Victor Ralchenko

List of Publications by Citations

177 papers	3,220 citations	25 h-index	51 g-index
182 ext. papers	3,608 ext. citations	2.6 avg, IF	4.7 L-index

#	Paper	IF	Citations
177	Carbon structures with three-dimensional periodicity at optical wavelengths. *Science*, **1998**, 282, 897-901	33.3	891
176	Nanodiamond Photoemitters Based on Strong Narrow-Band Luminescence from Silicon-Vacancy Defects. *Advanced Materials*, **2009**, 21, 808-812	24	108
175	Direct observation of laser-induced crystallization of a-C:H films. *Applied Physics A: Solids and Surfaces*, **1994**, 58, 137-144		106
174	Efficient nitrogen doping of graphene by plasma treatment. *Carbon*, **2016**, 96, 196-202	10.4	104
173	Core-shell designs of photoluminescent nanodiamonds with porous silica coatings for bioimaging and drug delivery II: application. *Nanoscale*, **2013**, 5, 3713-22	7.7	88
172	Nitrogen and hydrogen in thick diamond films grown by microwave plasma enhanced chemical vapor deposition at variable H2 flow rates. *Journal of Applied Physics*, **2000**, 87, 8741-8746	2.5	62
171	High-rate growth of single crystal diamond in microwave plasma in CH4/H2 and CH4/H2/Ar gas mixtures in presence of intensive soot formation. *Diamond and Related Materials*, **2016**, 62, 49-57	3.5	61
170	High-order stimulated Raman scattering in CVD single crystal diamond. *Laser Physics Letters*, **2007**, 4, 350-353	1.5	60
169	Bulk and surface-enhanced Raman spectroscopy of nitrogen-doped ultrananocrystalline diamond films. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 3028-3035	1.6	58
168	Si-doped nano- and microcrystalline diamond films with controlled bright photoluminescence of silicon-vacancy color centers. *Diamond and Related Materials*, **2015**, 56, 23-28	3.5	49
167	Thermal conductivity of high purity synthetic single crystal diamonds. *Physical Review B*, **2018**, 97,	3.3	48
166	Photoluminescence of SiV centers in single crystal CVD diamond in situ doped with Si from silane. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2525-2532	1.6	48
165	Optical monitoring of nucleation and growth of diamond films. *Applied Physics Letters*, **1993**, 62, 3449-3451	3.4	47
164	Fracture strength of optical quality and black polycrystalline CVD diamonds. *Diamond and Related Materials*, **2012**, 23, 172-177	3.5	43
163	Formation of Amorphous Carbon and Graphite in CVD Diamond upon Annealing: A HREM, EELS, Raman and Optical Study. *Physica Status Solidi A*, **2001**, 186, 207-214		40
162	Nitrogenated nanocrystalline diamond films: Thermal and optical properties. *Diamond and Related Materials*, **2007**, 16, 2067-2073	3.5	38
161	Observation of the Ge-vacancy color center in microcrystalline diamond films. *Bulletin of the Lebedev Physics Institute*, **2015**, 42, 165-168	0.5	37

160	Express in situ measurement of epitaxial CVD diamond film growth kinetics. *Diamond and Related Materials*, **2017**, 72, 61-70	3.5	35
159	Predicting the distribution and stability of photoactive defect centers in nanodiamond biomarkers. *Journal of Materials Chemistry*, **2009**, 19, 360-365		33
158	Stress mapping of chemical-vapor-deposited diamond film surface by micro-Raman spectroscopy. *Applied Physics Letters*, **1997**, 71, 1789-1791	3.4	31
157	CVD-diamond □a novel □(3)-nonlinear active crystalline material for SRS generation in very wide spectral range. *Laser Physics Letters*, **2006**, 3, 171-177	1.5	30
156	Low-field electron emission of diamond/pyrocarbon composites. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2001**, 19, 965		29
155	Measurement of thermal conductivity of polycrystalline CVD diamond by laser-induced transient grating technique. *Quantum Electronics*, **2002**, 32, 367-372	1.8	28
154	Diamond-EuF3 nanocomposites with bright orange photoluminescence. *Diamond and Related Materials*, **2017**, 72, 47-52	3.5	26
153	High-rate ultrasonic polishing of polycrystalline diamond films. *Diamond and Related Materials*, **2016**, 66, 171-176	3.5	26
152	Optical Properties and Defect Structure of CVD Diamond Films Annealed at 900□1600 □C. *Physica Status Solidi A*, **2000**, 181, 37-44		25
151	Measurements of thermal conductivity of diamond films by photothermal deflection technique. *Journal of Applied Physics*, **1994**, 75, 7795-7798	2.5	25
150	Single crystal diamond UV detector with a groove-shaped electrode structure and enhanced sensitivity. *Sensors and Actuators A: Physical*, **2017**, 259, 121-126	3.9	23
149	Spatial localization of Si-vacancy photoluminescent centers in a thin CVD nanodiamond film. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 2009-2011	1.6	22
148	The state of the art in the growth of diamond crystals and films. *Inorganic Materials*, **2006**, 42, S1-S18	0.9	22
147	High-order Stokes and anti-Stokes Raman generation in CVD diamond. *Physica Status Solidi (B): Basic Research*, **2005**, 242, R4-R6	1.3	22
146	Diamond refractive lens for hard x-ray focusing **2002**, 4783, 1		22
145	Epitaxial growth of mosaic diamond: Mapping of stress and defects in crystal junction with a confocal Raman spectroscopy. *Journal of Crystal Growth*, **2017**, 463, 19-26	1.6	21
144	Nitridation of Ti and Zr by multi-pulse TEA CO2laser irradiation in liquid nitrogen. *Journal Physics D: Applied Physics*, **1986**, 19, 1183-1188	3	20
143	Fabrication of polycrystalline diamond refractive X-ray lens by femtosecond laser processing. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	19

142	Gas-phase growth of silicon-doped luminescent diamond films and isolated nanocrystals. *Bulletin of the Lebedev Physics Institute*, **2011**, 38, 291-296	0.5	19
141	Fabrication of CVD Diamond Optics with Antireflective Surface Structures. *Physica Status Solidi A*, **1999**, 174, 171-176		19
140	Monoisotopic Ensembles of Silicon-Vacancy Color Centers with Narrow-Line Luminescence in Homoepitaxial Diamond Layers Grown in H2□CH4□x]SiH4 Gas Mixtures (x = 28, 29, 30). *ACS Photonics*, **2019**, 6, 66-72	6.3	19
139	Polycrystalline CVD diamond pixel array detector for nuclear particles monitoring. *Journal of Instrumentation*, **2013**, 8, C02043-C02043	1	18
138	Observation of stimulated raman scattering in CVD-diamond. *JETP Letters*, **2004**, 80, 267-270	1.2	18
137	Plateholder design for deposition of uniform diamond coatings on WC-Co substrates by microwave plasma CVD for efficient turning application. *Diamond and Related Materials*, **2017**, 75, 169-175	3.5	17
136	Size-dependent luminescence of color centers in composite nanodiamonds. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2600-2605	1.6	17
135	Crystal Growth of Diamond **2015**, 671-713		16
134	Multi-octave frequency comb generation by(3)-nonlinear optical processes in CVD diamond at low temperatures. *Laser Physics Letters*, **2014**, 11, 086101	1.5	16
133	Analysis of synthetic diamond single crystals by X-ray topography and double-crystal diffractometry. *Crystallography Reports*, **2013**, 58, 1010-1016	0.6	16
132	Fabrication of diamond microstub photoemitters with strong photoluminescence of SiV color centers: bottom-up approach. *Applied Physics A: Materials Science and Processing*, **2015**, 118, 17-21	2.6	15
131	Nano-carbon pixels array for ionizing particles monitoring. *Diamond and Related Materials*, **2017**, 73, 132-136	3.5	15
130	Creation of strong adhesive diamond coatings on hard alloy by electric-spark alloying. *Metallurgist*, **2010**, 54, 523-529	0.8	15
129	Investigation with particles and protons of buried graphite pillars in single-crystal CVD diamond. *Diamond and Related Materials*, **2018**, 84, 1-10	3.5	14
128	Etching Kinetics of (100) Single Crystal Diamond Surfaces in a Hydrogen Microwave Plasma, Studied with In Situ Low-Coherence Interferometry. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1700177	1.6	14
127	Growth of 4? diameter polycrystalline diamond wafers with high thermal conductivity by 915 MHz microwave plasma chemical vapor deposition. *Plasma Science and Technology*, **2017**, 19, 035503	1.5	13
126	DiamondRare Earth Composites with Embedded NaGdF4:Eu Nanoparticles as Robust Photo- and X-ray-Luminescent Materials for Radiation Monitoring Screens. *ACS Applied Nano Materials*, **2020**, 3, 1324-1331	5.6	13
125	Radiation Damage Effects on Optical, Electrical, and Thermophysical Properties of CVD Diamond Films. *Journal of Applied Spectroscopy*, **2013**, 80, 707-714	0.7	13

124	Diamond direct and inverse opal matrices produced by chemical vapor deposition. *Physics of the Solid State*, **2011**, 53, 1131-1134	0.8	13
123	Structural studies of diamond thin films grown from dc arc plasma. *Journal of Materials Research*, **1997**, 12, 2533-2542	2.5	13
122	Effect of microstructure and grain size on the thermal conductivity of high-pressure-sintered diamond composites. *Inorganic Materials*, **2008**, 44, 224-229	0.9	13
121	Nitrification of zirconium by cw CO2 laser irradiation in ambient atmosphere. *Applied Physics Letters* , **1985**, 46, 110-112	3.4	13
120	Optimization of X-ray beam profilers based on CVD diamond detectors. *Journal of Instrumentation*, **2012**, 7, C11005-C11005	1	12
119	Neutron irradiation effects in chemical-vapor-deposited diamond. *Physical Review B*, **2008**, 78,	3.3	12
118	Vertical-substrate epitaxial growth of single-crystal diamond by microwave plasma-assisted chemical vapor deposition. *Journal of Crystal Growth*, **2018**, 486, 104-110	1.6	11
117	Diamond micropowder synthesis via graphite etching in a microwave hydrogen plasma. *Powder Technology*, **2017**, 322, 124-130	5.2	11
116	Growth of single-crystal diamonds in microwave plasma. *Plasma Physics Reports*, **2012**, 38, 1113-1118	1.2	11
115	Wettability of ultrananocrystalline diamond and graphite nanowalls films: a comparison with their single crystal analogs. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 3665-71	1.3	11
114	Stress in Thin Diamond Films on Various Materials Measured by Microraman Spectroscopy. *Materials Research Society Symposia Proceedings*, **1995**, 383, 153		11
113	Hydrogen loss from laser-annealed amorphous hydrogenated carbon films studied by secondary-ion mass spectrometry. *Applied Physics Letters*, **1991**, 58, 2758-2760	3.4	11
112	Very long laser-induced graphitic pillars buried in single-crystal CVD-diamond for 3D detectors realization. *Diamond and Related Materials*, **2018**, 90, 84-92	3.5	11
111	Thermal conductivity of free-standing CVD diamond films by growing on both nuclear and growth sides. *Diamond and Related Materials*, **2017**, 76, 9-13	3.5	10
110	On the thermal conductivity of single crystal AlN. *Journal of Applied Physics*, **2020**, 127, 205109	2.5	10
109	Diamond films and particles growth in hydrogen microwave plasma with graphite solid precursor: Optical emission spectroscopy study. *Diamond and Related Materials*, **2018**, 82, 33-40	3.5	10
108	Growth of CVD diamond nanopillars with imbedded silicon-vacancy color centers. *Optical Materials*, **2016**, 61, 25-29	3.3	10
107	Electrochemical behavior of nitrogenated nanocrystalline diamond electrodes. *Russian Journal of Electrochemistry*, **2007**, 43, 827-836	1.2	10

106	CVD diamond coating of AlN ceramic substrates to enhance heat removal. *Russian Microelectronics*, **2006**, 35, 205-209	0.5	10
105	Synthetic diamond electrodes: The effect of surface microroughnesson the electrochemical properties of CVD diamond thin films on titanium. *Journal of Applied Electrochemistry*, **2005**, 35, 857-864	2.6	10
104	Tailoring of Typical Color Centers in Diamond for Photonics. *Advanced Materials*, **2021**, 33, e2000891	24	10
103	Diamond Detector With Laser-Formed Buried Graphitic Electrodes: Micron-Scale Mapping of Stress and Charge Collection Efficiency. *IEEE Sensors Journal*, **2019**, 19, 11908-11917	4	9
102	Photoluminescence Spectra of the 580-nm Center in Irradiated Diamonds. *Journal of Applied Spectroscopy*, **2019**, 86, 597-605	0.7	9
101	Precise control of photoluminescence of silicon-vacancy color centers in homoepitaxial single-crystal diamond: evaluation of efficiency of Si doping from gas phase. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	9
100	External-cavity diamond Raman laser performance at 1240 nm and 1485 nm wavelengths with high pulse energy. *Laser Physics Letters*, **2016**, 13, 065001	1.5	9
99	Benzene oxidation at diamond electrodes: comparison of microcrystalline and nanocrystalline diamonds. *ChemPhysChem*, **2012**, 13, 3047-52	3.2	9
98	Thermal conductivity of polycrystalline CVD diamond: effect of annealing-induced transformations of defects and grain boundaries. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2226-2232	1.6	9
97	KrF excimer laser etching of diamondlike carbon films **1992**, 1759, 106		9
96	Surface nitridation of zirconium and hafnium by powerful cw CO2 laser irradiation in air. *Applied Optics*, **1986**, 25, 2720	1.7	9
95	SiV Color Centers in Si-Doped Isotopically Enriched 12C and 13C CVD Diamonds. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1700198	1.6	8
94	Near-infrared refractive index of synthetic single crystal and polycrystalline diamonds at high temperatures. *Journal of Applied Physics*, **2017**, 122, 243106	2.5	8
93	Use of Optical Spectroscopy Methods to Determine the Solubility Limit for Nitrogen in Diamond Single Crystals Synthesized by Chemical Vapor Deposition. *Journal of Applied Spectroscopy*, **2015**, 82, 242-247	0.7	8
92	Nitrogen-Doped Chemical Vapour Deposited Diamond: a New Material for Room-Temperature Solid State Maser. *Chinese Physics Letters*, **2007**, 24, 2088-2090	1.8	8
91	Mechanism of surface compound formations by cw CO2 laser irradiation of zirconium samples in air. *Journal of Applied Physics*, **1986**, 59, 668-670	2.5	8
90	2D inverse periodic opal structures in single crystal diamond with incorporated silicon-vacancy color centers. *Diamond and Related Materials*, **2017**, 73, 204-209	3.5	7
89	Electrodes of strongly nitrogenated nanocrystalline diamond. *Russian Journal of Electrochemistry*, **2010**, 46, 1063-1068	1.2	7

88	Polycrystalline diamond film UV detectors for excimer lasers. *Quantum Electronics*, **2006**, 36, 487-488	1.8	7
87	Hydrated magnesium-carbon films with conductivity and wide-range visible-to-far-infrared transparency. *Materials Letters*, **2018**, 216, 88-91	3.3	6
86	Semiconductor properties of nanocrystalline diamond electrodes. *Russian Journal of Electrochemistry*, **2014**, 50, 101-107	1.2	6
85	Considerable increase in thermal conductivity of a polycrystalline CVD diamond upon isotope enrichment. *Bulletin of the Lebedev Physics Institute*, **2007**, 34, 329-333	0.5	6
84	Dielectric-carbon composites for field electron emitters. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 597		6
83	Laser "Nano"ablation of Ultrananocrystalline Diamond Films. *Journal of Nanoelectronics and Optoelectronics*, **2009**, 4, 286-289	1.3	6
82	Diamond composite with embedded YAG:Ce nanoparticles as a source of fast X-ray luminescence in the visible and near-IR range. *Carbon*, **2021**, 174, 52-58	10.4	6
81	Growth of three-dimensional diamond mosaics by microwave plasma-assisted chemical vapor deposition. *CrystEngComm*, **2018**, 20, 198-203	3.3	6
80	Chemical Vapor Deposition Single-Crystal Diamond: A Review. *Physica Status Solidi - Rapid Research Letters*,2100354	2.5	6
79	Microwave plasma-assisted chemical vapor deposition of microcrystalline diamond films via graphite etching under different hydrogen flow rates. *CrystEngComm*, **2019**, 21, 2502-2507	3.3	5
78	Strength of synthetic diamonds under tensile stresses produced by picosecond laser action. *Journal of Applied Mechanics and Technical Physics*, **2015**, 56, 143-149	0.6	5
77	Laser-Assisted Formation of High-Quality Polycrystalline Diamond Membranes. *Journal of Russian Laser Research*, **2020**, 41, 321-326	0.7	5
76	Photonic crystals of diamond spheres with the opal structure. *Physics of the Solid State*, **2013**, 55, 1120-1123	1.3	5
75	Photoluminescence of Si-vacancy color centers in diamond films grown in microwave plasma in methane-hydrogen-silane mixtures. *Bulletin of the Lebedev Physics Institute*, **2014**, 41, 359-363	0.5	5
74	Strength of optical quality polycrystalline CVD diamond. *Inorganic Materials: Applied Research*, **2011**, 2, 439-444	0.6	5
73	Oxygen-assisted laser cutting and drilling of CVD diamond **1998**,		5
72	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. *Materials*, **2020**, 13,	3.5	5
71	A new approach to precise mapping of local temperature fields in submicrometer aqueous volumes. *Scientific Reports*, **2021**, 11, 14228	4.9	5

70	Effect of americium-241 source activity on total conversion efficiency of diamond alpha-voltaic battery. *International Journal of Energy Research*, **2019**, 43, 6038-6044	4.5	4
69	Surface damage of YAG crystal induced by broadband nanosecond laser pulses: morphology of craters and material deformation. *Laser Physics Letters*, **2015**, 12, 056102	1.5	4
68	Stimulated Raman scatting in CVD diamond 12C. *Doklady Physics*, **2015**, 60, 437-439	0.8	4
67	Evolution of surface relief of epitaxial diamond films upon growth resumption by microwave plasma chemical vapor deposition. *CrystEngComm*, **2020**, 22, 2138-2146	3.3	4
66	X-ray diffraction characterization of epitaxial CVD diamond films with natural and isotopically modified compositions. *Crystallography Reports*, **2016**, 61, 979-986	0.6	4
65	Effect of crystal structure on the tribological properties of diamond coatings on hard-alloy cutting tools. *Journal of Friction and Wear*, **2017**, 38, 252-258	0.9	4
64	Diamond-graphite pixel array for particles detection. *Journal of Instrumentation*, **2013**, 8, C10013-C10013		4
63	Diamond electrophoretic microchips□oule heating effects. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2011**, 176, 326-330	3.1	4
62	Nanocrystalline diamond films: laser assisted fabrication, optical and electronic properties **2005**,		4
61	Diamond-germanium composite films grown by microwave plasma CVD. *Carbon*, **2022**, 190, 10-21	10.4	4
60	CVD synthesis of multi-layered polycrystalline diamond films with reduced roughness using time-limited injections of N2 gas. *Diamond and Related Materials*, **2021**, 114, 108333	3.5	4
59	Luminescent diamond window of the sandwich type for X-ray visualization. *Applied Physics A: Materials Science and Processing*, **2018**, 124, 1	2.6	4
58	Past Achievements and Future Challenges in the Development of Infrared Antireflective and Protective Coatings. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 2000149	1.6	3
57	Diamond x-ray refractive lenses produced by femto-second laser ablation **2016**,		3
56	Nanocrystalline nitrogenated diamond: An N-type electrode material. *Russian Journal of Electrochemistry*, **2008**, 44, 861-865	1.2	3
55	Laser-induced transient gratings application for measurement of thermal conductivity of CVD diamond **2003**,		3
54	Laser microprocessing of diamond and diamond-like films **1994**, 2045, 184		3
53	Growth and dissolution of oxide films during laser-assisted combustion of Ti and Zr. *Applied Physics Letters*, **1987**, 50, 563-565	3.4	3

52	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. *Materials*, **2021**, 14,	3.5	3
51	Color Centers in Silic On-Doped Diamond Films. *Journal of Applied Spectroscopy*, **2016**, 83, 229-233	0.7	3
50	Confocal luminescence study of nitrogen-vacancy distribution within nitrogen-rich single crystal CVD diamond. *Laser Physics*, **2016**, 26, 015202	1.2	2
49	Diamond Raman laser emitting at 1194, 1419, and 597 nm. *Quantum Electronics*, **2018**, 48, 201-205	1.8	2
48	Muonic atom as an acceptor centre in diamond. *Journal of Physics: Conference Series*, **2014**, 551, 012046	0.3	2
47	CVD-diamond 13C: A new SRS-active crystal. *Doklady Physics*, **2015**, 60, 529-532	0.8	2
46	Measurement of the complex permittivity of polycrystalline diamond by the resonator method in the millimeter range. *Physics of Wave Phenomena*, **2015**, 23, 202-208	1.2	2
45	Optical and paramagnetic properties of polycrystalline CVD-diamonds implanted with deuterium ions. *Journal of Applied Spectroscopy*, **2012**, 79, 600-609	0.7	2
44	Methane conversion in a multielectrode slipping surface discharge in the two-phase water-gas medium. *Technical Physics*, **2011**, 56, 1588-1592	0.5	2
43	Polycrystal diamond growth in a microwave plasma torch. *Plasma Physics Reports*, **2010**, 36, 1272-1277	1.2	2
42	Oxidation improvement of field electron emission from diamond nanomaterials. *Surface and Interface Analysis*, **2004**, 36, 455-460	1.5	2
41	Experimental evidence for charge state of 3H defect in diamond. *Physica Status Solidi A*, **2003**, 199, 103-107		2
40	Synthetic diamond electrodes: Photoelectrochemical behavior of vacuum-annealed undoped polycrystalline diamond films. *Russian Journal of Electrochemistry*, **2005**, 41, 304-309	1.2	2
39	Spatial distribution of thermal conductivity of diamond wafers as measured by laser flash technique **1998**, 3484, 214		2
38	CVD diamond films for synchrotron radiation beam monitoring **1999**,		2
37	Optically Transparent Flexible Broadband Metamaterial Absorber Based on Topology Optimization Design. *Micromachines*, **2021**, 12,	3.3	2
36	Epitaxial growth of 3C-SiC film by microwave plasma chemical vapor deposition in H2-CH4-SiH4 mixtures: Optical emission spectroscopy study. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 023002	2.9	2
35	Using Si-doped diamond plate of sandwich type for spatial profiling of laser beam. *Laser Physics Letters*, **2017**, 14, 026003	1.5	1

34	Temperature quenching of the luminescence of SiV centers in CVD diamond films. *Bulletin of the Russian Academy of Sciences: Physics*, **2017**, 81, 1154-1158	0.4	1
33	Specific Features of Distribution and Relaxation of Elastic Stresses in Homoepitaxial CVD Films of Germanium and Diamond. *Crystallography Reports*, **2019**, 64, 392-397	0.6	1
32	Synthesis and doping of microcolumn diamond photoemitters with silicon-vacancy color centers. *Bulletin of the Lebedev Physics Institute*, **2015**, 42, 63-66	0.5	1
31	High-order Stokes and anti-Stokes Raman generation in monoisotopic CVD 12C-diamond. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 471-474	2.5	1
30	Experimental investigation into polycrystalline and single-crystal diamonds under negative pressures formed by picosecond laser pulses. *Doklady Physics*, **2014**, 59, 309-312	0.8	1
29	Microwave plasma deposition and mechanical treatment of single crystals and polycrystalline diamond films. *Inorganic Materials: Applied Research*, **2014**, 5, 230-236	0.6	1
28	Application of Raman Spectroscopy for Analyzing Diamond Coatings on a Hard Alloy. *Journal of Applied Spectroscopy*, **2017**, 84, 312-318	0.7	1
27	Investigation of free charge carrier dynamics in single-crystalline CVD diamond by two-photon absorption. *Quantum Electronics*, **2014**, 44, 1055-1060	1.8	1
26	Photoluminescence of silicon after deposition of polycrystalline diamond films. *Semiconductors*, **2009**, 43, 1159-1163	0.7	1
25	UV detectors based on epitaxial diamond films grown on single-crystal diamond substrates by vapor-phase synthesis. *Journal of Applied Spectroscopy*, **2010**, 77, 658-662	0.7	1
24	Fast bolometric sensor built-in into polycrystalline CVD diamond. *Journal of Physics: Conference Series*, **2007**, 92, 012181	0.3	1
23	Precision shaping of a diamond surface by using interferometrically controlled laser-ablation method **1998**, 3484, 112		1
22	Raman spectroscopy for 3D mapping of stress in CVD diamond **1998**,		1
21	Nanocrystalline diamond films: new material for IR optics **1995**,		1
20	Double-Crystal X-Ray Diffractometry and Topography Methods in the Analysis of the Real Structure of Crystals. *Journal of Surface Investigation*, **2020**, 14, 1113-1120	0.5	1
19	Chemical Vapor Deposition of Diamond Films on Diamond Compacts **1997**, 39-52		1
18	Novel reparation method for polymethyl methacrylate optical windows of aircrafts damaged by service environment. *Science China Technological Sciences*, **2020**, 63, 1585-1590	3.5	1
17	Isotope Effect in Thermal Conductivity of Polycrystalline CVD-Diamond: Experiment and Theory. *Crystals*, **2021**, 11, 322	2.3	1

List of Publications

16	Microscopic Insight into the Inhomogeneous Broadening of Zero-Phonon Lines of GeV Color Centers in Chemical Vapor Deposition Diamond Films Synthesized from Gaseous Germane. *Journal of Physical Chemistry C*, **2021**, 125, 17774-17785	3.8	1
15	Growth of nano-crystalline diamond on single-crystalline diamond by CVD method. *Bulletin of the Lebedev Physics Institute*, **2016**, 43, 378-381	0.5	1
14	Nondestructive diagnostics of diamond coatings of hard-alloy cutters **2019**,		1
13	Effect of neutron irradiation on the hydrogen state in CVD diamond films. *Journal of Physics: Conference Series*, **2018**, 1135, 012019	0.3	1
12	CVD diamond-SiC composite films: Structure and electrical properties. *Diamond and Related Materials*, **2022**, 125, 108975	3.5	1
11	Luminescent diamond composites. *Functional Diamond*, **2022**, 2, 53-63		1
10	Propagation of Laser-Induced Hypersound Waves in Polycrystalline Diamond with Submicron Crystallites. *Journal of Russian Laser Research*, **2021**, 42, 580-585	0.7	0
9	X-ray diffraction characterization of synthetic garnet, diamond and sapphire crystals. *Journal of Surface Investigation*, **2015**, 9, 471-478	0.5	
8	The Frenkel–Poole Effect in the Ionization of an Acceptor Impurity of Boron in Diamond in a Strong Electric Field. *Journal of Communications Technology and Electronics*, **2020**, 65, 1336-1338	0.5	
7	Optical spectroscopy characterization of growth hillocks on the surface of homoepitaxial CVD diamond films. *Journal of Physics: Conference Series*, **2019**, 1199, 012006	0.3	
6	Effect of the surface state on pulsed laser etching of ultrananocrystalline nitrogen-doped diamond films. *Bulletin of the Lebedev Physics Institute*, **2013**, 40, 354-356	0.5	
5	Analysis of photoluminescence spectra for detection of stress-induced defects in silicon substrates after the polycrystalline diamond film deposition. *Physica B: Condensed Matter*, **2009**, 404, 4616-4618	2.8	
4	Evaluation of thermal parameters of layers and interfaces in silicon-on-diamond structures by a photothermal method. *Journal of Physics: Conference Series*, **2010**, 214, 012108	0.3	
3	Synthesis of Multilayered Diamond Films in Microwave Plasma with Periodic Nitrogen Injections. *Doklady Physics*, **2021**, 66, 42-44	0.8	
2	Engineering of defects in fast neutron irradiated synthetic diamonds. *Journal of Physics: Conference Series*, **2021**, 2103, 012076	0.3	
1	Study of color centers in radiation-modified diamonds. *Journal of Physics: Conference Series*, **2021**, 2103, 012223	0.3	