

Pavel

List of Publications by Year in descending order

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58
papers

394
citations

933447

10
h-index

888059

17
g-index

58
all docs

58
docs citations

58
times ranked

351
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of plasma in ablation of materials by ultrashort laser pulses. Quantum Electronics, 2001, 31, 378-382.	1.0	59
2	Plasma effects during ablation and drilling using pulsed solid-state lasers. , 2003, , .		26
3	Laser microprocessing in a gas environment at a high repetition rate of ablative pulses. Quantum Electronics, 2004, 34, 537-540.	1.0	26
4	Single Silicon Vacancy Centers in 10 nm Diamonds for Quantum Information Applications. ACS Applied Nano Materials, 2019, 2, 4765-4772.	5.0	26
5	Processing of polycrystalline diamond surface by IR laser pulses without interior damage. Optics and Laser Technology, 2019, 117, 87-93.	4.6	16
6	High-speed ablation of ultradeep channels by a phase-conjugate dynamically controlled passively Q-switched Nd:YAG laser. Quantum Electronics, 2007, 37, 956-960.	1.0	15
7	Laser-induced local profile transformation of multilayered graphene on a substrate. Optics and Laser Technology, 2015, 69, 34-38.	4.6	15
8	Effect of nonlinear light scattering in air on ablation of materials produced by femtosecond laser pulses. Quantum Electronics, 2002, 32, 433-436.	1.0	14
9	Printing of Crumpled CVD Graphene via Blister-Based Laser-Induced Forward Transfer. Nanomaterials, 2020, 10, 1103.	4.1	13
10	Preparation of Copper Surface for the Synthesis of Single-Layer Graphene. Nanomaterials, 2021, 11, 1071.	4.1	13
11	Effect of nonlinear scattering of radiation in air on material ablation by femtosecond laser pulses. , 2003, , .		12
12	Role of gas environment in the process of deep-hole drilling by ultrashort laser pulses. , 2003, , .		11
13	Effect of low-threshold air breakdown on material ablation by short laser pulses. Physics of Wave Phenomena, 2007, 15, 1-11.	1.1	11
14	<title>Propagation of short-pulsed laser radiation and stages of ablative deep-channel formation</title>. , 2001, , .		10
15	Influence of laser irradiation on local electronic properties of graphene in the presence of water adsorbate. Optics and Laser Technology, 2017, 90, 216-221.	4.6	10
16	Generation of long-living charged nanoparticles at ablation in air and their role in pulsed microdrilling. Laser Physics, 2008, 18, 774-779.	1.2	9
17	Water at the grapheneâ€“substrate interface: interaction with short laser pulses. Quantum Electronics, 2015, 45, 1166-1170.	1.0	9
18	Direct amplification of picosecond pulses in F2-: LiF crystals. Quantum Electronics, 2006, 36, 609-611.	1.0	8

#	ARTICLE	IF	CITATIONS
19	High-damage-threshold antireflection coatings on diamond for CW and pulsed CO ₂ lasers. Laser Physics Letters, 2018, 15, 036001.	1.4	8
20	Effect of absorbing coating on ablation of diamond by IR laser pulses. Quantum Electronics, 2018, 48, 244-250.	1.0	8
21	Evolution of surface relief of epitaxial diamond films upon growth resumption by microwave plasma chemical vapor deposition. CrystEngComm, 2020, 22, 2138-2146.	2.6	7
22	Conical emission in focused beams: analysis of contributing factors and elimination of scattering. Applied Physics B: Lasers and Optics, 2011, 105, 495-501.	2.2	6
23	Laser-induced modification of graphene in the presence of ethanol on a graphene-substrate interface. Quantum Electronics, 2017, 47, 1017-1022.	1.0	6
24	Field Electron Emission from Crumpled CVD Graphene Patterns Printed via Laser-Induced Forward Transfer. Nanomaterials, 2022, 12, 1934.	4.1	6
25	Acoustic diagnostics of the explosive boiling up of a transparent liquid on an absorbing substrate induced by two nanosecond laser pulses. Quantum Electronics, 2007, 37, 967-970.	1.0	5
26	Spectral dependences of conical emission in gases: Minimization of scattering for ultra-short pulsed laser ablation. Laser Physics, 2009, 19, 1282-1287.	1.2	5
27	Laser induced modification of mechanical properties of nanostructures: graphene-water adsorbate-substrate. Laser Physics, 2016, 26, 084002.	1.2	5
28	Effect of submillisecond radiation of the erbium laser on absorbing liquid. Bulletin of the Lebedev Physics Institute, 2007, 34, 325-328.	0.6	4
29	Laser nanoablation of graphite. Applied Physics A: Materials Science and Processing, 2014, 114, 51-55.	2.3	4
30	Antireflection coating of diamond elements of power optics for CO ₂ lasers. Quantum Electronics, 2018, 48, 1000-1004.	1.0	4
31	Photoacoustic and laser-induced evaporation effects in liquids. Applied Physics B: Lasers and Optics, 2011, 105, 551-556.	2.2	3
32	Laser ablation of absorbing liquids under transparent cover: acoustical and optical monitoring. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	3
33	Atomic-force-microscopy nanowriting on ultrathin tetrahedral amorphous carbon films. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	3
34	High-power compact laser with segmented longitudinal pumping of coupled laser channels. Quantum Electronics, 2015, 45, 508-510.	1.0	2
35	Crystallization of Thin Copper Films on Silica Substrate for Graphene Growth. Physica Status Solidi (B): Basic Research, 2019, 256, 1800685.	1.5	2
36	Plasmon channels in the electronic relaxation of diamond under high-order harmonics femtosecond irradiation. Laser Physics Letters, 2005, 2, 292-296.	1.4	1

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37	<title>Ablated nano-particles residing in air: characterization, elimination, and role in pulsed microdrilling</title>. , 2007, , .		1
38	Laser nanoablation of graphite in argon atmosphere. Bulletin of the Lebedev Physics Institute, 2014, 41, 329-331.	0.6	1
39	Manipulations with diamond nanoparticles in SPM: the effect of electric field of the conductive probe tip. Bulletin of the Lebedev Physics Institute, 2016, 43, 356-360.	0.6	1
40	SPM probe-assisted surface nanostructuring of boron-doped diamond. Nanotechnologies in Russia, 2016, 11, 73-77.	0.7	1
41	Laser vaporisation of absorbing liquid under transparent cover. Bulletin of the Lebedev Physics Institute, 2016, 43, 156-159.	0.6	1
42	Scanning Probe Lithography of Dendrite-Like Nanostructures in Ultrathin Diamond-Like Nanocomposite Films. Nanotechnologies in Russia, 2017, 12, 376-384.	0.7	1
43	On the mathematical model of combined rarefaction and compression waves in condensed matter. Mathematica Montisnigri, 2021, 50, 104-107.	0.3	1
44	Modeling of transducer calibration for pressure measurement in nanosecond laser ablation. Mathematica Montisnigri, 2020, 48, 58-69.	0.3	1
45	Influence of Different Copper Treatment on the Formation of Single-Layer Graphene by CVD Method. Materials Proceedings, 2021, 4, 14.	0.2	1
46	<title>Spectroscopy of transient conductivity in diamond induced by ultra-short laser pulses in the spectral range from IR to VUV</title>. , 2006, , .		0
47	<title>Effect of high repetition rate on pulsed laser ablation in gas environment</title>. , 2006, 6161, 68.		0
48	Charged nano-particles generated at ablation in air and their role in pulsed microdrilling. , 2007, , .		0
49	<title>Ablation efficiency at high repetition rate of short laser pulses</title>. , 2007, , .		0
50	<title>High rate ablative formation of ultra-deep channels by self-adaptive Nd:YAG laser with dynamically adjustable passive Q-switch</title>. Proceedings of SPIE, 2008, , .	0.8	0
51	Minimization of conical emission in gases for enhanced micromachining by ultrashort pulses. , 2009, , .		0
52	Delocalization of focused intense ultra-short laser pulses in air and transparent solids. , 2013, , .		0
53	Manifestation of spinodal singularities in the liquidâ€“vapor phase transition during simulation of nanosecond vaporization of a liquid film. Bulletin of the Lebedev Physics Institute, 2016, 43, 207-209.	0.6	0
54	Nanostructuring of Titanium-Doped Diamond-Like Nanocomposite Films via Electric Probe Lithography. Nanotechnologies in Russia, 2018, 13, 464-469.	0.7	0

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55	Change in Graphene Electronic Properties in the Presence of Acetone Vapor. Bulletin of the Lebedev Physics Institute, 2018, 45, 209-213.	0.6	0
56	Mid-IR reflectance spectrum of multilayer graphene: Influence of adsorbate at the graphene “ substrate interface. Quantum Electronics, 2019, 49, 1074-1077.	1.0	0
57	Photoconductivité et photoémission de diamant(s) sous irradiation XUV femtoseconde. European Physical Journal Special Topics, 2005, 127, 131-138.	0.2	0
58	Effect of focused nanosecond laser pulse irradiation on microtribological properties of diamond-like films. Quantum Electronics, 2020, 50, 750-755.	1.0	0