

# Yuri Petrov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8657466/publications.pdf>

Version: 2024-02-01

66  
papers

570  
citations

686830

13  
h-index

752256

20  
g-index

66  
all docs

66  
docs citations

66  
times ranked

595  
citing authors

#	ARTICLE	IF	CITATIONS
1	Single Step Laser-Induced Deposition of Plasmonic Au, Ag, Pt Mono-, Bi- and Tri-Metallic Nanoparticles. <i>Nanomaterials</i> , 2022, 12, 146.	1.9	12
2	Direct observation of topological Hall effect in Co/Pt nanostructured films. <i>Physical Review B</i> , 2021, 103, .	1.1	18
3	Laser-Induced Deposition of Plasmonic Ag and Pt Nanoparticles, and Periodic Arrays. <i>Materials</i> , 2021, 14, 10.	1.3	10
4	Cathodoluminescence of carbon-related defects in hexagonal boron nitride. <i>Journal of Physics: Conference Series</i> , 2021, 2103, 012065.	0.3	0
5	Artificial Dense Lattices of Magnetic Skyrmions. <i>Materials</i> , 2020, 13, 99.	1.3	11
6	Hybrid Orthorhombic Carbon Flakes Intercalated with Bimetallic Au-Ag Nanoclusters: Influence of Synthesis Parameters on Optical Properties. <i>Nanomaterials</i> , 2020, 10, 1376.	1.9	5
7	Helium focused ion beam irradiation with subsequent chemical etching for the fabrication of nanostructures. <i>Nanotechnology</i> , 2020, 31, 215301.	1.3	5
8	Investigation of the encapsulated XIIIth century French Legendarium F-403 from the Library of Russian Academy of Science. <i>Journal of Cultural Heritage</i> , 2020, 46, 298-303.	1.5	3
9	Electroluminescence of Ta2O5 Films Formed by Molecular Layer Deposition. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2020, 128, 220-223.	0.2	0
10	The Proximity and Josephson Effects in Niobium Nitride–Aluminum Bilayers. <i>Physics of the Solid State</i> , 2019, 61, 1544-1548.	0.2	2
11	Impact of the Field of a Magnetic Force Microscope Probe on the Skyrmion State in a Modified Co/Pt Film with Perpendicular Anisotropy. <i>Physics of the Solid State</i> , 2019, 61, 1594-1598.	0.2	4
12	Secondary electron energy distribution from insulators in helium ion microscope. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
13	Biodamage to Paper by Micromycetes under Experimental Conditions: A Study by Vibrational Spectroscopy Methods. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2019, 126, 354-359.	0.2	4
14	Investigating the Optical Properties of a Laser Induced 3D Self-Assembled Carbon–Metal Hybrid Structure. <i>Small</i> , 2019, 15, e1900512.	5.2	6
15	Plasmonic carbon nanohybrids from laser-induced deposition: controlled synthesis and SERS properties. <i>Journal of Materials Science</i> , 2019, 54, 8177-8186.	1.7	13
16	Fabrication of nanopores in silicon nitride membrane by means of wet etching enhanced by focused helium ion beam irradiation. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	5
17	Lorentz transmission electron microscopy of ferromagnetic nanodisks. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
18	Diffraction from excitonic diffraction grating. <i>Journal of Physics: Conference Series</i> , 2019, 1368, 022013.	0.3	0

#	ARTICLE	IF	CITATIONS
19	Control over the Magnetic Properties of Co/Pt-based Multilayered Periodical Structures. Technical Physics, 2019, 64, 1584-1589.	0.2	1
20	Luminescence of SiO <sub>2</sub> layers on silicon at various types of excitation. Journal of Luminescence, 2019, 205, 102-108.	1.5	29
21	Modeling and optimization of the excitonic diffraction grating. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 1505.	0.8	1
22	Helium ion beam induced electron emission from insulating silicon nitride films under charging conditions. Nuclear Instruments & Methods in Physics Research B, 2018, 425, 11-17.	0.6	6
23	Effect of helium ion beam treatment on wet etching of silicon dioxide. Nuclear Instruments & Methods in Physics Research B, 2018, 418, 94-100.	0.6	4
24	Interface-Assisted Synthesis of Single-Crystalline ScF <sub>3</sub> Microtubes. Inorganic Chemistry, 2018, 57, 9779-9781.	1.9	8
25	Formation of Fe and Fe <sub>2</sub> O <sub>3</sub> Microspirals via Interfacial Synthesis. Particle and Particle Systems Characterization, 2018, 35, 1800186.	1.2	6
26	Magnetic Force Microscopy of Nanostructured Co/Pt Multilayer Films with Perpendicular Magnetization. Materials, 2017, 10, 1034.	1.3	11
27	Design Rules for Oxygen Evolution Catalysis at Porous Iron Oxide Electrodes: A 1000-fold Current Density Increase. ChemSusChem, 2017, 10, 3644-3651.	3.6	27
28	Helium ion beam enhanced local etching of silicon nitride. AIP Conference Proceedings, 2016, , .	0.3	2
29	The interaction of gaseous SiF <sub>4</sub> and HF with surface of aqueous solution of LaCl <sub>3</sub> leading to the formation of the LaF <sub>3</sub> ·SiO <sub>2</sub> ·nH <sub>2</sub> O nanocomposite and microtubes on its basis. Russian Journal of General Chemistry, 2016, 86, 2689-2692.	0.3	7
30	Structural and electrical properties of AlN layers grown on silicon by reactive RF magnetron sputtering. AIP Conference Proceedings, 2016, , .	0.3	1
31	The modification of the structure of multilayer Co/Pt films by the irradiation with a focused helium ion beam. AIP Conference Proceedings, 2016, , .	0.3	4
32	Artificial dense lattice of magnetic bubbles. Applied Physics Letters, 2016, 109, 042406.	1.5	44
33	Low-voltage scanning electron microscopy study of lampbrush chromosomes and nuclear bodies in avian and amphibian oocytes. Scientific Reports, 2016, 6, 36878.	1.6	7
34	NEXAFS study of electronic and atomic structure of active layer in Al/indium tin oxide/TiO <sub>2</sub> stack during resistive switching. Science and Technology of Advanced Materials, 2016, 17, 274-284.	2.8	1
35	Plasmon-enhanced electron scattering in nanostructured thin metal films revealed by low-voltage scanning electron microscopy. AIP Conference Proceedings, 2016, , .	0.3	1
36	Ion-beam-assisted spatial modulation of inhomogeneous broadening of a quantum well resonance: excitonic diffraction grating. Optics Letters, 2016, 41, 104.	1.7	10

#	ARTICLE	IF	CITATIONS
37	Secondary Electron Generation in the Helium Ion Microscope: Basics and Imaging. <i>Nanoscience and Technology</i> , 2016, , 119-146.	1.5	11
38	Experimental study of angular and frequency spectra of laser pulse diffraction on a planar periodic nanostructure of gold V antennas. <i>Quantum Electronics</i> , 2015, 45, 914-916.	0.3	0
39	Effect of irradiation by He <sup>+</sup> and Ga <sup>+</sup> ions on the 2D $\pi$ -exciton susceptibility of InGaAs/GaAs quantum-well structures. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 1950-1954.	0.7	9
40	Scanning reflection ion microscopy in a helium ion microscope. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1125-1137.	1.5	10
41	Direct laser writing of $\lambda/4$ -chips based on hybrid Au-Ag nanoparticles for express analysis of hazardous and biological substances. <i>Lab on A Chip</i> , 2015, 15, 1742-1747.	3.1	23
42	Energy filtration of secondary and backscattered electrons by the method of the retarding potential in scanning electron and ion microscopy. <i>Journal of Surface Investigation</i> , 2015, 9, 196-202.	0.1	7
43	Annealing effect: Controlled modification of the structure, composition and plasmon resonance of hybrid Au-Ag/C nanostructures. <i>Applied Surface Science</i> , 2015, 353, 11-16.	3.1	8
44	Laser-induced transformation of supramolecular complexes: approach to controlled formation of hybrid multi-yolk-shell Au-Ag@C:H nanostructures. <i>Scientific Reports</i> , 2015, 5, 12027.	1.6	25
45	Effect of helium ion beam treatment on the etching rate of silicon nitride. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 349, 90-95.	0.6	9
46	Facile synthesis of LaF <sub>3</sub> strained 2D nanoparticles and microtubes at solution-gas interface. <i>Journal of Fluorine Chemistry</i> , 2015, 180, 117-121.	0.9	22
47	Nanomodification of SnO <sub>2</sub> films by doping with additives of copper and gold chlorides. <i>Glass Physics and Chemistry</i> , 2014, 40, 617-622.	0.2	1
48	Waveguide fabrication in lithium-niobo-phosphate glasses by high repetition rate femtosecond laser: route to non-equilibrium material states. <i>Optical Materials Express</i> , 2014, 4, 1197.	1.6	10
49	Transport of Massless Dirac Fermions in Non-topological Type Edge States. <i>Scientific Reports</i> , 2014, 4, 7578.	1.6	18
50	Orbital quantization in a system of edge Dirac fermions in nanoperforated graphene. <i>JETP Letters</i> , 2013, 98, 214-218.	0.4	13
51	Charge-controlled fixation of DNA molecules on silicon surface and electro-physical properties of Au-DNA-Si interface. <i>Applied Surface Science</i> , 2013, 267, 224-228.	3.1	7
52	Diagnostics of $\beta$ -irradiated Si-SiO <sub>2</sub> structures by the cathodoluminescence method. <i>Semiconductors</i> , 2013, 47, 1711-1714.	0.2	7
53	Low-Temperature Transformations of Protonic Forms of Layered Complex Oxides HLnTiO <sub>4</sub> and H <sub>2</sub> Ln <sub>2</sub> Ti <sub>3</sub> O <sub>10</sub> (Ln = La, Nd). <i>Journal of Nanomaterials</i> , 2013, 2013, 1-8.	1.5	11
54	Laser-induced synthesis of metallic silver-gold nanoparticles encapsulated in carbon nanospheres for surface-enhanced Raman spectroscopy and toxins detection. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	21

#	ARTICLE	IF	CITATIONS
55	Secondary Electrons Energy Distribution In Helium Ion Microscope And Contrast Manipulation. Microscopy and Microanalysis, 2012, 18, 824-825.	0.2	0
56	Electron-excited luminescence of SiO <sub>2</sub> layers on silicon. Physics of the Solid State, 2012, 54, 1149-1152.	0.2	3
57	Preparation of oxidized PbSeO <sub>3</sub> films from PbSe films. Glass Physics and Chemistry, 2012, 38, 240-244.	0.2	5
58	Growth of whisker nanocrystals in the (1 - x)In <sub>2</sub> O <sub>3</sub> · xSeO <sub>2</sub> system. Glass Physics and Chemistry, 2012, 38, 339-346.	0.2	2
59	Secondary electron emission spectra and energy selective imaging in helium ion microscope. Proceedings of SPIE, 2011, , .	0.8	16
60	Metallization of DNA on silicon surface. Journal of Nanoparticle Research, 2011, 13, 3633-3641.	0.8	13
61	Scanning helium ion microscope: Distribution of secondary electrons and ion channeling. Journal of Surface Investigation, 2010, 4, 792-795.	0.1	30
62	Charge state of luminescence centers in the Si-SiO <sub>2</sub> structures subjected to sequential implantation with silicon and carbon ions. Semiconductors, 2008, 42, 1515-1518.	0.2	2
63	Electroluminescence of Si-SiO <sub>2</sub> structures subjected to sequential ion implantation with silicon and carbon. Physics of the Solid State, 2006, 48, 966-968.	0.2	1
64	The electroluminescence of SiO <sub>2</sub> layers with excess silicon. Technical Physics Letters, 2004, 30, 40-41.	0.2	2
65	The effect of annealing on the electroluminescence of SiO <sub>2</sub> layers with excess silicon. Technical Physics Letters, 2004, 30, 85-87.	0.2	4
66	Soft Chemistry Synthesis of Complex Oxides Using Protonic Form of Titanates HLnTiO <sub>4</sub> (Ln=La, Nd). Solid State Phenomena, 0, 194, 213-216.	0.3	8