273-281, @2020 [Линк](#)
1741. Kokkinaki, O., Klini, A., Polychronaki, M., Mavrikakis, N.C., Siderakis, K.G., Koudoumas, E., Pylarinos, D., Thalassinakis, E., Kalpouzou, K., Anglos, D. "Assessing the type and quality of high voltage composite outdoor insulators by remote laser-induced breakdown spectroscopy analysis: A feasibility study" (Article) Spectrochimica Acta - Part B Atomic Spectroscopy Volume 165, March 2020, Article number 105768, @2020 [Линк](#)
1742. Oser, P., Düttmann, O., Schmid, F., Schulte-Spechtel, L., Große, C.U., Wu, D. "Synthesis and Characterization of CNT Composites for Laser-Generated Ultrasonic Waves" (Article)(Open Access) Macromolecular Materials and Engineering Volume 305, Issue 4, 1 April 2020, Article number 1900852, @2020 [Линк](#)
1743. Panusa, G., Pu, Y., Wang, J., Moser, C., Psaltis, D. "Fabrication of sub-micron polymer waveguides through two-photon polymerization in polydimethylsiloxane"(Article)(Open Access) PolymersOpen Access Volume 12, Issue 11, November 2020, Article number 2485, Pages 1-14, @2020 [Линк](#)
1744. Torrisi, L., Cutroneo, M., Torrisi, A., Di Marco, G., Fazio, B., Silipigni, L. "IR ns pulsed laser irradiation of Polydimethylsiloxane in vacuum" (Article) Vacuum Volume 177, July 2020, Article number 109361, @2020 [Линк](#)
1745. Wen, N., Zhang, L., Jiang, D., Wu, Z., Li, B., Sun, C.a, Guo, Z. "Emerging flexible sensors based on nanomaterials: recent status and applications"(Review) Journal of Materials Chemistry A Volume 8, Issue 48, 28 December 2020, Pages 25499-25527, @2020 [Линк](#)
1746. Yang, R., Liang, Y., Hong, S., Zuo, S., Wu, Y., Shi, J., Cai, L., Li, J., Mao, H., Ge, S., Xia, C. "Novel low-temperature chemical vapor deposition of hydrothermal delignified wood for hydrophobic property" Article)(Open Access) Polymers Open Access Volume 12, Issue 8, August 2020, Article number 1757, @2020 [Линк](#)
1747. Zhang, S., Huang, X., Wang, D., Xiao, W., Huo, L., Zhao, M., Wang, L., Gao, J. "Flexible and Superhydrophobic Composites with Dual Polymer Nanofiber and Carbon Nanofiber Network for High-Performance Chemical Vapor Sensing and Oil/Water Separation" ACS Applied Materials and Interfaces 2020, 12, 41, 47076–47089. <https://doi.org/10.1021/acsami.0c15110>, @2020 [Линк](#)
1748. Baczyński, Szymon, Piotr Sobotka, Kasper Marchlewicz, Mateusz Słowikowski, Marcin Juchniewicz, Artur Dybko, and Katarzyna A. Rutkowska. "Orientation of Liquid Crystalline Molecules on PDMS Surfaces and within PDMS Microfluidic Systems." Applied Sciences 11, no. 24 (2021): 11593., @2021 [Линк](#)
1749. Bai, R., Gao, Y., Lu, C., Tan, J., Xuan, F. "Femtosecond laser micro-fabricated flexible sensor arrays for simultaneous mechanical and thermal stimuli detection" (Article) Measurement, 2021, Volume 169, Article number 108348, @2021 [Линк](#)
1750. Cruz, Juan Manuel Gomez. "Development of Nanoplasmonic Platforms for Portable Sensing Applications." PhD dissertation., Queen's University (Canada), 2021., @2021 [Линк](#)
1751. Güell-Grau, P., Pi, F., Villa, R., Nogués, J., Alvarez, M. and Sepúlveda, B., 2021. Ultrabroadband light absorbing Fe/polymer flexible metamaterial for soft opto-mechanical devices. Applied Materials Today, 2021, 23, p.101052., @2021 [Линк](#)
1752. Jin, H., Zheng, Z., Cui, Z., Jiang, Y., Chen, G., Li, W., Wang, Z., Wang, J., Yang, C., Song, W. and Chen, X., 2021. " A flexible optoacoustic blood stethoscope for non-invasive multiparametric cardiovascular monitoring.", @2021 [Линк](#)
1753. Lai, Pei Lun. "The E-jet printing of organic inks on organic substrates." (01-01-2021). <https://dr.lib.iastate.edu/handle/20.500.12876/Nr1V5Qoz>, @2021 [Линк](#)
1754. Min, K., Lim, J., Lim, J.H., Hwang, E., Kim, Y., Lee, H., Lee, H. and Hong, S., Fabrication of Perforated PDMS Microchannel by Successive Laser Pyrolysis. Materials, 2021, 14(23), p.7275., @2021 [Линк](#)
1755. Molnár István "Az idegenfajú génátvitelt segítő strukturális genomikai kutatások Aegilops fajokban", 2021, Thesis, @2021 1.000
1756. Nam, K.H., Jeong, C.B., Kim, H., Ahn, M., Ahn, S.J., Hur, H., Kim, D.U., Jang, J., Gwon, H.J., Lim, Y.M. and Cho, D.W., 2021. "Quantitative Photothermal Characterization with Bioprinted 3D Complex Tissue Constructs for Early - Stage Breast Cancer Therapy Using Gold Nanorods. Advanced Healthcare Materials, 10(18), p.2100636., @2021 [Линк](#)
1757. Oser, P., Jehn, J., Kaiser, M., Düttmann, O., Schmid, F., Schulte-Spechtel, L., Rivas, S.S., Eulenkamp, C.,

- Schindler, C., Grosse, C.U., Wu, D. "Fiber-Optic Photoacoustic Generator Realized by Inkjet-Printing of CNT-PDMS Composites on Fiber End Faces" *Macromolecular Materials and Engineering* 2021, Volume 306, Issue 2, Article N 2000563 (1 of 8) <https://doi.org/10.1002/mame.202000563> (Open Access), @2021 [Линк](#)
1758. Panusa, Giulia. Three-dimensional fabrication of sub-micron optical waveguides in PDMS and other polymer materials. No. THESIS. EPFL, 2021., @2021 1.000
1759. Razavi, M., Primavera, R., Vykunta, A., Thakor, A.S. "Silicone-based bioscaffolds for cellular therapies" (Review) *Materials Science and Engineering C* Volume 119, February 2021, Article number 111615, @2021 [Линк](#)
1760. S Ozunlu, N G Akdogan, M N Bozkurt, L Doganturk, H A Alshammari, D Le Roy and O Akdogan. "Innovative technique for patterning Nd-Fe-B arrays and development of a microfluidic device with high trapping efficiency" 2021 *Nanotechnology*, Volume 32, Number 49, 32 495501, @2021 [Линк](#)
1761. Scheiger, J. M. "Waste to Resources-Elemental Sulfur for Functional Materials". 2021, Doctoral dissertation, Dissertation, Karlsruhe, Karlsruher Institut für Technologie (KIT), @2021 1.000
1762. Syahida, Nafila Amalia. "KARAKTERISASI DAN UJI STABILITAS SINTESIS POLYDIMETHYLSILOXANE (PDMS) TERHADAP PAPAN RADIASI SINAR ULTRAVIOLET (UV)." PhD dissertation., Universitas Pendidikan Indonesia, 2021., @2021 1.000
1763. Terakawa M. (28 April 2021) Laser-Induced Carbonization and Graphitization. In: Sugioka K. (eds) *Handbook of Laser Micro- and Nano-Engineering*. Springer, Cham. , pp.1-22 https://doi.org/10.1007/978-3-319-69537-2_65-1, @2021 [Линк](#)
1764. Uba, I., Ghebreyessus K., Geddis D. and Hommerich U., "Tunable Optoelectronic Properties of Polydimethylsiloxane-Arylazopyrazole Flexible Composite, " *SoutheastCon 2021*, Publisher IEEE, 2021, pp. 1-5, INSPEC Accession Number: 20610828 doi: 10.1109/SoutheastCon45413.2021.9401853., @2021
1765. Wangyang Zhang, Weishan Yan, Haonian Zheng, Chaopeng Zhao, and Duo Liu "Laser-Engineered Superhydrophobic Polydimethylsiloxane for Highly Efficient Water Manipulation" *ACS Appl. Mater. Interfaces* 2021, 13, 40, 48163–48170 Publication Date:September 28, 2021, @2021
1766. Wu, Lisheng, Junchen Luo, Yiyao Li, Weimiao Zhang, Ling Wang, Xuewu Huang, Wei Xiao, Longcheng Tang, and Jiefeng Gao. "Emulsion dipping based superhydrophobic, temperature tolerant, and multifunctional coatings for smart strain sensing applications." *Composites Science and Technology*, 216 (2021): 109045., @2021 [Линк](#)
1767. Aditya Shekhar Nittala, Jürgen Steimle. "Next Steps in Epidermal Computing: Opportunities and Challenges for Soft On-Skin Devices". *CHI '22: Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* April 2022 Article No.: 389 Pages 1–22, @2022 [Линк](#)
1768. Ahmed, M. H. M., N. Mohd Yusoff, NH Zainol Abidin, H. K. Lee, M. T. Alresheedi, A. F. Abas, C. S. Goh, and M. A. Mahdi. "Ultrashort pulse thulium-doped fiber laser with molybdenum trioxide on tapered fiber." 2022, *Optik* 257 (2022): 168736., @2022 [Линк](#)
1769. Baczyński, S.; Sobotka, P.; Marchlewicz, K.; Juchniewicz, M.; Dybko, A.; Rutkowska, K.A. "Study of PDMS Microchannels for Liquid Crystalline Optofluidic Devices in Waveguiding Photonic Systems." *Crystals*, 2022, 12, 729,
1770. Bing Han, He Wang, Wei Bing and Huichao Jin. "Bacterial adhesion properties of parylene C and D deposited on polydimethylsiloxane". *New J. Chem.*, 2022, 46, 8773-8778, @2022 [Линк](#)
1771. Chaturika Maduwanthi, Chao-An Jong, Poompat Saengdomlert, Karel Sterckx, Waleed S. Mohammed, Shu-Han Hsu. (2022) "Demonstration of a simple approach for sub - microliter fluorescence detection by structured PDMS cuvette with TiO2 nanoparticle inclusion using 3D printing technology." *Micro & Nano Letters*, 2022, 17(3), 68-75.,
1772. Fan, D., Yuan, X., Wu, W. et al. "Self-shrinking soft demoulding for complex high-aspect-ratio microchannels." *Nat Commun* 13, 5083 (2022)., @2022 [Линк](#)
1773. Ilyas, M. 2022. "Spongy polydimethylsiloxane preparation and its applications for soft robotics." (Doctoral dissertation, THE GRADUATE SCHOOL OF ENGINEERING AND SCIENCE, Bilkent University), Thesis, @2022
1774. Jonathan Grinham, Matthew J Hancock, Kitty Kumar, Martin Bechthold, Donald E Ingber and Joanna Aizenberg. "Bioinspired design and optimization for thin film wearable and building cooling systems". 2022 *Bioinspir. Biomim.* 17 015003, @2022 1.000
1775. Kavkani, P.H., Mostafae, M., Goudarzi, H., Riahi, M. and Azimbeik, N., 2022, May. "Investigation of the ability of SLB 3D printing process for fabrication of micro-optical structures with PDMS. " *3D Printed Optics and Additive Photonic Manufacturing III* , 2022, Vol. 12135, pp. 39-45). *SPIE, Proceedings of the SPIE*, Volume 12135, id. 1213506 7 pp. (2022)., @2022 [Линк](#)
1776. Kim, B. C., Lim, D. W., Kim, J. H., & Lee, H. T. (2022). "Superhydrophobicity and corrosion resistance of AISI 4140 mold made through nanosecond laser texturing. " *The International Journal of Advanced Manufacturing Technology*, 2022, 119(7), 5119-5130., @2022 [Линк](#)
1777. Li, Fuqiang, Zhong Liang, Yuxing Li, Zhimin Wu, and Zhengming Yi. "Synthesis of waterborne polyurethane by inserting polydimethylsiloxane and constructing dual crosslinking for obtaining the superior performance of waterborne coatings." *Composites Part B: Engineering*, 2022, Volume 238, 109889, @2022 [Линк](#)
1778. Li, Q., Zhang, H., Li, R., & Chen, T. "Excimer laser dry etching of PDMS applied for microfluidic chips", *Proc. SPIE* 12255, 2022 International Conference on Optoelectronic Information and Functional Materials (OIFM 2022), 122550A (29 April 2022), @2022 [Линк](#)
1779. M. Bashir, S. Bashir, A. Javed, and O. U. Noor. "Characterization of helium microplasma generated in a flow focusing microfluidic device". *Journal of Applied Physics*, 2022, 132, 063303, @2022 [Линк](#)
1780. M. Sc. Johannes Martin Scheiger . "Waste to Resources – Elemental Sulfur for Functional Materials ", 2022, von der KIT-Fakultät für Chemie und Biowissenschaften des Karlsruher Instituts für Technologie (KIT), @2022

1781. Ogawa, H., T. Shibuya, Y. Moriai, D. Satoh, E. Terasawa, S. Maru, M. Tanaka, and R. Kuroda. "Correlation between chemical structural changes and laser fluence in femtosecond laser processing of polydimethylsiloxane." *Applied Physics A*, 2022, 128, no. 9 (2022): 1-7., @2022 1.000
1782. Ojaghi, A., Williams, E.K., Kaza, N., Gorti, V., Choi, H., Torey, J., Wiley, T., Turner, B., Jackson, S., Park, S. and Lam, W.A., 2022. "Label-free deep-UV microscopy detection and grading of neutropenia using a passive microfluidic device." *Optics Letters*, 2022, 47(22), pp.6005-6008., @2022 1.000
1783. Xiang Zhang, Rosa Son, Yen-Ju Lin, Alexi Gill, Shilin Chen, Tong Qi, David Choi, Jing Wen, Yunfeng Lu, Neil Y. C. Lin and Pei-Yu Chiou. "Rapid prototyping of functional acoustic devices using laser manufacturing" *Lab Chip*, 2022, 22, 4327-4334, @2022 [Линк](#)
1784. Zhao, W., Zhang, J., Yu, Z., & Hu, J. Effects of Bioinspired Leaf Vein Structure on Biological Properties of UV Laser Patterned Titanium Alloy. 2022 Available at SSRN 4241713., @2022 1.000
1785. Aaron Glenn, Subhash Chandra and Sarah McCormack, "Design, fabrication and preliminary testing of plasmonic luminescent solar concentrator devices". *Sust. Build.* Volume 6, Article Number 8, 2023, @2023 [Линк](#)
1786. Anlin Lazar, K., Vijoy, K.V., Joseph, T., John, H., Saji, K.J. "Vertically integrated triboelectric nanogenerators using PDMS/LSCO composite". *Materials Science and Engineering B: Solid-State Materials for Advanced Technology* 292, 116388, 2023, @2023 [Линк](#)
1787. Bin Xiao, Ruiming Zhao, Nan Wang, Juan Zhang, Xiaoyun Sun, Ailiang Chen, "Recent advances in centrifugal microfluidic chip-based loop-mediated isothermal amplification." *TrAC Trends in Analytical Chemistry*, 2023, Volume 158, 116836, @2023 [Линк](#)
1788. Chakraborty, A., Gottumukkala, N.R., Gupta, M.C. "Superhydrophobic Surface by Laser Ablation of PDMS". *Langmuir* 39 (32), pp. 11259-11267, 2023, @2023 [Линк](#)
1789. Devi, M., Wang, H., Moon, S., Sharma, S., Strauss, V. "Laser-Carbonization – A Powerful Tool for Micro-Fabrication of Patterned Electronic Carbons". *Advanced Materials* 35 (38), 2211054, 2023, @2023 [Линк](#)
1790. Gailevicius D., Zvirblis R., Malinauskas M. "Resilient Calcination Transformed Micro-Optics ", *Engineering Proceedings*, 34 (1), 20, 2023, @2023 [Линк](#)
1791. Gailevicius, D., Zvirblis, R., Galvanauskas, K., Bataviciute, G., Malinauskas, M. "Calcination-Enhanced Laser-Induced Damage Threshold of 3D Micro-Optics Made with Laser Multi-Photon Lithography". *Photonics* 10(5), 597, 2023, @2023 [Линк](#)
1792. Garmasukis, R., Hackl, C., Dusny, C., Elsner C., Charvat A., Schmid A., Abel B. "Cryo-printed microfluidics enable rapid prototyping for optical-cell analysis. " *Microfluidics and Nanofluidics* 27 (1), 5 (2023)., @2023 [Линк](#)
1793. Jin, H., Zheng, Z., Cui, Z., (...), Chen, X., Zheng, Y. "A flexible optoacoustic blood 'stethoscope' for noninvasive multiparametric cardiovascular monitoring". *Nature Communications* 14 (1), 4692, 2023, @2023 [Линк](#)
1794. Klimov, A., Bakeev, I., Zenin, A. "Electron-Beam Processing of Aluminum-Containing Ceramics in the Forevacuum Pressure Range". *Ceramics* 6 (4), pp. 2098-2116, 2023, @2023 [Линк](#)
1795. Kostadinov, I.K., Temelkov, K.A., Popova, L.T., Slaveeva, S.I., Yankov, G.P. "Diffraction-limited high-power master oscillator - Power amplifier system oscillating in visible spectral range on copper atomic transitions for precise material micromachining". *Journal of Physics: Conference Series* 2487(1), 012008, 2023., @2023 1.000
1796. Lu, Y., Lin, C., Guo, M., Rong, Y., Huang, Y. and Wu, C., 2022. "Effects of Ambient Temperature on Nanosecond Laser Micro-Drilling of Polydimethylsiloxane (PDMS)." *Micromachines*, 2023, 14(1), p.90., @2023
1797. Mohd Yusoff N., Lee H.K., Ng, E.K., (...), Alresheedi M.T., Mahdi M.A. "Titania-coated silica nanocomposite for L-band noise-like pulse fiber laser". *Journal of Luminescence* 258, 119779, 2023, @2023 [Линк](#)
1798. Oser, Patrick, "Entwicklung von faserbasierten photoakustischen Wandlern für Ultraschallanwendungen im Megahertz-Bereich" Translated title: "Development of fibre-based photoacoustic transducers for ultrasound applications in the megahertz range". 2023, TUM School of Engineering and Design Thesis, @2023 [Линк](#)
1799. Puneetha P., Mallem S.P.R., Park S.C., (...), Lee D.-Y., Park K.-I. "Ultra-flexible graphene/nylon/PDMS coaxial fiber-shaped multifunctional sensor". *Nano Research* 16(4), pp. 5541-5547, 2023, @2023 [Линк](#)
1800. S.B. Ivriq, K. Laursen, A.M. Jørgensen, T. Mondal, M. Zamani, Y. Rezaeiyan, B. Corbett, B.B. Iversen, F.Moradi. "A System-Level Feasibility Study of a Lead-Free Ultrasonically Powered Light Delivery Implant for Optogenetics". *Adv. Intell. Syst.*2023, 2300527 (1 of 13) 2023 <https://doi.org/10.1002/aisy.202300527>, @2023 [Линк](#)
1801. Thermal Radiation From Modulated Metal Surfaces Amin, Saifa (2023) *Thermal Radiation From Modulated Metal Surfaces*. [Thesis], @2023 [Линк](#)
1802. Viswanathan, S., Biju, J. & Kallingal, A. Graphitic carbon nitride–adorned PDMS self-cleaning floating photocatalyst for simultaneous removal of Rhodamine B, Crystal Violet and Malachite Green from a ternary dye mixture. *Environ Sci Pollut Res* 30, 117325–117339 (2023), @2023 [Линк](#)
1803. X. Xia, X. Ding, L. Zhang, Z. Hou and Y. Cao, "Laser Direct Writing Inkless Flexible Sensor," in *IEEE Sensors Journal*, Date of Publication: 28 December 2023, @2023 1.000
1804. Zhang, H., Zhang, X., Li, Q., Chen, T. "Study on ablation properties of PDMS by 193 nm and 248 nm excimer laser". *Proceedings of SPIE - The International Society for Optical Engineering* 12600 (2023) 126000Q, @2023 1.000
1805. Zhao, W., Zhang, J., Yu, Z., Hu, J. "Effects of bioinspired leaf vein structure on biological properties of UV laser patterned titanium alloy". *Surfaces and Interfaces* 38, 102785, 2023, @2023 [Линк](#)

Nedyalkov N., Y. Nakajima, M. Terakawa. Magnetic nanoparticle composed nanowires fabricated by ultrashort laser ablation in air. *Appl. Phys. Lett.*, 108, 2016, 04310. ISI IF:3.14

1806. Deviren, B. Nonequilibrium magnetic properties of the mixed spin (1/2, 1) Ising nanowire with core-shell structure 2020 *Physica E: Low-Dimensional Systems and Nanostructures* 120, 114052, @2020 1.000
1807. Krajewski, M., Liou, S.-C., Chiou, W.-A., (...), Lewińska, S., Ślawska-Waniewska, A. Amorphous Fe_xCo_{1-x}

- Wire-like Nanostructures Manufactured through Surfactant-Free Magnetic-Field-Induced Synthesis . 2020 Crystal Growth and Design 20(5), pp. 3208-3216, @2020 1.000
1808. Shahov, P.V., Nastulyavichus, A.A., Khaertdinova, L.F., (...), Rudenko, A.A., Ionin, A.A. Synthesis of magnetic nanoparticles by laser ablation in a liquid and verification of their antibacterial properties 2020 Journal of Physics: Conference Series 1692(1), 012015, @2020 1.000
1809. Purohit, P., Fortes, F.J., Laserna, J.J. Optical Trapping as a Morphologically Selective Tool for in Situ LIBS Elemental Characterization of Single Nanoparticles Generated by Laser Ablation of Bulk Targets in Air 2021 Analytical Chemistry 93(4), pp. 2635-2643, @2021 1.000
1810. Zhang, X., Kan, X., Wang, M., (...), Wang, M., Ma, Y. The magnetic property of CoFe₂O₄ assembly by the gradient magnetic field 2021 Journal of Crystal Growth 565, 126131, @2021 1.000
1811. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. "Laser-Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". Physica Status Solidi (A) Applications and Materials Science 220(6), 2200786, @2023 1.000
1812. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". Vacuum 211, 111912, @2023 1.000
1813. Masrour, R. "Study of magnetic properties of Ising nanowires with core-shell structure". European Physical Journal B 96(7), 100, @2023 1.000
1814. Mouhib, M., Bri, S., Belrhiti, M.D., Mounir, H. "Study of the Mixed Spin Ising Nanowire with Random and Dilute Crystal Field". SPIN 2350025, @2023 1.000
- Nedyalkov N., Nakajima Y., Takami A., Koleva M., Karashanova D., Terakawa M.. Laser induced morphological and optical properties changes in Au doped aluminum oxide and silicon oxide thin films. Optics and Laser Technology, 79, 2016, 179. ISI IF:1.88**
1815. Ihlemann, J., Richter, L.J., Meinertz, J., (...), Oberleiter, B., Rainer, T. Glass marking by laser transfer implantation (LTI) of plasmonic nanoparticles 2022 Optics and Laser Technology, 155, 108371, @2022 1.000
- Nikolov A. S., Nikov R.G., Nedyalkov N.N., Atanasov P. A., Alexandrov M. T., Karashanova D. B., Marinkov N. E., Dimitrov I. Z., Boevski I. I., Visan A., Mihailescu I. N.. Influence of the liquid level and ablation process duration on the characteristics of nanostructures created by nanosecond laser ablation of Ag in water. Proceedings of SPIE, 10226, 102260C, SPIE, 2017, ISSN:0277-786X, DOI:doi:10.1117/12.2262450, SJR:0.212**
1816. Stefano Sala, "Linear sp carbon chains-polymer nanocomposites by Pulsed Laser Ablation in Liquid", Master Thesis, 2020., @2020 Линк
- Nikov R. G., N. N. Nedyalkov, P. A. Atanasov, D. B. Karashanova. Laser-assisted fabrication and size distribution modification of colloidal gold nanostructures by nanosecond laser ablation in different liquids. Applied Physics A: Materials Science and Processing, 123, 490, Springer Berlin Heidelberg, 2017, ISSN:0947-8396, DOI:https://doi.org/10.1007/s00339-017-1105-0, JCR-IF (Web of Science):1.604**
1817. Barbillon, G. "Application of Novel Plasmonic Nanomaterials on SERS". Nanomaterials 2020, 10, 2308.,
1818. De Bonis, A.; Curcio, M.; Santagata, A.; Galasso, A.; Teghil, R. Transition Metal Carbide Core/Shell Nanoparticles by Ultra-Short Laser Ablation in Liquid. Nanomaterials 2020, 10, 145., @2020 Линк
1819. Zhang, D., & Wada, H. (2020). Laser Ablation in Liquids for Nanomaterial Synthesis and Applications. Handbook of Laser Micro-and Nano-Engineering, 1-35., @2020 Линк
1820. Esmailzadeh, M., Dizajghorbani-Aghdam, H., Malekfar, R., Surface-Enhanced Raman scattering of methylene blue on titanium nitride nanoparticles synthesized by laser ablation in organic solvents, (2021) Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 257, art. no. 119721., @2021 Линк
1821. Forsythe, R.C., Cox, C.P., Wilsey, M.K., Müller, A.M., Pulsed Laser in Liquids Made Nanomaterials for Catalysis, (2021) Chemical Reviews, 121 (13) 7568-7637., @2021 Линк
1822. Tommalieh, M.J., Awwad, N.S., Ibrahim, H.A., Menazea, A.A., "Characterization and electrical enhancement of PVP/PVA matrix doped by gold nanoparticles prepared by laser ablation", Radiation Physics and Chemistry 179 (2021) art. no. 109195., @2021 Линк
1823. Zhang, D., Li, Z., Sugioka, K., Laser ablation in liquids for nanomaterial synthesis: Diversities of targets and liquids, (2021) JPhys Photonics, 3 (4), art. no. 042002., @2021 Линк
1824. Щербинин, Д. П., Дададжанов, Д. Р., & Вартамян, Т. А. ЭКСПЕРИМЕНТАЛЬНЫЕ МЕТОДЫ ИССЛЕДОВАНИЯ ОПТИЧЕСКИХ СВОЙСТВ МЕТАЛЛИЧЕСКИХ НАНОСТРУКТУР., @2021 Линк
1825. Subhan, A., Mourad, A.-H.I., Al-Douri, Y., "Influence of Laser Process Parameters, Liquid Medium, and External Field on the Synthesis of Colloidal Metal Nanoparticles Using Pulsed Laser Ablation in Liquid: A Review", (2022) Nanomaterials, 12 (13), art. no. 2144., @2022 Линк
1826. Goncharova, D., Salaev, M., Volokitina, A., (...), Svetlichnyi, V., Vodyankina, O. "Gold-based catalysts prepared by pulsed laser ablation: A review of recent advances". Materials Today Chemistry 33, 101709, @2023
- Nikov Ru. G., A. Og. Dikovska, N. N. Nedyalkov, P. A. Atanasov, G. Atanasova, D. Hirsh, B. Raushenbach. ZnO nanostructures produced by pulsed laser deposition in open air. Applied Physics A, 123, 657, Springer, 2017, DOI:10.1007/s00339-017-1276-8, ISI IF:1.604**
1827. Al-Khalqi, E.M., Hamid, M.A.A., Shamsudin, R., Al-Hardan, N.H., Keng, L.K. "The effect of various zno layer towards sensing performance as an electrolyte-insulator-semiconductor ph sensor". Solid State Phenomena 307 SSP, 37-44, 2020, @2020 Линк

1828. Gavrilenko, E.A., Goncharova, D.A., Lapin, I.N., Gerasimova, M.A., Svetlichnyi, V.A. "Photocatalytic Activity of Zinc Oxide Nanoparticles Prepared by Laser Ablation in a Decomposition Reaction of Rhodamine B". *Russian Physics Journal* 63, 1429-1437, 2020, @2020 Линк
1829. El Hamidi, A., El Mahboub, E., Meziane, K., El Hichou, A., Almaggoussi, A. "The effect of electronegativity on optical properties of Mg doped ZnO." *Optik*, 241, 2021, art. no. 167070., @2021 Линк
1830. Socol, M., Preda, N., Socol, G. "Organic thin films deposited by matrix-assisted pulsed laser evaporation (MAPLE) for photovoltaic cell applications: A review." *Coatings* 11(11), 2021, 1368., @2021 Линк
1831. Jellal, I., Nouneh, K., Hatel, R., Boutamart, M., Briche, S., Addou, M., Plantard, G., Baitoul, M., Naja, J. Enhanced visible-light photocatalytic activity of rGO-ZnO composite thin films prepared by SILAR method (2022) *Advances in Materials and Processing Technologies*, @2022 1.000
1832. Supraja, P., Mishra, S., Kumar, R.R., Haranth, D., Kumar, K.U., Borkar, H., *Advances in zinc oxide (ZnO) nanostructure-based nanogenerators: Challenges and opportunities*, (2022) *Advances in Energy Research*. Volume 36, 36, pp. 43-71., @2022 1.000
1833. Bonjakhi, M., Mahdich, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
1834. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. "Laser-Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(6), 2200786, @2023 1.000
Nikolov, A. S., Balchev, I. I., Nedyalkov, N. N., Kostadinov, I. K., Karashanova, D. B., Atanasova, G. B.. Influence of the laser pulse repetition rate and scanning speed on the morphology of Ag nanostructures fabricated by pulsed laser ablation of solid target in water. APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 123, 11, SPRINGER, 233 SPRING ST, NEW YORK, NY 10013 USA, 2017, DOI:10.1007/s00339-017-1328-0, JCR-IF (Web of Science):1.604
1835. Hossein Mozaffari and Mohammad Hossein Mahdich "Synthesis of colloidal aluminum nanoparticles by nanosecond pulsed laser and the effect of external electric field and laser fluence on ablation rate" *Optics & Laser Technology*, Vol. 126, 106083, 2022, @2020 Линк
1836. Jurkevičiūtė, A., Klimaitė, G., Tamulevičius, T., (...), Rubahn, H.-G., Tamulevičius, S. Tailoring of Silver Nanoparticle Size Distributions in Hydrogenated Amorphous Diamond-Like Carbon Nanocomposite Thin Films by Direct Femtosecond Laser Interference Patterning, 2020 *Advanced Engineering Materials* 22(3), 1900951, @2020
1837. Hesabizadeh, Tina et al. "Synthesis of "Naked" TeO₂ Nanoparticles for Biomedical Applications". *ACS Omega* 2022, @2022 Линк
1838. Riahimadvar Mohamad S. and Tajaldini Mehdi. "Fast and one-step synthesis of small ZnO nano-tetrapods Using CO₂ laser in ambient air: physical properties". *Phys. Scr.* 97, 105811, 2022, @2022 Линк
1839. Subhan Abdul, Mourad Abdel-Hamid I. and Al-Douri Yarub. "Influence of Laser Process Parameters, Liquid Medium, and External Field on the Synthesis of Colloidal Metal Nanoparticles Using Pulsed Laser Ablation in Liquid: A Review". *Nanomaterials*, 12(13), 2144, 2022, @2022 Линк
1840. Attallah, A.H., Abdulwahid, F.S., Ali, Y.A. et al. Effect of Liquid and Laser Parameters on Fabrication of Nanoparticles via Pulsed Laser Ablation in Liquid with Their Applications: A Review. *Plasmonics*, 2023, @2023 Линк
- Nakajima Y, Nedyalkov N., Takami A, Terakawa M.. Fabrication of isolated platinum nanowire gratings and nanoparticles on silica substrate by femtosecond laser irradiation. Appl. Surf. Sci., 394, 2017, 108. ISI IF:3.387**
1841. Jin, T., Chen, J., Zhao, T., Zhao, Q., Tian, Y. Nanotwinned diamond cutting tool processed by femtosecond pulsed laser milling with trochoidal trajectory 2021 *Journal of Materials Processing Technology*, 294, 117115, @2021
Mao, Y., Yang, J., Xu, W. Laser Surface Texturing Process and Its Mechanism for Brass Material 2021, *Chinese Journal of Lasers*, 48(10), 1002111, @2021 1.000
1842. Yang, D., Cheng, J., Zhao, L., (...), Sun, Y., Xu, Q. "Mechanisms of the sharp decrease of the LIDT from the plastic surface defect to the brittle surface defect on optical surface". *Applied Surface Science* 629, 157394, @2023
- Koleva, M., Nedyalkov, N., Fukata, N., Jevasuwan, W., Amoroso, S., Koutzarova, T., Avdeev, G.V., Georgieva, B., Karashanova, D.. Laser-assisted approach for synthesis of plasmonic Ag/ZnO nanostructures. Superlattices and Microstructures, 109, Elsevier B.V., 2017, ISSN:0749-6036, DOI:https://doi.org/10.1016/j.spmi.2017.06.007, 886-896. ISI IF:2.099**
1843. Yarali, E., Koutsiaki, C., Faber, H., Kornelius Tetzner Emre Yengel Panos Patsalas Nikolaos Kalfagiannis, Koutsogeorgis, D.C., Anthopoulos, T.D., "Recent Progress in Photonic Processing of Metal-Oxide Transistors", 2020 *Advanced Functional Materials* 30(20), 1906022, @2020 Линк
1844. Ке Поповичев - Кристаллическая структура и химические свойства порошка Al₂O₃ после плазменной обработки, @2020 1.000
1845. Yudasari, N., Anugrahwidya, R., Tahir, D., Suliyanti, M.M., Herbani, Y., Imawan, C., Khalil, M., Djuhana, D. Enhanced photocatalytic degradation of rhodamine 6G (R6G) using ZnO–Ag nanoparticles synthesized by pulsed laser ablation in liquid (PLAL) (2021) *Journal of Alloys and Compounds*, 886, art. no. 161291., @2021 Линк

1846. Каспарян, С. О. "Пористые керамики на основе циркония и алюминия и их физико-химические свойства". магистерская диссертация по направлению подготовки: 15.04.03 - Прикладная механика. Физико-технический факультет, Томского государственного университета, @2021 [Линк](#)
1847. Lahewil, A.S.Z., Ahmed, N.M., Azman, N.Z.N. "Nanostructured zinc oxide growth on nickel and palladium seed layer using laser-assisted chemical bath deposition". *International Journal of Nanotechnology* 19(2-5), pp. 281-292, 2022, @2022 [Линк](#)
1848. Gomaа, M., Salah, A., Abdel Fattah, G. "Superior enhancement of SPR fiber optic sensor using laser sensitized dip-coated graphene gold nanocomposite probes". *Optics and Laser Technology* 157, 108644, @2023 1.000
1849. Kurilova U.E., Chernikov A.S., Kochuev D.A., Volkova L.S., Voznesenskaya A.A., Chkalov R.V., Abramov D.V., Kazak A.V., Suetina I.A., Mezentseva M.V., Russu L.I., Gerasimenko A. Yu., Khorkov K.S. Physical and Biological Properties of Layers with Nanoparticles Based on Metal Chalcogenides and Titanium Synthesized by Femtosecond Laser Ablation and Fragmentation in Liquid. *Journal of Biomedical Photonics & Engineering*. vol. 9, Art. Num. 020301, @2023 [Линк](#)

Takami A, Nakajima Y, Nedyalkov N., Terakawa M.. The influence of the thermal diffusivity of the substrates on fabrication of metal nanostructures by femtosecond laser irradiation. *Appl. Phys. A*, 123, 2017, 126. ISI IF:1.604

1850. Electronic structure of monolayer Cu, Ag and Au structures Karbivskii, V.L., Romansky, A.A., Karbivska, L.I., Shulyma, S.I. 2022 *Applied Nanoscience (Switzerland)* 12(3), pp. 781-794, @2022 1.000
- Sawczak M, Zyskowski M, Karczewski J, Atanasov P, Nedyalkov N., Nikov Ru, Stankova N, Sliwinski G. Nanoparticle Over Mirror plasmonic structures prepared with use of Au colloid produced by laser ablation in water. *Proc. SPIE*, 10226, 2017, 102260G-1. SJR:0.2**
1851. Shalaby, M.S.a, Abdallah, H.a, Cenian, A.b, Sołowski, G.b Email Author, Sawczak, M.b, Shaban, A.M.c, Ramadan, R. "Laser synthesized gold- nanoparticles, blend NF membrane for phosphate separation from wastewater" (Article)(Open Access) *Separation and Purification Technology* Volume 247, 15 September 2020, Article number 116994, @2020 [Линк](#)

Dikovska A. Og., Pallotti D, Lettieri S, Atanasova G. B., Avdeev G. V., Maddalena P., Amoruso S., Nedyalkov N. N.. Growth mechanism of ZnO nanostructures produced by ultraviolet and visible laser ablation. *Applied Surface Science*, 423, Elsevier, 2017, DOI:10.1016/j.apsusc.2017.06.331, 977-982. ISI IF:4.439

1852. Elzein, B., Yao, Y., Barham, A.S., Dogheche, E., Jabbour, G.E., "Toward the growth of self-catalyzed zno nanowires perpendicular to the surface of silicon and glass substrates, by pulsed laser deposition", *Materials*, 13(19), 4427, pp. 1-14, 2020, @2020 [Линк](#)
1853. Khan, S., Iftikhar, M., Alvi, H.W.A., (...), Shah, A., Mahmood, A., "Effect of oxidation time on structural and optical properties of ZnO films prepared by hydrothermal oxidation of electrodeposited Zn coating on ITO substrate", *Surface Review and Letters*, 27(10), 1950227, 2020, @2020 [Линк](#)
1854. Reddy, C.V., Reddy, I.N., Ravindranadh, K., Akkinapally, B., Alonso-Marroquin, F., Reddy, K.R., Cheolho, B., Shim, J. "Effect of noble metal ions dopants on solar photoelectrochemical water splitting and electrochemical supercapacitive performance of BiVO4 hollow tubes". *Solar Energy Materials and Solar Cells* 226, 111056, 2021, @2021 [Линк](#)
1855. Ahmed, S.M., Imam, H. "Photocatalytic activity of hybrid Ag/Er:ZnO nanoparticles synthesized by pulsed laser ablation in distilled water". *Physica Scripta* 98(9), 095934, @2023 1.000
- Nikov Ru. G., A. Og. Dikovska, N. N. Nedyalkov, P. A. Atanasov. Fabrication of Au nanostructures by pulsed laser deposition in air. *Proceedings of SPIE*, 10226, 102260F, SPIE, 2017, ISSN:0277-786X, DOI:10.1117/12.2262274, SJR:0.234**
1856. Deng, Z., Jia, Q., Feng, B., Liu, L. "Research progress on fabrication and applications of high-performance films by pulsed laser deposition | [脉冲激光沉积高性能薄膜制备及其应用研究进展]." *Zhongguo Jiguang/Chinese Journal of Lasers*, 48(8), 2021, art. no. 0802010., @2021 [Линк](#)

Nikov R.G., N. Nedyalkov, P.A. Atanasov, D. B. Karashanova. Characterization of colloidal silver nanostructures produced by pulsed laser ablation in different liquids. *Proceedings of SPIE - The International Society for Optical Engineering*, 10226, 102260E, SPIE, 2017, ISSN:0277-786X, DOI:doi:10.1117/12.2261813, SJR:0.216

1857. Esmailzadeh, M., Dizajghorbani-Aghdam, H., & Malekfar, R. (2021). Surface-Enhanced Raman scattering of methylene blue on titanium nitride nanoparticles synthesized by laser ablation in organic solvents. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 257, 119721., @2021 [Линк](#)
1858. Ganash, E.A., Altuwirqi, R.M., Size control of synthesized silver nanoparticles by simultaneous chemical reduction and laser fragmentation in origanum majorana extract: Antibacterial application, (2021) *Materials*, 14 (9), art. no. 2326, ,
1859. Moniri, S., Mohammad Zadeh, A.H., Ramezani, A.H., Hantehzadeh, M.R., Influence of laser wavelength on the optical and structural properties of MoS2 nanoparticles prepared via laser irradiation in ethylene glycol, (2021) *Journal of Laser Applications*, 33 (3), art. no. 032013., @2021 [Линк](#)
1860. Mohammed, R.A., Mutlak, F.A.-H., Saleh, G.M., Structural and optical properties of green spinach extract leaf (*Spincia Olercea*) prepared with silver nanoparticles as antibacterial by effect of pulsed laser, (2022) *Journal of Optics (India)*, 51 (2), pp. 491-499., @2022 [Линк](#)

Nedyalkov N., Ru. Nikov, Ro. Nikov, A. Nikolov, P. Atanasov, Y. Nakajima, M. Terakawa, M. Sawczak, K. Grochowska, G. Sliwinski. Gold nanostructures for detection of pesticides, nitrates and drugs using Surface Enhanced Raman Spectroscopy. Proceedings of SPIE, 10226, 102260B, SPIE, 2017, ISSN:0277-786X, DOI:doi:10.1117/12.2261674, SJR:0.212

1861. Ong, T.T.X., Blanch, E.W., Jones, O. A.H. "Surface Enhanced Raman Spectroscopy in environmental analysis, monitoring and assessment." *Science of The Total Environment*, 720, 2020, art. no. 137601., @2020 [Линк](#)
1862. Moldovan, R., Iacob, B.-C., Farcău, C., Bodoki, E., Oprean, R. "Strategies for SERS detection of organochlorine pesticides." *Nanomaterials*, 11(2), 2021, art. no. 304., @2021 [Линк](#)

Nikov Rumen G., Anna Og. Dikovska, Nikolay N. Nedyalkov, Georgi V. Avdeev, Petar A. Atanasov. Au nanostructure fabrication by pulsed laser deposition in open air: Influence of the deposition geometry. Beilstein Journal of Nanotechnology, 8, 2017, DOI:10.3762/bjnano.8.242, 2438-2445. SJR:3.13, ISI IF:2.968

1863. Khan, T.M., Khan, S.U.-D., Khan, S.U.-D., Ahmad, A., Abbasi, S.A., Khan, E.M., Mehigan, S. "Silver nanoparticle films by flowing gas atmospheric pulsed laser deposition and application to surface - enhanced Raman spectroscopy". *International Journal of Energy Research* 44, 11443-11452, 2020, @2020 [Линк](#)
1864. Vu, T.T., La, T.V., Tran, N.K., Huynh, D.C. "A comprehensive review on the sacrificial template-accelerated hydrolysis synthesis method for the fabrication of supported nanomaterials". *Journal of the Iranian Chemical Society* 17, 229-245, 2020, @2020 [Линк](#)
1865. Bonjakhi, M., Mahdiah, M.H. "Fabrication of silver nanoparticle films by pulsed laser deposition in flowless open air and studying the effects of laser fluence and number of pulses." *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 626, 2021, art. no. 126990., @2021 [Линк](#)
1866. Deng, Z., Jia, Q., Feng, B., Liu, L. "Research progress on fabrication and applications of high-performance films by pulsed laser deposition | [脉冲激光沉积高性能薄膜制备及其应用研究进展]." *Zhongguo Jiguang/Chinese Journal of Lasers*, 48(8), 2021, art. no. 0802010., @2021 [Линк](#)
1867. Socol, M., Preda, N., Socol, G. "Organic thin films deposited by matrix-assisted pulsed laser evaporation (MAPLE) for photovoltaic cell applications: A review." *Coatings*, 11(11), 2021, 1368., @2021 [Линк](#)
1868. Rafiq, M., Khan, R.S., Rather, A.H., Wani, T.U., Qureashi, A., Pandith, A.H., Rather, S.-U., Sheikh, F.A., Overview of printable nanoparticles through inkjet process: Their application towards medical use, (2022) *Microelectronic Engineering*, 266, art. no. 111889, @2022 1.000
1869. Bonjakhi, M., Mahdiah, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
1870. Ganash, E.A., Synthesis of silver nanoparticles using pulsed laser ablation in liquid: a review, (2023) *Laser Physics Letters*, 20 (1), art. no. 013001, @2023 1.000
1871. Khan, T.M., Aslam, N., Iqbal, A., Abbasi, S.A., Ali, D. "Cold Plasma Jet Coupled Nanosecond Laser Ablation Scheme For Plasmonic Nanostructured Surfaces". *Advanced Materials Interfaces* 10(21), 2300280, @2023 1.000
1872. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. "Laser-Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(6), 2200786, @2023 1.000

Nedyalkov, N., Dikovska, A, Nikov, R., Atanasov, P., Sliwinski, G., Hirsch, D., Rauschenbach, B.. Laser-induced nanoparticle fabrication on paper. App. Phys. A, 123, 2017, 570. ISI IF:1.604

1873. Bonjakhi, M., Mahdiah, M.H. "Fabrication of silver nanoparticle films by pulsed laser deposition in flowless open air and studying the effects of laser fluence and number of pulses". *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 626, 126990, 2021, @2021 [Линк](#)
1874. Wang, M., Chen, J., Lu, K., Ma, Y., Li, H., Ye, J., "Preparation of high-performance flexible microsupercapacitors based on papermaking and laser-induced graphene techniques". *Electrochimica Acta* 401, 139490, 2022, @2022 1.000

Nedyalkov N., Nikov Ru, Dikovska A., Atanasova G., Nakajima Y., Terakawa M.. Gold nanostructure deposition by laser ablation in air using nano- and femtosecond laser pulses. Appl. Phys. A, 123, 2017, 306. ISI IF:1.604

1875. Bonjakhi, M., Mahdiah, M.H. "Fabrication of silver nanoparticle films by pulsed laser deposition in flowless open air and studying the effects of laser fluence and number of pulses." *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 626, 2021, art. no. 126990., @2021 [Линк](#)
1876. Feng, Y., Liang, M., You, R., Li, T., Zhu, L. "Femtosecond Laser Fabrication of Noble Metal Plasma Nanostructures and Its Application-A Mini Review". *Frontiers in Physics* 10, 918372, 2022, @2022 1.000
1877. Bonjakhi, M., Mahdiah, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
1878. Todorov, R., Hristova-Vasileva, T., Katrova, V., Atanasova, A. "Silver and Gold Containing Compounds of p-Block Elements As Perspective Materials for UV Plasmonics". *ACS Omega* 8(16), pp. 14321-14341, @2023 1.000

Rumen G. Nikov, Anna Og. Dikovska, Genoveva B. Atanasova, Georgi V. Avdeev, Nikolay N. Nedyalkov. Magnetic-field-assisted formation of oriented nanowires produced by pld in open air. Applied Surface Science, 458, Elsevier, 2018, ISSN:0169-4332, 273-280. SJR (Scopus):1.093, JCR-IF (Web of Science):5.155

1879. Krajewski, M., Liou, S.-C., Chiou, W.-A., Tokarczyk, M., Małolepszy, A., Płocińska, M., Witecka, A., Lewińska, S., Ślawska-Waniewska, A. "Amorphous FeCo_{1-x} Wire-like Nanostructures Manufactured through Surfactant-Free Magnetic-Field-Induced Synthesis". *Crystal Growth and Design* 20, 3208-3216, 2020, @2020 Линк
1880. Ismail, R.A., Shaker, S.S., Mousa, A.M. "Study the optoelectronic properties of PbI₂ nanorods/Si photodetector prepared by magnetic field-assisted laser deposition route." *Optics and Laser Technology*, 140, 2021, art. no. 107042., @2021 Линк
1881. Socol, M., Preda, N., Socol, G. "Organic thin films deposited by matrix-assisted pulsed laser evaporation (MAPLE) for photovoltaic cell applications: A review." *Coatings*, 11(11), 2021, art. no. 1368., @2021 Линк
1882. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. "Laser-Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(6), 2200786, @2023 1.000
1883. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". *Vacuum* 211, 111912, @2023 1.000
- Nedyalkov N., Stankova N, Koleva M, Nikov R, Grozeva M, Iordanova K, Yankov G, Aleksandrov L, Iordanova R, karashanova D. Optical properties modification of gold doped glass induced by nanosecond laser radiation and annealing. Opt. mat, 75, 2018, DOI:https://doi.org/10.1016/j.optmat.2017.10.032, 646-653. SJR (Scopus):0.59, JCR-IF (Web of Science):2.687**
1884. Babich, E., Kaasik, V., Reduto, I., Scherbak, S., Lipovskii, A. "Kinetics of Nanoparticles Formation Under UV, VIS and IR Nanosecond Laser Irradiation of a Silver-Ions-Enriched Glass". *2021 Journal of Laser Micro Nanoengineering* 16(2), pp. 88-93, @2021 1.000
1885. Schlotthauer, T., Nolan, D., Middendorf, P. "Influence of short carbon and glass fibers on the curing behavior and accuracy of photopolymers used in stereolithography". *2021 Additive Manufacturing*, 42, 102005, @2021 1.000
1886. Fukushima, S., Hidai, H., Itoh, S., Matsusaka, S., "Local control of optical absorption properties of glass using precipitation of gold nanoparticles via gold sphere movement driven by laser", (2022) *Nanotechnology*, 33 (45), art. no. 455202., @2022 1.000
- Atanasov P.A., N Nedyalkov, R. Nikov, N. Fukata, W. Jevasuwan, T. Subramani, D. Hirsch, B. Rauschenbach. SERS analyses of thiamethoxam assisted by Ag films and nanostructures produced by laser techniques. J. Raman Spectrosc, 2018, JCR-IF (Web of Science):2.879**
1887. Cialla-May, D., Weber, K., Popp, J. "Sensitive detection of organic pollutants by advanced nanostructures". *Advanced Nanostructures for Environmental Health: Micro and Nano Technologies*, 35-74, 2020., @2020 Линк
1888. Fu, F., Yang, B., Hu, X., Tang, H., Zhang, Y., Xu, X., Zhang, Y., Touhid, S.S.B., Liu, X., Zhu, Y., Zhou, J., Yao, J. "Biomimetic synthesis of 3D Au-decorated chitosan nanocomposite for sensitive and reliable SERS detection" *Chemical Engineering Journal* 392, 123693, 2020, @2020 Линк
1889. Xu, X., Hu, X., Fu, F., Liu, L., Liu, X. "DNA-Induced Assembly of Silver Nanoparticle Decorated Cellulose Nanofiber: A Flexible Surface-Enhanced Raman Spectroscopy Substrate for the Selective Charge Molecular Detection and Wipe Test of Pesticide Residues in Fruits." *ACS Sustainable Chemistry and Engineering*, 9(14), 2021, pp. 5217-5229., @2021 Линк
1890. Yang, Y., Creedon, N., O'Riordan, A., Lovera, P. "Surface Enhanced Raman Spectroscopy: Applications in Agriculture and Food Safety." *Photonics*, 8, 2021, art. no. 568., @2021 Линк
1891. Han, Z., Weng, Z., Cao, L., (...), Li, J., Wang, Z. "Laser interference induced backward transfer to prepare silver micro-stripe structure" *2022 Optics and Precision Engineering* 30(9), pp. 1029-1037, @2022 1.000
- R. G. Nikov, N. N. Nedyalkov, Ru. G. Nikov, D. B. Karashanova. Nanosecond laser ablation of Ag–Au films in water for fabrication of nanostructures with tunable optical properties. Applied Physics A: Materials Science & Processing, 124, 847, Springer Berlin Heidelberg, 2018, ISSN:1432-0630 (Online), 0947-8396 (Print), DOI:https://doi.org/10.1007/s00339-018-2272-3, SJR (Scopus):0.421, JCR-IF (Web of Science):1.784**
1892. A A Salim, S K Ghoshal, Hazri Bakhtiar, G Krishnan, M Safwan aziz, H H J Sapongi, "Pulse laser ablated growth of Au-Ag nanocolloids: Basic insight on physiochemical attributes", *Journal of Physics: Conference Series* 1484 (2020) 012011. doi:10.1088/1742-6596/1484/1/012011, @2020 Линк
1893. Rybaltovsky, A., Epifanov, E., Khmelenin, D., Shubny, A., Zavorotny, Y., Yusupov, V., Minaev, N., Two approaches to the laser - induced formation of au/ag bimetallic nanoparticles in supercritical carbon dioxide, (2021) *Nanomaterials*, 11 (6), art. no. 1553., @2021 Линк
1894. Homik, Z., Kopniczky, J., Smausz, T., Berkesi, D., Hopp, B., "Formation of gold/silver composite nanoparticles by pulsed laser ablation of gold–silver layered films in liquid", (2022) *Applied Physics A: Materials Science and Processing*, 128 (9), art. no. 797., @2022 Линк
1895. Tahir, Ginoble Pandoli, O., Zaman, Q., Concas, G.C., Gisbert, M., Cremona, M., Freire, F.L., Carvalho, I.C.S., Bevilaqua, P.H.C., Santos De Sá, D., Canellas, A.P., Mattoso, V., Del Rosso, T., "Thermoelastic pulsed laser ablation of silver thin films with organic metal-SiO₂adhesion layer in water: Application to the sustainable regeneration of glass microfluidic reactors for silver nanoparticles", (2022) *Journal of Physics Communications*, 6 (5), art. no. 055005., @2022 Линк
1896. Siebeneicher, S., Reichenberger, S., Hengst, C., (...), Wittek, B., Barcikowski, S. " Activity and Durability Patterns of 45 Binary Noble Metal Alloy Nanoparticle Variants for Commercial Diesel Exhaust Aftertreatment". *ChemCatChem*, @2023 1.000
- Nakajima Y., Hayashi Sh., Katayama Ak., Nedyalkov N., Terakawa M.. Femtosecond Laser-Based Modification of PDMS to Electrically Conductive Silicon Carbide. Nanomaterials, 8, 2018, 558. ISI IF:3.504**

1897. Laser-Induced Graphenization of PDMS as Flexible Electrode for Microsupercapacitors Zaccagnini, P., Ballin, C., Fontana, M., (...), Ferrero, S., Lamberti, A. 2021 *Advanced Materials Interfaces* 8(23), 2101046, @2021 1.000
1898. Monolithic digital patterning of polydimethylsiloxane with successive laser pyrolysis Shin, J., Ko, J., Jeong, S., (...), Jeon, N.L., Ko, S.H. 2021 *Nature Materials* 20(1), pp. 100-107, @2021 1.000
1899. Multi-layer superhydrophobic nickel foam (NF) composite for highly efficient water-in-oil emulsion separation Wang, Y., Zhao, S., Guo, Z., Huang, J., Liu, W. 2021 *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 628, 127299, @2021 1.000
1900. Du, Y., Wu, T., Xie, H., Qu, J.-P. One-step laser etching of a bionic hierarchical structure on a silicone rubber surface with thermal and acid/alkali resistance and tunable wettability 2022 *Soft Matter*, 18(17), pp. 3412-3421,
1901. Huilong Liu, Zhijian Sun, Yun Chen*, Wenjun Zhang*, Xin Chen*, and Ching-Ping Wong Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing of Nanostructured Electrodes, *ACS Nano* 2022, 16, 7, 10088–10129, @2022 1.000
1902. Jiahua He, Sumei Wang, Lan Jiang, Xin Li, Quan Hong, Weihua Zhu, Jiabin Sun, Xueqiang Zhang, Zhao Xu, Femtosecond Laser One-Step Direct Writing Electrodes with Ag NPs-Graphite Carbon Composites for Electrochemical Sensing, *Adv. Mat. Technol.*, Volume7, Issue11, November 2022, 2200210, @2022 1.000
1903. Longsheng Lu, Duankang Zhang, Yingxi Xie, Hengfei He, Wentao Wang, Laser Induced Graphene/Silicon Carbide: Core-Shell Structure, Multifield Coupling Effects, and Pressure Sensor Applications, *Adv. Mat. Technol.* Volume7, Issue12, 2022, 2200441, @2022 1.000
1904. Minjie Wang , Yuan Zhang , Jianxiong Bin , Lan Niu , Jing Zhang, Lusheng Liu , Aiping Wang , Jin Tao , Jingqiu Liang , Lihua Zhang, Xiaoyang Kang, Cold Laser Micro-Machining of PDMS as an Encapsulation Layer for Soft Implantable Neural Interface, *Micromachines* 2022, 13(9), 1484, @2022 1.000
1905. Gao, C., Zhang, L., Hou, Y., Zheng, Y. "A UV-Resistant Heterogeneous Wettability-Patterned Surface". *Advanced Materials*, @2023 1.000
1906. Nan, M., Darmawan, B.A., Go, G., (...), Park, J.-O., Bang, D. "Wearable Localized Surface Plasmon Resonance-Based Biosensor with Highly Sensitive and Direct Detection of Cortisol in Human Sweat". *Biosensors* 13(2), 184, @2023
1907. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M. "3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures". *Advanced Electronic Materials*, @2023 1.000
1908. Wentao Wang, Longsheng Lu, Duankang Zhang, Yunpeng Yao, Yingxi Xie, Experimental and modeling study of laser induced silicon carbide/graphene on cotton cloth for superhydrophobic applications, *Optics & Laser Technology* Volume 158, Part A, February 2023, 108782, @2023 1.000
- Georgieva D.A., Petrov T.S., Yoneda H., Shikne R., Nedyalkov N., Kovachev L.. Avalanche parametric conversion and white spectrum generation from infrared femtosecond pulses in glasses. *Optics Express*, 26, 2018, 17649. ISI IF:3.356**
1909. Supercontinuum generation from zinc borate glasses: bandgap versus rare-earth doping Neethish, M.M., Kanth Kumar, V.V.R., Anurag Nalam, S., Sree Harsha, S., Kiran, P.P. 2021 *Optics Letters* 46(6), pp. 1201-1204, @2021
1910. Xiao Wang, Mingyin Yao, Min Zeng, and Jiang Xu, "Detection model of copper based on polarization degree induced by low-energy density laser, " *Appl. Opt.* 60, 10780-10784 (2021), @2021 Линк
1911. MM Neethish, V.V. Ravi Kanth Kumar, Samuel Anurag Nalam, S Sree Harsha, P Prem Kiran, Effect of chirp on supercontinuum generation from Barium Zinc Borate glasses, *Optics & Laser Technology*, Volume 149, 2022, 107890, ISSN 0030-3992, [https://doi.org/10.1016/j.optlastec.2022.107890.](https://doi.org/10.1016/j.optlastec.2022.107890), @2022 Линк
1912. Samuel, A.B., Neethish, M.M., Ravi Kanth Kumar, V.V., (...), Sree Harsha, S., Prem Kiran, P. "Supercontinuum generation in antimony zinc borate glasses - A material perspective". *Journal of Applied Physics* 133(9), 093104, @2023 1.000
- N E Stankova,, P Atanasov, N. Nedyalkov, Dr Tatchev, K N Kolev, E I Valova, St A Armyanov, K Grochowska, G Śliwiński, N Fukata, D Hirsch, B Rauschenbach. Laser-induced surface modification of biopolymers – micro/nanostructuring and functionalization. *Journal of Physics: Conference Series*, 992, 1, IOP Science, 2018, ISSN:Journal of Physics: Conference Series, DOI:doi :10.1088/1742-6596/992/1/012051, 012051-1-012051-7. SJR (Scopus):0.241**
1913. Kaczorowski W., Świątek H., Łuczak K., Głuszek M., Cłapa M. Impact of plasma pre-treatment on the tribological properties of DLC coatings on PDMS substrates *Materials*, 2021, 14 (2) , Pages 1 - 132, January 2021, Article number 433, @2021 Линк
- R G Nikov, N N Nedyalkov, P A Atanasov, D B Karashanova. Synthesis of bimetallic nanostructures by nanosecond laser ablation of multicomponent thin films in water. *Journal of Physics: Conference Series*, 992, 012046, IOP Publishing, 2018, ISSN:Online ISSN: 1742-6596, Print ISSN: 1742-6588, DOI:doi :10.1088/1742-6596/992/1/012046, SJR (Scopus):0.221**
1914. Homik, Z., Kopniczky, J., Smausz, T., Berkesi, D., Hopp, B., "Formation of gold/silver composite nanoparticles by pulsed laser ablation of gold-silver layered films in liquid", (2022) *Applied Physics A: Materials Science and Processing*, 128 (9), art. no. 797., @2022 Линк
1915. AdibAmini, S., Sari, A.H., Dorrani, D."Optical properties of synthesized Au/Ag Nanoparticles using 532 nm and 1064 nm pulsed laser ablation: effect of solution concentration". *SN Applied Sciences* 5(4), 122, @2023 1.000
1916. Goncharova, D., Salaev, M., Volokitina, A., (...), Svetlichnyi, V., Vodyankina, O. "Gold-based catalysts

prepared by pulsed laser ablation: A review of recent advances". *Materials Today Chemistry* 33, 101709, @2023 1.000

1917. Mohebi, E., Sari, A.H., Dorrnian, D., AdibAmini, S. "Formation of Agshell/Aucore Bimetallic Nanoparticles by Pulsed Laser Ablation Method: Effect of Colloidal/Solution Concentration". *Plasmonics*, @2023 1.000
Ru. Nikov, A. Dikovska, N. Nedyalkov, P. Atanasov. Magnetic-particles-composed wire structures produced by pulsed laser deposition in a magnetic field. *Journal of Physics: Conference Series*, 992, 012025, IOP Publishing Ltd, 2018, ISSN:1742-6588, DOI:10.1088/1742-6596/992/1/012025, SJR (Scopus):0.241
1918. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". *Vacuum* 211, 111912, @2023 1.000
P A Atanasov, N N Nedyalkov, Ru G Nikov, Ch Grüner, B Rauschenbach, N Fukata. SERS analysis of Ag nanostructures produced by ion-beam deposition. *Journal of Physics: Conference Series*, 992, 012050, IOP Publishing Ltd, 2018, ISSN:1742-6588, DOI:10.1088/1742-6596/992/1/012050, SJR (Scopus):0.241, JCR-IF (Web of Science):0.51
1919. Yussuf, N.A., Huang, H. "Branching of titanium nanorods." *Nanomaterials*, 11(5), 2021, art. no. 1070., @2021
1920. Ion beam nanoengineering of surfaces for molecular detection using surface enhanced Raman scattering Prakash, J., Samriti, N., Wijesundera, D.N., Rajapaksa, I., Chu, W.-K. 2022 *Molecular Systems Design and Engineering*, @2022 1.000

M.E. Koleva, N.N. Nedyalkov. Modification of plasmon resonance properties of noble metal nanoparticles inside the glass matrices. *Applied Surface Science*, 475, Elsevier, 2019, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2019.01.051, 974-981. JCR-IF (Web of Science):5.155

1921. Boudjahem, A.-G., Boulbazine, M., Dardare, M., Electronic and Magnetic Properties of Small Nickel Clusters and Their Interaction with CO Molecule, 2020 *Journal of Superconductivity and Novel Magnetism*, Article in Press, @2020 Линк
1922. Menazea, A.A., Abdelbadie, S.A., Ahmed, M.K., Manipulation of AgNPs coated on selenium/carbonated hydroxyapatite/ ϵ -polycaprolactone nano-fibrous via pulsed laser deposition for wound healing applications 2020 *Applied Surface Science* 508, 145299, @2020 Линк
1923. Boudjahem, A.-G., Boulbazine, M., Dardare, M. Electronic and Magnetic Properties of Small Nickel Clusters and Their Interaction with CO Molecule (2021) *Journal of Superconductivity and Novel Magnetism*, 34 (2), pp. 561-570., @2021 Линк
1924. Fathi, A.M., Ahmed, M.K., Afifi, M., Menazea, A.A., Uskoković, V. Taking Hydroxyapatite-Coated Titanium Implants Two Steps Forward: Surface Modification Using Graphene Mesolayers and a Hydroxyapatite-Reinforced Polymeric Scaffold (2021) *ACS Biomaterials Science and Engineering*, 7 (1), pp. 360-372., @2021 Линк
1925. Zhang, X., Jia, X., Li, M., Shi, Z., Xu, R., Zhao, J., Niu, Y. Surface modification, adsorption behavior, and optical properties of α -Fe₂O₃@SiO₂/Au core-shell ellipsoids (2021) *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 625, art. no. 126888, ., @2021 Линк
1926. Firmansyah, T., Wibisono, G., Tjipto Rahardjo, E., Kondoh, J., Reconfigurable localized surface plasmon resonance spectrum based on acousto-dynamic coupling in arrays gold nanoparticles induced by shear horizontal vibration 2022 *Applied Surface Science* 571, 151331, @2022 Линк
1927. Ghasemi, F., Ghasemi, M., Eftekhari, L., Soleimani, V., Comparison and influence of metal dopants on the opto-electrical, microstructure and gas sensing properties of nanostructured indium oxide films 2022 *Optics and Laser Technology* 146, 107564, @2022 Линк
1928. Ntemogiannis, D., Floropoulos, P., Karoutsos, V., (...), Pouloupoulos, P., Alexandropoulos, D. "Plasmonic Nanostructuring by Means of Industrial-Friendly Laser Techniques". *Photonics* 10(4), 384, @2023 1.000
T. Dilova, G. Atanasov, A. Og. Dikovska, G.V. Avdeev, P. Stefanov, N. N. Nedyalkov. Gas-sensing properties of metal-oxide nanostructures produced by PLD. *Proc. of SPIE*, 11047, 2019, DOI:10.1117/12.2516753, 110470G-1-110470G-6. SJR (Scopus):0.234
1929. Bonjakhi, M., Mahdieh, M.H. "Fabrication of silver nanoparticle films by pulsed laser deposition in flowless open air and studying the effects of laser fluence and number of pulses". *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 626, 126990, 2021, @2021 Линк

Nedyalkov N., Koleva, M.E., Nikov R., Stankova N.E.. Tuning optical properties of noble metal nanoparticle-composed glasses by laser radiation. *Applied Surface Science*, 463, Elsevier, 2019, ISSN:01694332, DOI:https://doi.org/10.1016/j.apsusc.2018.09.024, 968-975. SJR (Scopus):1.115, JCR-IF (Web of Science):4.439

1930. Amjed Javid, Manish Kumar, Seokyoung Yoon, Jung Heon Lee, Jeon Geon Han. "Synergistic enhancement of antibacterial activity of Cu:C nanocomposites through plasma induced microstructural engineering" *Appl. Sur. Sci.*, 500, 143996, 2020., @2020 Линк
1931. Khan, M., Mishra, S., Ratna, D., Sonawane, S., Shimpi, N.G.. "Investigation of thermal and mechanical properties of styrene-butadiene rubber nanocomposites filled with SiO₂-polystyrene core-shell nanoparticles", *Journal of Composite Materials*, 54(14), pp. 1785-1795., @2020 Линк
1932. Tharwat I. Shaheen (2022) Nanotechnology for modern textiles: highlights on smart applications, *The Journal of The Textile Institute*, 113 (10) , pp. 2274-2284, 2022, @2022 Линк
1933. Liu, J.-J., Jiang, Z.-W., Hsu, S.-W. "Investigation of the Performance of Heterogeneous MOF-Silver Nanocube Nanocomposites as CO₂ Reduction Photocatalysts by In Situ Raman Spectroscopy". *ACS Applied Materials and*

Nedyalkov N, Koleva M, Stankova N, Nikov R, Dikovska A, Aleksandrov L, Iordanova R, Atanasova G, Karashanova D, Grochowska K, Sliwinski G. All optical formation and decomposition of silver nanoparticles in glass. Appl. Surf. Sci, 495, 2019, 143546. JCR-IF (Web of Science):5.155

1934. Gökce, B., Filipescu, M., Barcikowski, S., "Recent progress in laser materials processing and synthesis", Applied Surface Science 513 (2020) article id. 145762., @2020 Линк
1935. Zheng, W., Zhou, B., Ren, Z., Xu, X., Yang, G., Qiao, X., Yan, D., Qian, G., Fan, X., "Fluorescence–Phosphorescence Manipulation and Atom Probe Observation of Fully Inorganic Silver Quantum Clusters: Imitating from and Behaving beyond Organic Hosts", (2022) Advanced Optical Materials, 10 (2), art. no. 2101632., @2022
- Nedyalkov N, Stankova N, Koleva M, Nikov R, Aleksandrov L, Iordanova R, Atanasova G., Iordanova E, Yankov G. Laser processing of noble metal doped glasses by femto- and nanosecond laser pulses. Appl. Surf. Sci, 475, 2019, 479. JCR-IF (Web of Science):5.155**
1936. Bubli, I., Ali, S., Ali, M., (...), Haq, A.U., Cattaruzza, E., Enhancement of solar cell efficiency via luminescent downshifting by an optimized coverglass, Ceramics International 46 (2) 2020, 2110-2115., @2020 Линк
1937. Kawamura, H., Matsusaka, S., Nomoto, K., Kodaka, H., Hidai, H., Chiba, A., Morita, N., "Improvement in etching efficiency of borosilicate glass by dissolving internal silver precipitates", Precision Engineering, 64 (2020) pp. 108-112., @2020 Линк
1938. Vasileva, A., Haschke, S., Mikhailovskii, V., Gitlina, A., Bachmann, J., Manshina, A., "Direct laser-induced deposition of AgPt@C nanoparticles on 2D and 3D substrates for electrocatalytic glucose oxidation", (2020) Nano-Structures and Nano-Objects, 24, art. no. 100547., @2020 Линк
1939. Zaguliaev, Dmitrii, Victor Gromov, Sergey Kononov, and Yurii Ivanov. "Electron-Ion-Plasma Modification of a Hypoeutectoid Al-Si Alloy." CRC Press, 2020., @2020 1.000
1940. Ultrafast laser manufacturing: from physics to industrial applications Orazi, L., Romoli, L., Schmidt, M., Li, L. 2021, CIRP Annals, 70(2), pp. 543-566, @2021 1.000
1941. Fukushima, S., Hidai, H., Itoh, S., Matsusaka, S., "Local control of optical absorption properties of glass using precipitation of gold nanoparticles via gold sphere movement driven by laser", (2022) Nanotechnology, 33 (45), art. no. 455202., @2022 1.000
1942. Kawamura, H., Okuda, R., Matsusaka, S., Nomoto, K., Kodaka, H., Hidai, H., Chiba, A., Morita, N., "Fine hole drilling of alkali-containing silicate glass substrate using preferential penetration of etchants around silver precipitates", (2022) Precision Engineering, 76, 141-148., @2022 1.000
1943. Xu, L., Zhang, S., Huang, L., Yang, Y., Tao, H., Zhu, J., Yang, C., Li, S., Jin, R., Dong, X., "A novel CoxNi1-xP/fs-Si self-supporting electrodes manufactured via femtosecond laser for highly efficient hydrogen evolution reaction", (2022) Surfaces and Interfaces, 32, art. no. 102173., @2022 1.000
1944. Zhao, H., Cun, Y., Bai, X., Xiao, D., Qiu, J., Song, Z., Liao, J., Yang, Z., "Entirely Reversible Photochromic Glass with High Coloration and Luminescence Contrast for 3D Optical Storage", ACS Energy Letters, 2022, 7 (6) 2060-2069., @2022 Линк
- Stoyanova D, Stambolova I, Blaskov V, Zaharieva K, Avramova I, Dimitrov O, Vassilev S, Eliyas A, Nedyalkov N. Mechanical milling of hydrothermally obtained CaTiO3 powders—morphology and photocatalytic activity. Nano-Structures and Nano-Objects, 18, 2019, 100301. SJR (Scopus):0.644, JCR-IF (Web of Science):0.64**
1945. Fauzi, F., Muhammad Habieb, A., Noviyanto, A., (...), Aryanto, D., Taufiqu Rochman, N. The effect of mechanochemical on the formation of calcium titanate (CaTiO₃) prepared by high energy milling 2020 IOP Conference Series: Materials Science and Engineering 924(1), 012006, @2020 1.000
1946. Moreira, M.L., Bordin, J.R., Andrés, J., Varela, J.A., Longo, E. A description of the formation and growth processes of CaTiO₃ mesocrystals: A joint experimental and theoretical approach 2020 Molecular Systems Design and Engineering 5(7), pp. 1255-1266, @2020 1.000
1947. Shawky, A., Alhaddad, M., Al-Namshah, K.S., Mohamed, R.M., Awwad, N.S. Synthesis of Pt-decorated CaTiO₃ nanocrystals for efficient photoconversion of nitrobenzene to aniline under visible light 2020 Journal of Molecular Liquids 304, 112704, @2020 1.000
1948. Teng, J., Wang, Z., Liu, J., Sun, X. Thermodynamic and shape memory properties of TPI/HDPE hybrid shape memory polymer 2020 Polymer Testing 81, 106257, @2020 1.000
1949. Structure and optical properties of nanocomposites based on polystyrene (PS) and calcium titanate (CaTiO₃) perovskite nanoparticles Ezat, G.S., Hussien, S.A., Aziz, S.B. 2021 Optik, 241, 166963, @2021 1.000
1950. Chanturiyaa, V.A., Bunin, I.Zh., Ryazantsevaa, M.V., Khabarova, I.A. EFFECT OF HIGH-POWER ELECTROMAGNETIC PULSES AND DIELECTRIC BARRIER DISCHARGES ON PHYSICOCHEMICAL AND FLOTATION PROPERTIES OF PEROVSKITE, 2022 Eurasian Mining 37(1), pp. 45-51, @2022 1.000
1951. Mamba, G., Mafa, P.J., Muthuraj, V., (...), Nkambule, T.I.T., Rtimi, S. Heterogeneous advanced oxidation processes over stoichiometric ABO₃ perovskite nanostructures. 2022 Materials Today Nano, 18, 100184, @2022 1.000
1952. Polymer-metal oxide composite as sensors (Book Chapter) Palencia, M., Ramírez-Rincón, J.A., Restrepo-Holguín, D.F. 2022 Renewable Polymers and Polymer-Metal Oxide Composites: Synthesis, Properties, and Applications pp. 283-306, @2022 1.000

1953. Recent Advances and Prospects of Biochar-based Adsorbents for Malachite Green Removal: A Comprehensive Review Aoulad El Hadj Ali, Y., Ahrouch, M., Ait Lahcen, A., Abdellaoui, Y., Stitou, M. 2022 Chemistry Africa (in press), @2022 1.000
1954. 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 1.000
1955. Dhoble, S.J., Kadam, A.R., Darshan, G.P., Sharma, S.C., Nagabhushuna, H. "Paradigms of Titanate Centered Energy Materials". Paradigms of Titanate Centered Energy Materials pp. 1-180, @2023 1.000
1956. Prabhu, L., Selvakumar, V., Anderson, A., Dhavamani, C. "Influence of CNT fillers on the thermal, mechanical and shape memory properties of TPI shape memory polymer composites". Digest Journal of Nanomaterials and Biostructures 18(1), pp. 299-305, @2023 1.000
- Atanasov P, Nedyalkov N, Fukata N, Jevasuwan W, Subramani T, Terakawa M, Nakajima Y. Surface-Enhanced Raman Spectroscopy (SERS) of Mancozeb and Thiamethoxam Assisted by Gold and Silver Nanostructures Produced by Laser Techniques on Paper. Appl. Spectroscopy, 73, 2019, 313. JCR-IF (Web of Science):2.064**
1957. Application of surface-enhanced Raman scattering in rapid detection of dithiocarbamate pesticide residues in foods Tsen, C.-M., Yu, C.-W., Chen, S.-Y., Lin, C.-L., Chuang, C.-Y. 2021 Applied Surface Science 558, 149740, @2021 1.000
1958. Automated material identification with a Raman spectrometer based on the contribution enhancement of small differences and the adaptive target Raman peak subtraction Huang, F., Xue, M., Yang, Z., Guo, H. 2021 Applied Optics 60(19), pp. 5682-5690, @2021 1.000
1959. Quantitative detection of dithiocarbamate pesticides by surface-enhanced Raman spectroscopy combined with an exhaustive peak-seeking method Wei, Q., Zhang, L., Song, C., Yuan, H., Li, X. 2021 Analytical Methods 13(12), pp. 1479-1488, @2021 1.000
1960. Han Zhuang, Weng Zhankun, Cao Liang, Liu Day, Wang Shenzhi, Chu Xueying, Li Jinhua, Wang Zuobin, Fabrication of Silver Microstripe Structures by Backward Transfer Induced by Laser Interference, Optics Precision Engineering, 2022, 30(9): 1029, @2022 1.000
- Atanasov P, Nedyalkov N, Fukata N, Jevasuwan W, Subramani T, Hirsch D, Rauschenbach B. Au and Ag films and nanostructures for detection of fungicide mancozeb: SERS analyses. AIP Conference Proc., 2075, 2019, 030001. SJR (Scopus):0.18**
1961. Chen, S., Zhang, C., Jiang, Z. Experimental investigation for roll-to-plate embossing of ordered micro-pyramid array on the silver sheet (2020) Journal of Micromechanics and Microengineering, @2020 1.000
1962. An overview of surface-enhanced Raman scattering substrates by pulsed laser deposition technique: fundamentals and applications, Jing, Y., Wang, R., Wang, Q., (...), Gu, H., Wang, X. 2021, Advanced Composites and Hybrid Materials, 4, pages885–905, @2021 1.000
1963. Detection of organic dyes by surface-enhanced Raman spectroscopy using plasmonic NiAg nanocavity films Petruš, O., Macko, J., Oriňaková, R., Pastucha, M., Socha, V. 2021 Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy 249, 119322, @2021 1.000
1964. Large-Area Nanogap-Controlled 3D Nanoarchitectures Fabricated via Layer-by-Layer Nanoimprint Zhao, Z.-J., Ahn, J., Hwang, S.H., (...), Park, I., Jeong, J.-H. 2021 ACS Nano 15(1), pp. 503-514, @2021 1.000
1965. Alawadhi, H., Alnaqbi, M.A., Ramachandran, K., (...), El Khakani, M.A., Gaidi, M. "Trace-level sensing of food toxins by flexible and cost-effective SERS sensors fabricated by pulsed-laser-deposition of gold nanoparticles on polycarbonate matrix". Surfaces and Interfaces 40, 103016, @2023 1.000
1966. Kacem, H.H., Ramachandran, K., Mani, G.T., (...), Khakani, M.A.E., Gaidi, M. "Rapid screening of Turkey DNA fingerprint using highly sensitive label free plasmonic SERS biosensor". Surfaces and Interfaces 40, 103141, @2023 1.000
- Nadya E. Stankova, Petar A. Atanasov, Nikolay N. Nedyalkov, Konstantin Kolev, Eugenia Valova, Stefan Armyanov. Laser processing of biopolymers for development of medical and high-tech devices. eBook (електронна КНИГА) - Elsevier books "Materials for Biomedical Engineering - HYDROGELS and POLYMER-BASED SCAFFOLDS", chapter 15, Elsevier, 2019, ISBN:978-0-12-816901-8, DOI:eBook ISBN: 9780128169025, 40, 487-526**
1967. Gomes, M., Teixeira-Santos, R., Gomes, L.C., (...), Whitehead, K.A., Mergulhão, F.J. "Antibiofilm Effect of Nitric Acid-Functionalized Carbon Nanotube-Based Surfaces against E. coli and S. aureus". Antibiotics 12(11), 1620, 2023, @2023 ЛИНК
- Ru.G. Nikov, A.Og. Dikovska, G.V. Avdeev, S. Amoroso, G. Ausanio, N.N. Nedyalkov. PLD fabrication of oriented nanowires in magnetic field. Applied Surface Science, 471, Elsevier, 2019, DOI:10.1016/j.apsusc.2018.12.030, 368-374. ISI IF:4.439**
1968. Bhowmik, R.N., Mitra, P., Choudhury, R.J., Reddy, V.R. "Substrate effect on the structural phase formation and magnetic properties of α -Fe₂O₃ and Ti doped α -Fe₂O₃ thin films". Applied Surface Science 501, 144224, 2020,
1969. Chou, C.-Y., Tseng, S.-F., Chang, T.-L., Tu, C.-T., Han, H.-C. "Controlled bridge growth of ZnO nanowires on laser-scribed graphene-based devices for NO gas detection". Applied Surface Science 508, 145204 (2020), @2020
1970. Li, H., Zou, X., Wei, H., Li, Q., Gao, Q., Liu, Q., Zhang, J. "SiO₂ Coated on ZnO Nanorod Arrays With UV-Durable Superhydrophobicity and Highly Transmittance on Glass". Frontiers in Chemistry 8, 101, 2020, @2020
1971. Yang, Z., Yin, Z., Zhao, Z., Yu, J., Li, J., Ren, Z., Yu, G. "Morphologies and magnetic properties of La-doped CeO₂ nanoparticles by the solvothermal method in a low magnetic field". Materials Chemistry and Physics 240,

- 122148, 2020, @2020 Линк
1972. Shapouri, S., Rajabi Kalvani, P., Jahangiri, A.R., Elahi, S.M. "Physical characterization of copper oxide nanowire fabricated via magnetic-field assisted thermal oxidation." *Journal of Magnetism and Magnetic Materials*, 524, 2021, art. no. 167633, @2021 Линк
1973. Bhowmik, R.N., Choudhary, R.J., Mitra, P., Reddy, V.R., Sinha, A.K. "Dimensionality induced enhancement of ferromagnetic spin order and ferroelectric polarization in Ga doped α -Fe₂O₃ thin films." *Applied Surface Science*, 573, 2022, art. no. 151609., @2022 Линк
1974. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. "Laser-Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(6), 2200786, @2023 1.000
1975. 637. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". *Vacuum* 211, 111912, @2023 1.000
1976. Masrou, R. "Study of magnetic properties of Ising nanowires with core-shell structure". *European Physical Journal B* 96(7), 100, @2023 1.000
1977. Zhi, Y., Xu, J., He, J., Xu, J., Zhang, H. "Magnetic Field-Induced Aligned Graphene/Cellulose Conductive Composites for Electroluminescent Devices". *ACS Applied Nano Materials* 6(18), pp. 17251-17262, @2023 1.000
- G. Atanasova, A. Og. Dikovska, T. Dilova, B. Georgieva, G.V. Avdeev, P. Stefanov, N. N. Nedyalkov. Metal-oxide nanostructures produced by PLD in open air for gas sensor applications. Applied Surface Science, 470, Elsevier, 2019, DOI:10.1016/j.apsusc.2018.11.178, 861-869. ISI IF:4.439**
1978. Hanh, N.H., Van Duy, L., Hung, C.M., (...), Van Hieu, N., Hoa, N.D., "VOC gas sensor based on hollow cubic assembled nanocrystal Zn₂SnO₄ for breath analysis", *Sensors and Actuators, A: Physical*, 302, 111834, 2020, @2020
1979. Hu, G., Yang, J., Han, Y., Cao, D., Liu, F., "Solution processed amorphous gallium-incorporated tin oxide thin-film transistors", *Japanese Journal of Applied Physics*, 59(5), 050906, 2020, @2020 Линк
1980. Jones de A. Pereira, Janiny N. Lacerda, Izabella F. Coelho, Cauê de S. C. Nogueira, Dante F. Franceschini, Eduardo A. Ponzio, Fernando B. Mainier and Yutao Xing, "Tuning the morphology of manganese oxide nanostructures for obtaining both high gravimetric and volumetric capacitance", *Mater. Adv.*, 1, 2433-2442, 2020, @2020 Линк
1981. Lacerda, J.N., Franceschini, D.F., Ponzio, E.A., (...), Guimarães, R.B., Xing, Y.T., "Manganese oxide nanofoam prepared by pulsed laser deposition for high performance supercapacitor electrodes", *Materials Chemistry and Physics* 242, 122459 (2020), @2020 1.000
1982. Park J.-H., Eom, J.-H., Lee, S.-L., (...), Lee, Y.-H., Seo, D.-C., "Exploration of the potential capacity of fly ash and bottom ash derived from wood pellet-based thermal power plant for heavy metal removal", *Science of the Total Environment*, 740, 140205, 2020, @2020 Линк
1983. Sobețkii, A., Olaru, M.T., Cindemir, U., (...), Bejan, S.E., Irimescu, R.E., "Deposition and characterization of thin films based on nanostructured wo₃ as sensorial elements for detection of h₂s" | [Depunerea și caracterizarea filmelor subțiri pe bază de wo₃ nanostructurat ca elemente senzoriale pentru detecția h₂s], *Revista Romana de Materiale/ Romanian Journal of Materials*, 50(3), pp. 387-394, 2020, @2020 Линк
1984. Sreenivasa Kumar, G., Venkataramana, B., Reddy, S.A., Maseed, H., Nagireddy, R.R., "Hydrothermal synthesis of Mn₃O₄ nanoparticles by evaluation of pH effect on particle Size formation and its antibacterial activity", *Advances in Natural Sciences: Nanoscience and Nanotechnology*, 11(3), 035006, 2020, @2020 Линк
1985. Van Duy, L., Van Duy, N., Hung, C.M., Hoa, N.D., Dich, N.Q., "Urea mediated synthesis and acetone-sensing properties of ultrathin porous ZnO nanoplates", *Materials Today Communications*, 25, 101445, 2020, @2020 Линк
1986. Alves Junior, R., Alves, H.P.A., Cartaxo, J.M., (...), Neves, G.A., Menezes, R.R., "Use of nanostructured and modified TiO₂ as a gas sensing agent", *Ceramica* 67(383), 316-326, 2021, @2021 Линк
1987. Deng, Z., Jia, Q., Feng, B., Liu, L., "Research progress on fabrication and applications of high-performance films by pulsed laser deposition", *Zhongguo Jiguang/Chinese Journal of Lasers* 48(8), 0802010, 2021, @2021 Линк
1988. Ikram, M., Rashid, M., Haider, A., (...), Khan, Q., Maqbool, M., "A review of photocatalytic characterization, and environmental cleaning, of metal oxide nanostructured materials", *Sustainable Materials and Technologies* 30, e00343, 2021, @2021 Линк
1989. Mehmood, S., Zhao, X., Fahad Bhopal, M., (...), Wang, G., Pan, X., "MoO₂-Ni-graphene ternary nanocomposite for a high-performance room-temperature ethanol gas sensor", *Appl. Surf. Sci.* 554, 149595, 2021, @2021 Линк
1990. Socol, M., Preda, N., Socol, G., "Organic thin films deposited by matrix-assisted pulsed laser evaporation (MAPLE) for photovoltaic cell applications: A review". *Coatings* 11(11), 1368, 2021, @2021 Линк
1991. Constantinoiu, I., Miu, D., Viespe, C., "SAW Hydrogen Sensors with Pd/SnO₂ Layers". *Materials* 15(22), 8012, 2022, @2022 Линк
1992. Guo, H., Wang, X., Dupuy, A.D., Schoenung, J.M., Bowman, W.J. "Growth of nanoporous high-entropy oxide thin films by pulsed laser deposition". *Journal of Materials Research* 37(1), pp. 124-135, 2022, @2022 1.000
1993. Lustosa, A.C.L.B., Evers, M., Franceschini, D.F., Litterst, F.J., Xing, Y. "sp-hybridized carbon atoms formed by low-energy collisions in carbon nanofoams produced by pulsed laser deposition". *Materials Letters* 314, 131886, 2022,
1994. Mohajir, A.E., Yazdi, M.A.P., Krystianiak, A., Heintz, O., Martin, N., Berger, F., Sanchez, J.-B. "Nanostructuring of SnO₂ Thin Films by Associating Glancing Angle Deposition and Sputtering Pressure for Gas Sensing Applications". *Chemosensors* 10(10), 426, 2022, @2022 Линк
1995. Raj, S., Samantara, A.K. "Noble Metal Nanoparticles-Based Composites for Gas Sensing: Progress and Perspective". *Nanomaterials-Based Sensing Platforms: Towards the Efficient Detection of Biomolecules and Gases*, pp. 213-243, 2022, @2022 1.000
1996. Bonjakhi, M., Mahdieh, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle

- Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
1997. Conde Garrido, J.M., Silveyra, J.M. "A review of typical PLD arrangements: Challenges, awareness, and solutions". *Optics and Lasers in Engineering* 168, 107677, @2023 1.000
1998. Kim, Y.-H., Kim, S.-G., Lee, S., (...), Kim, Y.-M., Jeong, S.-Y. "Self-Oxidation Resistance of the Curved Surface of Achromatic Copper". *Advanced Materials*, @2023 1.000
1999. Kuśmierczyk, F., Cieniek, L., Kopia, A., Zimowski, S., Moskalewicz, T. "Development and Characterization of Multilayered Cu/HAMetallurgical and Materials Transactions A: Physical Metallurgy and Materials Science 54(7), pp. 2803-2818/ZnS + PEEK Coating System by Hybrid Technology"., @2023 1.000
2000. Syed, K., Krstulović, N., Casanova-Cháfer, J., (...), Baran, N., Ivanda, M. "The role of the pulsed laser deposition in different growth atmospheres on the gas-sensing properties of ZnO films". *Sensors and Actuators B: Chemical* 382, 133454, @2023 1.000
2001. Wu, G., Du, H., Pakravan, K., (...), Pan, X., Kim, D.-J. "Polyaniline/Ti3C2Tx functionalized mask sensors for monitoring of CO2 and human respiration rate". *Chemical Engineering Journal* 475, 146228, @2023 1.000

Ru Nikov, G Avdeev, A Dikovska, M Koleva, N Nedyalkov. Microstructural characterization of nanocomposites produced by laser ablation in a magnetic field. *Journal of Physics: Conference Series*, 1492, 012057, IOP Publishing, 2020, ISSN:1742-6588, DOI:10.1088/1742-6596/1492/1/012057, SJR (Scopus):0.227

2002. Fadeyibi, A., Oluwaseun, A.A., Ojo, A.P. "EFFECT COLD TEMPERATURE AND pH ON PERFORMANCE OF A STARCH-BASED WATERMELON SEED NANOCOMPOSITE FILM FOR LOCUST BEANS PACKAGING". *Carpathian Journal of Food Science and Technology* 15(2), pp. 169-179, @2023 1.000
2003. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". *Vacuum* 211, 111912, @2023 1.000
- Atanasov P, Nedyalkov N, Fukata N, Jevasuwan, W. Ag and Au nanostructures for surface-enhanced Raman spectroscopy of Mospilan 20 SP (acetamiprid). *Journal of Raman Spectroscopy*, 51, 2020, 2398. JCR-IF (Web of Science):2**
2004. Wu, W.; Li, R.; Chen, M.; Li, J.; Zhan, W.; Jing, Z.; Pang, L. Noble Metallic Pyramidal Substrate for Surface-Enhanced Raman Scattering Detection of Plasmid DNA Based on Template Stripping Method. *Micromachines* 2021, 12, 923. <https://doi.org/10.3390/mi12080923>, @2021 1.000
2005. Chen, P.-T., Lu, Y.-C., Tangsuwanjinda, S., (...), Sakthivel, R., Cheng, H.-M., Irradiation-Induced Synthesis of Ag/ZnO Nanostructures as Surface-Enhanced Raman Scattering Sensors for Sensitive Detection of the Pesticide Acetamiprid, 2022 *Sensors* 22(17), 6406, @2022 1.000
2006. Cho, S.W., Wei, H. "Surface-enhanced Raman spectroscopy for emerging contaminant analysis in drinking water". *Frontiers of Environmental Science and Engineering* 17(5), 57, @2023 1.000
2007. El Harery, A.H., Ghani, N.T.A., El Nashar, R.M. "Application of Molecularly Imprinted Electrochemical Sensor for Selective Non-Labelled Detection of Acetamiprid Insecticide in Fruits"., @2023 1.000
2008. Wang, K., Gao, Y., Fang, Z., (...), Zou, M., Wang, C. "SERS detection for pesticide residue via a single-atom sites decoration strategy". *Applied Surface Science* 621, 156832, @2023 1.000
- Grochowska, K, Nedyalkov N, Karczewski, J, Śliwiński, G.. Anodic titania nanotubes decorated with gold nanoparticles produced by laser-induced dewetting of thin metallic films. *Scientific reports*, 10, 2020, 20506. JCR-IF (Web of Science):3.998**
2009. Boháč, M.; Čížmar, T.; Kojić, V.; Marčec, J.; Juraić, K.; Grčić, I.; Gajović, A. Novel, Simple and Low-Cost Preparation of Ba-Modified TiO2 Nanotubes for Diclofenac Degradation under UV/Vis Radiation. *Nanomaterials* 2021, 11, 2714. <https://doi.org/10.3390/nano11102714>, @2021 1.000
2010. M.S.Vasilyeva, I.V.Lukiyanchuk, K.A.Sergeeva, A.A.Sergeev, E.V.Shchitovskaya, V.S.Egorkin, .V.G.Kuryavii, A.Yu.Ustinov, S.L.Sinebryukhov, S.V.Gnedenkov, Titania coatings decorated with ultra-thin gold films: Optical, electrochemical and photoelectrochemical properties, *Journal of Alloys and Compounds* Volume 913, 25 August 2022, 165320, @2022 1.000
2011. Sharma, S., Sidhartha, P.N., Chappanda, K.N. Influence of laser and alkali treatment on an Ag/TiO2nanotube based dopamine sensor 2022 *Nanotechnology* 33(1), 015502, @2022 1.000
2012. GuoliangShang, DongxueBi, Vladimir S. Gorelik, Guangtao Fei, Lide Zhang, Anodic alumina photonic crystals: Structure engineering, optical properties and prospective applications, *Materials Today Communications*, Volume 34, March 2023, 105052, @2023 1.000
2013. Lee, S.F., Jimenez-Relinque, E., Martinez, I., Castellote, M. "Effects of Mott–Schottky Frequency Selection and Other Controlling Factors on Flat-Band Potential and Band-Edge Position Determination of TiO2". *Catalysts* 13(6), 1000, @2023 1.000
2014. Morales-Gil, P., de Oca-Yemha, M.G.M., Pérez-Cruz, F., (...), Aldana-González, J., Pardavé, M.P. "Electrodeposition of gold and silver nanoparticles onto TiO2 nanotubes anodically formed on Ti using reline deep eutectic solvent". *Journal of Molecular Liquids* 386, 122499, @2023 1.000
2015. Ramírez-Ortega, D., Guerrero-Araque, D., Sierra-Urbe, J.H., (...), Gómez, R., Zanella, R. "Accelerated transfer and separation of charge carriers during the photocatalytic production of hydrogen over Au/ZrO2–TiO2 structures by interfacial energy states". *International Journal of Hydrogen Energy* 48(42), pp. 15956-15966, @2023 1.000
2016. Sapoletova, N.A., Kushnir, S.E., Ulyanov, A.N., (...), Roslyakov, I.V., Napolskii, K.S. "Effect of post-treatment on photocatalytic activity of anodic titania photonic crystals". *Optical Materials* 144, 114350, @2023 1.000
2017. Sarda Sharma, P. N. Sidhartha, Karumbaiah N. Chappanda, Ni(OH)2 Nanoparticles Anchored on Laser- and

Alkali-Modified TiO₂ Nanotubes Arrays for High-Performance Supercapacitor Application, *J. Electron. Mater.* 52, 483–499 (2023), @2023 1.000

Nedyalkov N, Nikov R, Koleva M, Stankova N., Aleksandrov L, Iordanova R. Gas ejection mechanism of glass structuring induced by nanosecond laser pulses. *Appl. Phys. A*, 126, 2020, 786. JCR-IF (Web of Science):1.8

2018. Hou, H.-Y., Tang, W.-T., Lin, Y.-C., Cheng, P.-Y., Hsiao, W.-T., Chiang, D., "Internal modification morphologies in glasses irradiated by nanosecond laser pulses", (2022) *Applied Physics A: Materials Science and Processing*, 128 (10), art. no. 876., @2022 1.000
Atanasov P, Nedyalkov N, Fukata N., Jevasuwan W., Subramani T.. Surface-Enhanced Raman Spectroscopy (SERS) of Neonicotinoid Insecticide Thiacloprid Assisted by Silver and Gold Nanostructures. *Appl. Spectroscopy*, 74, 2020, 357. JCR-IF (Web of Science):2.087
2019. Wang, S.-H., Lo, S.-C., Tung, Y.-J., (...), Hsu, J.-C., Wei, P.-K. Multichannel nanoplasmonic platform for imidacloprid and fipronil residues rapid screen detection. *2020 Biosensors and Bioelectronics* 170, 112677, @2020
2020. Jing, Y., Wang, R., Wang, Q. et al. An overview of surface-enhanced Raman scattering substrates by pulsed laser deposition technique: fundamentals and applications. *Adv Compos Hybrid Mater* 4, 885–905 (2021). <https://doi.org/10.1007/s42114-021-00330-0>, @2021 1.000
2021. Md. Musfiqur Rahman, Dong Ju Lee, Ara Jo, Seung Hee Yun, Jong-Bang Eun, Moo-Hyeog Im, Jae-Han Shim, A. M. Abd El-Aty, Onsite/on-field analysis of pesticide and veterinary drug residues by a state-of-art technology: A review, *J. Separ. Sci.*, Volume44, Issue11, 2021, , 2310-2327, @2021 1.000
2022. Self-Cleaning-Mediated SERS Chip Coupled Chemometric Algorithms for Detection and Photocatalytic Degradation of Pesticides in Food Yi Xu, Md Mehedi Hassan, Shujat Ali, Huanhuan Li*, Qin Ouyang, and Quansheng Chen, *J. Agric. Food Chem.* 2021, 69, 5, 1667–1674, @2021 1.000
2023. Seo Won Cho, Haoran Wei, Surface-enhanced Raman spectroscopy for emerging contaminant analysis in drinking water, *Frontiers of Environmental Science & Engineering* volume 17, Article number: 57 (2023), @2023
- T. Dilova, G. Atanasova, A.Og. Dikovska, N.N. Nedyalkov. The effect of light irradiation on the gas-sensing properties of nanocomposites based on ZnO and Ag nanoparticles. *Applied Surface Science*, 505, Elsevier, 2020, DOI:10.1016/j.apusc.2019.144625, 144625-1-144625-9. JCR-IF (Web of Science):5.155**
2024. Elzein, B., Yao, Y., Barham, A.S., Dogheche, E., Jabbour, G.E., "Toward the growth of self-catalyzed ZnO nanowires perpendicular to the surface of silicon and glass substrates, by pulsed laser deposition", *Materials*, 13(19), 4427, pp. 1-14, 2020, @2020 [Линк](#)
2025. Gökce, B., Filipescu, M., Barcikowski, S., "Recent progress in laser materials processing and synthesis", *Applied Surface Science*, 513, 145762, 2020, @2020 [Линк](#)
2026. Maldonado-Arriola, J.A., Sánchez-Zeferino, R., Álvarez-Ramos, M.E., "Photoluminescent properties of ZnO nanorods films used to detect methanol contamination in tequila", *Sensors and Actuators, A: Physical*, 312, 112142, 2020, @2020 [Линк](#)
2027. Naskar, A., Lee, S., Lee, Y., Kim, S., Kim, K.-S., "A new nano-platform of erythromycin combined with Ag nano-particle ZnO nano-structure against methicillin-resistant *Staphylococcus aureus*", *Pharmaceutics*, 12(9), 841, pp. 1-14, 2020, @2020 [Линк](#)
2028. Petruleviciene, M., Juodkazyte, J., Parvin, M. (...), Samukaite-Bubniene, U., Ramanavicius, A., "Tuning the photo-luminescence properties of WO₃ layers by the adjustment of layer formation conditions", *Materials*, 13(12), 2814, pp. 1-14, 2020, @2020 [Линк](#)
2029. Yousefi, H.R., Hashemi, B., Mirzaei, A., Roshan, H., Sheikhi, M.H., "Effect of Ag on the ZnO nanoparticles properties as an ethanol vapor sensor", *Materials Science in Semiconductor Processing*, 117, 105172, 2020, @2020
2030. Zhang, C., Liu, G., Liu, K., Wu, K., "ZnO_{1-x} coatings deposited by atmospheric plasma spraying for room temperature ppb-level NO₂ detection", *Appl. Surf. Sci.* 528, 147041, 2020, @2020 [Линк](#)
2031. Agarwal, S., Kumar, S., Agrawal, H., (...), Sharma, S.K., Awasthi, K., "An efficient hydrogen gas sensor based on hierarchical Ag/ZnO hollow microstructures", *Sens. & Act. B: Chem.* 346, 130510, 2021, @2021 [Линк](#)
2032. Galstyan, V., "Quantum dots: Perspectives in next-generation chemical gas sensors" – A review", *Analytica Chimica Acta* 1152, 238192, 2021, @2021 [Линк](#)
2033. Jun Min Suh, Tae Hoon Eom, Sung Hwan Cho, Taehoon Kim and Ho Won Jang, "Light-activated gas sensing: a perspective of integration with micro-LEDs and plasmonic nanoparticles". *Mater. Adv.* 2, 827-844, 2021,
2034. Kamble, V.S., Navale, Y.H., Patil, V.B., (...), Vajekar, S.N., Salunkhe, S.T., "Studies on structural, spectral and morphological properties of co-precipitation derived Co-doped ZnO nanocapsules for NO₂ sensing applications", *J. Mater. Sci.: Mater. in Electronics* 32(22), 26503-26519, 2021, @2021 [Линк](#)
2035. Qin, C., Wang, B., Li, P., (...), Wu, N., Wang, Y., "Metal-organic framework-derived highly dispersed Pt nanoparticles-functionalized ZnO polyhedrons for ppb-level CO detection", *Sens. & Act. B: Chem.* 331, 129433, 2021,
2036. Rahamim, M., Cohen, H., Edri, E., "Chemistry and Charge Trapping at the Interface of Silver and Ultrathin Layers of Zinc Oxide", *ACS Appl. Mater. & Interfaces*, 13, 41, 49423–49432, 2021, @2021 [Линк](#)
2037. Ravita, Rao, A.S., "Effective energy transfer from Dy³⁺ to Tb³⁺ ions in thermally stable KZABS glasses for intense green emitting device applications", *J. Lumines.* 239, 118325, 2021, @2021 [Линк](#)
2038. Zhang, Q., Pang, Z., Hu, W., (...), Zhang, C., Xu, M., "Performance degradation mechanism of the light-activated room temperature NO₂ gas sensor based on Ag-ZnO nanoparticles", *Appl. Surf. Sci.* 541, 148418, 2021,
2039. Cai, L., Dong, X., Wu, G., Sun, G., Chen, N., Wei, H., Zhu, S., Tian, Q., Wang, X., Jing, Q., Li, P., Liu, B. "Ultrasensitive acetone gas sensor can distinguish the diabetic state of people and its high performance analysis by first-

- principles calculation". *Sensors and Actuators B: Chemical* 351, 130863, 2022, @2022 1.000
2040. Ravita, Rao, A.S. "Effective sensitization of Eu³⁺ visible red emission by Sm³⁺ in thermally stable potassium zinc alumino borosilicate glasses for photonic device applications". *Journal of Luminescence* 244, 118689, 2022,
2041. Moayed, M., Ansari, H.R., Kordrostami, Z. "Highly Sensitive Isopropanol Gas Sensor based on SnO₂ Nano-Flowers on Gold, Silver, and Aluminum Interdigitated Electrodes". *ECS Journal of Solid State Science and Technology* 12(5), 057011, @2023 1.000
2042. Ren, H., Weng, H., Dong, X., Huang, J., Joo, S.W. "Nickel-Doped ZnO Porous Sea Urchin Nanostructures with Various Amounts of Oxygen Defects for Volatile Organic Compound Detection". *Chemosensors* 11(4), 223, @2023
2043. Sun, Y., Fan, H., Shang, Y., (...), Wang, W., Ma, L. "MOF-5 derived 3D ZnO/Ag micro-octahedra for ultrahigh response and selective triethylamine detection at low temperature". *Sensors and Actuators B: Chemical* 390, 133975, @2023
2044. Turko, B., Vasil'yev, V., Kapustianyk, V., (...), Hrytsak, L., Kostruba, A. "THE EFFECT OF UV LIGHT IRRADIATION ON THE GAS-SENSING PROPERTIES OF THE QUARTZ CRYSTAL MICROBALANCE SENSOR COMBINED WITH ZnO FILM". *Journal of Physical Studies* 27(3), 3001, @2023 1.000
2045. Wang, T., Chen, J., Chen, J., (...), Yang, X.-C., Li, Q. "UV-light enhanced gas sensor based on Ga doped ZnO for ultra-high sensitive and selective n-butanol detection". *Applied Surface Science* 641, 158551, @2023 1.000
2046. Wen, Z., Ren, H., Li, D., (...), Joo, S.W., Huang, J. "A highly efficient acetone gas sensor based on 2D porous ZnFe₂O₄ nanosheets". *Sensors and Actuators B: Chemical* 379, 133287, @2023 1.000
2047. Zhu, L.-Y., Ou, L.-X., Mao, L.-W., (...), Liu, Y.-P., Lu, H.-L. "Advances in Noble Metal-Decorated Metal Oxide Nanomaterials for Chemiresistive Gas Sensors: Overview". *Nano-Micro Letters* 15(1), 89, @2023 1.000
- T. Dilova, G. Atanasova, A.Og. Dikovska, G. Avdeev, M. Machida, M. Terakawa, P. Stefanov, N.N. Nedyalkov. Effect of Pd-decoration on the sensing properties of ZnO nanostructures. Thin Solid Films, 693, Elsevier, 2020, DOI:10.1016/j.tsf.2019.137693, 137693-1-137693-8. JCR-IF (Web of Science):1.888**
2048. Devi, K.R., Selvan, G., Karunakaran, M., (...), Shkir, M., AlFaify, S., "Enhanced room temperature ammonia gas sensing properties of Al-doped ZnO nanostructured thin films", *Optical and Quantum Electronics*, 52(11), 501, 2020, @2020 Линк
2049. Wang, C.-N., Li, Y.-L., Gong, F.-L., (...), Fang, S.-M., Zhang, H.-L., "Advances in doped ZnO nanostructures for gas sensor", *Chemical Record*, 20(12), 1553-1567, 2020, @2020 Линк
2050. Galstyan, V., D'Arco, A., Di Fabrizio, M., (...), Lupi, S., Comini, E., "Detection of volatile organic compounds: From chemical gas sensors to terahertz spectroscopy", *Reviews in Analytical Chemistry* 40(1), 33-57 (2021)., @2021
2051. Qin, C., Wang, B., Li, P., (...), Wu, N., Wang, Y., "Metal-organic framework-derived highly dispersed Pt nanoparticles-functionalized ZnO polyhedrons for ppb-level CO detection", *Sens. & Act. B: Chem.* 331, 129433 (2021)., @2021 Линк
2052. Tomić, M., Claros, M., Gràcia, I., (...), Cané, C., Vallejos, S., "Zno structures with surface nanoscale interfaces formed by au, fe₂o₃, or cu₂o modifier nanoparticles: Characterization and gas sensing properties", *Sensors* 21(13), 4509 (2021)., @2021 Линк
2053. Tomic, M., Gracia, I., Figueras, E., Cane, C., Vallejos, S., "ZnO Nanorods and Their Modification with Au Nanoparticles for UV-light Activated Gas Sensing", *Proc. of the 2021 13th Spanish Conference on Electron Devices, CDE 2021*, 9455726, 117-120 (2021)., @2021 Линк
2054. Yu, S., Zhang, D., Li, Q., "Room Temperature Acetone-Sensing Properties of Ru-Doped MoSe Nanoflowers: Experimental and Density Functional Theory Study", *IEEE Electron Device Lett.* 42(5), 9382974, 739-742 (2021).,
2055. Bruce, J., Bosnick, K., Kamali Heidari, E. "Pd-decorated ZnO nanoflowers as a promising gas sensor for the detection of meat spoilage". *Sensors and Actuators B: Chemical* 355, 131316, 2022, @2022 1.000
2056. Dmitry Olegovich Bokov, Abduladheem Turki Jalil, Forat H. Alsultany, Mustafa Z. Mahmoud, Wanich Suksatan, Supat Chupradit-Ir-decorated gallium nitride nanotubes as a chemical sensor for recognition of mesalamine drug: a DFT study, *Molecular Simulation Volume 48*, 2022 - Issue 5, @2022 1.000
2057. He, J., Li, M., Dai, S., Huang, M., Liu, Y., Li, Y., Fan, L., Yu, J. "Double-functionalization of water repellence and anti-reflectance by multiple-laser-based fabrication of triple-scale hierarchical surface structures". *Materials and Design* 219, 110734, 2022, @2022 1.000
2058. Kozhukharov, S., Girginov, C., Tsanev, A., Boshkova, N., "Synergistic effect of Zn electrodeposition and cerium conversion coating on the corrosion performance of low carbon steel". *Applied Surface Science* 602, 154254, 2022, @2022 1.000
2059. Kim, M.Y., Hwang, J.Y., Mirzaei, A., (...), Lee, S.Y., Jin, C. "NO₂ Gas Sensing Properties of Ag-Functionalized Porous ZnO Sheets". *Adsorption Science and Technology* 2023, 9021169, @2023 1.000
2060. Kumar, S., Lawaniya, S.D., Nelamarri, S.R., (...), Mishra, Y.K., Awasthi, K. "Bimetallic Ag-Pd nanoparticles decorated ZnO nanorods for efficient hydrogen sensing". *Sensors and Actuators B: Chemical* 394, 134394, @2023
2061. Wongrat, E., Ta-om, T., Khamprakaysit, S., Chanlek, N., Chooopun, S. "Effect of Cu or Ni addition to ZnO nanostructures on their n-butanol sensing performance". *Thin Solid Films* 774, 139839, @2023 1.000
2062. Zhao, X., Jheng, J.-C., Chou, N.-N., Wang, F.-H., Yang, C.-F. "Synthesis of ZnO Nanoflower Arrays on a Protrusion Sapphire Substrate and Application of Al-Decorated ZnO Nanoflower Matrix in Gas Sensors". *Sensors* 23(12), 5629, @2023 1.000
- Nikov, Ro., Nedyalkov, N., Koleva, M., Stankova, N., Iordanova, E., Yankov, G., Aleksandrov, L., Iordanova, R.. Femtosecond laser modification of the optical properties of glass containing noble-metal nanoparticles. Journal of Physics: Conference Series, 1492, 012058, IOP Publishing Ltd, 2020, DOI:doi:10.1088/1742-6596/1492/1/012058, SJR (Scopus):0.227**
2063. Ling, W., Wang, W. Research progress of 2 μm ultrashort pulse all solid state thulium doped oscillator (Invited)

[2 μm 超短脉冲全固态掺铥振荡器研究进展(特邀)] (2021) Hongwai yu Jiguang Gongcheng/Infrared and Laser Engineering, 50 (8), art. no. 20210346, ., @2021

Nedyalkov N., Dikovska A., Koleva M., Stankova N., Nikov R., Borisova E., Genova Ts., Alexandrov L., Iordanova R., Terakawa M. Luminescence properties of laser-induced silver clusters in borosilicate glass. Optical Materials, 100, 2, Elsevier Ltd., 2020, ISSN:0925-3467, DOI:10.1016/j.optmat.2019.109618, 109618-109618-6. SJR (Scopus):0.59, JCR-IF (Web of Science):2.687

2064. Evstrop'ev, S.K., Nikonorov, N.V., Saratovskii, A.S., Danilovich, D.P., "The Effect of UV Irradiation on the Formation of Silver Molecular Clusters and Their Stabilization in Solutions and Composite and Oxide Coatings", Optics and Spectroscopy 128 (6) (2020) 707-712., @2020 Линк
2065. HOGAN NICKI LYNNE . "STEADY STATE PHOTOTHERMALIZATION AND HOT ELECTRON DYNAMICS IN NOBLE METALS". PhD Dissertation, Major Subject: Chemistry, Texas A&M University, August, 2020, @2020 Линк
2066. Sergeev, M.M., Zakoldaev, R.A., Itina, T.E., Varlamov, P.V., Kostyuk, G.K. "Real-time analysis of laser-induced plasmon tuning in nanoporous glass composite", Nanomaterials 10 (6) (2020) art. no. 1131, pp. 1-14., @2020 Линк
2067. Евстропьев, Е. К., Н. В. Никоноров, А. С. Саратовский, and Д. П. Данилович. "Влияние УФ облучения на формирование молекулярных кластеров серебра и их стабилизация в растворах, композиционных и оксидных покрытиях." Оптика и спектроскопия 128, no. 6 (2020): 701-706., @2020 1.000
2068. Alrowaili, Z.A., Taha, T.A., Ibrahim, M., Saron, K.M.A., Sriwunkum, C., Al-Baradi, A.M., Al-Buriah, M.S. "Synthesis and characterization of B₂O₃-Ag₃PO₄-ZnO-Na₂O glasses for optical and radiation shielding applications" Optik, 248, art. no. 168199, 2021 DOI: 10.1016/j.ijleo.2021.168199, @2021 1.000
2069. Reduto, I., Babich, E., Zolotovskaya, S., Abdolvand, A., Lipovskii, A., Zhurikhina, V. "Controlled metallization of ion-exchanged glasses by thermal poling" Journal of Physics Condensed Matter, 33 (50), art. no. 505001, 2021 DOI: 10.1088/1361-648X/ac276c, @2021 1.000
2070. Skvortsov, A., Babich, E., Redkov, A., Lipovskii, A., Zhurikhina, V. "Stable in biocompatible buffers silver nanoisland films for sers" Biosensors, 11 (11), art. no. 448, 2021 DOI: 10.3390/bios11110448, @2021 1.000
2071. Evstropiev, S.K., Yurchenko, D.A., Stolyarova, V.L., Knyazyan, N.B., Manukyan, G.G., Shashkin, A.V. "Some features of the surface modification of MgO–Al₂O₃–TiO₂–SiO₂ glass and glass ceramics by Ag diffusion". Ceramics International 48(17), pp. 24517-24522, 2022, @2022 1.000
2072. Lipatiev, A.S., Fedotov, S.S., Lotarev, S.V., Lipateva, T.O., Shakhgildyan, G.Y., Sigaev, V.N. "Single-Pulse Laser-Induced Ag Nanoclustering in Silver-Doped Glass for High-Density 3D-Rewritable Optical Data Storage" ACS Applied Nano Materials 5(5), pp. 6750-6756, 2022, @2022 1.000
2073. Gonzalez-Garcia, M.C., Garcia-Fernandez, E., Hueso, J.L., Paulo, P.M.R., Orte, A. "Optical Binding-Driven Micropatterning and Photosculpting with Silver Nanorods". Small Methods, 2023, @2023 Линк
2074. Mironov, L.Y., Marasanov, D.V., Sgibnev, Y.M., (...), Zhizhin, E.V., Koroleva, A.V. "Reversible Photobleaching of Silver Clusters in Silica-Based Glass under Ultraviolet Irradiation". ChemPhotoChem 7(9), e202200320, 2023, @2023 Линк
2075. Wesal M Madani & Roshdi Seoudi, "Improving the fluorescent properties of polyacrylic acid by adding a mixture of (silver nanoparticles/rhodamine B)", J.Umm Al-Qura Univ. Appl. Sci. 9, 285–293., @2023 Линк

Nikov, Ro.G., Nedyalkov, N.N., Karashanova, D.B.. Laser ablation of Ni in the presence of external magnetic field: Selection of microsized particles. Applied Surface Science, 518, 146211, Elsevier, 2020, ISSN:0169-4332, DOI:https://doi.org/10.1016/j.apsusc.2020.146211, SJR (Scopus):1.115, JCR-IF (Web of Science):5.155

2076. Wawrzyniak, J., Karczewski, J., Ryl, J., Grochowska, K., Siuzdak, K., "Laser-assisted synthesis and oxygen generation of nickel nanoparticles" Materials 13(18) (2020) 4068., @2020 Линк
2077. Chen, Y., Bao, L., Wang, H., Ning, Z., Zhong, X., Cao, J., Shen, R., Zhang, W. Research Progress in Preparation of Nanoparticles by Laser Ablation in Liquid, (2021) Zhongguo Jiguang/Chinese Journal of Lasers, 48 (6), art. no. 0600002., @2021 Линк
2078. Nadarajah, R., Tasdemir, L., Thiel, C., Salamon, S., Semisalova, A.S., Wende, H., Farle, M., Barcikowski, S., Erni, D., Gökce, B., Formation of fe-ni nanoparticle strands in macroscopic polymer composites: Experiment and simulation, (2021) Nanomaterials, 11 (8), art. no. 2095., @2021 Линк
2079. Nastulyavichus, A., Shahov, P., Khaertdinova, L., Tolordava, E., Saraeva, I., Yushina, Y., Rudenko, A., Ionin, A., Khmelniyskiy, R., Khmelenin, D., Borodina, T., Kharin, A., Kudryashov, S., Bactericidal impact of nickel-oxide nanoparticles on foodborne pathogens: Complementary microbiological and IR-spectroscopic insights, (2021) Applied Surface Science, 558, art. no. 149857., @2021 Линк
2080. Semaltianos, N.G., Karczewski, G., Laser Synthesis of Magnetic Nanoparticles in Liquids and Application in the Fabrication of Polymer-Nanoparticle Composites, (2021) ACS Applied Nano Materials, 4 (7), pp. 6407-6440., @2021 Линк
2081. Chen, T., Zhang, G., Zhang, H., Lv, J., Wang, Y., Qu, P., Stoian, R., Cheng, G., "Nano-spheroid formation on YAG surfaces induced by single ultrafast Bessel laser pulses", (2022) Applied Surface Science, 604, art. no. 154360 ., @2022 Линк
2082. Kharphanbuh, S.M., Phukan, A., Nath, A., "Magnetic field assisted nucleation dynamics of laser induced manganese oxide nanoparticles in water", (2022) Journal of Physics D: Applied Physics, 55 (37), art. no. 375002., @2022 Линк

2083. Sreenilayam, S.P., McCarthy, É., McKeon, L., Ronan, O., Fleischer, K., Nicolosi, V., Brabazon, D., "Silver Nano-Colloid Characterization for Printing Application", (2022) Key Engineering Materials, 926 KEM, pp. 220-225., @2022 Линк
2084. Sreenilayam, S.P., McCarthy, É., McKeon, L., Ronan, O., McCann, R., Fleischer, K., Freeland, B., Nicolosi, V., Brabazon, D., "Additive-free silver nanoparticle ink development using flow-based Laser Ablation Synthesis in Solution and Aerosol Jet printing", (2022) Chemical Engineering Journal, 449, art. no. 137817., @2022 Линк
2085. Subhan, A., Mourad, A.-H.I., Al-Douri, Y., "Influence of Laser Process Parameters, Liquid Medium, and External Field on the Synthesis of Colloidal Metal Nanoparticles Using Pulsed Laser Ablation in Liquid: A Review", (2022) Nanomaterials, 12 (13), art. no. 2144., @2022 Линк
2086. Yarali, E., Baniyadi, M., Zolfagharian, A., Chavoshi, M., Arefi, F., Hossain, M., Bastola, A., Ansari, M., Foyouzat, A., Dabbagh, A., Ebrahimi, M., Mirzaali, M.J., Bodaghi, M., "Magneto - / electro - responsive polymers toward manufacturing, characterization, and biomedical/ soft robotic applications", (2022) Applied Materials Today, 26, art. no. 101306., @2022 Линк
2087. Zhang, D.S., Li, Z.G., Liang, C.H., "Diverse nanomaterials synthesized by laser ablation of pure metals in liquids", (2022) Science China: Physics, Mechanics and Astronomy, 65 (7), art. no. 274203., @2022 Линк
2088. Attallah, A.H., Abdulwahid, F.S., Ali, Y.A., Haider, A.J. "Effect of Liquid and Laser Parameters on Fabrication of Nanoparticles via Pulsed Laser Ablation in Liquid with Their Applications: A Review". Plasmonics, @2023 1.000
2089. Naderi-Samani, H., Shoja Razavi, R., Mozaffarinia, R. "Investigating the effect of 532 nm and 1064 nm wavelengths and different liquid media on the qualities of silver nanoparticles yielded through laser ablation". Materials Chemistry and Physics 305, 128001, @2023 1.000
2090. Phukan, A., Nath, A. "Influence of an external magnetic field on laser-induced plasma and cavitation bubbles in submerged targets". Journal of Laser Applications 35(1), 012011, @2023 1.000
2091. Zhang, H., Qi, X., Liu, C., (...), Cui, H., Dong, J. "Effect of Sonication and Ceria Doping on Nanoparticles Fabricated by Laser Marker Ablation of Ti in Water". Nanomaterials 13(15), 2201, @2023 1.000
M.E. Koleva, N.N. Nedyalkov, Ru. Nikov, Ro. Nikov. Fabrication of Ag/ZnO nanostructures for SERS applications. Applied Surface Science, 508, Elsevier, 2020, DOI:https://doi.org/10.1016/j.apsusc.2019.145227, 145227-1-145227-9. JCR-IF (Web of Science):5.155
2092. Hanna Bandarenka Nadzeya V. Khinevich Aliaksandr A. Burko Sergey V. Redko Siarhei A. Zavatski Uladzislau Shapel Kahramon Z. Mamatkulov Maria Yu. Vorobyeva Grigory M. Arzumanyan, "3D silver dendrites for single - molecule imaging by surface - enhanced Raman spectroscopy", ChemNanoMat 10.1002/cnma.202000521., @2020 Линк
2093. Li, H., Ren, C., Meng, J., Gao, Y., Ren, T., Li, Y., Qiao, Y., Liu, C., Che, G. "Multifunction Sandwich Composite SERS Imprinted Sensor Based on ZnO/GO/Ag for Selective Detection of Cyfluthrin in River" ChemistrySelect 5 (21) (2020) 6475-6481., @2020 Линк
2094. Lim, F.S., Tan, S.T., Zhu, Y., Chen, J.-W., Wu, B., Yu, H., Kim, J.-M., Ginting, R.T., Lau, K.S., Chia, C.H., Wu, H., Gu, M., Chang, W.S., "Tunable Plasmon-Induced Charge Transport and Photon Absorption of Bimetallic Au-Ag Nanoparticles on ZnO Photoanode for Photoelectrochemical Enhancement under Visible Light", Journal of Physical Chemistry C, 124 (26) (2020) 14105-14117., @2020 Линк
2095. Bandarenka, H.V., Khinevich, N.V., Burko, A.A., Redko, S.V., Zavatski, S.A., Shapel, U.A., Mamatkulov, K.Z., Vorobyeva, M.Y., Arzumanyan, G.M. 3D Silver Dendrites for Single-molecule Imaging by Surface-enhanced Raman Spectroscopy (2021) ChemNanoMat, 7 (2), pp. 141-149., @2021 Линк
2096. Kumar, G., Soni, R.K. Trace-Level Detection of Explosive Molecules with Triangular Silver Nanoplates-Based SERS Substrates. Plasmonics (06 October 2021). <https://doi.org/10.1007/s11468-021-01544-0>, Article in Press, @2021 Линк
2097. López-Lorente, Á.I. Recent developments on gold nanostructures for surface enhanced Raman spectroscopy: Particle shape, substrates and analytical applications. A review (2021) Analytica Chimica Acta, 1168, art. no. 338474., @2021 Линк
2098. Tran, T.H., Nguyen, T.M.A., Dao, V.P.T., Sai, C.D., Bach, T.C., Pham, N.H., Ngac, A.B., Pham, V.T., Tran, T.K.C., Cheong, H., Nguyen, V.T. Highly sensitive characteristic of surface enhanced Raman scattering for CuO/Au core/shell nanowires substrate (2021) Ceramics International, Available online 19 October 2021 In Press., @2021 Линк
2099. Wang, G., Jing, Y., Dai, H., Liu, C. The influence of Cu ion implantation on the morphology and optical properties of TiO₂ nanogranular film (2021) Journal of Materials Science: Materials in Electronics, 32 (6), pp. 7455-7463., @2021
2100. Xia, B., Ganem, J.J., Briand, E., Steydli, S., Tancrez, H., Vickridge, I. The carbon and hydrogen contents in ALD-grown ZnO films define a narrow ALD temperature window (2021) Vacuum, 190, art. no. 110289., @2021
2101. Xue, Y., Shao, J., Sui, G., Ma, Y., Li, H. Rapid detection of orange II dyes in water with SERS imprinted sensor based on PDA-modified MOFs@Ag (2021) Journal of Environmental Chemical Engineering, 9 (6), art. no. 106317., @2021 Линк
2102. Yuan, Y., Zhou, Z., Luo, J., Dan, Z., Qin, F., Chang, H. (1 1 1)-facet dominant ultrafine nanoporous silver as SERS substrates with high sensitivities and ultrahigh detection limits (2021) Applied Surface Science, 556, art. no. 149820., @2021
2103. Adéla Jagerová, Josef Flaks, Zdeněk Sofer, Marek Vronka, Alena Michalcová and Anna Macková, The synthesis of Au-NPs by ion implantation in the crystalline GaN and characterisation of their optical properties, EPJ Web Conf., Volume 261, 2022 <https://doi.org/10.1051/epjconf/202226101003>, @2022 Линк

2104. Baoqiang Du, Jibing Tan, Chang Ji, Mingrui Shao, Xiaofei Zhao, Jing Yu, Chao Zhang, Chuansong Chen, Hui Pan, Baoyuan Man & Zhen Li, Study of thermoelectric enhanced SERS and photocatalysis with ZnO-metal nanorod arrays, 2022, Nano Research, <https://doi.org/10.1007/s12274-022-5253-y>, @2022 [Линк](#)
2105. Govind Kumar, Ravi Kant Soni, Trace-Level Detection of Explosive Molecules with Triangular Silver Nanoplates-Based SERS Substrates, 2022, Plasmonics, 17(2), pp. 559-573, @2022 [Линк](#)
2106. Jie Huang, Tianxiang Zhou, Wenshi Zhao, Sicheng Cui, Rui Guo, Dan Li, Naveen Reddy Kadasala, Dong lai Han, Yuhong Jiang, Yang Liu, Huilian Liu, Multifunctional magnetic Fe₃O₄/Cu₂O-Ag nanocomposites with high sensitivity for SERS detection and efficient visible light-driven photocatalytic degradation of polycyclic aromatic hydrocarbons (PAHs) 2022 Journal of Colloid and Interface Science, 628, pp. 315-326, @2022 [Линк](#)
2107. Prakash, J., Samriti, N., Wijesundera, D.N., Rajapaksa, I., Chu, W.-K., Ion beam nanoengineering of surfaces for molecular detection using surface enhanced Raman scattering, 2022, Molecular Systems Design and Engineering, 2022, 7, 411-421, <https://doi.org/10.1039/D2ME00006G>, @2022 [Линк](#)
2108. Runze Shen, Taiyang Zhang, Hu Zhu, Lixia Qin, Shi-Zhao Kang, Xiangqing Li, A dendritic Ag induced by the polyaniline on copper sheet for facilely and highly efficient SERS detection, Materials Chemistry and Physics, Volume 287, 1 August 2022, 126346, @2022 [Линк](#)
2109. Thi HaTran, Thi Mai Nguyen, Vu Phuong Thao Dao, Cong Doanh Sai, Thanh Cong Bach, Nguyen Hai Pham, An Bang Ngac, Van Thanh Pham, Thi Kim Chi Tran, Hyeonsik Cheong, Viet TuyenNguyen., Highly sensitive characteristic of surface enhanced Raman scattering for CuO/Au core/shell nanowires substrate, 2022, Ceramics International, 48(3), pp. 3199-3205, @2022 [Линк](#)
2110. Thi Thu Ha Pham, Xuan Hoa Vu, Nguyen Dac Dien, Tran Thu Trang, Tran Thi Kim Chi, Pham Ha Phuong, Nguyen Trong Nghia, Ag nanoparticles on ZnO nanoplates as a hybrid SERS-active substrate for trace detection of methylene blue, Open Access, 2022, RSC Advances, 12(13), pp. 7850-7863, @2022 [Линк](#)
2111. TRAN THI HA, HANOI NATIONAL UNIVERSITY OF NATURAL SCIENCE, RESEARCH OF NANO Au MATERIAL PROPERTIES, ZnO/Au, CuO/Au, and ORIENTATION MATERIALS APPLICATIONS IN BIOLOGY & ENVIRONMENT, Hanoi TRẦN THỊ HÀ, ĐẠI HỌC QUỐC GIA HÀ NỘI TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN NGHIÊN CỨU TÍNH CHẤT VẬT LIỆU NANO Au, VẬT LIỆU TỔ HỢP ZnO/Au, CuO/Au VÀ ĐỊNH HƯỚNG ỨNG DỤNG TRONG Y SINH & MÔI TRƯỜNG Hà Nội, @2022 [Линк](#)
2112. C S, K., Nair, A.S., George, P., (...), Ulahannan, J.P., A C, S. "Hydrothermally synthesized Ag decorated β-Ga₂O₃ heterostructures as low cost, reusable SERS substrates for the nanomolar detection of rhodamine 6G". Journal of Physics and Chemistry of Solids 179, 111407, @2023 1.000
2113. Du, B., Tan, J., Ji, C., (...), Man, B., Li, Z. "Study of thermoelectric enhanced SERS and photocatalysis with ZnO-metal nanorod arrays". Nano Research 16(4), pp. 5427-5435, @2023 1.000
2114. J Gokulakrishnan, K. C. Sekhar, Kamakshi Koppole et al. Green synthesized Ag/rGO embedded flexible cotton SERS substrate for detection of methylene blue, PREPRINT Researchsquare, @2023 [Линк](#)
2115. Jin, D., Lee, Y., Lee, C., Kim, M.H. "Electrochemically programmed evolution of 3-dimensional Ag-microstructure dictating dramatic Raman amplification for sensitive detection of molecules". Materials Today Nano 24, 100381, @2023 1.000
2116. Kumaravel, S., Kim, H. "Development and characterization of solar active Ag-ZnO/g-C₃N₄ as a highly efficient photocatalyst for the detoxification of organic pollutant". Colloids and Surfaces A: Physicochemical and Engineering Aspects 679, 132644, @2023 1.000
2117. Salim, K.H., Khudair, H.F., Mohammed, K.A., (...), Elayaperumal, M., Saxena, K.K. "Eco-Friendly Synthesis OF Ag-ZnO Nanocomposite and its Anti-Bacterial Activity, Photocatalysis Toward Degradation of (CB) Dye and Removal Wastewater Pollution". International Journal of Nanoscience 2350041, @2023 1.000
2118. Sun, C., Guo, N., Ye, L., (...), Yan, M., Ding, J. "Quantitative detection of phenol red by surface enhanced Raman spectroscopy based on improved GA-BP". Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy 296, 122663, @2023 1.000
2119. Tran, T.H., Pham, N.H., Nguyen, T.H., (...), Pham, V.T., Ngac, A.B. "Preparation of ZnO/Ag nanoflowers by hydrothermal assisted with galvanic effect and its surface enhanced Raman scattering activity". Chemical Physics Letters 833, 140948, @2023 1.000
2120. Wu, H., Wang, J., Yang, Q., (...), Pan, J., Li, C. "Ultrasensitive and stable SERS detection by defect engineering constructed Ag@Ga-doped ZnO core-shell nanoparticles". Applied Surface Science 621, 156873, @2023 1.000

Nikov R.G., Dikovska A.O., Avdeev G.V., Atanasova G.B., Nedyalkov N.N.. Composite magnetic and non-magnetic oxide nanostructures fabricated by a laser-based technique. Applied Surface Science, 549, Elsevier B.V., 2021, DOI:10.1016/j.apsusc.2021.149204, 149204-149204. JCR-IF (Web of Science):6.707

2121. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". Vacuum 211, 111912, @2023 1.000
- Nikov R.G., Dikovska A.O., Avdeev G.V., Atanasova G.B., Karashanova D.B., Amoroso S., Ausanio G., Nedyalkov N.N.. Single-step fabrication of oriented composite nanowires by pulsed laser deposition in magnetic field. Materials Today Communications, 26, Elsevier Ltd, 2021, DOI:10.1016/j.mtcomm.2020.101717, 101717-101717. JCR-IF (Web of Science):3.383**
2122. Krajewski, M., Kaczmarek, A., Tokarczyk, M., (...), Hoffman, J., Ślawska-Waniewska, A. Laser-"Assisted Growth of Fe₃O₄ Nanoparticle Films on Silicon Substrate in Open Air". Physica Status Solidi (A) Applications and Materials Science 220(6), 2200786, @2023 1.000
2123. Lu, Y., Yang, C., Wang, H., (...), Xu, M., Xi, L. "Structure, principle, and application of magnetic field-assisted pulsed laser deposition: An overview". Vacuum 211, 111912, @2023 1.000

- Nedyalkov N, Dikovska A, Aleksandrov L, Terakawa M. Nanosecond laser ablation of AlN ceramic. Appl. Phys. A, 127, 2021, 951. JCR-IF (Web of Science):2.584**
2124. Wang, X., Jia, Z., Ma, J., Han, D., Qi, X., Gui, C., Liu, W. "Prediction method of radial heat-affected zone width in nanosecond pulsed laser ablation of TC4 titanium alloy". *International Journal of Advanced Manufacturing Technology* 121(3-4), pp. 2663-2670, 2022, @2022 1.000
2125. Xu, S., Zhao, X.-K., Zhao, Z.-L. "Effect of Process Parameters on Resistance of Laser Metallized Layer of AlN Ceramics". *Surface Technology* 52(5), pp. 398-404, @2023 1.000
- Nedyalkov N, Dikovska A, Nikov R, Atanasova G, Hayashi S, Terakawa M. Laser-induced periodic structure formation in AlN ceramic. Optics and Laser Technology, 144, 2021, 107402. JCR-IF (Web of Science):3.867**
2126. Daewong Park, Sungyoon Lee, Seungjin Hwang, Geonhui Lee, Hanjin Jo, Sanghyun Park, Seryeyohan Cho, Tae Jun Yu, Study of the Change in Surface Wettability for Zircaloy-4 Utilizing Spatially Homogenized Nanosecond Laser Beam, *Journal of Welding and Joining* 2022; 40(2): 156-164., @2022 1.000
2127. Park, D., Lee, S., Hwang, S., Lee, G., Go, H., Cho, S., Yu, T.J. "Surface wettability control on zircaloy-4 by nanosecond Nd:YAG laser with beam homogenizer". *AIP Advances* 12(6), 065130, 2022, @2022 1.000
2128. Zhao, W., Mei, X., Wang, L. "Competitive mechanism of laser energy and pulses on holes ablation by femtosecond laser percussion drilling on AlN ceramics". *Ceramics International* 48(24), pp. 36297-36304, 2022, @2022 1.000
2129. Pan, F., Wang, J., Xu, H., Yao, J., Wang, Q. "Research Status and Development Trend of Ultra Precision Machining of Aluminum Nitride Ceramics". *Journal of Ceramics* 44(2), pp. 208-216, @2023 1.000
- Nedyalkov N, Nikov R, Nikov R, Dikovska A, Karashanova D, Grochowska, K, Sliwinski G, Terakawa M. Pulsed laser deposition of plasmonic structures in air by irradiation through the substrate. Thin Solid Films, 734, 2021, 138836. JCR-IF (Web of Science):2.183**
2130. Bonjakhi, M., Mahdieh, M.H. "The Effects of Thermal Annealing and Postirradiation on Silver Nanoparticle Films Fabricated by Pulsed Laser Deposition in the Flowless Open Air". *Physica Status Solidi (A) Applications and Materials Science* 220(17), 2300307, @2023 1.000
- Atanasov P, Nedyalkov N, Fukata N, Jevasuwan W. Advanced silver and gold substrates for surface-enhanced Raman spectroscopy of pesticides. Spectroscopy Letters, 54, 2021, 528.**
2131. Zhang, S., Xu, J., Liu, Z., Huang, Y., Jiang, S. Rapid and scalable preparation of flexible Ag nanoparticle-decorated nanocellulose SERS sensors by magnetron sputtering for trace detection of toxic materials 2022 *Cellulose* 29(18), pp. 9865-9879, @2022 1.000
- Nikov, Ro, Dikovska, A, Nedyalkov, N, Nikova, T, Karashanova, D. Nanosecond laser ablation of composite thin films in liquid. Journal of Physics: Conference Series, 1859, 012012, IOP Publishing Ltd, 2021, ISSN:17426588, DOI:10.1088/1742-6596/1859/1/012012, SJR(Scopus):0.21**
2132. Garcia-de-los-Rios, V.M., Arano-Martínez, J.A., Trejo-Valdez, M., (...), Vidales-Hurtado, M.A., Torres-Torres, C. "Fractional Photoconduction and Nonlinear Optical Behavior in ZnO Micro and Nanostructures". *Fractal and Fractional* 7(12), 885, @2023 1.000
- Nikolov A.S., Stankova N.E., Karashanova D.B., Nedyalkov N.N., Pavlov E.L., Koev K.T., Najdenski H., Kussovski V., Avramov L.A., Ristoscu C., Badiceanu M., Mihailescu I.N.. Synergistic effect in a two-phase laser procedure for production of silver nanoparticles colloids applicable in ophthalmology. Optics & Laser Technology, 138, Elsevier, 2021, ISSN:00303992, DOI:https://doi.org/10.1016/j.optlastec.2020.106850, 106850-1-106850-8. SJR (Scopus):0.8, JCR-IF (Web of Science):3.867**
2133. Nene, A., Galluzzi, M., Hongrong, L., Somani, P., Ramakrishna, S., Yu, X.-F., Synthetic preparations and atomic scale engineering of silver nanoparticles for biomedical applications 2021 *Nanoscale*, 13(33), pp. 13923-13942, @2021
2134. Jianing, L., Dongshi, Z., & Zhuguo, L. "Advance in femtosecond laser fabrication of flexible electronics". *Opto-Electronic Engineering*, 2022, 49(2), 210388-1.,
2135. López-Álvarez, M., L. González-Rodríguez, F. Gontad, R. Teixeira-Santos, M. Doiro, L. Álvarez-Gómez, F. J. M. Mergulhão, P. González, and J. Serra. "Dual pulsed laser deposition of Ag nanoparticles on calcium phosphate coatings for biomedical applications." *Biomedical Physics & Engineering Express* 8, no. 6 (2022): 065019.,
2136. Pérez-Tanoira R, Fernández-Arias M, Potel C, Carballo-Fernández R, Pérez-Castro S, Boutinguiza M, Górgolas M, Lusquiños F, Pou J. "Silver Nanoparticles Produced by Laser Ablation and Re-Irradiation Are Effective Preventing Peri-Implantitis Multispecies Biofilm Formation". *International Journal of Molecular Sciences*. 2022; 23(19):12027,
2137. Mahmood Alhajj, Md. Safwan Abd Aziz, A.A.Salim, Sunita Sharma, W.H.A. Kamaruddin, S.K.Ghoshal. "Customization of structure, morphology and optical characteristics of silver and copper nanoparticles: Role of laser fluence tuning". *Appl. Sur. Sci.* 614, 2023, p. 156176, @2023 Линк
2138. Marquis, M., Musino, D., Gemin, V., (...), Passerini, D., Capron, I. "Alginate microgels encapsulation strategy of silver nanoparticles active against *Candida albicans*". *Carbohydrate Polymer Technologies and Applications* 6, 100405, 2023,

Nadya Stankova, Anastas Nikolov, Ekaterina Iordanova, Georgi Yankov, Nikolay Nedyalkov, Petar Atanasov, Dragomir Tatchev, Eugenia Valova, Konstantin Kolev, Stephan Armyanov, Karashanova D, Naoki Fukata. New approach toward laser - assisted modification of biocompatible polymers relevant to neural interfacing technologies. Polymers, 13, 17, MDPI, 2021, ISSN:2073-4360, DOI:doi.org/10.3390/polym13173004, 3004-1-3004-20. JCR-IF (Web of Science):4.329

2139. Kechagias, J.D., Fountas, N.A., Ninikas, K., Vaxevanidis, N.M. "Kerf Geometry and Surface Roughness Optimization in CO₂ Laser Processing of FFF Plates Utilizing Neural Networks and Genetic Algorithms Approaches". *Journal of Manufacturing and Materials Processing* 7 (2), 77, 2023, @2023 Линк
2140. Rowthu, S., Mattaparthi, S., Siringil, E., Hoffmann, P. "Sewage Water-Repellent PDMS and Magnetic Silicone Composites: Lab to Commercialization". *ACS Applied Polymer Materials* 5(8), pp. 6161-6175, 2023, @2023 Линк

Ro. G. Nikov, N. N. Nedyalkov, A. Og. Dikovska, D. B. Karashanova. Nanonetworks fabrication by laser ablation in water of bimetallic compositions of platinum and palladium with gold and silver. *Lasers in Manufacturing and Materials Processing*, 9, Springer US, 2022, DOI:<https://doi.org/10.1007/s40516-022-00168-4>, 102-116. SJR (Scopus):0.498, JCR-IF (Web of Science):2.41

2141. Awada, C., Ruffino, F. "A Study of the Laser-Assisted Alloying Effect on Plasmonic Properties of Au-Pd Nanostructured Film Using Surface-Enhanced Raman Spectroscopy". *Coatings* 13(4), 797, @2023 1.000
2142. Goncharova, D., Salaev, M., Volokitina, A., (...), Svetlichnyi, V., Vodyankina, O. "Gold-based catalysts prepared by pulsed laser ablation: A review of recent advances". *Materials Today Chemistry* 33, 101709, @2023 1.000
- Atanasova, G, Dilova, T, Dikovska, A.O., Nikov, R.G., Nedyalkov, N.N.. Acetone-sensing properties of ZnO–noble-metals composite nano-structures and their improvement by light irradiation. *Thin Solid Films*, 750, 139198, Elsevier, 2022, DOI:<https://doi.org/10.1016/j.tsf.2022.139198>, SJR (Scopus):0.468, JCR-IF (Web of Science):2.358**
2143. Mishra, R.K., Kumar, V., Trung, L.G., Choi, G.J., Ryu, J.W., Mane, S.M., Shin, J.C., Kumar, P., Lee, S.H., Gwag, J.S. "WS₂ Nanorod as a Remarkable Acetone Sensor for Monitoring Work/Public Places". *Sensors* 22(22), 8609, 2022, @2022 1.000
2144. Chizhov, A., Kutukov, P., Gulin, A., Astafiev, A., Rumyantseva, M. Highly "Active Nanocrystalline ZnO and Its Photo-Oxidative Properties towards Acetone Vapor". *Micromachines* 14(5), 912, @2023 1.000
- E Iordanova, G Yankov, N Stankova, N Nedyalkov. Modification and activation of the surface of medical-grade PDMS after irradiation by ultrashort laser pulses. *Journal of Physics: Conference Series*, 2240, 012051, IOPScience, 2022, DOI:DOI 10.1088/1742-6596/2240/1/01205, SJR (Scopus):0.21**
2145. Rimkus, L., Darginavičius, J., Atkočaitis, E., Augus, A. "Solid-state femtosecond UV lasers: Recent advances and challenges". *Proceedings of SPIE - The International Society for Optical Engineering, UV and Higher Energy Photonics: From Materials to Applications* 12652, 1265206, 16-28, 2023, @2023 Линк

Stankova N.E., Nikolov A., Karashanova D., Nedyalkov N., Dikovska A.. Laser-assisted synthesis of metallic composite nanostructures in aqueous solutions. *Journal of Physics: Conference Series*, 2487, 12023, 2023, ISSN:17426588, DOI:10.1088/1742-6596/2487/1/012013, SJR (Scopus):0.183

2146. Liu, X., Liang, X., Yu, J., (...), Duan, W., Zeng, J. "Recent development of noble metal-based bimetallic nanoparticles for colorimetric sensing". *TrAC - Trends in Analytical Chemistry* 169, 117386, 2023
2147. Naranji, E., Aliannezhadi, M., & Panahibakhsh, S. (2023). Surface structured silver-copper bimetallic nanoparticles by irradiation of excimer laser pulses to bilayer thin films. *Physica Scripta*, 98(10), 105529, 2023

Nikolov A.S., Stankova N.E., Karashanova D.B., Nedyalkov N.N., Pavlov E.L., Koev K.T., Najdenski H., Kussovski V., Avramov L.A., Ristoscu C., Badiceanu M., Mihailescu I.N.. Synergistic effect in a two-phase laser procedure for production of silver nanoparticles colloids applicable in ophthalmology. *Optics & Laser Technology*, 138, Elsevier, 2021, ISSN:00303992, DOI:<https://doi.org/10.1016/j.optlastec.2020.106850>, 106850-1-106850-8. SJR (Scopus):0.8, JCR-IF (Web of Science):3.867.

2148. Nazha, H.M., Darwich, M.A., Ammar, B., Dakkak, H., Juhre, D., Determination of Laser Parameters in Thermomechanical Treatment of Skin Based on Response Surface Methodology, *Applied Sciences*, 14(6), 2619, 2024.
2149. Kasálková, N.S., Juřicová, V., Rimpelová, S., Švorčík, V., Slepíčka, P., LIPSS pattern induced by polymer surface instability for myoblast cell guidance *Polymer Degradation and Stability*, , 221, 110667, 2024.

M.E. Koleva, N.N. Nedyalkov, Ru. Nikov, Ro. Nikov. Fabrication of Ag/ZnO nanostructures for SERS applications. *Applied Surface Science*, 508, Elsevier, 2020

2150. Jagerová, A. Malinský, P., Sofer, Z., Galeckas, A., Macková, A., Evolution of Au nanoparticles in c-plane GaN under the heavy ion implantation and their optical properties, *Journal of Alloys and Compounds*, 986, 174035, 2024.
2151. Vemula, S.K., Katta, V.S., Ojha, S., Singh, F., Raavi, S.S.K., A study on the Raman response of TiO₂ upon ion-implantation and annealing in O₂ atmosphere, *Optical Materials*, 148, 114947, 2024.
2152. Kalashgrani, M.Y., Mousavi, S.M., Akmal, M.H., Lai, C.W., Rahman, M.M., Gold Fluorescence Nanoparticles for Enhanced SERS Detection in Biomedical Sensor Applications: Current Trends and Future Directions, *Chemical Record*, <https://doi.org/10.1002/tcr.202300303>, 2024.
2153. Gokulakrishnan J., Koppole, K., Green synthesized Ag/rGO embedded flexible cotton SERS substrate for methylene blue detection, *Optical Materials*, 147, 114712, 2024.

2154. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M., 3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures, *Advanced Electronic Materials*, , 10(3), 2300705, 2024
2155. Dai, W., Xia, X., Ding, X., Hou, Z., Cao, Y., Enhancing Microfluidic Chip Functionality via Thermal Gradient-Driven Optofluidic Manipulation, *Advanced Materials Technologies*, <https://doi.org/10.1002/admt.202301986> 2024

N.E. Stankova, P.A. Atanasov, Ru.G. Nikov, R.G. Nikov, N.N. Nedyalkov, T.R. Stoyanchoy, N. Fukata, K.N. Kolev, E.I. Valova, J.S. Georgieva, St.A. Armyanov. Optical properties of polydimethylsiloxane (PDMS) during nanosecond laser processing. *Applied Surface Science*, 374, Elsevier, 2016, ISSN:01694332, DOI:<https://doi.org/10.1016/j.apsusc.2015.10.016>, 96-103.

2156. Bakhtiari, N., Ihlemann, J., Fabrication of fluidic submicron-channels by pulsed laser-induced buckling of SiO_x films on fused silica, *Discover Nano*, , 19(1), 46, 2024.
2157. Hayashi, S., Du, X., Rupp, M., Terakawa, M., Arnold, C.B., Defect-initiated formation mechanism of 3D carbon tracks on flexible transparent substrates by laser irradiation, *Optics and Laser Technology*, , 174, 110686, 2024.
2158. Theogene, B., Cui, J., Ren, X., Wang, Z., Mei, X., Influence of Laser Power on Achieving Ultra Low Stiffness in Resistive Strain Gauges Through on Laser Bonding Transfer-Patterning of Multiwall Carbon Nanotubes (MWCNTs) onto Polydimethylsiloxane (PDMS) Film, *Advanced Materials Interfaces*, , 11(11), 2300842, 2024.
2159. Straus, I., Kravanja, G., Hribar, L., Drevensek-Olenik, I., Kokot, G., Surface Modification of Magnetoactive Elastomers by Laser Micromachining, *Materials*, 17(7), 1550, 2024.
2160. Baghaee Ivriq, S., Laursen, K., Jørgensen, A.M., Iversen, B.B., Moradi, F., A System-Level Feasibility Study of a Lead-Free Ultrasonically Powered Light Delivery Implant for Optogenetics, *Advanced Intelligent Systems*, 6(3), 2300527, 2024.
2161. Xia, X., Ding, X., Zhang, L., Hou, Z., Cao, Y., Laser Direct Writing Inkless Flexible Sensor, *IEEE Sensors Journal*, , 24(4), pp. 4267–4273, 2024.
2162. Qiming, Z., Inagaki, N.F., Hirabayashi, Y., Kamihira, M., Ito, T., Development of rapid hypoxia-detectable artificial oxygen carriers with a core-shell structure and erythrocyte mimetic shape, *Materials Advances*, DOI <https://doi.org/10.1039/D3MA01135F>, 2024.
2163. Dai, W., Xia, X., Ding, X., Hou, Z., Cao, Y., Enhancing Microfluidic Chip Functionality via Thermal Gradient-Driven Optofluidic Manipulation, *Advanced Materials Technologies*, <https://doi.org/10.1002/admt.202301986> 2024.
2164. Kostadinov, I.K., Temelkov, K.A., Shehadi, M., Slaveeva, S.I., Yankov, G.P., New diffraction-limited laser systems with variable output parameters operating in visible spectral range on copper atomic transitions for advanced material micromachining, *Journal of Physics: Conference Series*, , 2710(1), 012015, 2024.

Amoruso S., Bruzzese R., Wang X., Nedyalkov N.N., Atanasov P.A., Femtosecond laser ablation of nickel in vacuum, (2007) *Journal of Physics D: Applied Physics*, 40 (2), art. no. 008, pp. 331 – 340

2165. Tsubaki, A.T., Anderson, M., Shield, J.E., Alexander, D.R., Zuhlke, C.A., Seeding the growth of femtosecond laser produced microstructures on copper with multi-layered materials, *Applied Surface Science*, , 658, 159849, 2024
2166. Buerkle, M., Padmanaban, D.B., McGlynn, R., Mariotti, D., Svrcsek, V., Unexpected Electronic Features of NiO Quantum Dots Produced by Femtosecond Pulsed Laser Ablation in Water, *Journal of Physical Chemistry Letters*, , 15(15), pp. 4185–4190, 2024

Stankova N.E., Atanasov P.A., Nedyalkov N.N., Stoyanchoy T.R., Kolev K.N., Valova E.I., Georgieva J.S., Armyanov S.A., Amoruso S., Wang X., Bruzzese R., Grochowska K., Iwiński G., Baert K., Hubin A., Delplancke M.P., Dille J. Fs- and ns-laser processing of polydimethylsiloxane (PDMS) elastomer: Comparative study, (2015) *Applied Surface Science*, 336, pp. 321 – 328.

2167. Thekkekara, L.V., Cheong, Y.Z., Rahman, M.A., Sriram, S., Bhaskaran, M., 3D Stretchable Devices: Laser-Patterned Electronic and Photonic Structures, *Advanced Electronic Materials*, 10(3), 2300705, 2024
2168. Xia, X., Ding, X., Zhang, L., Hou, Z., Cao, Y., Laser Direct Writing Inkless Flexible Sensor, *IEEE Sensors Journal*, , 24(4), pp. 4267–4273, 2024.
2169. Tran, H.Q., Rehman, A., Fioux, P., Vandamme, T., Luchnikov, V., Formation of a Controllable Diffusion Barrier Layer on the Surface of Polydimethylsiloxane Films by Infrared Laser Irradiation, *ACS Applied Materials and Interfaces*, 16(6), pp. 7983–7995, 2024.

Nedyalkov N.N., Imamova S.E., Atanasov P.A., *J. Phys. D: Appl. Phys.*, 37, 4, 638-643 (2004).

2170. Alexopoulou, V.E., Markopoulos, A.P., An advanced methodology for the development of highly accurate two temperature models (TTMs) to describe the material irradiation by an ultrashort laser, *Optics and Laser Technology*, ,

- 177, 111062, 2024.
2171. Li, B., Zhu, J., Zhao, X., Yao, H., Residual stress prediction in laser shock peening induced LD-TC4 alloy by data-driven ensemble learning methods, *Optics and Laser Technology*, 176, 110946, 2024.
2172. Kawaguchi, H., Yasuhara, R., Yang, H., Ota, M., Uehara, H., Femtosecond vector vortex laser ablation in tungsten: chiral nano-micro texturing and structuring, *Optical Materials Express*, 14(2), pp. 424–434, 2024.
2173. Choi, J., Cho, K., Cho, S.-H., Ablation morphology and characteristic analysis of anisotropic conductive film (ACF) using femtosecond lasers with NIR, Green, and DUV wavelengths for micro-LED display repair, *Applied Physics A: Materials Science and Processing*, 130(2), 140, 2024.
2174. Chen, Y., Wan, X., Si, J., Chen, A., Jin, M., High-sensitivity analysis of trace elements in water using femtosecond LIBS with dry droplet pretreatment on a metallic substrate, *Journal of Analytical Atomic Spectrometry*, DOI <https://doi.org/10.1039/D3JA00432E>, 2024.
2175. Yi Zhang, Jiaqing Pei, Zhuohui Huang, Leyong Jiang, Kai Yin, Jie Jiang, Maskless Femtosecond-Laser-Processed Ionotronic Double-Gate Transistor Array for Pattern Adaptation Emulation, *Adv. Func. Mat.*, <https://doi.org/10.1002/adfm.202400822>, 2024.

Nikov Ru.G., Nedyalkov N.N., Atanasov P.A., Hirsch D., Rauschenbach B., Grochowska K., Sliwinski G., Characterization of Ag nanostructures fabricated by laser-induced dewetting of thin films, (2016) *Applied Surface Science*, 374, pp. 36 – 41.

2176. Petrikaitė, V., Ignatjev, I., Selskis, A., Niaura, G., Stankevičius, E., Hybrid gold-silver nanoparticles synthesis on a glass substrate using a nanosecond laser-induced dewetting of thin bimetallic films and their application in SERS, *Optics and Laser Technology*, 168, 109956, 2024.
2177. Wang, J.-J., Chen, I.-C., Lin, H.-K., Lin, Y.-C., Huang, C.-J., Preparation of uniform Ag nanoparticles with enhanced plasmon resonance intensity and antibacterial efficiency via two-step dewetting process, *Optics and Laser Technology*, 168, 109886, 2024

Atanasova G., Dikovska A.O., Dilova T., Georgieva B., Avdeev G.V., Stefanov P., Nedyalkov N.N., Metal-oxide nanostructures produced by PLD in open air for gas sensor applications, (2019) *Applied Surface Science*, 470, pp. 861 – 869.

2178. Wang, H., Deng, D., Zhai, Z., Yao, Y., Laser-processed functional surface structures for multi-functional applications-a review, *Journal of Manufacturing Processes*, 116, pp. 247–283, 2024.
2179. Wu, G., Du, H., Pakravan, K., Pan, X., Kim, D.-J., Wearable room-temperature ethanol sensor based on Ti3C2Tx/Polypyrrole functionalized face mask for drunk driving monitoring, *Carbon*, 216, 118565, 2024
2180. Filipescu, M., Dobrescu, S., Bercea, A.I., Brajnicov, S., Palla-Papavlu, A., Polypyrrole–Tungsten Oxide Nanocomposite Fabrication through Laser-Based Techniques for an Ammonia Sensor: Achieving Room Temperature Operation, *Polymers*, 16(1), 79, 2024

Nedyalkov N., Dikovska A., Aleksandrov L., Terakawa M, Nanosecond laser ablation of AlN ceramic, (2021) *Applied Physics A: Materials Science and Processing*, 127 (12), art. no. 951

2181. Xiong, L., Wang, C., Wu, W., Deng, H., Cheung, C.F., The surface softening mechanism of AlN ceramic by laser treatment, *Surfaces and Interfaces*, 46, 104023, 2024

Nedyalkov N.N., Dikovska A., Nikov R., Atanasova G., Hayashi S., Terakawa M., Laser-induced periodic structure formation in AlN ceramic, (2021) *Optics and Laser Technology*, 144, art. no. 107402.

2182. Chen, N., Liu, J., He, N., Jia, Y., Yu, N., Fabrication of high aspect ratio grooves on aluminium nitride by laser and chemical milling enhanced micro milling, *Journal of Materials Processing Technology*, 325, 18299, 2024.
2183. Fang, R., Xu, F., Luo, C., Zhou, X., Vorobyev, A.Y., Interfacially-engineered trifunctional high-temperature nano/microstructured aluminum nitride ceramic for evaporation-based technologies, *Journal of Materials Research and Technology*, 29, pp. 703–713, 2024.

Atanasov P.A., Nedyalkov N.N., Fukata N., Jevasuwan W., Subramani T, Surface-enhanced Raman spectroscopy of neonicotinoid insecticide imidacloprid, assisted by gold and silver nanostructures, (2020) *Spectroscopy Letters*, 53 (3), pp. 184 – 193.

2184. Hermsen, A., Hertel, F., Wilbert, D., Mayer, C., Jaeger, M., Pesticide Identification Using Surface-Enhanced Raman Spectroscopy and Density Functional Theory Calculations: From Structural Insights to On-Site Detection, *Applied Spectroscopy*, <https://doi.org/10.1177/0003702824123652024>.
2185. Afrozeh, A., A Review of Developed Surface-Enhanced Raman Spectroscopy (SERS)-Based Sensors for the Detection of Common Hazardous Substances in the Agricultural Industry, *Plasmonics*, <https://doi.org/10.1007/s11468->

Atanasov P.A., Nedyalkov N.N., Fukata N., Jevasuwan W., Subramani T., Surface-Enhanced Raman Spectroscopy (SERS) of Neonicotinoid Insecticide Thiachloprid Assisted by Silver and Gold, Nanostructures, (2020) Applied Spectroscopy, 74 (3), pp. 357 – 364.

2186. Guo, Z., Wu, X., Jayan, H., El-Seedi, H.R., Zou, X., Recent developments and applications of surface enhanced Raman scattering spectroscopy in safety detection of fruits and vegetables, *Food Chemistry*, 434, 137469, 2024.
2187. Abu Bakar, N., Fronzi, M., Shapter, J.G., Surface-Enhanced Raman Spectroscopy Using a Silver Nanostar Substrate for Neonicotinoid Pesticides Detection, *Sensors*, 24(2), 373, 2024

Nedyalkov N., Stankova N.E., Koleva M.E., Nikov R., Aleksandrov L., Iordanova R., Atanasova G., Iordanova E., Yankov G., Laser processing of noble metal doped glasses by femto- and nanosecond laser pulses, (2019) Applied Surface Science, 475, pp. 479 – 486.

2188. Zhang, Y., Li, J., Jiao, S., Maryam, B., Liu, X., Microfluidic sensors for the detection of emerging contaminants in water: A review, *Science of the Total Environment*, 929, 172734, 2024.
2189. Zhu, D., Zuo, P., Li, F., Liu, J., Qian, X., Fabrication and applications of surface micro/nanostructures by femtosecond laser, *Colloids and Interface Science Communications*, 59, 100770, 2024

Atanasov P.A., Nedyalkov N.N., Fukata N., Jevasuwan W., Subramani T., Terakawa M., Nakajima Y., Surface-Enhanced Raman Spectroscopy (SERS) of Mancozeb and Thiamethoxam Assisted by Gold and Silver Nanostructures Produced by Laser Techniques on Paper, (2019) Applied Spectroscopy, 73 (3), pp. 313 – 319.

2190. Abu Bakar, N., Fronzi, M., Shapter, J.G., Surface-Enhanced Raman Spectroscopy Using a Silver Nanostar Substrate for Neonicotinoid Pesticides Detection, *Sensors*, 24(2), 373, 2024

Atanasov P.A., Nedyalkov N.N., Fukata N., Jevasuwan W., Subramani T., Hirsch D., Rauschenbach B., Au and Ag films and nanostructures for detection of fungicide mancozeb: SERS analyses, (2019) AIP Conference Proceedings, 2075, art. no. 030001,

2191. Afroozeh, A., A Review of Developed Surface-Enhanced Raman Spectroscopy (SERS)-Based Sensors for the Detection of Common Hazardous Substances in the Agricultural Industry, *Plasmonics*, <https://doi.org/10.1007/s11468-024-02261-0>, 2024

Terakawa M., Torres-Mapa M.L., Takami A., Heinemann D., Nedyalkov N.N., Nakajima Y., Hördt A., Ripken T., Heisterkamp A, Femtosecond laser direct writing of metal microstructure in a stretchable poly(ethylene glycol) diacrylate (PEGDA) hydrogel, (2016) Optics Letters, 41 (7), pp. 1392 – 1395.

2192. Fan, X., Wang, X., Ye, Y., Zhang, Y., Wang, C., Printing 3D Metallic Structures in Porous Matrix, *Small*, <https://doi.org/10.1002/smll.202312071>, 2024

Aleksandrov L., Milanova M., Yordanova A., Iordanova R., Nedyalkov N., Petrova P., Tagiara N.S., Palles D., Kamitsos E.I., Synthesis, structure and luminescence properties of Eu³⁺-doped 50ZnO.40B₂O₃.5WO₃.5Nb₂O₅ glass, (2023) Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, 64 (4), pp. 101 – 109

2193. Vijayalakshmi, L., Kwon, S.J., Energy transfer-based color tunability, thermal quenching, and quantum yield of Sm³⁺/Eu³⁺ codoped lithium zinc borophosphate glasses, *Ceramics International*, 50(3), pp. 5728–5738, 2024.

Nikolov A.S., Balchev I.I., Nedyalkov N.N., Kostadinov I.K., Karashanova D.B., Atanasova G.B., Influence of the laser pulse repetition rate and scanning speed on the morphology of Ag nanostructures fabricated by pulsed laser ablation of solid target in water, (2017) Applied Physics A: Materials Science and Processing, 123 (11), art. no. 719.

2194. Qiu, P., Guo, Y., Li, J., Xu, S., Effect of bubble dynamic behaviors on machining performance of laser-induced microjet-assisted ablation, *Journal of Manufacturing Processes*, 120, pp. 116–122, 2024.
2195. Vilkevičius, K., Tsibidis, G.D., Selskis, A., Stratakis, E., Stankevičius, E., Formation of Highly Tunable Periodic Plasmonic Structures on Gold Films Using Direct Laser Writing, *Advanced Optical Materials*, <https://doi.org/10.1002/adom.202400172>, 2024.

Tanaka Y., Obara G., Zenidaka A., Nedyalkov N.N., Terakawa M., Obara M., Near-field interaction of two-dimensional high-permittivity spherical particle arrays on substrate in the Mie resonance scattering domain, (2010) Optics Express, 18 (26), pp. 27226 – 27237

2196. Saitow, K.-I., 1D, 2D, and 3D Mapping of Plasmon and Mie Resonances: A Review of Field Enhancement Imaging Based on Electron or Photon Spectromicroscopy, *Journal of Physical Chemistry C*, 128(13), pp. 5367–5393, 2024

Nedyalkov N.N., Imamova S.E., Atanasov P.A., Toshkova R.A., Gardeva E.G., Yossifova L.S., Alexandrov M.T., Obara M., Interaction of gold nanoparticles with nanosecond laser pulses: Nanoparticle heating, (2011) Applied Surface Science, 257 (12), pp. 5456 – 5459.

2197. Liu, Y., Zheng, W., Li, S., Hu, S., Shao, C., Non-monotonic thermal conductivity modulation in colloidal quantum dot superlattices via ligand engineering, *Materials Today Physics*, 44, 101431, 2024.

2198. Pustovalov, V.K., Heating of nanoparticles and their environment by laser radiation and applications, *Nanotechnology and Precision Engineering*, 7(1), 015001, 2024

Nedyalkov N., Dikovska A., Grochowska K., Jendrzewski R., Aleksandrov L., Dilova T., Atanasova G., Ablation and surface structuring of Si₃N₄ ceramics by nanosecond laser pulses, (2022) Applied Physics A: Materials Science and Processing, 128 (11), art. no. 974,

2199. Yu, X., Cai, Y., Jiang, L., Wang, B., Liu, Z., Surface integrity analysis of Si₃N₄ under cryogenic assisted femtosecond laser ablation, *Ceramics International*, <https://doi.org/10.1016/j.ceramint.2024.04.119>, 2024

Nedyalkov N., Dilova T., Dikovska A., Nikov R., Nikov R., Koleva M., Stankova N., Daskalova A., Angelova L., Laser processing of nitride ceramics, (2022) Journal of Physics: Conference Series, 2240 (1), art. no. 012044.

2200. Chen, N., Liu, J., He, N., Jia, Y., Yu, N., Fabrication of high aspect ratio grooves on aluminium nitride by laser and chemical milling enhanced micro milling, *Journal of Materials Processing Technology*, 325, 118299, 2024

Atanasov P.A., Nedyalkov N.N., Imamova S.E., Ruf, A., Hugel H., Dausinger F., Berger P., Appl. Surf. Sci., 186/1-4, 369-373 (2002).

2201. Mo, J., Li, L., Li, X., Nie, J., Zu, X., First-principles study on the effects of fast neutron irradiation and fast neutron irradiation under the external electric field on carbon-based material AB bilayer graphene, *Diamond and Related Materials*, 144, 110988, 2024