

# List of Publications

## Ivan Stefanov

### A. Articles in scientific journals

- 1. Controllable beam reshaping by mixing square-shaped and hexagonal optical vortex lattices** L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus and A. Dreischuh  
**Scientific Reports 9, Article # 2128 (2019).**  
*Scientific Reports* IF=4.609  
<https://doi.org/10.1038/s41598-019-38608-5> *Scientific Reports* IF=4.609
- 2. Formation of multi-spot focal arrays by square-shaped optical vortex lattices**  
M. Zhekova, Georgi Maleshkov, Lyubomir Stoyanov, Ivan Stefanov, Gerhard G. Paulus, Alexander Dreischuh  
**Optics Communications 449, May 2019,**  
DOI:10.1016/j.optcom.2019.05.051
- 3. "Far-field beam reshaping by manipulating the topological charges of hexagonal optical vortex lattices"**  
L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus and A. Dreischuh  
*Journal of Optics*, vol. 20, Art. No. 095601 (2018). [\[Abstract\]](#) [\[LINK\]](#)
- 4. "Five vortex spot patterns generated by diffraction of azimuthally X-shaped beam by the fork-shaped grating"**  
S. Topuzoski, Lj. Janicijevic, L. Stoyanov, I. Stefanov and A. Dreischuh  
*Optics Communicatons*, vol. 428, pp. 206-215 (2018). [\[Abstract\]](#) [\[LINK\]](#)  
<https://doi.org/10.1016/j.optcom.2018.07.059>  
*Optics Communications* IF=1.887
- 5. "Far-field pattern formation by manipulating the topological charges of square-shaped optical vortex lattices"**

L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, D. N. Neshev, G. G. Paulus and A. Dreischuh

*J. Opt. Soc. Am. B*, vol. 35, pp. 402-409 (2018). [\[Abstract\]](#) [\[LINK\]](#)

6. **"Optical waveguiding by necklace and azimuthon beams in nonlinear media"**

L. Stoyanov, N. Dimitrov, I. Stefanov, D. N. Neshev, and A. Dreischuh

*J. Opt. Soc. Am. B*, vol. 34, pp. 801-807 (2017). [\[Abstract\]](#) [\[PDF\]](#)

7. **"Diffraction of a Gaussian beam by a four-sector binary grating with a shift between adjacent sectors"**

Lj. Janicijevic, S. Topuzoski, L. Stoyanov, A. Dreischuh

*Optics Communications*, vol. 389, pp. 203-211 (2017). [\[Abstract\]](#) [\[PDF\]](#)

8. **"Generation of high harmonics of coherent radiation in the extreme ultraviolet spectral range in the low-intensity regime"**

N. Dimitrov, L. Stoyanov, I. Stefanov, I. P. Christov, A. Dreischuh

*Bulg. J. of Physics*, vol. 44, pp. 99-108 (2017). [\[Abstract\]](#) [\[PDF\]](#)

9. **"Pulse front tilt measurement of femtosecond laser pulses"**

N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus

*Optics Communications*, vol. 371, pp. 51-58 (2016). [\[Abstract\]](#) [\[PDF\]](#)

10. **"Measuring the relation between pulse-front-tilt angle and beam size for ultrashort laser pulses"**

N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus

*Bulg. J. Phys.*, vol. 43, pp. 21-29 (2016). [\[Abstract\]](#) [\[PDF\]](#)

11. **"Far field diffraction of an optical vortex beam by a fork-shaped grating"**

L. Stoyanov, S. Topuzoski, I. Stefanov, L. Janicijevic, and A. Dreischuh

*Optics Communications*, vol. 350, pp. 301-308 (2015). [\[Abstract\]](#) [\[PDF\]](#)

12. **"Initiating self-focusing of beams carrying spatial phase singularities"**

L. Stoyanov, G. Maleshkov, I. Stefanov, and A. Dreischuh

*J. Opt. Soc. Am. B*, vol. 31, pp. 1159-1164 (2014). [\[Abstract\]](#) [\[PDF\]](#)

- 13. Single-frequency Q-switched Nd:YAG Micro-laser with 1.7-ns, 1.6-mJ Pulses at 1 kHz,**  
H. Iliev, B. Oreshkov, D. Chuchumishev, A. Trifonov, I. Stefanov, and I. Buchvarov,  
Advanced Solid State Lasers, ATh2A. 37, 2014
- 14. Laser Interferometry for Study of Nonlocal Response of Optically-Transparent Ion-Implanted Polymers,**  
Ivan L. Stefanov, Georgi B. Hadjichristov,  
Bulg. J. Phys. 40 (2013) 11–16
- 15. Optical Properties of Nano-Structured Material in Ion-Implanted Polymer,**  
Hristiyan Y. Stoyanov, Ivan L. Stefanov, Stoyan C. Russev, Gichka G. Tsutsumanova, Georgi B. Hadjichristov,  
Bulg. J. Phys. 40 (2013) 17–21
- 16. Ellipsometrical characterization of complex refractive index depth ,**  
Stoyan C. Russev, Gichka G. Tsutsumanova, Ivan L. Stefanov, Georgi B. Hadjichristov,  
Vacuum 94 (2013) 19-25.
- 17. Measurement of nonlinear refractive index and multiphoton absorption by the subpicosecondz-scan method of tellurite multicomponent glassy matrixes having nonlinear susceptibility,**  
G Yankov, I Stefanov, Kr Dimitrov, I Piroeva, L T Dimowa, M P Tarassov, B L Shivachev, H Yoneda and T Petrov,  
*Physica Scripta*, (2013), Phys. Scr.T157(2013) 014026 (5pp).
- 18. Interferometric pump-probe characterization of the nonlocal response of optically transparent ion implanted polymers,**  
Ivan L. Stefanov , Georgi B. Hadjichristov. ,  
Applied Surface Science 258 (2012) 4770–4776

**19. Application of Rayleigh back-scattering for distributed optical fiber sensing using a heterodyne detection system,**

A. Popov, S. Vodenicharov, T. Eftimov, I. Stefanov, D. Stoyanov,  
B. ELEKTROTECHNICA & ELEKTRONICA E+E Vol. 47. No 9-10/2012

**20. Interferometric pump-probe characterization of the nonlocal response of optically transparent ion implanted polymers**

I.L. Stefanov, G.B. Hadjichristov,  
Appl. Surf. Sci. 258(10) (2012) 4770–4776.

**21. Depth-profiled characterization of complex refractive index of ion implanted optically transparent polymers using multilayer calculations and reflectance data,**

H.Y. Stoyanov, I.L. Stefanov, G.G. Tsutsumanova, S.C. Russev, G.B. Hadjichristov  
Vacuum 86(12):1822-1827, July 2012  
DOI: 10.1016/j.vacuum.2012.04.030

**22. Ion-implanted polymethyl methacrylate beam splitter/coupler for 1.55  $\mu\text{m}$  applications**

G.B. Hadjichristov, I.L. Stefanov,  
Appl. Opt. 49 (10) (2010) 1876-1879.

**23. Phase-sensitive reflectometer using a single-frequency laser diode and an Er-doped fibre amplifier**

T.Eftimov, I.Stefanov, A.Popov and S.Vodenicharov,  
J. Phys. Conf. Ser. 253 (2010) 012018.

**24. The luminescence response of Eu(III)-thenoyltrifluoroacetate complexes upon preresonant excitation with femtosecond laser pulses G.B. Hadjichristov,**

I.L. Stefanov, S.S. Stanimirov, I.K. Petkov,

Spectrochim. Acta A: Mol. Biomol. Spectrosc. 75 (1) (2010) 448–452.

**25. Reflectance spectroscopy of PMMA implanted with 50 keV silicon ions**

B.I. Florian, I.L. Stefanov, G.B. Hadjichristov,  
Verhandlungen der DPG (2009), Thin Films, DS 16.25.

**26. Silicon ion implanted PMMA field-effect structure with electronic memory**

G. B. Hadjichristov, Tz. E. Ivanov, V. K. Gueorguiev, Y. G. Marinov, I. Stefanov,  
V. G. Ivanov, E. Faulques,  
J. Ovonic Res . 5 (1) (2009) 9-13.

**27. Optical reflectivity study of silicon ion implanted poly(methyl methacrylate)**

G.B. Hadjichristov, I.L Stefanov, B.I. Florian, G.D. Blaskova, V.G. Ivanov, E. Faulques,  
Appl. Surf. Sci. 256 (3) (2009) 779-786.

**28. The luminescence response of diamine-liganded europium complexes upon resonant and pre-resonant excitation**

G.B. Hadjichristov, S.S. Stanimirov, I.L. Stefanov, I.K. Petkov,  
Spectrochim. Acta A: Mol. Biomol. Spectrosc. 69 (2) (2008) 443-448.

**29. Optical limiting in polar macromolecules in the nanosecond time range**

Georgi Hadjichristov, N. Kirov, Ivan Stefanov

Journal of Optoelectronics and Advanced Materials 9(8):2458-2461, August 2007

**30. Generation and intrinsic dynamics of ring dark solitary waves**

D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Fließer, and L. Windholz

*Appl. Phys.*, vol. B64, pp. 429-433 (1997). [\[Abstract\]](#) [\[PDF\]](#)

**31. A chain mechanism of amplification via magnetic dipole transition,**

S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,

IEEE J.Quant.Electron., 28, 2655-2661, 1992.

- 32. Observation of forbidden five wave mixing in potassium atom,**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
Opt. Commun., 52, 295-299, 1992.
- 33. A optical six wave mixing via two forbidden transitions in the potassium atom**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
J.Phys.B, 24, 5175-5181, 1991.
- 34. Four wave mixing in potassium involving quadrupole excitation and emission,**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
J.Opt.Soc.Am. B, 8, 1846-1850, 1991.
- 35. Interference effects between Raman and parametric stimulated emission**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
Appl. Phys.B:Photophys.Laser Chem., B49, 521-525, 1989.
- 36. Efficient red stimulated emission enhanced by quadrupole Raman scattering**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
Opt.Comm., 74, 176-179, 1989.
- 37. K(6s-4p) parametric emission excited by bound-bound transitions of NaK,**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
J.Phys.B:At.Mol.Opt.Phys. 22, 3775-3387,1989
- 38. Stimulated emission by hybrid transitions via a heteronuclear molecule**  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
Opt.Comm., 75, 273, 1990.
- 39. Automated Lase Spectrometer for investigation of alkali atoms and dimers**  
S.G.Dinev, I.L.Stefanov,

Electreopromishlenost i priborostroene, N2, 32, (1989).

40. **Raman and parametric emission from excited states induced by collisions,**

S.G.Dinev, I.L.Stefanov,  
Appl.Phys. B, B44, 235-240, 1987.

41. **Dimer laser action in Na by collisional energy transfer,**

S.G.Dinev, I.G.Koprinkov, I.L.Stefanov  
J.Phys. B: Atom and Mol. Phys., 19, 2735-2744, 1986.

42. **Molecular enhanced four-wave parametric generation in sodium**

S.G.Dinev, I.G.Koprinkov, I.L.Stefanov,  
Appl.Phys. B, 39, 65-72, 1986.

43.  **$\text{Na}_2 \text{b}^3 \sum_g^+ - 3 \sum_u^+$  - excimer laser emission in the IR**

S.G.Dinev, I.G.Koprinkov, I.L.Stefanov  
Optics Commun., 52, 199-203, 1984.

## B. Articles in Proceedings of SPIE

1. **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 11047, 20th International Conference and School on Quantum Electronics: Laser Physics and Applications, 110471D (2019). <https://doi.org/10.1117/12.2516531>  
*Proceedings of SPIE* SJR=0.228
2. **"Dispersion control in a folded 4-f system for shaping femtosecond laser pulses"**  
N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, A. Dreischuh  
*Proc. of SPIE* vol. **10226**, Art. # 102261D (2017). [\[PDF\]](#)
3. **"Controllable bright beam self-focusing initiated by singular dark beams"**  
G. Maleshkov, L. Stojanov, I. Stefanov, A. Dreischuh  
*Proc. of SPIE* vol. **8770**, Art. # 87701H (2013). [\[PDF\]](#)

4. **Laser characterization of the depth profile of complex refractive index of PMMA implanted with 50 keV silicon ions** , Ivan L. Stefanov, Hristiyan Y. Stoyanov, Elitza Petrova, Stoyan C. Russev, Gichka.Tsutsumanova, and Georgi B. Hadjichristov, Laser characterization of the depth profile of complex refractive index of PMMA implanted with 50 keV silicon ions , Proc. of SPIE Vol. 8770 87701N-7, (2013).
5. **"Tuning the pulse duration, spectral position and bandwidth of femtosecond pulses by the beam's penetration in an intracavity prism"**  
N. Dimitrov, I. Stefanov, A. Dreischuh  
*Proc. of SPIE vol. 7747*, Art. # 77471K (2011). [\[PDF\]](#)
6. **Femtosecond laser spectroscopy of europium complexes in solutions**  
G.B. Hadjichristov, I.L. Stefanov, S.S. Stanimirov, I.K. Petkov,  
Proc. SPIE 7501 (2009), art. no. 75010O, 1-8.
7. **Laser-induced thermo-lens in ion-implanted optically-transparent polymer**  
I.L. Stefanov, V.G. Ivanov, G.B. Hadjichristov,  
Proc. SPIE 7501 (2009), art. no. 75010Q, 1-9.
8. **"Experimental investigation of computer-synthesized holograms for generation of ring dark solitary waves and optical vortex solitons"**  
D. Neshev, A. Dreischuh, V. Kamenov, I. Stefanov, S. Dinev, W. Flieser and L. Windholz  
*Proc. SPIE, vol. 3052*, pp. 258-262 (1996). [\[PDF\]](#)

## **D. Conference contributions**

1. ***"Luminescence of iridium complexes upon short laser pulses"***  
***Georgi Hadjichristov, Nikolay R. Dimirov, Ivan Stefanov***  
***January 2019, 20th International Conference and School on Quantum Electronics Laser Physics and Applications***



**DOI:10.1117/12.2516653Conference:**

- 2. "Far-field beam reshaping of square and hexagonal optical vortex lattices by a second identical lattice"**  
**L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh**  
**10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria).**
- 3. "Formation of stable elementary cells of rigid optical vortex lattices"**  
**L. Stoyanov, N. Gorunski, I. Stefanov, and A. Dreischuh**  
**10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria).**
- 4. "Manipulating the topological charges of singular optical beams"**  
**A. Dreischuh, L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, S. Topuzoski, Lj. Janicijevic, P. Hansinger and G. G. Paulus**  
**10th Jubilee Conference of the Balkan Physical Union (Aug. 26-30, 2018, Sofia, Bulgaria).**
- 5. "Far-field beam manipulating by mixing square-shaped and hexagonal optical vortex lattices"**  
**L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh**  
**20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria).**
- 6. "Far-field pattern formation by manipulating the topological charges of hexagonal optical vortex lattices"**  
**L. Stoyanov, G. Maleshkov, M. Zhekova, I. Stefanov, G. G. Paulus, and A. Dreischuh**  
**20th International Conference and School on Quantum Electronics: Laser Physics and Applications (Sept. 17-21, 2018, Nessebar, Bulgaria).**

7. **"Five-vortex spots patterns generated from azimuthally X-shaped beam"**  
**S. Topuzoski, Lj. Janicijevic, L. Stoyanov, I. Stefanov and A. Dreischuh**  
**Winter College on Extreme Non-linear Optics, Attosecond Science and High-field Physics", ICTP, Trieste, Italy (05-16.02.2016).**
8. **"Bessel-like beam generation by manipulation of the topological charges of optical vortices"**  
**M. Zhekova, L. Stoyanov, I. Stefanov, and A. Dreischuh**  
**Humboldt Kolleg - Humboldtians and scientific progress in the Central and East European countries, November 16–18, 2017, Sofia, Bulgaria. (oral presentation)**
9. **"Manipulation of the topological charges of vortices within large optical vortex lattices: Far-field beam reshaping"**  
**L. Stoyanov, G. Maleshkov, I. Stefanov, and A. Dreischuh**  
**PHOTONICA 2017 – VII-th Internat. School and Conference on Photonics, August 28-Sept. 1, 2017, Belgrade, Serbia.**
10. **"Azimuthons, vortices, and vortex lattices: Phase aspects"**  
**L. Stoyanov, G. Maleshkov, N. Dimitrov, I. Stefanov, A. Dreischuh, S. Topuzoski, L. Janicijevic, G. G. Paulus, D. N. Neshev**  
**4th NANOPHI consortium meeting, Fraunhofer Institute of Applied Optics, Campus Beutenberg, Jena, Germany, June 30, 2017.**
11. **"Arithmetics with topological charges of optical vortices nested in lager vortex lattices"**  
**L. Stoyanov, I. Stefanov, N. Dimitrov, and A. Dreischuh**  
**Third National Congress in Physical Sciences, 29.09.-02.10.2016, Sofia, Bulgaria.**
12. **"Dispersion control of femtosecond laser pulses in-and outside the laser cavity"**  
**N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, and A. Dreischuh**  
**Third National Congress in Physical Sciences, 29.09.-02.10.2016, Sofia, Bulgaria.**

- 13. "Dispersion control in a folded 4-f system for shaping femtosecond laser pulses"**  
**N. Dimitrov, P. Lazarova, L. Stoyanov, I. Stefanov, and A. Dreischuh**  
**XIX-th Internat. Conference and School on Quantum Electronics: Lasers and Applications, Sept. 26 – 30, 2016, Sozopol, Bulgaria.**
- 14. "Diffraction of square-shaped optical vortex lattice by a second vortex lattice"**  
**L. Stoyanov, I. Stefanov, and A. Dreischuh**  
**XIX-th Internat. Conference and School on Quantum Electronics: Lasers and Applications, Sept. 26 – 30, 2016, Sozopol, Bulgaria.**
- 15. "Optical vortex beams generated with diffractive optical elements"**  
**S. Topuzoski, L. Janicijevic, D. Cojoc, L. Stoyanov, I. Stefanov, and A. Dreischuh**  
**Internat. Workshop "Advances in Nanophysics and Nanophotonics", Magurele-Bucharest (Romania), 31 August-2 September, 2015 (invited talk).**
- 16. "Characteristics, interactions and control of optical vortices and vortex lattices."**  
**G. Maleshkov, N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, G. G. Paulus, S. Topuzoski, and L. Janicijevic**  
**Internat. Workshop "Advances in Nanophysics and Nanophotonics", Magurele-Bucharest (Romania), 31 August-2 September, 2015.**
- 17. "Vortex necklace beams: Self-focusing and guiding properties in SBN crystal"**  
**L. Stoyanov, I. Stefanov, N. Dimitrov, and A. Dreischuh**  
**PHOTONICA 2015 – V Internat. School and Conference on Photonics, August 24-28, 2015, Belgrade, Serbia.**
- 18. H. Iliev, B. Oreshkov, D. Chuchumishev, A. Trifonov, I. Stefanov, and I. Buchvarov, Single-frequency Q-switched Nd:YAG Micro-laser with 1.7-ns, 1.6-mJ Pulses at 1 kHz, The European Conference on Lasers and Electro-Optics 2015, Munich Germany, 21–25 June 2015.**

19. ***"Pulse front tilt measurement of femtosecond laser pulses"***  
***N. Dimitrov, L. Stoyanov, I. Stefanov, A. Dreischuh, P. Hansinger, and G. G. Paulus***  
***XVIII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 29 – Oct. 3, 2014, Sozopol, Bulgaria.***
20. ***"Far- field diffraction of singular dark beams by computer-generated holograms with encoded optical vortices"***  
***L. Stoyanov, S. Topuzoski, G. Maleshkov, I. Stefanov, L. Janicijevic, and A. Dreischuh***  
***XVIII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 29 – Oct. 3, 2014, Sozopol, Bulgaria.***
21. ***"Fraunhofer diffraction of an optical vortex beam by fork-shaped grating"***  
***L. Stoyanov, S. Topuzoski, I. Stefanov, L. Janicijevic, and A. Dreischuh***  
***23rd annual International Laser Physics Workshop LPHYS'14, July 14-18, 2014, Sofia, Bulgaria.***
22. ***"Bright beam self-focusing controlled by singular dark beams"***  
***L. Stoyanov, G. Maleshkov, I. Stefanov, A. Dreischuh***  
***IX-th International Workshop on Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light (CAMEL-IX) , June. 16-21, 2013, Nessebar, Bulgaria.***
23. ***"Controllable bright beam self-focusing initiated by singular dark beams"***  
***G. Maleshkov, L. Stojanov, I. Stefanov, A. Dreischuh***  
***XVII-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 24-28, 2012, Nessebar, Bulgaria.***
24. ***"Tuning femtosecond laser pulses and their correct autocorrelation measurement"***  
***N. Dimitrov, I. Stefanov, A. Dreischuh***  
***Meetings in Physics'2011, Feb. 24, 2011, Sofia University, Sofia, Bulgaria.***

25. ***Reflectivity characterization of silicon ion-implanted PMMA for device application at 1.55  $\mu\text{m}$***   
***Florian, I. Stefanov, G. Hadjichristov,***  
***Verhandlungen der DPG (2011), Nanoengineered Thin Films, DS 42.65.***
  
26. ***Tuning femtosecond laser pulses and their correct autocorrelation measurement***  
***N. Dimitrov, I. Stefanov, A. Dreischuh ,***  
***Meetings in Physics'2011 (2011), Sofia University, Sofia, Bulgaria.***
  
27. ***Nonlinear refractive index measurement of new multicomponent glassy matrix possessing variable nonlinear susceptibility by using z-scan method***  
***G. Yankov, H. Yoneda, I. Stefanov, B. L. Shivachev, T. Petrov,***  
***ALT'11 Advanced laser technologies (2011).***
  
28. ***"Tuning the pulse duration, spectral position and bandwidth of femtosecond pulses by the beam's penetration in an intracavity prism"***  
***N. Dimitrov, I. Stefanov, and A. Dreischuh***  
***XVI-th Internat. School on Quantum Electronics: Lasers and Applications, Sept. 20-24, 2010, Nessebar, Bulgaria.***
  
29. ***"Techniques for characterization of pico- and femtosecond laser pulses"***  
***M. Paskalev, A. Gaydardjiev, H. Stoyanov, I. Stefanov, I. Buchvarov, I. Christov, A Dreischuh***  
***Meetings in Physics' 2007,***  
***Feb. 23, 2007, Sofia University, Sofia, Bulgaria.***
  
30. ***I.Stefanov, Pl.Stanoev, St.Shurulinkov, B.Handjieva-Florian,***  
***Colorimeter FOK-1, The first Balkan Conference on Lighting, Varna 1999.***
  
31. ***I.Stefanov, B.Handjieva-Florian,***

*Tragbares Spektralkolorimeter, International Color Conference  
"BULCOLOR'99", Varna 1999*

- 32. Parametric emission excited by hybrid transitions in NaK,  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
IV Nat. Conf. on Optics and Lasers, OPTICS'89,  
May 18-20, 1989, Varna.**
- 33. Quadrupole Raman scattering and parametric emission in potassium,  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
Laser Atomic Spectroscopy  
XXVI CSI Symposium, Bourgas, 7-9 July, 1989.**
- 34. K(6s-4p) parametric emission excited by bound-bound transition of NaK  
S.G.Dinev, G.V.Hadjichristov, I.L.Stefanov,  
XXVI CSI, 2-9 July, 1989, Sofia**
- 35. Interference effects between Raman and parametric emission excited  
via forbidden transitions  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
II Europ. Confer. Quantum Electron. EQEC'89,  
Aug.28-Sept.1, 1989, Dresden.**
- 36. Hybrid transitions in heteronuclear molecules NaK  
S.G.Dinev, G.B.Hadjichristov, I.L.Stefanov,  
XIX Europ. Confer. Molec. Spectr. EUCMOS,  
4-8 Sept., 1989, Dresden.**
- 37. Excited States Energy Transfer in Sodium and Potassium,  
S.G.Dinev, I.L.Stefanov, I.V.Tomov,  
Int. Confer. Quantum Electron., IQEC'88, 18-21 July, Tokyo.**
- 38. Nonlinear spectroscopy of alkali dimers,  
S.G.Dinev, I.L.Stefanov, G.B.Hadjichristov  
X Nat. Conf. on Molec. Spectr.,  
29 Aug.-3 Sept. 1988, Blagoevgrad (invited paper).**

39. *Nonlinear spectroscopy of atoms and dimers*  
S.G.Dinev, I.L.Stefanov,  
III Nat. Conf. "Lasers and Their Applications",  
10-14 Oct., 1988, Plovdiv (invited paper).
40. *Energy transfer laser in sodium vapour*  
I.G.Koprinkov, S.G.Dinev, I.L.Stefanov,  
Energy transfer spectroscopy., Proc. XIII Int. Conf. Photochemistry,  
9-14 Aug. 1987, Budapest, vol.II, 612-13.
41. *Nonlinear processes from excited atomic states,*  
S.G.Dinev, I.L.Stefanov,  
III Nat. Conf. on Optics and Lasers,  
18-20 May, 1987, Varna.
42. *Stimulated emission in Na<sub>2</sub> excited by collisional energy transfer  
from Na(4d)*  
S.G.Dinev, I.G.Koprinkov, I.L.Stefanov,  
Intern. Symp. Photochem. and Luminescence,  
2-5 Sept, 1986, Torun, Poland.
43. *Stimulated emission excited by collisional energy transfer between  
atoms and dimers*  
S.G.Dinev, I.G.Koprinkov, I.L.Stefanov,  
Winter school on laser Spectroscopy, 17-23 March 1986,  
Gyulechitza, Bulgaria, (invited paper).
44. *Stimulated emission by collisional energy transfer,*  
G.Dinev, I.G.Koprinkov, I.L.Stefanov,  
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