

# Pavels Onufrijevs

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

401  
citations

686830

13  
h-index

839053

18  
g-index

61  
all docs

61  
docs citations

61  
times ranked

464  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biobased Resin for Sustainable Stereolithography: 3D Printed Vegetable Oil Acrylate Reinforced with Ultra-Low Content of Nanocellulose for Fossil Resin Substitution. 3D Printing and Additive Manufacturing, 2023, 10, 1272-1286.	1.4	7
2	Surface quality characterization of thin Nb films for superconducting radiofrequency cavities. Superconductor Science and Technology, 2022, 35, 075010.	1.8	3
3	Improvement of the first flux entry field by laser post-treatment of the thin Nb film on Cu. Superconductor Science and Technology, 2021, 34, 065001.	1.8	4
4	Anatase or rutile TiO <sub>2</sub> nanolayer formation on Ti substrates by laser radiation: Mechanical, photocatalytic and antibacterial properties. Optics and Laser Technology, 2021, 138, 106898.	2.2	20
5	Extension of spectral sensitivity of GeSn IR photodiode after laser annealing. Applied Surface Science, 2021, 555, 149711.	3.1	10
6	Temperature and spatial dependence of carrier lifetime and luminescence intensity in Ge <sub>0.95</sub> Sn <sub>0.05</sub> layer. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 270, 115204.	1.7	3
7	Morphological and optical property study of Li doped ZnO produced by microwave-assisted solvothermal synthesis. Materials Science in Semiconductor Processing, 2021, 135, 106069.	1.9	15
8	Phase transformation from rutile to anatase with oxygen ion dose in the TiO <sub>2</sub> layer formed on a Ti substrate. Materials Science in Semiconductor Processing, 2020, 106, 104776.	1.9	15
9	Temperature dependent carrier lifetime, diffusion coefficient, and diffusion length in Ge <sub>0.95</sub> Sn <sub>0.05</sub> epilayer. Journal of Applied Physics, 2020, 128, .	1.1	7
10	Understanding and Control of Stress at Si-SiO <sub>2</sub> Interface. Key Engineering Materials, 2020, 850, 291-296.	0.4	0
11	Improvement of Nb/Cu adhesion and increase of Nb crystal size by laser radiation. Applied Surface Science, 2020, 525, 146528.	3.1	4
12	Direct-indirect GeSn band structure formation by laser Radiation: The enhancement of Sn solubility in Ge. Optics and Laser Technology, 2020, 128, 106200.	2.2	11
13	Colossal laser ablation threshold of Ge crystal due to formation of GeO <sub>2</sub> nanolayer: "Lid Effect" - Subsurface boiling mechanism. Optics and Laser Technology, 2019, 119, 105630.	2.2	2
14	Laser-induced crystalline phase transition from rutile to anatase of niobium doped TiO <sub>2</sub> . Current Applied Physics, 2019, 19, 351-355.	1.1	14
15	Origin of n-type conductivity in ZnO crystal and formation of Zn and ZnO nanoparticles by laser radiation. Optics and Laser Technology, 2019, 111, 121-128.	2.2	19
16	Formation of SnS phase obtained by thermal vacuum annealing of SnS <sub>2</sub> thin films and its application in solar cells. Materials Science in Semiconductor Processing, 2018, 79, 32-39.	1.9	19
17	UV-light-induced curing of branched epoxy novolac resin for coatings. EXPRESS Polymer Letters, 2018, 12, 918-929.	1.1	20
18	Sol-gel coated enamel for steel: 250 days of continuous high-temperature stability. Ceramics International, 2017, 43, 2974-2980.	2.3	10

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19	Two-stage mechanism of Zn nanoparticles formation in ZnO crystal by Nd:YAG laser radiation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017, 14, 1700038.	0.8	0
20	Photo-electrical and transport properties of hydrothermal ZnO. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	7
21	The effect of UV Nd:YAG laser radiation on the optical and electrical properties of hydrothermal ZnO crystal. <i>Optics and Laser Technology</i> , 2016, 86, 21-25.	2.2	4
22	Laser-induced SnS <sub>2</sub> -SnS phase transition and surface modification in SnS <sub>2</sub> thin films. <i>Journal of Alloys and Compounds</i> , 2016, 688, 130-139.	2.8	36
23	Rutile to anatase phase transition in TiO <sub>2</sub> :Nb thin films by annealing in H <sub>2</sub> atmosphere. <i>Current Applied Physics</i> , 2016, 16, 826-829.	1.1	14
24	Angular dependence of recombination luminescence-detected EPR in a ZnO crystal. <i>Physica Scripta</i> , 2015, 90, 094016.	1.2	1
25	Formation mechanisms of nano and microcones by laser radiation on surfaces of Si, Ge, and SiGe crystals. <i>Nanoscale Research Letters</i> , 2013, 8, 264.	3.1	19
26	Homo- and Hetero-Structure Formation in Semiconductors by Laser Radiation: First Stage of Quantum Cones Formation. <i>Solid State Phenomena</i> , 2013, 205-206, 475-479.	0.3	1
27	Two-stage model of quantum cones formation on a surface of semiconductors by laser radiation. , 2013, , .		0
28	On Applicability of Time-Resolved Optical Techniques for Characterization of Differently Grown 3C-SiC Crystals and Heterostructures. <i>Materials Science Forum</i> , 2012, 711, 159-163.	0.3	1
29	Two-stage model of nanocone formation on a surface of elementary semiconductors by laser radiation. <i>Nanoscale Research Letters</i> , 2012, 7, 428.	3.1	4
30	Application of Nd:YAG Laser in Semiconductors™ Nanotechnology. , 2012, , .		2
31	Suppression of defect-related luminescence in laser-annealed InGaN epilayers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1021-1023.	0.8	1
32	“Black Silicon” Formation by Nd:YAG Laser Radiation. <i>Advanced Materials Research</i> , 2011, 222, 44-47.	0.3	3
33	Stress relaxation mechanism by strain in the Si-SiO <sub>2</sub> system and its influence on the interface properties. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 25, 012018.	0.3	0
34	Nano-cones Formed on a Surface of Semiconductors by Laser Radiation: Technology, Model and Properties. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	4
35	Nano-Cones Formation on a Surface of Ge, Si Crystals and Si<SUB>1-x</SUB>Ge<SUB>x</SUB> Solid Solution by Laser Radiation. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 9088-9094.	0.9	2
36	Impact of Laser Radiation on Microhardness of a Semiconductor. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	2

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37	Properties of nanocones formed on a surface of semiconductors by laser radiation: quantum confinement effect of electrons, phonons, and excitons. <i>Nanoscale Research Letters</i> , 2011, 6, 582.	3.1	23
38	Influence of laser annealing on defect-related luminescence of InGaN epilayers. <i>Journal of Luminescence</i> , 2011, 131, 1322-1326.	1.5	3
39	P-N Junction Formation in ITO/p-Si Structure by Powerful Laser Radiation for Solar Cells Applications. <i>Advanced Materials Research</i> , 2011, 222, 225-228.	0.3	6
40	Stress Relaxation Mechanism by Strain in the Si-SiO <sub>2</sub> System and its Influence on the Interface Properties. <i>Solid State Phenomena</i> , 2011, 178-179, 259-262.	0.3	0
41	Characterization of Optical and Photoelectrical Properties of ZnO Crystals. <i>Acta Physica Polonica A</i> , 2011, 119, 274-276.	0.2	0
42	Self-Assembly of Nanohills in Si <sub>1-x</sub> Ge <sub>x</sub> /Si Hetero-Epitaxial Structure Due to Ge Redistribution Induced by Laser Radiation. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 1094-1098.	0.9	7
43	Electron field emission from the Si nanostructures formed by laser irradiation. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C2B11-C2B13.	0.6	6
44	Suppression of Pores Formation on a Surface of p-Si by Laser Radiation. <i>Solid State Phenomena</i> , 2009, 156-158, 337-341.	0.3	2
45	Exciton quantum confinement effect in nanostructures formed by laser radiation on the surface of CdZnTe ternary compound. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 209-212.	0.8	15
46	Dynamics of nanostructure formation using point defects on semiconductors by laser radiation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 1927-1928.	0.8	2
47	Laser-induced self-organization of nano-wires on SiO <sub>2</sub> /Si interface. <i>Microelectronics Journal</i> , 2009, 40, 449-451.	1.1	2
48	The electron field emission from the Si nanostructures formed by laser irradiation. , 2009, , .		0
49	Properties of Nanostructure Formed on SiO <sub>2</sub> /Si Interface by Laser Radiation. <i>Solid State Phenomena</i> , 2008, 131-133, 559-562.	0.3	11
50	Graphitization of amorphous diamond-like carbon films by laser irradiation. <i>Optical Materials</i> , 2008, 30, 749-752.	1.7	13
51	Laser Induced Self-Organization of Nanohills/Nanowires in SiO <sub>2</sub> /Si Interface. <i>Acta Physica Polonica A</i> , 2008, 113, 1067-1070.	0.2	0
52	Low-K factor of SiO <sub>2</sub> layer on Si irradiated by YAG:Nd laser. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 703-707.	1.5	1
53	Quantum confinement effect in nanohills formed on a surface of Ge by laser radiation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 3066-3069.	0.8	19
54	<title>Nanosecond and picosecond pulse transmission in optical fibres</title>. , 2006, , .		0

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55	Formation of pores in Ge single crystal by laser radiation. Applied Surface Science, 2005, 244, 203-208.	3.1	2
56	Phase Transition on Surface of IV Group Semiconductors by Laser Radiation. Solid State Phenomena, 2005, 108-109, 345-350.	0.3	4
57	Photoluminescence and micro-Raman study of nanohills formed on the surface of Ge by YAG:Nd laser. , 2005, , .		0
58	Decrease of Point Defect Concentration at a Surface of ZnO/Si Heterostructure by Powerful Laser Radiation. Advanced Materials Research, 0, 222, 158-161.	0.3	0
59	Magnetization Peculiarities of Defects in Silicon Produced by Ni<sup>+</sup>, Co<sup>+</sup>, Fe<sup>+</sup> Ion Implantation. Advanced Materials Research, 0, 222, 82-85.	0.3	0
60	Control of Au Nanoparticles Structural and Optical Properties by Laser Radiation and Thermal Annealing. Key Engineering Materials, 0, 788, 74-82.	0.4	1