

СПИСЪК НА ПУБЛИКАЦИИТЕ на проф. дфн Александър Драйшу

Общо 270 научни публикации, от които 88 статии в реферирани международни списания с импакт-фактор (1-изпратена), 39 статии в реферирани международни списания с импакт-ранг, 4 статии в Bulgarian Journal of Physics, 1 в Годишника на Софийския университет, 1 в Доклади на БАН, 2 обзора и 135 доклада на международни конференции (12 от тях - публикувани в пълен текст и 123 – с публикувано разширено резюме).

Редактор на 2 тома на Proc. of SPIE (САЩ), изнесени 37 поканени доклада, 28 от които-пленарни, както и редица популярни лекции за ученици и учители по физика. По-детайлно, 64 от статиите са от квартал Q1, 24 са от квартал Q2, 1 - от квартал Q3 (по Scopus).

| СПИСАНИЕ | Брой статии / квартал | Импакт-Фактор IF | СПИСАНИЕ | Брой статии / квартал | Импакт-Фактор IF |
|--|-----------------------|------------------|--|-----------------------|------------------------------|
| Nature Physics (Nature) | 1 / Q1 | 20.113 | Journal of Physics B (IOP) | 2 / Q2 | 1.703 |
| Physical Review Letters (APS) | 4 / Q1 | 8.385 | Journal of the Optical Society of America B (OSA; Optica) | 12 / Q1 | 2.180 |
| Eur. Phys. J. Plus (EPS) | 1 / Q2 | 3.758 | Applied Optics (OSA; Optica) | 1 / Q2 | изпратена, получени рецензии |
| Scientific Reports (Nature) | 2 / Q1 | 3.998 | Journal of Optics (EPS&IOP) | 2 / Q1 | 2.379 |
| New Journal of Physics (IOP) | 1 / Q1 | 3.539 | Applied Physics B (Springer) | 10 / Q2 | 1.817 |
| Optics Express (OSA; Optica) | 8 / Q1 | 3.669 | Optics Communications (Elsevier) | 16 / Q1 | 2.125 |
| Optics Letters (OSA; Optica) | 3 / Q1 | 3.714 | Physica Scripta (IOP) | 4 / Q2 | 1.985 |
| Physical Review A (APS) | 2 / Q1 | 2.777 | Journal of Modern Optics (Taylor & Francis) | 2 / Q2 | 1.544 |
| Physical Review E (APS) | 4 / Q1 | 2.296 | Optical and Quantum Electronics (Springer) | 4 / Q2 | 1.842 |
| IEEE Journal of Quantum Electronics (IEEE) | 7 / Q1 | 2.384 | Advanced Photonics (SPIE) | 1 / Q1 | 17.3 |
| | | | Comptes rendus de l'Académie bulgare des Sciences (Доклади на БАН) | 1 / Q3 | приета за печат |
| | | | ОБЩО: | 87 (+1) | 263.06 |

| СПИСАНИЕ | Брой статии / квартал | Импакт-ранг (SJR) | СПИСАНИЕ | Брой статии / квартал | Импакт-ранг (SJR) |
|--|-----------------------|-------------------|--------------|-----------------------|-------------------|
| Proceedings of SPIE (USA) | 36 | 0.215 | | | |
| Optics and Photonics News | 1 / Q1 | 0.742 | | | |
| American Inst. of Physics Conference Proceedings | 2 | 0.190 | ОБЩО: | 39 | 8.862 |

Стойностите на наукометричните данни (импакт-фактор IF, импакт-ранг SJR и съответните квартали) в горните таблици са по данни за 2019 г., а за публикуваните след 2019г. – по данни за 2023г.

A. СТАТИИ В МЕЖДУНАРОДНИ СПИСАНИЯ С ИМПАКТ ФАКТОР

- A1.** S. G. Dinev and A. A. Dreischuh, "Sum-frequency generation in the XUV," *Opt. Quant. Electron.*, **vol. 23**, pp. 91-97 (1991). **IF=1.842**
<https://doi.org/10.1007/BF00619524>
- A2.** S. G. Dinev and A. A. Dreischuh, "Induced steepening of femtosecond pulses", *Opt. Quant. Electron.*, **vol. 23**, pp. 639-647 (1991). **IF=1.842**
<https://doi.org/10.1007/BF00620090>
- A3.** S. G. Dinev and A. A. Dreischuh, "The induced phase modulation in the UV," *J. Phys. B*, **vol. 24**, pp. 319-323 (1991). **IF=1.703**
<https://doi.org/10.1088/0953-4075/24/1/031>
- A4.** S. G. Dinev, A. A. Dreischuh and A. M. Naidenov, "Induced waveguiding in a medium with cubic nonlinearity," *J. Opt. Soc. Am.*, **vol. B8**, pp. 2128-2131 (1991). **IF=2.180**
<https://doi.org/10.1364/JOSAB.8.002128>
- A5.** A. B. Blagoeva, S. G. Dinev, A. A. Dreischuh and A. M. Naidenov, "Light bullets formation in a bulk media," *IEEE J. Quant. Electron.*, **vol. QE-27**, pp. 2060-2065 (1991). **IF=2.384**
<https://doi.org/10.1109/3.83416>
- A6.** S. G. Dinev and A. A. Dreischuh, "Modeling the induced-phase modulation and compression of UV laser pulses," *IEEE J. Quant. Electron.*, **vol. QE-28**, pp. 1384-1388 (1992). **IF=2.384**
<https://doi.org/10.1109/3.135281>
- A7.** A. B. Blagoeva, S. G. Dinev and A. A. Dreischuh, "Modeling the subpicosecond pulse compression in the vacuum ultraviolet and the extreme ultraviolet," *J. Opt. Soc. Am.*, **vol. B9**, pp. 909-914 (1992). **IF=2.180**
<https://doi.org/10.1364/JOSAB.9.000909>
- A8.** S. Dinev, A. Dreischuh, D. Kavaldjiev and K. Krastev, "Collimation and guiding of symbiotic light-beam pair," *J. Opt. Soc. Am.*, **vol. B9**, pp. 387-390 (1992). **IF=2.180**
- A9.** S. G. Dinev, A. A. Dreischuh and I. Ivanova, "Induced deflection of optical beams in an off-axis geometry," *J. Modern Optics*, **vol. 39**, pp. 667-671 (1992). **IF=1.544**
<https://doi.org/10.1364/JOSAB.9.000387>
- A10.** S. G. Dinev, A. A. Dreischuh and I. Ivanova, "Spatio-temporal analysis of all-optical streaking," *Appl. Phys.*, **vol. B56**, pp.34-38 (1993). **IF=1.817**
<https://doi.org/10.1007/BF00332152>
- A11.** S. G. Dinev, A. A. Dreischuh and S. Balushev, "Symbiotic light pairs sustained by self-phase modulation and cross-phase modulation," *Physica Scripta*, **vol. 47**, pp. 792-796 (1993). **IF=1.985**
<https://doi.org/10.1088/0031-8949/47/6/017>
- A12.** A. Dreischuh, E. Eugenieva and S. Dinev, "Pulse shaping and shortening by spatial filtering of an induced-phase-modulated probe wave," *IEEE J. Quant. Electron.*, **vol.30**, pp.1656-1661 (1994). **IF=2.384**
<https://doi.org/10.1109/3.299498>
- A13.** A. Dreischuh, D. Kavaldjiev and S. Dinev, "Dynamics of induced lightbeam deflection in an off-axis geometry", *J. Modern Optics*, **vol. 42**, pp. 483-488 (1995). **IF=1.544**
<https://doi.org/10.1080/09500349514550431>
- A14.** S. Balushev, A. Dreischuh, I. Velchev, S. Dinev and O. Marazov, "Odd and even two-dimensional dark spatial solitons," *Appl. Phys.*, **vol. B61**, pp. 121-124 (1995). **IF=1.817**
<https://doi.org/10.1007/BF01090982>
- A15.** S. Balushev, A. Dreischuh, I. Velchev, S. Dinev and O. Marazov, "Generation and evolution of two-dimensional dark spatial solitons", *Phys. Rev. E*, **vol. 52**, pp. 5517-5523 (1995). **IF=2.266**
<https://doi.org/10.1103/PhysRevE.52.5517>

- A16.** N. Goutev, A. Dreischuh, S. Balushev and S. Dinev, "2-D asymmetric induced phase modulation: Spatial and spatio-temporal aspects," *IEEE J. Quant. Electron.*, **vol. QE-31**, pp. 2114-2119 (1995). **IF=2.384**
<https://doi.org/10.1109/3.477735>
- A17.** A. Dreischuh, W. Fließer, I. Velchev, S. Dinev, and L. Windholz, "Phase measurements of ring dark solitons," *Appl. Phys.*, **vol. B62**, pp. 139-142 (1996). **IF=1.817**
<https://doi.org/10.1007/BF01081115>
- A18.** N. Nikolaev, A. Dreischuh, S. Dinev, "Complementary pairs of dark and bright optical pulses obtained by induced switching at a nonlinear interface", *Physica Scripta*, **vol. 53**, pp. 582-585 (1996). **IF=1.985**
<https://doi.org/10.1088/0031-8949/53/5/014>
- A19.** I. Velchev, A. Dreischuh, D. Neshev and S. Dinev, "Interactions of optical vortex solitons superimposed on different background beams," *Optics Communications*, **vol. 130**, pp. 385-392 (1996). **IF=2.125**
[https://doi.org/10.1016/0030-4018\(96\)00085-5](https://doi.org/10.1016/0030-4018(96)00085-5)
- A20.** A. Dreischuh, V. Marinov, I. Buchvarov, E. Eugenieva and S. Dinev, "T-scanner for measuring pulse durations," *Opt. Quant. Electron.*, **vol. 28**, pp. 1187-1197 (1996). **IF=1.842**
<https://doi.org/10.1007/BF00347649>
- A21.** A. Dreischuh, V. Kamenov and S. Dinev, "Parallel guiding of signal beams by a ring dark soliton," *Appl. Phys. B*, **vol. B63**, pp. 145-150 (1996). **IF=1.817**
<https://doi.org/10.1007/BF01095265>
- A22.** A. Dreischuh, E. Eugenieva and S. Dinev, "Spatiotemporal evolution of probe beams guided between bright solitons of nondegenerate frequencies", *IEEE J. Quant. Electron.*, **vol. QE-32**, pp. 1657-1663 (1996). **IF=2.384**
<https://doi.org/10.1109/3.535371>
- A23.** V. Kamenov, A. Dreischuh and S. Dinev, "Manipulation of the transverse dynamics of ring dark solitary waves," *Physica Scripta*, **vol. 55**, No.1, pp. 68-72 (1997). **IF=1.985**
<https://doi.org/10.1088/0031-8949/55/1/011>
- A24.** A. Dreischuh, I. Buchvarov, E. Eugenieva, A. Iliev, and S. Dinev, "Experimental demonstration of pulse shaping and shortening by spatial filtering of an induced-phase-modulated probe wave," *IEEE J. Quant. Electron.*, **vol. QE-33**, No.3, pp. 329-335 (1997). **IF=2.384**
<https://doi.org/10.1109/3.556000>
- A25.** D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Fließer, and L. Windholz, "Generation and intrinsic dynamics of ring dark solitary waves," *Appl. Phys.*, **vol. B64**, pp. 429-433 (1997). **IF=1.817**
<https://doi.org/10.1007/s003400050195>
- A26.** I. Velchev, A. Dreischuh, D. Neshev, S. Dinev, "Multiple-charged optical vortex solitons in bulk Kerr media," *Opt. Commun.*, **vol. 140**, pp. 77-82 (1997). **IF=2.125**
[https://doi.org/10.1016/S0030-4018\(97\)00172-7](https://doi.org/10.1016/S0030-4018(97)00172-7)
- A27.** D. Neshev, A. Dreischuh, S. Dinev, L. Windholz, "Controllable branching of optical beams by quasi-two-dimensional dark spatial solitons," *J. Opt. Soc. Am.*, **vol. B14**, pp. 2869-2876 (1997). **IF=2.180**
<https://doi.org/10.1364/JOSAB.14.002869>
- A28.** A. Dreischuh, V. Kamenov, S. Dinev, U. Reiter-Domiatty, D. Gruber, and L. Windholz, "Spectral and spatial evolution of a conical emission in Na vapor," *J. Opt. Soc. Am.*, **vol. B15**, pp. 34-40 (1998). **IF=2.180**
<https://doi.org/10.1364/JOSAB.15.000034>
- A29.** A. Dreischuh, U. Reiter-Domiatty, D. Gruber, L. Windholz, and S. Dinev, "Nonlinear alignment between conical emissions generated in a four-wave parametric mixing process," *Appl. Phys. B*, **vol. B66**, pp. 175-180 (1998). **IF=1.817**
<https://doi.org/10.1007/s003400050372>
- A30.** D. Neshev, A. Dreischuh, M. Assa, S. Dinev, "Motion control of ensembles of ordered optical vortices generated on finite-extent background," *Opt. Commun.*, **vol. 151**, pp. 413-421 (1998). **IF=2.125**
[https://doi.org/10.1016/S0030-4018\(98\)00075-3](https://doi.org/10.1016/S0030-4018(98)00075-3)

- A31.** E. D. Eugenieva, A. A. Dreischuh, "Dynamics of ring dark solitary waves in saturable self-defocusing media," *Physica Scripta*, **vol. 58**, pp. 481-485 (1998). **IF**=1.985
<https://doi.org/10.1088/0031-8949/58/5/009>
- A32.** A. Dreischuh, G. Paulus, F. Zacher, I. Velchev, "Steering one-dimensional odd dark beams of finite length", *Appl. Phys.* **vol.B69**, pp. 113-117 (1999). **IF**=1.817
<https://doi.org/10.1007/s003400050781>
- A33.** A. Dreischuh, G. G. Paulus, F. Zacher, "Quasi-two-dimensional dark spatial solitons and generation of mixed phase dislocations," *Appl. Phys.* **vol.B69**, pp.107-111 (1999).
<https://doi.org/10.1007/s003400050780> **IF**=1.817
- A34.** A. Dreischuh, G. G. Paulus, F. Zacher, F. Grasbon, H. Walther, "Generation of multiple-charged optical vortex solitons in a saturable nonlinear medium," *Phys. Rev.* **E60**, pp. 6111-6117 (1999). <https://doi.org/10.1103/PhysRevE.60.6111> **IF**=2.296
- A35.** A. Dreischuh, F. Grasbon, G. G. Paulus, F. Zacher, D. Neshev, H. Walther, "Modulational instability of multiple-charged optical vortex solitons under saturation of the nonlinearity," *Phys. Rev.* **E60**, pp. 7518-7524 (1999). **IF**=2.296
<https://doi.org/10.1103/PhysRevE.60.7518>
- A36.** A. Dreischuh, D. Neshev, G. G. Paulus, H. Walther, "Experimental generation of steering odd dark beams of finite length," *J. Opt. Soc. Am. B*, **vol.17**, pp. 2011-2017 (2000).
<https://doi.org/10.1364/JOSAB.17.002011> **IF**=2.180
- A37.** D. Neshev, A. Dreischuh, G. G. Paulus, H. Walther, "Directional coupling of optical signals by odd dark beams with mixed phase dislocations," *Appl. Phys. B.*, **vol.B72**, pp. 849-854 (2001). <https://doi.org/10.1007/s003400100568> **IF**=1.817
- A38.** A. Dreischuh, D. Neshev, G. G. Paulus, F. Grasbon, H. Walther, "Ring dark solitary waves: Experiment versus theory," *Phys. Rev.* **E 66**, art. No. 066611 (1-7) (2002). **IF**=2.296
<https://doi.org/10.1103/PhysRevE.66.066611>
- A39.** G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, R. Kopold, W. Becker, "Above-threshold ionization by an elliptically polarized field: Interplay between electronic quantum trajectories", *Phys. Rev. Lett.* **vol. 84**, pp. 3791-3794 (2000). **IF**=8.385
<https://doi.org/10.1103/PhysRevLett.84.3791>
- A40.** A. Dreischuh, S. Chervenkov, D. Neshev, G. G. Paulus, H. Walther, "Generation of lattice structures of optical vortices," *J. Opt. Soc. Am.*, **vol.B19**, pp. 550-556 (2002). **IF**=2.180
<https://doi.org/10.1364/JOSAB.19.000550>
- A41.** F. Lindner, G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, "Dispersion control in a 100-kHz-repetition-rate 30-fs Ti:sapphire regenerative amplifier system," *IEEE J. Quant. Electron.*, **vol.QE-38**, pp. 1465-1470 (2002). **IF**=2.384
<https://doi.org/10.1109/JQE.2002.804295>
- A42.** E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshhammer, B. Feuerstein, J. Ullrich, "Laser-induced non-sequential double ionization investigated at and below the threshold for electron impact ionization," *J. Phys. B: At. Mol. Opt. Phys.*, **vol. 36**, pp. 3269-3280 (2003). **IF**=1.703
<https://doi.org/10.1088/0953-4075/36/15/308>
- A43.** E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, M. Schätzel, G.G. Paulus, H. Walther, R. Moshhammer, J. Ullrich, "Influence of molecular structure on double ionization of N₂ and O₂ by high intensity ultra-short laser pulses," *Phys. Rev. Lett.* **vol. 92**, art. 173001 (2004); <https://link.aps.org/doi/10.1103/PhysRevLett.92.173001> **IF**=8.385
- A44.** K. Besuhanov, A. Dreischuh, G.G. Paulus, M. Schätzel, H. Walther, "Vortices in femtosecond laser fields," *Optics Letters*, **vol. 29**, No. 16, pp. 1942-1944 (2004). **IF**=3.714
<https://doi.org/10.1364/OL.29.001942>
- A45.** K. Besuhanov, A. Dreischuh, G. G. Paulus, M. G. Schätzel, H. Walther, D. Neshev, W. Krolikowski, Yu. Kivshar, "Spatial phase dislocations in femtosecond laser pulses", *J. Opt. Soc. Am. B*, **vol. 23**, No. 1, pp. 26-35 (2006). **IF**=2.180
<https://doi.org/10.1364/JOSAB.23.000026>

**** Selected and published online in Virtual Journal of Ultrafast Science, **vol. 5**, #2 (2006).

(<http://www.vjulfrafast.org>)

- A46.** A. Dreischuh, D. Neshev, D. E. Petersen, O. Bang, W. Krolikowski, "Observation of attraction between dark solitons," *Phys. Rev. Lett.* **vol. 96**, 043901-4 (2006). **IF=8.385**
<https://link.aps.org/doi/10.1103/PhysRevLett.96.043901>
- **** Selected and published online in Virtual Journal of Ultrafast Science, **vol. 5**, #3 (2006).
(<http://www.vjulfrafast.org>)
- A47.** A. S. Desyatnikov, N. Sagemerten, R. Fisher, B. Terhalle, D. Träger, D. N. Neshev, A. Dreischuh, C. Denz, W. Krolikowski, Yu. S. Kivshar, "Two-dimensional self-trapped nonlinear photonic lattices," *Optics Express*, vol. **14** (7), pp. 2851-2863 (2006). **IF=3.669**
<https://doi.org/10.1364/OE.14.002851>
- A48.** A. Sukhorukov, D. Neshev, A. Dreischuh, R. Fischer, S. Ha, W. Krolikowski, J. Bolger, A. Mitchell, B. Eggleton, and Yu. S. Kivshar, "Polychromatic nonlinear surface modes generated by supercontinuum light," *Optics Express*, vol. **14** (23), pp. 11265-11270 (2006). **IF=3.669**
<https://doi.org/10.1364/OE.14.011265>
- A49.** A. Minovich, D. N. Neshev, A. Dreischuh, W. Krolikowski, Yu. S. Kivshar, "Experimental reconstruction of nonlocal response of nonlinear optical media," *Optics Letters*, vol. **32** (12), pp. 1599-1601 (2007). **IF=3.714**
<https://doi.org/10.1364/OL.32.001599>
- A50.** D. N. Neshev, A. A. Sukhorukov, A. Dreischuh, R. Fischer, S. Ha, W. Krolikowski, J. Bolger, B. J. Eggleton, A. Mitchell, M. W. Austin, Yu. S. Kivshar, "Nonlinear spectral-spatial control and localization of supercontinuum radiation," *Phys. Rev. Lett.*, vol. **99** (12):123901-4 (2007).
<https://link.aps.org/doi/10.1103/PhysRevLett.99.123901> **IF=8.385**
- **** Selected and published online in Virtual Journal of Ultrafast Science, **vol. 6**, #10 (2007).
(<http://www.vjulfrafast.org>)
- A51.** K. Bezuharov, A. A. Dreischuh, W. Krolikowski, "Bright optical beams in weakly nonlocal media: Variational analysis," *Phys. Rev. A*, vol. **77**, art # 033825 (1-7) (2008). **IF=2.777**
<https://link.aps.org/doi/10.1103/PhysRevA.77.033825>
- A52.** A. Dreischuh, D. N. Neshev, V. Z. Kolev, S. Saltiel, M. Samoc, W. Krolikowski, and Yu. S. Kivshar, "Nonlinear dynamics of two-color optical vortices in lithium niobate crystals," *Optics Express*, vol. **16**, pp. 5406-5420 (2008). **IF=3.669**
<https://doi.org/10.1364/OE.16.005406>
- A53.** A. A. Sukhorukov, D. N. Neshev, A. Dreischuh, W. Krolikowski, J. Bolger, B. J. Eggleton, Lam Bui, A. Mitchell, and Yu. S. Kivshar, "Observation of polychromatic gap solitons," *Optics Express*, vol. **16**, pp. 5991-5996 (2008). **IF=3.669**
<https://doi.org/10.1364/OE.16.005991>
- A54.** D. N. Neshev, A. Dreischuh, V. Shvedov, A. S. Desyatnikov, W. Krolikowski, and Yu. S. Kivshar, "Observation of polychromatic vortex solitons," *Opt. Letters*, vol. **33**, pp. 1851-1853 (2008). **IF=3.714**
<https://doi.org/10.1364/OL.33.001851>
- **** Selected and published online in Virtual Journal of Ultrafast Science, **vol. 7**, #10 (2008).
(<http://www.vjulfrafast.org>)
- A55.** P. Hansinger, A. Dreischuh, and G. G. Paulus, "Optical vortices in self-focusing Kerr nonlinear media," *Optics Communications*, vol. **282** (16), pp. 3349-3355 (2009). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2009.05.037>
- A56.** G. Maleshkov, D. N. Neshev, and A. Dreischuh, "Nonlinear beam steering by fractional vortex dipoles," *Phys. Rev. A* **vol. 80**, art. # 053828 (1-5) (2009). **IF=2.777**
<https://link.aps.org/doi/10.1103/PhysRevA.80.053828>
- **** Selected and published online in Virtual Journal of Ultrafast Science, **vol. 8**, #12 (2009)
(<http://www.vjulfrafast.org>)
- A57.** D. N. Neshev, A. Dreischuh, G. Maleshkov, M. Samoc, and Yu. S. Kivshar, "Supercontinuum generation with optical vortices," *Optics Express*, **vol. 18**, pp.18368-18373 (2010).

- <https://doi.org/10.1364/OE.18.018368> **IF**=3.669
- A58.** N. Gorunski, N. Dimitrov, A. Dreischuh, and G. G. Paulus, "Pulse-front tilt created in misaligned dispersionless optical systems and correct interferometric autocorrelation," *Optics Communications*, **vol. 283**, pp. 5192-5198 (2010); **IF**=2.125
<https://doi.org/10.1016/j.optcom.2010.07.032>
- A59.** G. Maleshkov, D. N. Neshev, E. Petrova, and A. Dreischuh, "Filamentation and supercontinuum generation by singular beams in self-focusing nonlinear media," *Journal of Optics*, **vol. 13**, Art. No. 064015 (1-8) (2011). **IF**=2.379
<https://doi.org/10.1088/2040-8978/13/6/064015>
- A60.** P. Hansinger, A. Dreischuh, and G. G. Paulus, "Vortices in ultrashort laser pulses," *Appl. Physics B*, **vol. 104**, pp. 561-567 (2011). **IF**=1.817
<https://doi.org/10.1007/s00340-011-4649-2>
- A61.** G. Maleshkov, P. Hansinger, N. Dimitrov, A. Dreischuh, and G. G. Paulus, "Branching optical signals by fractional vortex dipoles," *Optics Communications*, **vol. 285**, pp. 3529–3534 (2012). **IF**=2.125
<https://doi.org/10.1016/j.optcom.2012.04.002>
- A62.** M. Zürch, C. Kern, P. Hansinger, A. Dreischuh, and Ch. Spielmann, "Strong-field physics with singular light beams," *Nature Physics*, **vol. 8**, pp. 743-746 (2012). **IF**=20.113
<https://doi.org/10.1038/nphys2397>
- A63.** P. Hansinger, G. Maleshkov, N. Gorunski, N. Dimitrov, A. Dreischuh and G. G. Paulus, "Interaction Between One-dimensional Dark Spatial Solitons and Semi-infinite Dark Stripes," *Optics Communications*, **vol. 313**, pp. 106-112 (2014). **IF**=2.125
<https://doi.org/10.1016/j.optcom.2013.08.085>
- A64.** L. Stoyanov, G. Maleshkov, I. Stefanov, A. Dreischuh, "Initiating self-focusing of beams carrying spatial phase singularities," *J. Opt. Soc. Am. B*, **vol. 31**, pp. 1159-1164 (2014). **IF**=2.180
<https://doi.org/10.1364/JOSAB.31.001159>
- A65.** P. Hansinger, G. Maleshkov, I. L. Garanovich, D. Skryabin, D. N. Neshev, A. Dreischuh, and G. G. Paulus, "Vortex algebra by multiply cascaded four-wave mixing of femtosecond optical beams," *Optics Express*, **vol. 22**, pp. 11079-11089 (2014). **IF**=3.669
<https://doi.org/10.1364/OE.22.011079>
- A66.** L. Stoyanov, S. Topuzoski, I. Stefanov, L. Janicijevic, A. Dreischuh, "Far field diffraction of an optical vortex beam by a fork-shaped grating," *Optics Communications*, **350**, pp. 301-308 (2015). **IF**=2.125
<https://doi.org/10.1016/j.optcom.2015.04.020>
- A67.** P. Hansinger., Ph. Töpfer, N. Dimitrov, D. Adolph, D. Hoff, T. Rathje, A. Max Sayler, A. Dreischuh, and G.G. Paulus, "Refractive index dispersion measurement using carrier-envelope phasemeters," *New Journal of Physics*, **vol. 19**, Art. No. 023040 (2017). **IF**=3.539
<https://doi.org/10.1088/1367-2630/aa5ca3>
- A68.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus, "Pulse front tilt measurement of femtosecond laser pulses," *Optics Communications*, **vol. 371**, pp. 51-58 (2016). **IF**=2.125
<https://doi.org/10.1016/j.optcom.2016.03.054>
- A69.** P. Hansinger, G. Maleshkov, I.L. Garanovich, D. Skryabin, D.N. Neshev, A. Dreischuh, and G. G. Paulus, "White light generated by femtosecond optical vortex beams," *J. Opt. Soc. Am. B*, **vol. 33**(4), pp. 681-690 (2016). **IF**=2.180
<https://doi.org/10.1364/JOSAB.33.000681>
- A70.** L. Stoyanov, N. Dimitrov, I. Stefanov, A. Dreischuh, "Optical waveguiding by necklace and azimuthal beams in nonlinear media," *J. Opt. Soc. Am. B*, **vol. 34** (4), pp.801-807(2017). **IF**=2.180
<https://doi.org/10.1364/JOSAB.34.000801>
- A71.** Lj. Janicijevic, S. Topuzoski, L. Stoyanov, A. Dreischuh, "Diffraction of a Gaussian beam by a four-sector binary grating with a shift between adjacent sectors," *Optics Communications*, **vol.389**, pp. 203–211 (2017). **IF**=2.125

- <https://doi.org/10.1016/j.optcom.2016.12.041>
- A72.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, D. N. Neshev, G. G. Paulus, and A. Dreischuh, “Far-field pattern formation by manipulating the topological charges of square-shaped optical vortex lattices,” *J. Opt. Soc. Am. B* **vol. 35**, pp. 402-409 (2018). **IF=2.180**
<https://doi.org/10.1364/JOSAB.35.000402>
- A73.** S. Topuzoski, Lj. Janicijevic, L. Stoyanov, I. Stefanov, A. Dreischuh, “Five-vortex spot patterns generated by diffraction of azimuthally X-shaped beam by the fork-shaped grating,” *Optics Communications* **vol. 428**, pp. 206-215 (2018). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2018.07.059>
- A74.** Lj. Janicijevic, S. Topuzoski, L. Stoyanov, A. Dreischuh, “Fraunhofer diffraction of a Gaussian beam by a four-sector binary grating with a half period fringes shift between adjacent sectors“, *Opt. Quant. Electron.* **vol. 51**, art. Nr. 71 (2019). **IF=1.842**
<https://link.springer.com/article/10.1007/s11082-019-1783-2>.
- A75.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Far-field beam reshaping by manipulating the topological charges of hexagonal optical vortex lattices,” *Journal of Optics* **vol. 20**, Art. No. 095601 (2018). **IF=2.379**
<https://doi.org/10.1088/2040-8986/aad30e>
- A76.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Controllable beam reshaping by mixing square-shaped and hexagonal optical vortex lattices,” *Scientific Reports* **vol. 9**, Art. # 9:2128 (2019). **IF=3.998**
<https://doi.org/10.1038/s41598-019-38608-5>
- A77.** M. Zhekova; G. Maleshkov; L. Stoyanov, I. Stefanov; G. G. Paulus, and A. Dreischuh, “Formation of multi-spot focal arrays by square-shaped optical vortex lattices,” *Optics Communications* **vol. 449**, pp. 110-116 (2019). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2019.05.051>
- A78.** N. Dimitrov, M. Zhekova, G. G. Paulus, and A. Dreischuh, “Inverted field interferometer for measuring the topological charges of optical vortices,” *Optics Communications* **vol. 456**, art. 1245301 (2020). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2019.124530>
- A79.** L. Stoyanov, M. Zhekova, A. Stefanov, I. Stefanov, G. G. Paulus, and A. Dreischuh, „Zeroth- and first-order long range non-diffracting Gauss-Bessel beams generated by annihilating multiple-charged optical vortices,” *Scientific Reports* **10**, art. 21981 (2020). **IF=3.998**
<https://doi.org/10.1038/s41598-020-78613-7>.
- A80.** L. Stoyanov, M. Zhekova, A. Stefanov, B. Ivanov, I. Stefanov, G. G. Paulus, A. Dreischuh, “Generation of long range low-divergent Gauss–Bessel beams by annihilating optical vortices,” *Optics Communications* **vol. 480**, art. 126510 (2021). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2020.126510>
- A81.** L. Stoyanov, Y. Zhang, A. Dreischuh, and G. G. Paulus, “Long-range quasi-non-diffracting Gauss-Bessel beams in few-cycle laser field,” *Optics Express* **vol. 29** (7), 10997-11008 (2021); <https://doi.org/10.1364/OE.419486> **IF=3.669**
- A82.** R. Camacho-Morales, D. Rocco, L. Xu, V. F. Gili, N. Dimitrov, L. Stoyanov, Z. Ma, A. Komar, M. Lysevych, F. Karouta, A. Dreischuh, H. H. Tan, G. Leo, C. De Angelis, C. Jagadish, A. E. Miroshnichenko, M. Rahmani, and D. N. Neshev, “Infrared upconversion imaging in nonlinear metasurfaces,” *Advanced Photonics* **3** (3), 036002 (2021). **IF=17.3**
<https://doi.org/10.1117/1.AP.3.3.036002>
- A83.** L. Stoyanov, G. Maleshkov, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Focal beam structuring by triple mixing of optical vortex lattices,” *Optical and Quantum Electronics* **54**, art. 34 (2022). <https://doi.org/10.1007/s11082-021-03399-5> **IF=2.084**
- A84.** N. Dimitrov, M. Zhekova, Y. Zhang, G. G. Paulus, and A. Dreischuh, “Background-free femtosecond autocorrelation in collinearly-aligned inverted field geometry using optical vortices,” *Optics Communications* **vol. 504**, art. 127493 (2022). **IF=2.125**
<https://doi.org/10.1016/j.optcom.2021.127493>

- A85.** L. Stoyanov, A. Stefanov, A. Dreischuh, and G. G. Paulus, „Gouy phase of Bessel-Gaussian beams: theory vs. experiment,” *Optics Express* 31, 13683-13699 (2023).; <https://doi.org/10.1364/OE.480761> **IF=3.669**
- A86.** L. Stoyanov, S. Topuzoski, G. G. Paulus, and A. Dreischuh, „Optical vortices in brief: introduction for experimentalists,” *Eur. Phys. J. Plus* 138, art. Nr. 702 (2023).; <https://doi.org/10.1140/epjp/s13360-023-04227-3> **IF=3.758**
- A87.** L. Stoyanov, N. Dimitrov, F. Wiesner, M. Fedoruk, G. G. Paulus, and A. Dreischuh, “Wavelength-tolerant generation of Bessel-Gaussian beams using vortex phase plates,” *Applied Optics* (submitted on March 18, 2024; рецензии, получени на 29.05.2024г.-положителни, приложени на информационния носител).
- A88.** L. Stoyanov, N. Gorunski, M. Mincheva, P. Drenkov, E. Lazarov, A. Dreischuh, “Experimental verification of the Gouy phase for higher-order Hermite-Gaussian beams,” *Comptes rendus de l’Académie bulgare des Sciences* (приета на 28.05.2024г.; писмо от редакцията – приложено на информационния носител).

B. СТАТИИ В МЕЖДУНАРОДНИ СПИСАНИЯ С ИМПАКТ-РАНГ

- B1.** S. G. Dinev and A. A. Dreischuh, "Pico- and femtosecond pulses in the UV and XUV," *Proc. SPIE*, vol. **1403**, pp. 427-430 (1990). **SJR=0.215**
<https://doi.org/10.1117/12.57335>
- B2.** D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Fliesser and L. Windholz, "Experimental investigation of computer-synthesized holograms for generation of ring dark solitary waves and optical vortex solitons," *Proc. SPIE*, vol. **3052**, pp. 223-228 (1996). **SJR=0.215**
<https://doi.org/10.1117/12.262929>
- B3.** M. Assa, I. Velchev, S. Dinev, D. Neshev, A. Dreischuh, "Topological-Charge Controlled Interaction Within Ordered Structures of Optical Vortex Solitons," *Proc. SPIE*, vol. **3052**, pp. 218-222 (1996). **SJR=0.215**
<https://doi.org/10.1117/12.262927>
- B4.** D. Neshev, A. Dreischuh, S. Dinev, L. Windholz, "Guiding and switching by quasi-2D dark spatial solitons," *Proc. of SPIE*, vol. **3052**, pp. 212-217 (1996). **SJR=0.215**
<https://doi.org/10.1117/12.262926>
- B5.** K. Blagoev, D. Gruber, A. Dreischuh, A. Morozov, U. Reiter-Domiatty, L. Windholz, "Time behavior of the 7^3S_1 - 6^3P_2 transition following pulsed laser excitation of the 6^3P_1 state of mercury," *AIP Conf. Proc.* vol. **386**, 209 (1997). **SJR=0.190**
<https://aip.scitation.org/doi/10.1063/1.51778>
- B6.** F. Grasbon, A. Dreischuh, F. Zacher, G.G. Paulus, H. Walther, "Femtosecond interferometric autocorrelations in the presence of pulse front distortions," *Proc. SPIE*, vol. **3571**, pp. 164-168 (1999). **SJR=0.215**
<https://doi.org/10.1117/12.347610>
- B7.** A. Dreischuh, T. Arabadjiev, D. Neshev, G.G. Paulus, F. Zacher, H. Walther, "Stability of one-dimensional dark spatial solitons of finite second transverse extent," *Proc. SPIE*, vol. **3571**, pp. 169-173 (1999). **SJR=0.215**
<https://doi.org/10.1117/12.347611>
- B8.** G. G. Paulus, F. Grasbon, A. Dreischuh, H. Walther, "Quantum effects in above-threshold ionization," *Multiphoton Processes: ICOMP VIII*, L.F. DiMauro, R.R. Freeman, K.C. Kulander (Eds), American Institute of Physics Conference Proceedings, vol. **525**, pp. 24-35 (2000). **SJR=0.190**
<https://doi.org/10.1063/1.1291923>
- B9.** A. Dreischuh, D. Neshev, S. Chervenkov, G. G. Paulus, F. Grasbon, H. Walther, "Nonlinear interaction of ring dark solitary waves with coaxial dark beams," *Proc. SPIE*, vol. **4397**, pp. 191-195 (2001). **SJR=0.215**
<https://doi.org/10.1117/12.425131>
- B10.** A. Dreischuh, G. G. Paulus, D. Neshev, F. Grasbon, H. Walther, "Multiple-charged optical vortex solitons: existence and stability in saturable Kerr-type nonlinear media," *Proc. SPIE*, vol. **4397**, pp. 196-200 (2001). **SJR=0.215**
<https://doi.org/10.1117/12.425132>
- B11.** S. Chervenkov, D. Neshev, G. G. Paulus, A. Dreischuh, H. Walther, "Directional coupling and branching of optical signals by dark beams," *Proc. SPIE*, vol. **4397**, pp. 186-190 (2001). **SJR=0.215**
<https://doi.org/10.1117/12.425130>
- B12.** I. Buchvarov, A. Dreischuh, A. Iliev, S. Dinev, and S. Saltiel, "Simultaneous shaping and shortening of nanosecond pulses," *Proc. SPIE*, vol. **2772**, pp. 152-157 (1996). **SJR=0.215**
<https://doi.org/10.1117/12.238094>
- B13.** K. Blagoev, D. Gruber, A. Dreischuh, A. Morozov, U. Reiter-Domiatty, L. Windholz, "Time behavior of the 7^3S and 6^3P_1 states after narrowband laser excitation of the 6^3P_1 state of mercury," *Proc. SPIE*, vol. **3052**, pp. 258-262 (1996). **SJR=0.215**
<https://doi.org/10.1117/12.262935>

- B14.** F. Lindner, M. Schätzel, F. Grasbon, A. Dreischuh, G.G. Paulus, and H. Walther, "Dispersion control in a 100 kHz repetition rate 35-fs laser system," *Proc. SPIE*, vol. **5226**, pp. 38-43 (2003).
<https://doi.org/10.1117/12.518891> **SJR=0.215**
- B15.** A. Dreischuh, S. Chervenkov, D. Neshev, G. G. Paulus, and H. Walther, "Generation of lattices of optical vortices," *Proc. SPIE*, vol. **5226**, pp. 104-108 (2003). **SJR=0.215**
<https://doi.org/10.1117/12.519084>
- B16.** K. Besuchanov, A. Dreischuh, "Vortices in femtosecond laser fields," *Proc. SPIE*, vol. **5449**, pp. 111-115 (2004). **SJR=0.215**
<https://doi.org/10.1117/12.563108>
- B17.** K. Besuchanov, A. Dreischuh, "Linear optics of dark beams with mixed phase dislocations," *Proc. SPIE*, vol. **5830**, pp. 211-215 (2005). **SJR=0.215**
<https://doi.org/10.1117/12.618469>
- B18.** K. Bezuharov, A. Dreischuh, G.G. Paulus, M. Schätzel, H. Walther, "Phase dislocations in femtosecond laser fields," *Proc. SPIE*, vol. **5830**, pp. 206-210 (2005). **SJR=0.215**
<https://doi.org/10.1117/12.618466>
- B19.** G. Maleshkov, K. Bezuharov, A. Dreischuh, "Variational analysis of SPM- and IPM-based interactions in cubic non-local nonlinear media," *Proc. SPIE*, vol. **5830**, pp. 216-220 (2005).
<https://doi.org/10.1117/12.618705> **SJR=0.215**
- B20.** W. Krolikowski, O. Bang, D. Briedis, A. Dreischuh, D. Edmundson, B. Luther-Davies, D. Neshev, N. Nikolov, D. E. Petersen, J. J. Rasmussen, and J. Wyller, "Nonlocal solitons," *Proc. SPIE*, vol. **5949**, art. # 59490B - 10 pages (2005). **SJR=0.215**
<https://doi.org/10.1117/12.622416>
- B21.** A. S. Desyatnikov, D. N. Neshev, R. Fischer, W. Krolikowski, N. Sagemerten, D. Träger, C. Denz, A. Dreischuh, Yu. S. Kivshar, "Two-dimensional nonlinear optically induced photonic lattices in photorefractive crystals," *Proc. SPIE*, vol. **6023**, art. # 60230H (2006).
<https://doi.org/10.1117/12.648200> **SJR=0.215**
- B22.** A. Minovich, K. Bezuharov, D. Neshev, A. Dreischuh, W. Krolikowski, and Yu. Kivshar, "Experimental reconstruction of a nonlocal nonlinear response function of a thermal medium," *Proc. SPIE*, vol. **6604**, art.# 66041U (2007). **SJR=0.215**
<https://doi.org/10.1117/12.727192>
- B23.** R. Fischer, S. Saltiel, D. Neshev, W. Krolikowski, A. Dreischuh, and Yu. Kivshar, "Frequency doubling in SBN crystal with random distribution of ferroelectric domain structure in the regime of thermal focusing," *Proc. SPIE*, vol. **6604**, art.# 66041F (2007).
<https://doi.org/10.1117/12.726985> **SJR=0.215**
- B24.** D. N. Neshev, A. A. Sukhorukov, A. Mitchell, Ch. R. Rosberg, R. Fischer, A. Dreischuh, Wieslaw Z. Krolikowski, Yuri S. Kivshar, "Optical lattices as nonlinear photonic crystals," *Proc. SPIE*, vol. **6604**, art. # 66041B (2007). **SJR=0.215**
<https://doi.org/10.1117/12.726976>
- B25.** A. A. Sukhorukov, D. N. Neshev, A. Dreischuh, R. Fischer, S. Ha, J. Bolger, Lam Bui, W. Krolikowski, B. J. Eggleton, A. Mitchell, M. W. Austin, and Yu. S. Kivshar, "Trapped supercontinuum and multi-color gap solitons," *Optics and Photonics News*, vol. **18** (12), pp. 41-41 (2007). **SJR=0.742**
<https://doi.org/10.1364/OPN.18.12.000041>
- B26.** N. Dimitrov, N. Chakarov, A. Dreischuh, "Spatial chirp revisited: Matrix analysis of dispersionless optical systems and correct interferometric autocorrelation," *Proc. SPIE*, vol. **7027**, art. # 70271K (2008). **SJR=0.215**
<https://doi.org/10.1117/12.822533>
- B27.** G. Maleshkov, D. N. Neshev, A. Dreischuh, "Bright beam deflection by steering of beams with mixed phase dislocations," *Proc. SPIE*, vol. **7027**, art. # 70271R(2008).
<https://doi.org/10.1117/12.822541> **SJR=0.215**
- B28.** G. Maleshkov, D. N. Neshev, A. Dreischuh, "Self-focusing and filamentation of optical vortex beams: Spatio-temporal analysis," *Proc. SPIE*, vol. **7501**, art. # 75010G (2009).

- <https://doi.org/10.1117/12.851352> **SJR=0.215**
- B29.** G. Maleshkov, P. Hansinger, A. Dreischuh, G. G. Paulus, "Fractional vortex dipoles of edge-screw type in self-focusing Kerr nonlinear media," *Proc. SPIE*, vol. **7747**, art. # 77471P (2011). **SJR=0.215**
<https://doi.org/10.1117/12.881862>
- B30.** G. Maleshkov, P. Hansinger, I. L. Garanovich, D. Skryabin, D. N. Neshev, A. Dreischuh, G. G. Paulus, "Degenerate four-wave mixing of optical vortices assisted by self-phase and cross-phase modulation," *Proc. SPIE*, vol. **7747**, art. # 77471E (2011). **SJR=0.215**
<https://doi.org/10.1117/12.881860>
- B31.** N. Dimitrov, I. Stefanov, A. Dreischuh, "Tuning the pulse duration, spectral position and bandwidth of femtosecond pulses by the beam's penetration in an intracavity prism," *Proc. SPIE*, vol. **7747**, art. # 77471K (2011). **SJR=0.215**
<https://doi.org/10.1117/12.882828>
- B32.** G. Maleshkov, L. Stojanov, I. Stefanov, A. Dreischuh, "Controllable bright beam self-focusing initiated by singular dark beams," *Proc. SPIE*, vol. **8770**, art. # 87701H (2013). **SJR=0.215**
<https://doi.org/10.1117/12.2012434>
- B33.** G. Maleshkov, P. Hansinger, N. Dimitrov, A. Dreischuh, G. G. Paulus, "Branching probe beams by fractional vortex dipoles: Guiding vs. anti-guiding," *Proc. SPIE*, vol. **8770**, art. # 87701K (2013). **SJR=0.215**
<https://doi.org/10.1117/12.2016385>
- B34.** C. Kern, M. Zürich, P. Hansinger, A. Dreischuh, Ch. Spielmann, "Extreme nonlinear optical processes with beams carrying orbital angular momentum," *Proc. SPIE*, vol. **8984**, Ultrafast Phenomena and Nanophotonics XVIII, art.# 89841A (2014). **SJR=0.215**
<https://doi.org/10.1117/12.2037632>
- B35.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus, „Evaluation of pulse front tilt measurement of femtosecond laser pulses," *Proc. SPIE*, vol. **9447**, art. # 94471E (2015). **SJR=0.215**
<https://doi.org/10.1117/12.2180268>
- B36.** N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, A. Dreischuh, „Dispersion control in a folded 4-f system for shaping femtosecond laser pulses," *Proc. SPIE*, vol. **10226**, art. # 102261D (2017). **SJR=0.215**
<https://doi.org/10.1117/12.2264705>
- B37.** L. Stoyanov, N. Gorunski, M. Zhekova, I. Stefanov, A. Dreischuh, "Vortex interactions revisited: Formation of stable elementary cells for creation of rigid vortex lattices," *Proc. SPIE*, vol. **11047**, art. # 110471D (2019). **SJR=0.215**
<https://doi.org/10.1117/12.2516531>
- B38.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, A. Dreischuh, "Multi-spot focal pattern formation and beam reshaping by mixing square-shaped and hexagonal vortex lattices," *Proc. SPIE* vol. **11332**, art. # 113320J (2019). **SJR=0.215**
<https://doi.org/10.1117/12.2554013>
- B39.** M. C. Morales, D. Rocco, L. Xu, M. Rahmani, V. F. Gili, A. Komar, N. Dimitrov, L. Stoyanov, M. Lysevych, F. Karouta, A. Dreischuh, H. H. Tan, G. Leo, C. De Angelis, C. Jagadish, A. E. Miroshnichenko, and D. N. Neshev, "Infrared imaging in nonlinear GaAs metasurfaces," *Proc. SPIE* vol. **11201**, art. # 112011S (2019). **SJR=0.215**
<https://doi.org/10.1117/12.2541224>

ВВ. СТАТИИ В РЕФЕРИРАНИ СПИСАНИЯ

- BB1.** K. Bezuhanov, G. Maleshkov, and A. Dreischuh, "Variational model of bright beam evolution in weakly non-local media", Supplement to *Bulgarian J. Phys.*, vol. **33** (3), pp. 211-216 (2006) (*Proceedings of the Alexander von Humboldt Conference "Advances in Physics and Astrophysics of the 21st Century,"* ed. I. Zhelyazkov, Heron Press, Sofia, 2006).
<https://www.bjp-bg.com/paper1.php?id=251>
- BB2.** A. Dreischuh, K. Bezuhanov, G. G. Paulus, M. Schätzel, H. Walther, D. Neshev, W. Królikowski, and Yu. Kivshar, "Femtosecond optical vortices", Supplement to *Bulgarian J. Phys.*, vol. **33** (3), pp. 186-193 (2006) (*Proceedings of the Alexander von Humboldt Conference "Advances in Physics and Astrophysics of the 21st Century,"* ed. I. Zhelyazkov, Heron Press, Sofia, 2006).
<https://www.bjp-bg.com/paper1.php?id=211>
- BB3.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus, "Measuring the relation between pulse-front-tilt angle and beam size for ultrashort laser pulses," *Bulg. J. Phys.*, vol. **43**, #1, pp. 21-29 (2016).
<https://www.bjp-bg.com/paper1.php?id=798>
- BB4.** N. Dimitrov, L. Stoyanov, I. Stefanov, I. P. Christov, A. Dreischuh, "Generation of high harmonics of coherent radiation in the extreme ultraviolet spectral range in the low-intensity regime," *Bulg. J. Phys.*, vol. **44**, pp. 99–108 (2017).
<https://www.bjp-bg.com/paper1.php?id=835>
- BB5.** L. Stoyanov, G. Maleshkov, M. Zhekova, S. Topuzoski, I. Stefanov, G. Paulus, A. Dreischuh, "Manipulation of the topological charges of optical vortices: Recent results," *Annual of Sofia University "St. Kliment Ohridski", Faculty of Physics*, Jubilee Edition of the Annual- 100 years Sofia University and 55th anniversary of Faculty of Physics, pp. 12-34 (2019).
https://www.phys.uni-sofia.bg/annual/archive/indexJubEdit2_en.html

С. ДОКЛАДИ НА МЕЖДУНАРОДНИ КОНФЕРЕНЦИИ, ПУБЛИКУВАНИ В ПЪЛЕН ТЕКСТ

- C1.** S. G. Dinev and A. A. Dreischuh, "Nonlinear Optical Properties of Atoms and Ions in the XUV," *Proc. of the XXVI-th Colloquium Spectroscopicum International CSI'89*, Sofia, vol. VI, pp. 36-45(1989).
- C2.** E. D. Eugenieva, A. A. Dreischuh, "Propagation of ring dark solitary waves in saturable self-defocusing media," in: *Advanced Photonics with Second-order Optically Nonlinear Processes*, A. D. Boardman et al. (eds.), (Kluwer Academic Publishers, Netherlands, 1999) pp. 215-218.
- C3.** D. Neshev, M. Georgiev, A. Dreischuh, S. Dinev, "Quadratic ring-shaped solitary waves," in: *Advanced Photonics with Second-order Optically Nonlinear Processes*, A. D. Boardman et al. (eds.), (Kluwer Academic Publishers, Netherlands, 1999) pp. 205-208.
- C4.** S. Dinev, A. Dreischuh, S. Balushev, and E. Eugenieva, "Picosecond pulse shaping and shortening by spatial windowing of induced-deflected probe wave," in: *Technical Digest of the 4th European Quantum Electronics Conference*, Sept. 10-13, 1993, Firenze, Italy, P. De Natale et al. (Eds), vol. I, pp. 244-247
- C5.** A. Dreischuh, S. Balushev, I. Velchev, D. Neshev, S. Dinev and O. Marazov, "Two dimensional dark spatial solitons," *Proc. of the 8th Internat. School on Quantum Electronics "Lasers and Applications"*, Sept. 29 - Oct. 4., 1994, Varna, Bulgaria, pp. 327-332.
- C6.** G. Paulus, F. Grasbon, H. Walther, A. Dreischuh, "Multiple-charged optical vortex solitons," CLEO/EUROPE Focus Meeting on Novel Lasers and Devices – Basic Aspects, Lasers'99 (München, Deutschland, Juni 14-18, 1999).
- *** G. G. Paulus, F. Grasbon, H. Walther, and A. Dreischuh, "Multiple-charged optical vortex solitons," in *Novel Lasers and Devices-Basic Aspects, 1999 OSA Technical Digest* (Optical Society of America, 1999), paper LTuB2, pp. 72-74.
<https://doi.org/10.1364/NLDA.1999.LTuB2>
- C7.** A. Dreischuh, D. N. Neshev, D. E. Petersen, O. Bang, W. Krolikowski, "Observation of attraction forces between dark solitons," OSA Topical Meeting on Nonlinear Guided Waves and Their Applications, Sept. 6-9, 2005, Dresden, Germany, (talk FC3), 2005 *OSA Technical Digest* (CD) (Optical Society of America, 2005), paper FC3.
<https://doi.org/10.1364/NLGW.2005.FC3>
- C8.** N. Sagemerten, J. Imbrock, D. Träger, C. Denz, A. S. Desyatnikov, D. N. Neshev, A. Dreischuh, W. Krolikowski, Y. S. Kivshar, and R. Fischer, "Two-Dimensional Complex Optically-Induced Nonlinear Photonic Lattices," OSA Topical Meeting on Nonlinear Guided Waves and Their Applications, Sept. 6-9, 2005, Dresden, Germany. 2005 *OSA Technical Digest* (CD) (Optical Society of America, 2005), paper TuC7.
<https://doi.org/10.1364/NLGW.2005.TuC7>
- C9.** N. Sagemerten, D. Träger, J. Jägers, J. Imbrock, C. Denz, A. S. Desyatnikov, D. N. Neshev, Y. S. Kivshar, W. Krolikowski, A. Dreischuh, "Nonlinear photonic lattices induced by periodic phase modulation in a photorefractive nonlocal self-focusing medium," Tenth International Conference on Photorefractive Effects, Materials, and Devices (July 19-23, 2005, Sanya, Hainan, P. R. China) in *Photorefractive Effects, Materials, and Devices*, G. Zhang, D. Kip, D. Nolte, and J. Xu, eds., **Vol. 99** of *OSA Trends in Optics and Photonics* (Optical Society of America, 2005), pp. 517-521.
<https://doi.org/10.1364/PEMD.2005.517>
- C10.** D. N. Neshev, A. A. Sukhorukov, A. Dreischuh, R. Fischer, S. Ha, W. Z. Krolikowski, J. Bolger, B. J. Eggleton, A. Mitchell, M. W. Austin, and Y. S. Kivshar, "Observation of Polychromatic Gap Solitons Generated by Supercontinuum Light," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, (May 6-11, 2007, Baltimore, Maryland, USA), oral

presentation QTuE3; 2007 *OSA Technical Digest* (CD) (Optical Society of America, 2007), paper QTuE3.

<https://www.osapublishing.org/abstract.cfm?uri=qels-2007-QTuE3&origin=search>

- C11.** A. A. Sukhorukov, D. N. Neshev, A. Dreischuh, R. Fischer, S. Ha, W. Krolikowski, J. Bolger, B. J. Eggleton, A. Mitchell, M. W. Austin, and Y. S. Kivshar, "Polychromatic Gap Solitons and Breathers in Nonlinear Waveguide Arrays," in *Bragg Gratings, Photosensitivity, and Poling in Glass Waveguides* (BGPP) Collocated with Nonlinear Photonics (NP), Quebec City, Canada, Sept. 2–6, 2007; 2007 *OSA Technical Digest* (CD) (Optical Society of America, 2007), paper JMB5.

<https://doi.org/10.1364/BGPP.2007.JMB5>

- C12.** P. Hansinger, G. Maleshkov, I. Garanovich, D. Skryabin, D.N. Neshev, Yu. S. Kivshar, A. Dreischuh, G.G. Paulus, "Generation of White-Light Optical Vortices through Cascaded Four-Wave Mixing," International Quantum Electronics Conference / Conference on Lasers and Electro-Optics IQEC/CLEO Pacific Rim, 28.08-01.09.2011, Sydney, Australia. (Talk 4460-CT-3); 2011 *IEEE Conference Publications*, pp. 808-810.

<https://doi.org/10.1109/IQEC-CLEO.2011.6194055>

D. ДОКЛАДИ НА КОНФЕРЕНЦИИ С ПУБЛИКУВАНО РАЗШИРЕНО РЕЗЮМЕ

- D1.** S. G. Dinev and A. A. Dreischuh, "Nonlinear optical properties of atoms and ions in the XUV", X-th School on Coherent Optics "Quantum Optics III", Sept. 18-26, 1989, Ustron, Poland, p. 21.
- D2.** S. G. Dinev and A. A. Dreischuh, "Phase modulation and pulse compression in the $5p^6$ -transition of Xe I," 22-nd Conf. of EGAS, July 10-13, 1990, Upsala, Sweden, Europhysics Conference Abstracts 14D.
- D3.** S. G. Dinev and A. A. Dreischuh, "Up-conversion of femtosecond pulses in a hollow waveguide," IV-th National Conf. and Technical Exhibition with International Participation "Lasers and Their Applications," Oct. 23-26, 1990, Plovdiv, Bulgaria, p. 100.
- D4.** S. G. Dinev and A. A. Dreischuh, "Pico- and femtosecond pulses in the UV and XUV," Internat. Conf. on Laser Applications in Life Sciences LALS'90, Aug. 27-31, Moscow, Russia.
- D5.** S. G. Dinev and A. A. Dreischuh, "Induced waveguiding of laser beams," XIV-th International Conf. on Coherent and Nonlinear Optics ICONO'91, Sept. 24-27, St. Petersburg, Russia, pp. 152-153.
- D6.** A. A. Dreischuh, S. G. Dinev and D. I. Kavaldjiev, "Modeling an all-optical streak camera", 14-th Symposium on Photonic Measurements, June 1-3, 1992, Sopron, Hungary, p. 44.
- D7.** A. A. Dreischuh, S. G. Dinev, E. Eugenieva and D. I. Kavaldjiev, "Novel methods for pulse duration measurement based on self/induced phase modulation," European Research Conference on Quantum Optics, Sept. 26 - Oct. 1, 1992, Davos, Switzerland (poster).
- D8.** S. Dinev, A. Dreischuh, S. Balushev and E. Eugenieva, "Beam deflection and pulse shaping and shortening in atomic gases and absorptive liquids," 25-th Conf. of EGAS, July 13-16, 1993, Caen, France, Europhysics Conference Abstracts 17D, paper P2-094.
- D9.** A. Dreischuh, S. Dinev and S. Balushev, "Spatio-temporal symbioticity of laser beams/pulses in resonant nonlinear media," 25-th Conf. of EGAS, July 13-16, 1993, Caen, France Europhysics Conference Abstracts 17D, paper P2-095.
- D10.** S. Dinev, A. Dreischuh, S. Balushev and E. Eugenieva, "Optical beam/pulse deflection and shaping," Jahrestagung der Österreichischen Physikalischen Gesellschaft, Sept. 20-21, 1993, Graz, Austria, Fachvortrag AMP-FV11.

- D11.** A. Dreischuh, E. Eugenieva and S. Dinev, "Analysis of an alternative approach for constructing a parallel all-optical data transmission line," International Conf. on Optical Computing, Aug. 22-25, 1994, Edinburgh, UK, paper MP61, pp. 149-150
- D12.** S. Balushev, S. Dinev, A. Dreischuh and N. Goutev, "Optimal conditions for an all-optical laser beam deflection," General Conference of the Balkan Physical Union, Sept. 12-14, 1994, Izmir, Turkey, paper CMP137, p. 41
- D13.** С. Динев, А. Драйшу, С. Балусhev, Я. Велчев, Д. Нешев, "Едномерни и двумерни пространствени тъмни солитони," Първи симпозиум по нелинейни явления и солитони, София, 21-22.06.1994 (устен доклад; 21.06.94; 9:15-9:55h).
- D14.** А. Драйшу, Я. Велчев, Д. Нешев, С. Балусhev, С. Динев, "Числено моделиране на генерацията и взаимодействието на пространствени тъмни солитони," Първи симпозиум по нелинейни явления и солитони, София, 21-22.06.1994 (устен доклад; 21.06.94; 9:55-10:15h).
- D15.** С. Балусhev, С. Динев, А. Драйшу, Д. Нешев, Я. Велчев, О. Маразов, "Експериментално изследване на пространствени тъмни солитони," Първи симпозиум по нелинейни явления и солитони, София, 21-22.06.1994 (устен доклад; 21.06.94; 10:15-10:35h).
- D16.** S. Dinev, A. Dreischuh, U. Reiter-Domiatty, D. Gruber, L. Windholz, "Nonlinear alignment between conical emissions in dense atomic vapors," 28-th EGAS Conference, July 16-19, 1996, Graz, Austria, paper C4-02, Europhysics Conference Abstracts 20D, pp. 236-237.
- D17.** D. Gruber, A. Dreischuh, V. Kamenov, U. Reiter-Domiatty, L. Windholz, S. Dinev, "Spectral and spatial evolution of a conical emission in Na vapors," VI-th Laser Interactions Conference – Crete LIC-C'96, May 29-31, 1996, Heraklion, Crete, Greece.
- D18.** D. Gruber, S. Dinev, A. Dreischuh, U. Reiter-Domiatty, and L. Windholz, "Energy pooling in Sr revisited: Consideration of the associative ionization process," 28-th EGAS Conference, July 16-19, 1996, Graz, Austria, paper C4-03, Europhysics Conference Abstracts 20D, pp. 238-239.
- D19.** M. Assa, I. Velchev, S. Dinev, D. Neshev, A. Dreischuh, "Topological-Charge Controlled Interaction Within Ordered Structures of Optical Vortex Solitons," Ninth International School on Quantum Electronics: Lasers and Applications, 16-20 September 1996, Varna, Bulgaria, Book of abstracts p. 47.
- D20.** D. Neshev, A. Dreischuh, S. Dinev, L. Windholz, "Guiding and Switching by Quasi-2D Dark Spatial Solitons," Ninth International School on Quantum Electronics: Lasers and Applications, 16-20 September 1996, Varna, Bulgaria, Book of abstracts p. 45.
- D21.** D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Fliesser, L. Windholz, "Experimental Investigation of Computer-Synthesized Holograms for Generation of Optical Vortex Solitons and Ring Dark Solitary Waves," Ninth International School on Quantum Electronics: Lasers and Applications, 16-20 September 1996, Varna, Bulgaria, Book of abstracts p. 46.
- D22.** G. Paulus, F. Zacher, F. Grasbon, A. Dreischuh, H. Walther, "Klassische und quantenmechanische Effekte on Above-threshold Ionization," Fachvortrag SYLF3.5, Deutsche Physikalische Gesellschaft, Frühjahrstagung der DPG 1999, Heidelberg, Deutschland.
<https://www.dpg-verhandlungen.de/year/1999/conference/heidelberg/part/sylyf/session/3/contribution/5>
- D23.** A. Dreischuh, T. Arabadjiev, D. Neshev, G.G. Paulus, F. Zacher, H. Walther, "Stability of one-dimensional dark spatial solitons of finite second transverse extent," Tenth International School on Quantum Electronics: Lasers and Applications, September 1998, Varna, Bulgaria, Book of abstracts, poster PB4.
- D24.** F. Grasbon, A. Dreischuh, F. Zacher, G.G. Paulus, H. Walther, "Femtosecond interferometric autocorrelations in the presence of pulse front distortions," Tenth International School on Quantum Electronics: Lasers and Applications, September 1998, Varna, Bulgaria, Book of abstracts, poster PB6.

- D25.** S. Chervenkov, D. Neshev, G. G. Paulus, A. Dreischuh, H. Walther, "Directional coupling and branching of optical signals by dark beams," 11th International School on Quantum Electronics: Laser Physics and Applications, 2000, Varna, Bulgaria, Book of abstracts, p.38.
- D26.** A. Dreischuh, G. G. Paulus, D. Neshev, F. Grasbon, H. Walther, "Multiple-charged optical vortex solitons: existence and stability in saturable Kerr-type nonlinear media," 11th International School on Quantum Electronics: Laser Physics and Applications, 2000, Varna, Bulgaria, Book of abstracts, p.39.
- D27.** A. Dreischuh, D. Neshev, S. Chervenkov, G. G. Paulus, F. Grasbon, H. Walther, "Nonlinear interaction of ring dark solitary waves with coaxial dark beams," 11th International School on Quantum Electronics: Laser Physics and Applications, 2000, Varna, Bulgaria, Book of abstracts, p.41.
- D28.** E. Eremina, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Mosshammer, B. Feuerstein, J. Ullrich, "Nicht-sequentielle Doppelionisation von Ar und Ne in 30 fs-Laserpulsen: Lichtintensität an und weit unter der Schwelle für direkte Stoßionisation," invited talk A1.3 presented from E. Eremina in HS15/E10, Frühjahrstagung der DPG, Fachverband Physik, 04.-08.März 2002, Osnabrück, Deutschland.
<https://www.dpg-verhandlungen.de/year/2002/conference/osnabrueck/part/a/session/1/contribution/3>
- D29.** E. Eremina, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Mosshammer, B. Feuerstein, J. Ullrich, "Doppelionisation von N₂ Molekülen in intensiven ultrakurzen Lazerpulsen," Poster A18.8, Deutsche Physikalische Gesellschaft, Frühjahrstagung, Fachverband Physik, 04.-08.März 2002, Osnabrück, Deutschland.
<https://www.dpg-verhandlungen.de/year/2002/conference/osnabrueck/part/a/session/18/contribution/8>
- D30.** F. Lindner, M. G. Schätzel, W. Stremme, F. Grasbon, G. G. Paulus, A. Dreischuh, and H. Walther, "Ultrakurzpuls-Ti:Saphir-Laser mit 100 kHz Repetitionsrate," Poster Q434.21, Frühjahrstagung der DPG, FachverbandPhysik, 04.-08.März 2002, Osnabrück, Deutschland.
<https://www.dpg-verhandlungen.de/year/2002/conference/osnabrueck/part/q/session/434/contribution/21>
- D31. (a)** D. Neshev, A. Dreischuh, S. Chervenkov, G.G. Paulus, and H. Walther, "Periodic modulation of the refractive index by vortex-lattices," International workshop on nonlinear photonic crystals, Copenhagen, Denmark (Oct. 25-26 2001), poster.
(b) D. Neshev, S. Chervenkov, A. Dreischuh, G.G. Paulus, and H. Walther, "Periodic modulation of the refractive index by vortex-lattices," Workshop "Photonic crystals down under", Canberra, Australia, (August 18-24, 2002), oral presentation of D. Neshev.
- D32.** H. Rottke, E. Eremina, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G. G. Paulus, H. Walther, R. Moshhammer, B. Feuerstein, J. Ullrich, "Strong-field non-sequential multiple ionization: At and far below the threshold for impact ionization," in: Technical Digest of Internat. Quant. Electron. Conf. IQEC'2002, June 22-28, 2002, Moscow, Russia, p. 231 (invited).
- D33.** F. Lindner, M. Schätzel, F. Grasbon, G.G. Paulus, A. Dreischuh, and H. Walther, "Dispersion control in a 100 kHz repetition rate 35-fs laser system," 12th International School on Quantum Electronics: Laser Physics and Applications, 2002, Varna, Bulgaria, Book of abstracts, p.26.
- D34.** A. Dreischuh, D. Georgiev, D. Neshev, G. G. Paulus, and H. Walther, "Generation of lattices of optical vortices, " 12th International School on Quantum Electronics: Laser Physics and Applications, 2002, Varna, Bulgaria, Book of abstracts, p.33.
- D35.** E. Eremina, X. Liu, H. Rottke, W. Sandner, G.G. Paulus, A. Dreischuh, M. Schätzel, F. Grasbon, F. Lindner, H. Walther, R. Moshhammer, F. Feuerstein, and J. Ullrich, "Nicht-sequentielle Doppelionisation in hochintensiven Laserpulsen: Elektronenimpulskorrelation an und unterhalb der "Schwelle" für e⁻ Stossionisation," Fachvortrag A16.3, Frühjahrstagung der DPG, Fachverband Physik, 24.-28.März 2003, Hannover, Deutschland
<https://www.dpg-verhandlungen.de/year/2003/conference/hannover/part/a/session/16/contribution/3>

- D36.** X. Liu, E. Eremina, H. Rottke, W. Sandner, G.G. Paulus, A. Dreischuh, M. Schätzel, F. Grasbon, F. Lindner, H. Walther, R. Moshhammer, F. Feuerstein, and J. Ullrich, "Correlation in two-electron emission in strong-field double ionization of molecules," Fachvortrag A16.5, Frühjahrstagung der DPG, Fachverband Physik, 24.-28.März 2003, Hannover, Deutschland
<https://www.dpg-verhandlungen.de/year/2003/conference/hannover/part/a/session/16/contribution/5>
- D37.** K. Besuchanov, A. Dreischuh, "Phase dislocations in femtosecond laser fields," VIII-th Internat. Conf. Laser and Laser Information Technologies: Fundamental Problems and Applications - ILLA'2003 / III-th Internat. Symposium on Laser Technologies and Laser – LTL'2003, Sept. 27-Oct. 1, 2003, Smolyan, Bulgaria.
- D38.** X. Liu, E. Eremina, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshhammer, J. Ullrich, "Corelation in strong field double ionization of molecules," XXIII Internat. Conf. on Photonic, Electronic and Atomic Collisions (ICPEAC'2003), July 23-29, 2003, Stockholm, Sweden,
- D39.** E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshhammer, B. Feuerstein, J. Ullrich, "Atomic double ionization in high intensity light pulses: Below the threshold for e^- impact ionization," XXIII Internat. Conf. on Photonic, Electronic and Atomic Collisions (ICPEAC'2003), July 23-29, 2003, Stockholm, Sweden,
- D40.** E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, F. Lindner, F. Grasbon, G.G. Paulus, H. Walther, R. Moshhammer, B. Feuerstein, J. Ullrich, "Strong field non-sequential atomic and molecular double ionization investigated close to and below the threshold for electron impact ionization," 12th Internat. Laser Physics Workshop (LPHYS'03), Aug. 25-29, 2003, Hamburg, Germany, Seminar 2.11. (Fri., Aug. 29, 2004, Time: 14.00-14.25).
- D41.** E. Eremina, X. Liu, H. Rottke, W. Sandner, A. Dreischuh, M. Schätzel, G. G. Paulus, H. Walther, R. Moshhammer, and J. Ullrich, "Influence of molecular structure on double ionization of N₂ and O₂ in high intensity ultra-short laser pulses," in Conference on Lasers and Electro-Optics/International Quantum Electronics Conference and Photonic Applications Systems Technologies (May 16-21, 2004, San Francisco, USA), Technical Digest (CD) (Optical Society of America, 2004), paper JTuC7.
<https://www.osapublishing.org/abstract.cfm?URI=CLEO-2004-JTuC7>
<https://ieeexplore.ieee.org/document/1367114>
- D42.** K. Bezuhanov, A. Dreischuh, "Linear optics of dark beams with mixed phase dislocations," XIII-th International School on Quantum Electronics: Lasers and Applications, Sept. 20-23, 2004, Burgas, Bulgaria, Book of abstracts p. 54.
- D43.** G. Maleshkov, K. Bezuhanov, A. Dreischuh, "Variational analysis of SPM- and IPM-based interactions in cubic non-local nonlinear media," XIII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 20-23, 2004, Burgas, Bulgaria, Book of abstracts pp. 52-53.
- D44.** D. GEORGIEV, A. DREISCHUH, "SELECTION OF ATOMS WITH SPECIFIC VELOCITY DISTRIBUTIONS," XIII-TH INTERNATIONAL SCHOOL ON QUANTUM ELECTRONICS: LASERS AND APPLICATIONS, SEPT. 20-23, 2004, BURGAS, BULGARIA, BOOK OF ABSTRACTS PP. 41-42.
- D45.** K. BEZUHANOV, A. DREISCHUH, G.G. PAULUS, M. SCHÄTZEL, H. WALTHER, "PHASE DISLOCATIONS IN FEMTOSECOND LASER FIELDS," XIII-TH INTERNATIONAL SCHOOL ON QUANTUM ELECTRONICS: LASERS AND APPLICATIONS, SEPT. 20-23, 2004, BURGAS, BULGARIA, BOOK OF ABSTRACTS P. 53.
- D46.** N. Sagemerten, D. Träger, J. Jaegers, C. Denz, A. Desyatnikov, D. Neshev, R. Fischer, A. Dreischuh, W. Krolikowski, and Yu. Kivshar, "Singular self-trapped periodic lattices in anisotropic photorefractive media," CLEO/Europe-EQEC'2005, June 12-17, 2005, Munich, Germany, p.119.
<https://doi.org/10.1109/EQEC.2005.1567290>

- D47.** D.E. Petersen, D. Neshev, W.Z. Krolikowski, A. Dreischuh, O. Bang, "Observation of attraction of dark solitons" (oral presentation EB2-6-WED), CLEO/Europe-EQEC'2005 (June 12-17, 2005, Munich, Germany), Book of abstracts p.51.
<https://doi.org/10.1109/EQEC.2005.1567223>
- D48.** W. Sandner, H. Rottke, E. Eremina, M. Böttcher, X. Liu, W. Becker, A. Dreischuh, F. Lindner, E. Goulielmakis, M. G. Schätzel, G. G. Paulus, H. Walther, F. Krausz, K. O. Keeffe, M. Lezius, R. Moshhammer, and J. Ullrich "Nonsequential double ionization by few-cycle laser pulses, and in molecular targets," XIV-th International Laser Physics Workshop (LPHYS'05), (July 4-8, 2005, Kyoto, Japan). (Talk 2.1.4., Mon., July 4, 12.15-12.40h);
- D49.** K. Bezuharov, G. Maleshkov, A. Dreischuh, "Variational Analysis of Nonlinear Nonlocal Interactions," Alexander-von-Humboldt Foundation Conference", Advances in Physics and Astrophysics of the 21st Century" (Sept. 6-11, 2005, Varna, Bulgaria).
- D50.** D. N. Neshev, A. Dreischuh, R. Fischer, S. Ha, A. A. Sukhorukov, W. Krolikowski, Yu. S. Kivshar, J. Bolger, B. J. Eggleton, A. Mitchell, "Observation of supercontinuum spatial gap solitons," V-th Workshop of the Centre for Ultrahigh Bandwidth Devices for Optical Systems (CUDOS; An ARC Centre of Excellence) (Aug. 9-11, 2006, Hervey Bay, QLD, Australia).
- D51.** D. N. Neshev, A. A. Sukhorukov, A. Dreischuh, R. Fischer, S. Ha, Ch. R. Rosberg, W. Krolikowski, J. Bolger, B. J. Eggleton, A. Mitchell, M. W. Austin, Yu. S. Kivshar, "Spatio-Spectral Control of Supercontinuum Light", Frontiers in Optics 2006, Rochester, New York, United States, 10 October 2006, ISBN: 1-55752-818-7, OSA Technical Digest (CD) (Optical Society of America, 2006), paper: PDP-FC4
https://doi.org/10.1364/FIO.2006.PDP_FC4
- D52.** S. M. Saitiel, R. Fischer, D. N. Neshev, A. Dreischuh, W. Krolikowski, Yu. S. Kivshar, "Optical harmonics generation in SBN crystal with random ferroelectric domain structure," OASIS - The 11th Meeting on Optical Engineering and Science in Israel, March 26-27, 2007, Tel-Aviv, Israel) (Session 6 - Nonlinear Optics; invited paper).
- D53.** M. Paskalev, A. Gaydardjiev, H. Stoyanov, I. Stefanov, I. Buchvarov, I. Christov, A. Dreischuh, "Techniques for characterization of pico- and femtosecond laser pulses," Meetings in Physics' 2007, Feb. 23, 2007, Sofia University, Sofia, Bulgaria.
- D54.** A. Minovich, D. N. Neshev, W. Krolikowski, Yu. S. Kivshar, A. Dreischuh, "Experimental characterization of nonlocal nonlinear media," Internat. Conf. on Coherent and Nonlinear Optics (ICONO) 2007 (May 28-June 1, 2007, Minsk, Belarus), Session I01, Talk I-3, Monday, May 28, 2007).
- D55.** A. Minovich, D. N. Neshev, A. Dreischuh, W. Krolikowski, Yu. S. Kivshar, "Nonlocal response of optical thermal nonlinearity", Conference on Lasers and Electro-Optics, 2007 and the International Quantum Electronics Conference. CLEOE-IQEC 2007. 17-22 June 2007, Munich, Germany, ISBN: 978-1-4244-0931-0; paper CD4_1
<https://doi.org/10.1109/CLEOE-IQEC.2007.4386100>
- D56.** A. A. Sukhorukov, D. N. Neshev, A. Dreischuh, R. Fischer, S. Ha, J. Bolger, L. Bui, W. Krolikowski, B. J. Eggleton, A. Mitchell, M. W. Austin, Yu. S. Kivshar, "Supercontinuum spatial gap solitons," CLEO/Europe and IQEC 2007 Conference Digest, (Optical Society of America, 2007), paper CD1_6.
<https://doi.org/10.1109/CLEOE-IQEC.2007.4386096>
- D57.** D. Neshev, A. A. Sukhorukov, A. Dreischuh, R. Fischer, S. Ha, J. Bolger, L. Bui, W. Krolikowski, B.J. Eggleton, A. Mitchell, M. W. Austin, Y. S. Kivshar, "Observation of supercontinuum spatial gap solitons", International Workshop on Instabilities, Patterns and Spatial Solitons IPSSO 2007, Supélec, Campus de Metz, March 28-30 (2007), oral presentation
- D58.** N. Dimitrov, N. Chakarov, A. Dreischuh, "Spatial chirp revisited: Matrix analysis of dispersionless optical systems and correct interferometric autocorrelation," XV-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 15-28, 2008, Burgas, Bulgaria, Book of abstracts, p.74

- D59.** G. Maleshkov, D. N. Neshev, A. Dreischuh, "Bright beam deflection by steering of beams with mixed phase dislocations," XV-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 15-28, 2008, Burgas, Bulgaria, Book of abstracts, p. 82.
- D60.** G. Maleshkov, D. N. Neshev, A. Dreischuh, "Crossed one-dimensional dark beams with step phase dislocations in self-focusing Kerr nonlinear media," International Conference on Ultrafast and Nonlinear Optics (UFNO'2009), Burgas 14-18 Sept. 2009, Bulgaria, Book of abstracts, p.50b.
- D61.** P. Hansinger, A. Dreischuh, G. G. Paulus, "Spatial control of multiple filamentation using optical vortices," International Conference on Ultrafast and Nonlinear Optics (UFNO'2009), Burgas 14-18 Sept. 2009, Bulgaria, Book of abstracts, p. 50.
- D62.** N. Gorunski, N. Dimitrov, A. Dreischuh, "Spatial chirp of ultrashort beam/pulse and correct interferometric autocorrelation," International Conference on Ultrafast and Nonlinear Optics (UFNO'2009), Burgas 14-18 Sept. 2009, Bulgaria, Book of abstracts, p. 8.
- D63.** A. Dreischuh, D. N. Neshev, G. Maleshkov, P. Hansinger, M. Samoc, Yu. S. Kivshar, and G. G. Paulus, "Optical Vortices in Self-Focusing Kerr Nonlinear Media," International conference "Light at Extreme Intensities: Scientific opportunities and technological issues of the Extreme Light Infrastructure" (LEI'2009), October 16 - 21, 2009, Brasov, Romania. (Poster P25), Book of abstracts, p. 131.
- D64.** G. Maleshkov, P. Hansinger, A. Dreischuh, G. G. Paulus, "Fractional vortex dipoles of edge-screw type in self-focusing Kerrnonlinear media," XVI-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 20-24, 2010, Nessebar, Bulgaria, Book of abstracts, pp.122.
- D65.** G. Maleshkov, A. Dreischuh, E. Petrova, D. Neshev, "Singular optical beams in self-focusing Kerr nonlinear media," XVI-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 20-24, 2010, Nessebar, Bulgaria, Book of abstracts, pp.106-107.
- D66.** N. Dimitrov, A. Dreischuh, G.G. Paulus, "Interferometric autocorrelation of ultrashort pulseswith tilted pulse fronts," XVI-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 20-24, 2010, Nessebar, Bulgaria. (poster awarded 2-nd Best Student Poster Award of OSA), Book of abstracts, pp.114-115.
- D67.** N. Dimitrov, I. Stefanov, A. Dreischuh, "Tuning femtosecond laser pulses and their correct autocorrelation measurement," Meetings in Physics'2011, Feb. 24, 2011, Sofia University, Sofia, Bulgaria.
- D68.** G. Maleshkov, P. Hansinger, G. G. Paulus, A. Dreischuh, "Four-wave mixing of optical vortex beams," Meetings in Physics'2011, Feb. 24, 2011, Sofia University, Sofia, Bulgaria.
- D69.** P. Hansinger, G. Maleshkov, I. Garanovich, D. Skryabin, D. N. Neshev, Y. S. Kivshar, A. Dreischuh, G. G. Paulus, "Generation of white-light optical vortices through four-wave mixing," Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC 2011, art. no. 5943477, 22-26 May 2011, Munich, Germany.
<https://doi.org/10.1109/CLEOE.2011.5943477>
- D70.** P. Hansinger, A. Dreischuh, G. Maleshkov, G. G. Paulus, "Optical vortex supercontinuum and topological charge transfer," Jahrestagung der DPG (Dresden, Germany, 2011), poster Q15.72.
<https://www.dpg-verhandlungen.de/year/2011/conference/dresden/part/q/session/15/contribution/72>
- D71.** G. Maleshkov, P. Hansinger, D. N. Neshev, A. Dreischuh, G. G. Paulus, "Four-wave frequency mixing of pump beams carrying multi-charged optical vortices: Step towards singular optical (super)continuum," XVII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 24-28, 2012, Nessebar, Bulgaria. (Poster PE10), Book of abstracts, pp.113-114.
- D72.** G. Maleshkov, L. Stojanov, I. Stefanov, A. Dreischuh, "Bright beam self-focusing initiated by singular dark beams," XVII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 24-28, 2012, Nessebar, Bulgaria. (Poster PE13), Book of abstracts, pp.116-117.

- D73.** G. Maleshkov, P. Hansinger, N. Dimitrov, A. Dreischuh, G. G. Paulus, “Branching optical signals by fractional vortex dipoles,” XVII-th International School on Quantum Electronics: Lasers and Applications, Sept. 24-28, 2012, Nessebar, Bulgaria. (Poster PE9), Book of abstracts, pp.111-112.
- D74.** P. Hansinger, G. Maleshkov, D. N. Neshev, A. Dreischuh, G. G. Paulus, “Cascaded ultrashort optical vortex four-wave mixing,” XVII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 24-28, 2012, Nessebar, Bulgaria. (Poster PE11), Book of abstracts, pp.114-115.
- D75.** M. Zürich, C. Kern, P. Hansinger, A. Dreischuh, and Ch. Spielmann, “Highly nonlinear interaction of laser beams with angular orbital momentum,” Abbe School of Photonics Workshop DOKDOK 2012 (Oct. 7-11, 2012, Jena, Germany), DoKDoK 2012 – Proceedings, pp. 130-131.
https://www.asp.uni-jena.de/aspmedia/dokdok/dokdok+2012/dokdok2012_proceedings_300dpi_web.pdf
- D76.** L. Stoyanov, G. Maleshkov, I. Stefanov, A. Dreischuh, “Bright beam self-focusing controlled by singular dark beams,” Ninth International Workshop on Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light (CAMEL-IX) (June 16-21, 2013, Nessebar, Bulgaria).
- D77.** M. Zürich, Ch. Kern, P. Hansinger, A. Dreischuh, Ch. Spielmann, “Extreme nonlinear optics with singular light beams carrying orbital angular momentum,” Ultrafast Optics 2013 Conference UFO IX, Davos, Switzerland, March 4-8 2013 (talk)
- D78.** A. Dreischuh, “Optical vortices as singular markers in cascaded four-wave frequency mixing process,” Laserlab User Meeting (Sept. 26-27, 2013, Marseille, France).
- D79.** C. Kern, M. Zürich, P. Hansinger, A. Dreischuh, and Ch. Spielmann, „Extreme Nonlinear Optical Processes with Beams Carrying Orbital Angular momentum”, CLEO/Europe - IQEC Conference, Munich, Germany, 16.05.2013. (talk)
<https://doi.org/10.1109/CLEOE-IQEC.2013.6801162>
- D80.** L. Stoyanov, S. Topuzoski, I. Stefanov, L. Janicijevic, A. Dreischuh, “Fraunhofer diffraction of an optical vortex beam by fork-shaped grating,” 23rd annual International Laser Physics Workshop LPHYS’14 (Sofia, July 14-18, 2014), poster presentation.
- D81.** Ch. Spielmann, M. Zürich, C. Kern, P. Hansinger, and A. Dreischuh. Extreme nonlinear optical processes with beams carrying orbital angular momentum, Photonics West - Ultrafast Phenomena and Nanophotonics XVIII, San Francisco, USA, 05.02.2014. (invited talk)
- D82.** L. Stoyanov, S. Topuzoski, G. Maleshkov, I. Stefanov, L. Janicijevic, A. Dreischuh, “Far-field diffraction of singular dark beams by computer-generated holograms with encoded optical vortices,” XVIII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 29 – Oct. 3, 2014, Sozopol, Bulgaria, (poster awarded 1st Best Student Paper Award of SPIE), Book of abstracts, pp.107-108.
- D83.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, G. G. Paulus, “Pulse front tilt measurement of femtosecond laser pulses,” XVIII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 29 – Oct. 3, 2014, Sozopol, Bulgaria, poster, Book of abstracts, pp.108-109.
- D84.** C. Kern, M. Zürich, P. Hansinger, A. Dreischuh, and Ch. Spielmann, “Extreme Nonlinear Optical Processes with Beams Carrying Orbital Angular Momentum,” Progress In Electromagnetics Research Symposium (PIERS)-2015, July 06-09, 2015, Prague, Czech Republic (invited talk), p.993.
<http://piers.org/piersproceedings/piers2015Prague.php>
- D85.** L. Stoyanov, I. Stefanov, N. Dimitrov and A. Dreischuh, “Vortex necklace beams: Self-focusing and guiding properties in SBN crystal,” PHOTONICA 2015 – V Internat. School and Conference on Photonics, August 24-28, 2015, Belgrade, Serbia, Book of abstracts, p.84.

- D86.** S. Topuzoski, L. Janicijevic, D. Cojoc, L. Stoyanov, I. Stefanov, A. Dreischuh, “Optical vortex beams generated with diffractive optical elements,” Internat. Workshop “Advances in Nanophysics and Nanophotonics”, Magurele-Bucharest (Romania), 31 August-2 September, 2015 (invited talk).
- D87.** L. Stoyanov, I. Stefanov, A. Dreischuh, “Diffraction of square-shaped optical vortex lattice by a second vortex lattice,” XIX-th Internat. Conference and School on Quantum Electronics: Lasers and Applications, Sept. 26 – 30, 2016, Sozopol, Bulgaria, poster, Book of abstracts, pp. 105-106.
- D88.** N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, A. Dreischuh, “Dispersion control in a folded 4-f system for shaping femtosecond laser pulses,” XIX-th Internat. Conference and School on Quantum Electronics: Lasers and Applications, Sept. 26 – 30, 2016, Sozopol, Bulgaria, poster, Book of abstracts, pp. 106-107.
- D89.** N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, A. Dreischuh, “Dispersion control of femtosecond laser pulses in-and outside the laser cavity,” Third National Congress in Physical Sciences, 29.09.-02.10.2016, Sofia, Bulgaria (poster), Book of abstracts, 2pp.
- D90.** L. Stoyanov, I. Stefanov, N. Dimitrov, A. Dreischuh, “Arithmetics with topological charges of optical vortices nested in larger vortex lattices, Third National Congress in Physical Sciences, 29.09.-02.10.2016, Sofia, Bulgaria (poster), Book of abstracts, 2pp.
- D91.** S. Topuzoski, Lj. Janicijevic, L. Stoyanov and A. Dreischuh, “Generation of coupled optical vortices by computer-constructed gratings,” Winter College on Optics: Advanced Optical Techniques for Bio-imaging, The Abdus Salam International Centre for Theoretical Physics (ICTPsmr 3104), Feb. 13-24, 2017, Trieste, Italy (oral presentation).
- D92.** L. Stoyanov, G. Maleshkov, I. Stefanov, A. Dreischuh, “Manipulation of the topological charges of vortices within large optical vortex lattices: Far-field beam reshaping,” PHOTONICA 2017 – VII-th Internat. School and Conference on Photonics, August 28-Sept. 1, 2017, Belgrade, Serbia, Book of abstracts, p. 208.
- D93.** M. Zhekova, L. Stoyanov, I. Stefanov, A. Dreischuh, “Bessel-like beam generation by manipulation of the topological charges of optical vortices,” Humboldt Kolleg - Humboldtians and scientific progress in the Central and East European countries, November 16–18, 2017, Sofia, Bulgaria. (oral presentation), Book of abstracts, p. 62.
- D94.** S. Topuzoski, Lj. Janicijevic, L. Stoyanov, I. Stefanov and A. Dreischuh, "Five-vortex spots patterns generated from azimuthally X-shaped beam," Winter College on Extreme Non-linear Optics, Attosecond Science and High-field Physics", ICTP, Trieste, Italy (05-16.02.2016).
- D95.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Far-Field Pattern Formation by Manipulating the Topological Charges of Hexagonal Optical Vortex Lattices,” 20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria), Book of abstracts, pp.119-120.
- D96.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Far-Field Beam Manipulating by Mixing Square-Shaped and Hexagonal Optical Vortex Lattices,” 20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria), Book of abstracts, pp.116-117.
- D97.** L. Stoyanov, N. Gorunski, I. Stefanov, A. Dreischuh, “Formation of Stable Elementary Cells of Rigid Optical Vortex Lattices,” 10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria), Book of abstracts, pp. 186-187.
- D98.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Far-field Beam Reshaping of Square and Hexagonal Optical Vortex Lattices by a Second Identical Lattice,” 10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria), Book of abstracts, pp. 188-189.
- D99.** L. Stoyanov, M. Zhekova, A. Stefanov, I. Stefanov, G. G. Paulus and A. Dreischuh, “Generation of zeroth- and first-order long range nondiffracting Gauss-Bessel beams by annihilating multiple-charged optical vortices,” VII International School and Conference on

Photonics - PHOTONICA2019, Belgrade, Serbia (Aug. 26 – Aug. 30, 2019), Book of abstracts, p. 179.

- D100.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus and A. Dreischuh, “Controllable multi-spot focal arrays created by optical vortex lattices,” Humboldt-Kolleg “Science without Borders: Alexander von Humboldt's Concept in Today's World”, Sept. 18-21, 2019 (Varna, Bulgaria).
- D101.** N. Dimitrov, M. Zhekova, G. G. Paulus and A. Dreischuh, “Inverted field interferometer for measuring the topological charge of optical vortices,” VII International School and Conference on Photonics - PHOTONICA2019, Belgrade, Serbia (Aug. 26 – Aug. 30, 2019), Book of abstracts, p. 186.
- D102.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, A. Dreischuh, “Multi-spot focal pattern formation and beam reshaping by mixing square-shaped and hexagonal vortex lattices,” Internat. Conf. of Quantum, Nonlinear and Nanophotonics’2019 (ICQNN’2019) and Symposium on Nanomaterials and Nanotechnologies (SNN’2019) (Sept. 02-05.2019, Sofia, Bulgaria), Book of abstracts, p. 42.
- D103.** M. Zhekova, L. Stoyanov, A. Dreischuh, “Gauss-Bessel beam formation via annihilating optical vortices,” 7th International Symposium Optics and its Applications, Yerevan-Ashtarak, Armenia (Sept. 20-24, 2019).
- D104.** M. Zhekova, L. Stoyanov, I. Stefanov, G. G. Paulus, A. Dreischuh, “Gauss-Bessel beam formation using annihilation and modification of optical vortices,” International Conference on Quantum, Nonlinear and Nanophotonics ICQNN’2019 (Sept. 02-04, 2019, Sofia, Bulgaria), Book of abstracts, p. 40.
- D105.** N. Dimitrov, L. Manova, M. Zhekova, I. Stefanov, A. Dreischuh, “Collinear inverted field autocorrelation of femtosecond vortex pulses/beams,” 20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria), Book of abstracts, p. 42.
- D106.** M. Zhekova, L. Stoyanov, G. Maleshkov, I. Stefanov, G. G. Paulus, and A. Dreischuh, “Bessel-like beam formation by annihilating the topological charges of optical vortices,” 20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria) Book of abstracts, pp.118-119.
- D107.** N. Dimitrov, M. Zhekova, G. G. Paulus, A. Dreischuh, “Interferometric approach for vortex beam topological charge characterization,” Internat. Conf. of Quantum, Nonlinear and Nanophotonics’2019 (ICQNN’2019) and Symposium on Nanomaterials and Nanotechnologies (SNN’2019) (Sept. 02-05.2019, Sofia, Bulgaria), Book of abstracts, p. 41.
- D108.** N. Dimitrov, M. Zhekova, I. Stefanov, G. G. Paulus, A. Dreischuh, “Measurement of few-cycle femtosecond pulses carried by vortex beams using an inverted-field autocorrelator,” XXI International Conference and School on Quantum Electronics: “Laser Physics and Applications”, Sept. 21-24., 2020, Sofia, virtual forum, Book of abstracts, pp. 56-57.
- D109.** L. Stoyanov, G. Maleshkov, B. Ivanov, I. Stefanov, G. G. Paulus, A. Dreischuh, “Triple mixing of optical vortex lattices for focused beams structuring,” XXI International Conference and School on Quantum Electronics: “Laser Physics and Applications”, Sept. 21-24., 2020, Sofia, virtual forum, Book of abstracts, pp. 58-59.
- D110.** L. Stoyanov, G. Maleshkov, B. Ivanov, I. Stefanov, G. G. Paulus, A. Dreischuh, “Convolution theorem revisited: Triple mixing of square optical vortex arrays,” XXI International Conference and School on Quantum Electronics: “Laser Physics and Applications”, Sept. 21-24., 2020, Sofia, virtual forum, Book of abstracts, pp. 105-106.
- D111.** L. Stoyanov, Y. Zhang, A. Dreischuh, and G. G. Paulus, “Ultrashort quasi-non-diffracting long-range Gauss-Bessel beams,” VIII International School and Conference on Photonics PHOTONICA-2021, 23 - 27 August 2021, Belgrade, Serbia; Book of Abstracts p. 141 ; ISBN 978-86-82441-53-3 (Poster presentation in Section 8: Ultrafast optical phenomena).
- D112.** L. Stoyanov, M. Zhekova, A. Stefanov, I. Stefanov, Y. Zhang, G. G. Paulus, and A. Dreischuh, “Zeroth- and First-Order Long-Range Gauss-Bessel Beams in CW and in Few-Cycle Laser Fields,” 13th Conference of the Society of Physicists of Macedonia CSPM

- 2020, Faculty of Natural Sciences and Mathematics – Skopje, Ss. Cyril and Methodius University in Skopje, 16–19 September 2021, Virtual meeting; Book of Abstracts p. 19; Contributed talk CT-09 (Saturday, 18.09.2021).
- D113.** N. Dimitrov, M. Zhekova, I. Stefanov, and A. Dreischuh, “Realignment-Free Switching Between Interferometric and Background-Free Autocorrelations,” 13th Conference of the Society of Physicists of Macedonia CSPM 2020, Faculty of Natural Sciences and Mathematics – Skopje, Ss. Cyril and Methodius University in Skopje, 16–19 September 2021, Virtual meeting; Book of Abstracts p. 36; Poster presentation Pp-01 (Saturday, 18.09.2021).
- D114.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh and G. G. Paulus, “Generation Gauss-Bessel beams with vortex phase plates at formally inadequate wavelengths,” BPU11 CONGRESS (The 11th International Conference of the Balkan Physical Union; 28 August 2022 - 1 September 2022, Belgrade, Serbia); Book of Abstracts p. 144; Poster presentation S07-OP-201.
- D115.** L. Stoyanov, A. Dreischuh and G. Paulus, „Experimental demonstration of coherent beam recombination after controllable beam break-up and filamentation by using optical vortex lattices,” BPU11 CONGRESS (The 11th International Conference of the Balkan Physical Union; 28 August 2022 - 1 September 2022, Belgrade, Serbia); Book of Abstracts p. 150; Poster presentation S07-OP-208.
- D116.** N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, G.G. Paulus, “Generation of Gauss-Bessel beams in a wide spectral range by using single vortex phase plate,” poster P.E5 presented at the XXII International Conference and School on Quantum Electronics: “Laser Physics and Applications” ICSQE’2022 (19-23 September 2022, Bulgaria, virtual event); Book of Abstracts p. 75.
- D117.** L. Stoyanov, A. Dreischuh, G.G. Paulus, „Controllable femtosecond beam splitting and coherent beam recombination using arrays of singular beams,” poster P.E6 presented at the XXII International Conference and School on Quantum Electronics: “Laser Physics and Applications” ICSQE’2022 (19-23 September 2022, Bulgaria, virtual event); Book of Abstracts p. 76.
- D118.** L. Stoyanov, N. Dimitrov, A. Dreischuh, G. G. Paulus, „Wavelength-tolerant generation of long-range Gauss-Bessel beams by using spiral phase plates,” International Conference of Quantum, Nonlinear and Nanophotonics ICQNN’2022 (05.-09. September 2022, Jena, Germany), oral presentation in Section 10 (08.09.2022, 16:00h-17:30h).
- D119.** L. Stoyanov, A. Dreischuh, and G. G. Paulus, „Coherent beam recombination of intense femtosecond beams/pulses after controllable beam break-up and spectral broadening by using optical vortex lattices,” Verhandlungen der Deutschen Physikalischen Gesellschaft (ISSN 2751-0522) Reihe VI, Band 58 (2023) from DPG Spring Meeting 2023 (5 – 10 March 2023, Hannover, Germany); poster Q 7.18.;
<https://samop23.dpg-tagungen.de/programm/verhandlungen>
- D120.** M. Zhekova, N. Dimitrov, and A. Dreischuh, „Generation of Gauss-Bessel quasi-nondiffracting beams (GBBs) using optical vortices,” Verhandlungen der Deutschen Physikalischen Gesellschaft (ISSN 2751-0522) Reihe VI, Band 58 (2023) from DPG Spring Meeting 2023 (5 – 10 March 2023, Hannover, Germany); poster Q 40.6.;
<https://samop23.dpg-tagungen.de/programm/verhandlungen>
- D121.** S. Topuzoski, Lj. Janicijevic, L. Stoyanov and A. Dreischuh, “Transformation of azimuthally X-shaped beam into a square lattice with optical vortices”, Career Development Workshop for Women in Physics (6-10.11.2023, International Centre for Theoretical Physics, Trieste, Italy). Poster and short oral presentation.
- D122.** S. Topuzoski, Lj. Janicijevic, L. Stoyanov and A. Dreischuh, “Generation of array of multiple-vortex beams from cosine-Laguerre-Gaussian modes”, Webinar “New Results in Nanophysics, Bionanoscience, Nanophotonics and Solar Energy Conversion”, 15.09.2023, Bucharest, Romania (online event).

- D123.** N. Dimitrov, L. Stoyanov, M. Zhekova, and A. Dreischuh, “Reliable Approach for Generating Wavelength-Tolerant Quasi-Non-Diffracting Bessel-Gaussian Beams,” SUMMIT First Annual Conference (22-23.04.2024, Sofia University, Sofia, Bulgaria).

Е. ОБЗОРНИ СТАТИИ

- E1.** D. Gruber, A. Dreischuh, U. Reiter-Domiatty, S. Dinev, L. Windholz, “Energy-pooling and Associative Ionization Involving Sr (5^1P_1) and Sr (4^1D_2) levels,” Inst. für Experimentalphysik, Technische Universität Graz, Interne Berichte, Heft **28** (Nov. 1996).
- E2.** U. Reiter-Domiatty, D. Gruber, K. Iskra, R. Polly, L. Windholz, A. Dreischuh, V. Kamenov, “Conical and Collimated Emission in Dense Sodium Vapour,” Inst. Für Experimentalphysik, Technische Universität Graz, Interne Berichte, Heft **31** (Aug. 1997).

Ф. РЕДАКТОРСКА ДЕЙНОСТ

- F1.** Solomon M. Saltiel, Alexander A. Dreischuh, Ivan P. Christov, Editors, Proceedings of SPIE, Volume 7501, International Conference on Ultrafast and Nonlinear Optics (SPIE, Bellingham, WA, USA)(2009);
<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/7501.toc>
- F2.** Alexander A. Dreischuh, Tony Spassov, Isabelle Staude, Dragomir N. Neshev, Editors, Proceedings of SPIE, Volume 11332, International Conference on Quantum, Nonlinear, and Nanophotonics 2019 (ICQNN 2019) (SPIE, Bellingham, WA, USA)(2019);
<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11332.toc>

Г. ИЗНЕСЕНИ ПОКАНЕНИ ЛЕКЦИИ/ДОКЛАДИ

- G1.** A. Dreischuh, “Nonlinear beam/pulse propagation in bulk third-order nonlinear media,” Institut für Experimentalphysik der Technischen Universität Graz (Austria), Dezember 1994.
- G2.** A. Dreischuh, “Optical vortex solitons and dark ring solitary waves in bulk Kerr nonlinear media,” Institut für Experimentalphysik der Technischen Universität Graz (Austria), April 1996.
- G3.** A. Dreischuh, “Zweidimensionale dunkle räumliche Solitonen,” Ringberg Tagung der Max-Planck-Institut für Quantenoptik und der Sektion Physik der Universität München, 3. März 1997.
- G4.** A. Dreischuh, “Zweidimensionale dunkle räumliche Solitonen,” Ringberg Tagung der Max-Planck-Institut für Quantenoptik und der Sektion Physik der Universität München, 9. Februar 1998.
- G5.** A. Dreischuh, "Sofia Optical Vortices," Nonlinear Physics Seminar, Research School of Physical Sciences and Engineering, The Australian National University, Canberra, Australia, Nov. 10, 2004.
- G6.** A. Dreischuh, K. Bezuhanov, G. G. Paulus, M. G. Schätzel, H. Walther, D. Neshev, W. Krolikowski, and Yu. S. Kivshar, "Femtosecond Optical Vortices," Alexander-von-Humboldt Foundation Conference "Advances in Physics and Astrophysics of the 21st Century" (Sept. 6-11, 2005, Varna, Bulgaria).
- G7.** A. Dreischuh, “Femtosecond lasers in the singular optics,” XXXI-st Australian Conference on Optical Fibre Technology and Meeting of the Australian Optical Society (ACOFT&AOS),

- Royal Melbourne Institute of Technology (RMIT) (July 10-13, 2006, Melbourne, Australia), Invited talk Wed30 in Sec. Nonlinear Optics 1 (www.acoft.com.au).
- G8.** А. Драйшу, “Бързо, по-бързо, ... фемтосекунден лазер,” Юлски лекторат на Съюза на физиците в България “Модерни направления във физиката”, (30.06-04.07.2008г, Физически факултет, Софийски университет).
- G9.** A. Dreischuh, “Femtosecond and polychromatic optical vortices,” II-nd Alexander-von-Humboldt Foundation Conference "Modern Trends in Mathematics, Physics and Astrophysics (Sept. 5-9, 2008, Varna, Bulgaria).
- G10.** A. Dreischuh, “Optical vortices in self-focusing Kerr nonlinear media,” Fifth International Workshop on Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light (CAMEL-V) (June 23-28, 2009, Nessebar, Bulgaria).
- G11.** A. Dreischuh, “Nobel prizes in physics for 2009,” XXXVIII-th National conference devoted to the problems of the education in physics, April 8-11, 2010, Lovech, Bulgaria;
*The same presented at the July Seminar of the Bulgarian Physical Union “Modern trends in Physics”, July 5, 2010, Faculty of Physics, Sofia University, Sofia, Bulgaria.
- G12.** A. Dreischuh, “Discrete diffraction and discrete polychromatic solitons,” Faculty seminar of the Faculty of Physics, May 3, 2010, Sofia University, Sofia, Bulgaria.
- G13.** A. Dreischuh, "Polychromatic optical vortices and vortex solitons," Seminar of the Institute of Optics and Quantum Electronics, Nov. 3, 2010, Friedrich-Schiller-University, Jena, Germany.
- G14.** A. Dreischuh, "Light emission in the optical communication systems," Seminar for young scientists of the Institute of Electronics, Bulgarian Academy of Sciences, Feb. 23, 2011, Sofia, Bulgaria.
- G15.** A. Dreischuh, “Femtosecond white-light optical vortices,” Seventh International Workshop on Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light (CAMEL-VII), 03-09 July 2011, Nessebar, Bulgaria.
- G16.** A. Dreischuh, series of four lectures on “*Introduction to singular nonlinear optics*” presented at the Abbe School of Photonics of the Friedrich-Schiller-University Jena, Germany, from Oct. 21, 2011 to Nov. 8, 2011.
Lecture 1: Linear vs. nonlinear optics. Optical solitons.
Lecture 2: Singular optical beams. Dark optical solitons - physics and applications.
Lecture 3: Interactions between optical solitons.
Lecture 4: Polychromatic spatial solitons.
- G17.** А. Драйшу, “Сингулярна оптика? Това е нещо просто,” Юлски лекторат на Съюза на физиците в България “Съвременни проблеми на физиката и естествените науки”, (02.07-05.07.2013г, Физически факултет, Софийски университет).
- G18.** А. Драйшу, И. Лалов, „Корпускулярна, вълнова и квантова теория на светлината – Развитие на идеите,” Лятна школа по нанотехнологии за учители (07.07.-11.07.2014г., Физически факултет, Софийски университет).
- **** Изнасяна още два пъти на Лятна школа по фотоника за учители (13.07.-16.07.2015г., Физически факултет, Софийски университет) и на есенното издание на същата Школа (10.10. – 31.10.2015г.).
- G19.** A. Dreischuh, Plenary talk “Singular Optics Revisited: Algebraic Operations with Topological Charges of Optical Vortices,” 23rd Annual International Laser Physics Workshop LPHYS’14 (Sofia, July 14-18, 2014).
- G20.** Т. Ефтимов, А. Драйшу, пленарен доклад „Оптиката в специализираните курсове на оптични специалности,” 43-та Национална конференция по въпросите на обучението по физика „Оптика и оптични технологии в образованието”, 2 - 5 април 2015 г., Благоевград, България.
- G21.** G. Maleshkov, N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, G. G. Paulus, S. Topuzoski, and L. Janicijevic, “Characteristics, interactions and control of optical vortices and vortex lattices,” Internat. Workshop “Advances in Nanophysics and Nanophotonics”, Magurele-Bucharest (Romania), 31 August-2 September, 2015.

- G22.** А. Драйшу, „Оптични комуникации – принципи“, Лятна школа по фотоника за учители (13.07.-16.07.2015г., Физически факултет, Софийски университет).
 **** Изнесена и на есенното издание на същата Школа (10.10. – 31.10.2015г.).
- G23.** А. Dreischuh, series of three talks on “*Singular optics basics*” presented at the Seminar of the Department of Nonlinear Optics, Faculty of Physics and Astronomy, Friedrich-Schiller-University Jena, Germany, from Oct. 20, 2016 to Dec. 8, 2016.
 Talk 1: Optical vortices, vortex lattices and azimuthons: Past, present and future.
 Talk 2: Topological charge control in optical vortex lattices.
 Talk 3: Hollow vortex phase plate as a filter for high-harmonic beams.
- G24.** L. Stoyanov, G. Maleshkov, N. Dimitrov, I. Stefanov, A. Dreischuh, S. Topuzoski, L. Janicijevic, G. G. Paulus, D. N. Neshev, “Azimuthons, vortices, and vortex lattices: Phase aspects, 4th NANOPHI consortium meeting, Fraunhofer Institute of Applied Optics, Campus Beutenberg, Jena, Germany, June 30, 2017.
- G25.** А. Dreischuh, L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, S. Topuzoski, Lj. Janicijevic, P. Hansinger and G. G. Paulus, “Manipulating the Topological Charges of Singular Optical Beams,” 10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria).
- G.26.** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, A. Dreischuh, S. Topuzoski, Lj. Janicijevic, P. Hansinger, and G. G. Paulus, plenary talk: “Far-field beam reshaping by optical vortices and vortex lattices,” 12th International Conference of the Society of Physicists of Macedonia (12-th CSPM) (Sept. 27-30, 2018, Ohrid, Macedonia).
 (<https://dfmconference2018.wixsite.com/12thconference-dfm/plenary-speakers>)
- G27.** А. Dreischuh, “The light, the lasers, and the Nobel prices in physics for 2019,” the first one of a series of lectures “The World of Physics Life”, Sofia City Library, Feb. 14, 2019.
 The same talk is presented at the
 /a2/ 47-th National conference devoted to the problems of the education in physics, April 4-7, 2019, Veliko Tarnovo, Bulgaria;
 /a3/ July Seminar of the Bulgarian Physical Union “Modern trends in Physics”, July 4, 2019, Faculty of Physics, Sofia University, Sofia, Bulgaria.
- G28.** А. Dreischuh, “Far-Field Beam Shaping By Singular Optical Lattices,” High Intensity Coherent Nonlinear Optics (HICONO) Network Fellow Meeting (June 20, 2019, Nessebar, Bulgaria).
- G29.** А. Драйшу, „На сцената: Оптичните комуникации“, Национален фестивал "Наука на сцената – 8", Севлиево, 23-25 април 2021 г.
- G30.** А. Драйшу, „Дискретна дифракция и квази-недифрагиращи снопове,“ Факултетен семинар на Физически факултет на Софийския университет (30.10.2021г.);
<https://www.youtube.com/watch?v=H2LgU6t2cUA>
- G31.** L. Stoyanov, A. Stefanov, A. Dreischuh and G. G. Paulus, “The Gouy phase of long-range Gauss-Bessel beams,” invited talk S07-OP-100 in Section Optics and Photonics (S07-OP) at the BPU11 CONGRESS (The 11th International Conference of the Balkan Physical Union; 28 August 2022 - 1 September 2022, Belgrade, Serbia); Book of Abstracts p. 140.
- G32.** L. Stoyanov, I. Stefanov, N. Dimitrov, M. Toma, G. G. Paulus and A. Dreischuh, “Generation and Characterization of Long-Range (Quasi-)Nondiffracting Gauss-Bessel Beams,” invited talk IL.E2 at the XXII International Conference and School on Quantum Electronics: “Laser Physics and Applications” ICSQE’2022 (19-23 September 2022, Bulgaria, virtual event).
- G33.** А. Драйшу, “Дифракцията – позната ..., неизбежна или ... не съвсем”, Юлска лектория на Съюза на физиците в България “Съвременни направления на природните науки”, (01.07-07.07.2022г., Физически факултет, Софийски университет; 06.07.2022г., 09:15h - 10:00h).
- G34.** А. Драйшу, „Нобеловата награда по физика за 2023-та година и приносът на български изследовател към нея,“ IX-ти Национален фестивал "Наука на сцената" (Севлиево, 21.10.2023г.)
 изнесена още два пъти на

/a2/ Ден на отворените врати на Физически факултет на Софийския университет, 17.11.2023г.

/a3/ Закриване на Международната година на фундаменталните науки за устойчиво развитие, Аула на Ректорат на Софийския университет, 05.12.2023г. ;

G35. А. Драйшу, „Елементи от сингулярната фемтосекундна фотоника,” Факултетен семинар на Физически факултет на Софийския университет (28.11.2023г.);

G36. А. Драйшу, „Популяризирането на физиката – необходима стъпка по пътя към устойчиво развитие,” 51-ва Национална конференция по въпросите на обучението по физика, 10-13.04.2023г., София);

http://upb.phys.uni-sofia.bg/conference/NK/51NK_Dokladi.pdf

G37. L. Stoyanov, A. Stefanov, N. Dimitrov, I. Stefanov, M. Zhekova, Y. Zhang, G. G. Paulus, A. Dreischuh, “Reliable Approach for Generating Quasi-Non-Diffracting Bessel-Gaussian Beams,” ENVIRONMENT. TECHNOLOGY. RESOURCES, 15th International Scientific and Practical Conference. June 27-28, 2024, "Vasil Levski" National Military University, Veliko Tarnovo, Bulgaria.;

<https://conferences.rta.lv/index.php/ETR/ETR2024/index>

Н. НАУЧНОПОПУЛЯРНИ ПУБЛИКАЦИИ

Н1. А. Драйшу, „Лазерният лъч в светлината на прожекторите,” Природа **CXXVI**, бр. 4, стр. 38-42 (2019).

Н2. А. Драйшу, „Развитието на науката предполага приемственост, надграждане, натрупване и осмисляне на знания,” Светът на физиката, бр. 1, стр. 4-14 (2020).

Н3. А. Драйшу, „Нобеловата награда по физика за 2023г. и приносът на български изследовател към нея,” Светът на физиката, бр. 4, стр. 253-269 (2023).

Н4. А. Драйшу, „Популяризирането на физиката – необходима стъпка по пътя към устойчиво развитие,” Светът на физиката, бр. 1, стр. 3-10 (2024).

София, 29.05.2024 г.