

СПИСЪК НА ПУБЛИКАЦИИТЕ на проф. д-р 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 квартил Q1, 24 са от квартил Q2, 1 - от квартил Q3 (по Scopus).

СПИСАНИЕ	БРОЙ СТАТИИ / КВАРТИЛ	ИМПАКТ- ФАКТОР IF	СПИСАНИЕ	БРОЙ СТАТИИ / КВАРТИЛ	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 / КВАРТИЛ	ИМПАКТ- РАНГ (SJR)	СПИСАНИЕ	БРОЙ СТАТИИ / КВАРТИЛ	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 квартили) в горните таблици са по данни за 2019 г., а за публикуваните след 2019г. – по данни за 2023г.

А. СТАТИИ В МЕЖДУНАРОДНИ СПИСАНИЯ С ИМПАКТ ФАКТОР

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С. ДОКЛАДИ НА МЕЖДУНАРОДНИ КОНФЕРЕНЦИИ, ПУБЛИКУВАНИ В ПЪЛЕН ТЕКСТ

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G. ИЗНЕСЕНИ ПОКАНЕНИ ЛЕКЦИИ/ДОКЛАДИ

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- 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.
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 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. Ефимов, 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.** A. 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.** A. 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).
- G26.** 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://dfrmconference2018.wixsite.com/12thconference-dfrm/plenary-speakers>)
- G27.** A. 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.** A. 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 сполове,“ 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

- /а2/ Ден на отворените врати на Физически факултет на Софийския университет, 17.11.2023г.
- /а3/ Закриване на Международната година на фундаменталните науки за устойчиво развитие, Аула на Ректорат на Софийския университет, 05.12.2023г. ;
- G35. А. Драйшу, „Елементи от сингуларната 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

- H1. А. Драйшу, „Лазерният лъч в светлината на прожекторите,” Природа **CXXVI**, бр. 4, стр. 38-42 (2019).
- H2. А. Драйшу, „Развитието на науката предполага приемственост, надграждане, натрупване и осмисляне на знания,” Светът на физиката, бр. 1, стр. 4-14 (2020).
- H3. А. Драйшу, „Нobelовата награда по физика за 2023г. и приносът на български изследователкъм нея,” Светът на физиката, бр. 4, стр. 253-269 (2023).
- H4. 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.