

Victor Ralchenko

List of Publications by Year in descending order

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180
papers

4,057
citations

185998

28
h-index

233125

45
g-index

182
all docs

182
docs citations

182
times ranked

3512
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon Structures with Three-Dimensional Periodicity at Optical Wavelengths. , 1998, 282, 897-901.		1,005
2	Efficient nitrogen doping of graphene by plasma treatment. Carbon, 2016, 96, 196-202.	5.4	136
3	Nanodiamond Photoemitters Based on Strong Narrow-Band Luminescence from Silicon-Vacancy Defects. Advanced Materials, 2009, 21, 808-812.	11.1	122
4	Direct observation of laser-induced crystallization of a-C:H films. Applied Physics A: Solids and Surfaces, 1994, 58, 137-144.	1.4	117
5	Core-shell designs of photoluminescent nanodiamonds with porous silica coatings for bioimaging and drug delivery II: application. Nanoscale, 2013, 5, 3713.	2.8	111
6	Nitrogen and hydrogen in thick diamond films grown by microwave plasma enhanced chemical vapor deposition at variable H ₂ flow rates. Journal of Applied Physics, 2000, 87, 8741-8746.	1.1	78
7	High-rate growth of single crystal diamond in microwave plasma in CH ₄ /H ₂ and CH ₄ /H ₂ /Ar gas mixtures in presence of intensive soot formation. Diamond and Related Materials, 2016, 62, 49-57.	1.8	77
8	Thermal conductivity of high purity synthetic single crystal diamonds. Physical Review B, 2018, 97, .	1.1	76
9	High-order stimulated Raman scattering in CVD single crystal diamond. Laser Physics Letters, 2007, 4, 350-353.	0.6	67
10	Si-doped nano- and microcrystalline diamond films with controlled bright photoluminescence of silicon-vacancy color centers. Diamond and Related Materials, 2015, 56, 23-28.	1.8	66
11	Photoluminescence of SiV centers in single crystal CVD diamond <i>in situ</i> doped with Si from silane. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2525-2532.	0.8	65
12	Bulk and surface-enhanced Raman spectroscopy of nitrogen-doped ultrananocrystalline diamond films. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 3028-3035.	0.8	61
13	Optical monitoring of nucleation and growth of diamond films. Applied Physics Letters, 1993, 62, 3449-3451.	1.5	53
14	Observation of the Ge-vacancy color center in microcrystalline diamond films. Bulletin of the Lebedev Physics Institute, 2015, 42, 165-168.	0.1	51
15	Fracture strength of optical quality and black polycrystalline CVD diamonds. Diamond and Related Materials, 2012, 23, 172-177.	1.8	48
16	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.	1.7	46
17	Express in situ measurement of epitaxial CVD diamond film growth kinetics. Diamond and Related Materials, 2017, 72, 61-70.	1.8	45
18	Nitrogenated nanocrystalline diamond films: Thermal and optical properties. Diamond and Related Materials, 2007, 16, 2067-2073.	1.8	43

#	ARTICLE	IF	CITATIONS
19	CVD-diamond – a novel $\chi(3)$ -nonlinear active crystalline material for SRS generation in very wide spectral range. <i>Laser Physics Letters</i> , 2006, 3, 171-177.	0.6	37
20	High-rate ultrasonic polishing of polycrystalline diamond films. <i>Diamond and Related Materials</i> , 2016, 66, 171-176.	1.8	36
21	Chemical Vapor Deposition Single-Crystal Diamond: A Review. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, 2100354.	1.2	36
22	Low-field electron emission of diamond/pyrocarbon composites. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001, 19, 965.	1.6	35
23	Predicting the distribution and stability of photoactive defect centers in nanodiamond biomarkers. <i>Journal of Materials Chemistry</i> , 2009, 19, 360-365.	6.7	35
24	Stress mapping of chemical-vapor-deposited diamond film surface by micro-Raman spectroscopy. <i>Applied Physics Letters</i> , 1997, 71, 1789-1791.	1.5	34
25	Measurements of thermal conductivity of diamond films by photothermal deflection technique. <i>Journal of Applied Physics</i> , 1994, 75, 7795-7798.	1.1	33
26	Diamond-EuF ₃ nanocomposites with bright orange photoluminescence. <i>Diamond and Related Materials</i> , 2017, 72, 47-52.	1.8	33
27	Measurement of thermal conductivity of polycrystalline CVD diamond by laser-induced transient grating technique. <i>Quantum Electronics</i> , 2002, 32, 367-372.	0.3	31
28	Tailoring of Typical Color Centers in Diamond for Photonics. <i>Advanced Materials</i> , 2021, 33, e2000891.	11.1	31
29	Epitaxial growth of mosaic diamond: Mapping of stress and defects in crystal junction with a confocal Raman spectroscopy. <i>Journal of Crystal Growth</i> , 2017, 463, 19-26.	0.7	30
30	Single crystal diamond UV detector with a groove-shaped electrode structure and enhanced sensitivity. <i>Sensors and Actuators A: Physical</i> , 2017, 259, 121-126.	2.0	30
31	Optical Properties and Defect Structure of CVD Diamond Films Annealed at 900-1600 $\frac{1}{2}$ C. <i>Physica Status Solidi A</i> , 2000, 181, 37-44.	1.7	29
32	Monoisotopic Ensembles of Silicon-Vacancy Color Centers with Narrow-Line Luminescence in Homoepitaxial Diamond Layers Grown in H ₂ –CH ₄ –SiH ₄ Gas Mixtures ($x = 28$), <i>Tj ETQq0 0 0 TgBT /Over</i>	3.2	29
33	Fabrication of polycrystalline diamond refractive X-ray lens by femtosecond laser processing. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	28
34	Crystal Growth of Diamond. , 2015, , 671-713.		27
35	The state of the art in the growth of diamond crystals and films. <i>Inorganic Materials</i> , 2006, 42, S1-S18.	0.2	25
36	Diamond refractive lens for hard x-ray focusing. , 2002, 4783, 1.		24

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37	High-order Stokes and anti-Stokes Raman generation in CVD diamond. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, R4-R6.	0.7	24
38	Gas-phase growth of silicon-doped luminescent diamond films and isolated nanocrystals. <i>Bulletin of the Lebedev Physics Institute</i> , 2011, 38, 291-296.	0.1	24
39	Placeholder design for deposition of uniform diamond coatings on WC-Co substrates by microwave plasma CVD for efficient turning application. <i>Diamond and Related Materials</i> , 2017, 75, 169-175.	1.8	24
40	Size-dependent luminescence of color centers in composite nanodiamonds. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2600-2605.	0.8	23
41	Fabrication of CVD Diamond Optics with Antireflective Surface Structures. <i>Physica Status Solidi A</i> , 1999, 174, 171-176.	1.7	22
42	Spatial localization of Si-vacancy photoluminescent centers in a thin CVD nanodiamond film. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 2009-2011.	0.8	22
43	Etching Kinetics of (100) Single Crystal Diamond Surfaces in a Hydrogen Microwave Plasma, Studied with In Situ Low-Coherence Interferometry. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1700177.	0.8	22
44	Polycrystalline CVD diamond pixel array detector for nuclear particles monitoring. <i>Journal of Instrumentation</i> , 2013, 8, C02043-C02043.	0.5	21
45	Nitridation of Ti and Zr by multi-pulse TEA CO ₂ laser irradiation in liquid nitrogen. <i>Journal Physics D: Applied Physics</i> , 1986, 19, 1183-1188.	1.3	20
46	Diamond-Rare Earth Composites with Embedded NaGdF ₄ :Eu Nanoparticles as Robust Photo- and X-ray-Luminescent Materials for Radiation Monitoring Screens. <i>ACS Applied Nano Materials</i> , 2020, 3, 1324-1331.	2.4	20
47	A new approach to precise mapping of local temperature fields in submicrometer aqueous volumes. <i>Scientific Reports</i> , 2021, 11, 14228.	1.6	20
48	Fabrication of diamond microstub photoemitters with strong photoluminescence of SiV color centers: bottom-up approach. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 118, 17-21.	1.1	19
49	Investigation with ¹² C-particles and protons of buried graphite pillars in single-crystal CVD diamond. <i>Diamond and Related Materials</i> , 2018, 84, 1-10.	1.8	19
50	Observation of stimulated raman scattering in CVD-diamond. <i>JETP Letters</i> , 2004, 80, 267-270.	0.4	18
51	Analysis of synthetic diamond single crystals by X-ray topography and double-crystal diffractometry. <i>Crystallography Reports</i> , 2013, 58, 1010-1016.	0.1	18
52	Multi-octave frequency comb generation by $\chi^{(3)}$ -nonlinear optical processes in CVD diamond at low temperatures. <i>Laser Physics Letters</i> , 2014, 11, 086101.	0.6	18
53	Growth of 4 μ m diameter polycrystalline diamond wafers with high thermal conductivity by 915 MHz microwave plasma chemical vapor deposition. <i>Plasma Science and Technology</i> , 2017, 19, 035503.	0.7	18
54	Very long laser-induced graphitic pillars buried in single-crystal CVD-diamond for 3D detectors realization. <i>Diamond and Related Materials</i> , 2018, 90, 84-92.	1.8	18

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55	Diamond Detector With Laser-Formed Buried Graphitic Electrodes: Micron-Scale Mapping of Stress and Charge Collection Efficiency. <i>IEEE Sensors Journal</i> , 2019, 19, 11908-11917.	2.4	18
56	Optically Transparent Flexible Broadband Metamaterial Absorber Based on Topology Optimization Design. <i>Micromachines</i> , 2021, 12, 1419.	1.4	17
57	Diamond-germanium composite films grown by microwave plasma CVD. <i>Carbon</i> , 2022, 190, 10-21.	5.4	17
58	Precise control of photoluminescence of silicon-vacancy color centers in homoepitaxial single-crystal diamond: evaluation of efficiency of Si doping from gas phase. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	16
59	Nano-carbon pixels array for ionizing particles monitoring. <i>Diamond and Related Materials</i> , 2017, 73, 132-136.	1.8	16
60	Vertical-substrate epitaxial growth of single-crystal diamond by microwave plasma-assisted chemical vapor deposition. <i>Journal of Crystal Growth</i> , 2018, 486, 104-110.	0.7	16
61	On the thermal conductivity of single crystal AlN. <i>Journal of Applied Physics</i> , 2020, 127, 205109.	1.1	16
62	Nitrification of zirconium by cw CO ₂ laser irradiation in ambient atmosphere. <i>Applied Physics Letters</i> , 1985, 46, 110-112.	1.5	15
63	Neutron irradiation effects in chemical-vapor-deposited diamond. <i>Physical Review B</i> , 2008, 78, .	1.1	15
64	Creation of strong adhesive diamond coatings on hard alloy by electric-spark alloying. <i>Metallurgist</i> , 2010, 54, 523-529.	0.2	15
65	Diamond direct and inverse opal matrices produced by chemical vapor deposition. <i>Physics of the Solid State</i> , 2011, 53, 1131-1134.	0.2	15
66	Optimization of X-ray beam profilers based on CVD diamond detectors. <i>Journal of Instrumentation</i> , 2012, 7, C11005-C11005.	0.5	15
67	Radiation Damage Effects on Optical, Electrical, and Thermophysical Properties of CVD Diamond Films. <i>Journal of Applied Spectroscopy</i> , 2013, 80, 707-714.	0.3	15
68	Structural studies of diamond thin films grown from dc arc plasma. <i>Journal of Materials Research</i> , 1997, 12, 2533-2542.	1.2	14
69	External-cavity diamond Raman laser performance at 1240 nm and 1485 nm wavelengths with high pulse energy. <i>Laser Physics Letters</i> , 2016, 13, 065001.	0.6	14
70	Diamond micropowder synthesis via graphite etching in a microwave hydrogen plasma. <i>Powder Technology</i> , 2017, 322, 124-130.	2.1	14
71	SiV Color Centers in Si-Doped Isotopically Enriched ¹² C and ¹³ C CVD Diamonds. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1700198.	0.8	14
72	Diamond composite with embedded YAG:Ce nanoparticles as a source of fast X-ray luminescence in the visible and near-IR range. <i>Carbon</i> , 2021, 174, 52-58.	5.4	14

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73	CVD synthesis of multi-layered polycrystalline diamond films with reduced roughness using time-limited injections of N ₂ gas. <i>Diamond and Related Materials</i> , 2021, 114, 108333.	1.8	14
74	Stress in Thin Diamond Films on Various Materials Measured by Micro-Raman Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 1995, 383, 153.	0.1	13
75	Effect of microstructure and grain size on the thermal conductivity of high-pressure-sintered diamond composites. <i>Inorganic Materials</i> , 2008, 44, 224-229.	0.2	13
76	Wettability of Ultrananocrystalline Diamond and Graphite Nanowalls Films: A Comparison with Their Single Crystal Analogs. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3665-3671.	0.9	13
77	2D inverse periodic opal structures in single crystal diamond with incorporated silicon-vacancy color centers. <i>Diamond and Related Materials</i> , 2017, 73, 204-209.	1.8	13
78	Benzene Oxidation at Diamond Electrodes: Comparison of Microcrystalline and Nanocrystalline Diamonds. <i>ChemPhysChem</i> , 2012, 13, 3047-3052.	1.0	12
79	Photoluminescence Spectra of the 580-nm Center in Irradiated Diamonds. <i>Journal of Applied Spectroscopy</i> , 2019, 86, 597-605.	0.3	12
80	Surface nitridation of zirconium and hafnium by powerful cw CO ₂ laser irradiation in air. <i>Applied Optics</i> , 1986, 25, 2720.	2.1	11
81	Hydrogen loss from laser-annealed amorphous hydrogenated carbon films studied by secondary-ion mass spectrometry. <i>Applied Physics Letters</i> , 1991, 58, 2758-2760.	1.5	11
82	Synthetic diamond electrodes: The effect of surface microroughness on the electrochemical properties of CVD diamond thin films on titanium. <i>Journal of Applied Electrochemistry</i> , 2005, 35, 857-864.	1.5	11
83	CVD diamond coating of AlN ceramic substrates to enhance heat removal. <i>Russian Microelectronics</i> , 2006, 35, 205-209.	0.1	11
84	Thermal conductivity of polycrystalline CVD diamond: effect of annealing-induced transformations of defects and grain boundaries. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 2226-2232.	0.8	11
85	Growth of single-crystal diamonds in microwave plasma. <i>Plasma Physics Reports</i> , 2012, 38, 1113-1118.	0.3	11
86	Use of Optical Spectroscopy Methods to Determine the Solubility Limit for Nitrogen in Diamond Single Crystals Synthesized by Chemical Vapor Deposition. <i>Journal of Applied Spectroscopy</i> , 2015, 82, 242-247.	0.3	11
87	Growth of CVD diamond nanopillars with imbedded silicon-vacancy color centers. <i>Optical Materials</i> , 2016, 61, 25-29.	1.7	11
88	Thermal conductivity of free-standing CVD diamond films by growing on both nuclear and growth sides. <i>Diamond and Related Materials</i> , 2017, 76, 9-13.	1.8	11
89	Near-infrared refractive index of synthetic single crystal and polycrystalline diamonds at high temperatures. <i>Journal of Applied Physics</i> , 2017, 122, 243106.	1.1	11
90	Diamond films and particles growth in hydrogen microwave plasma with graphite solid precursor: Optical emission spectroscopy study. <i>Diamond and Related Materials</i> , 2018, 82, 33-40.	1.8	11

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91	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. <i>Materials</i> , 2020, 13, 3697.	1.3	11
92	Electrochemical behavior of nitrogenated nanocrystalline diamond electrodes. <i>Russian Journal of Electrochemistry</i> , 2007, 43, 827-836.	0.3	10
93	<title>KrF excimer laser etching of diamondlike carbon films</title>. , 1992, 1759, 106.		9
94	Nitrogen-Doped Chemical Vapour Deposited Diamond: a New Material for Room-Temperature Solid State Maser. <i>Chinese Physics Letters</i> , 2007, 24, 2088-2090.	1.3	9
95	Luminescent diamond window of the sandwich type for X-ray visualization. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	9
96	Effect of americium ²⁴¹ source activity on total conversion efficiency of diamond alpha ^{voltaic} battery. <i>International Journal of Energy Research</i> , 2019, 43, 6038-6044.	2.2	9
97	Microwave plasma-assisted chemical vapor deposition of microcrystalline diamond films <i>via</i> graphite etching under different hydrogen flow rates. <i>CrystEngComm</i> , 2019, 21, 2502-2507.	1.3	9
98	Microscopic Insight into the Inhomogeneous Broadening of Zero-Phonon Lines of GeV ^{â€“} Color Centers in Chemical Vapor Deposition Diamond Films Synthesized from Gaseous Germane. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17774-17785.	1.5	9
99	Luminescent diamond composites. <i>Functional Diamond</i> , 2022, 2, 53-63.	1.7	9
100	Mechanism of surface compound formations by cw CO ₂ laser irradiation of zirconium samples in air. <i>Journal of Applied Physics</i> , 1986, 59, 668-670.	1.1	8
101	Polycrystalline diamond film UV detectors for excimer lasers. <i>Quantum Electronics</i> , 2006, 36, 487-488.	0.3	8
102	Effect of crystal structure on the tribological properties of diamond coatings on hard-alloy cutting tools. <i>Journal of Friction and Wear</i> , 2017, 38, 252-258.	0.1	8
103	Hydrated magnesium-carbon films with conductivity and wide-range visible-to-far-infrared transparency. <i>Materials Letters</i> , 2018, 216, 88-91.	1.3	8
104	Growth of three-dimensional diamond mosaics by microwave plasma-assisted chemical vapor deposition. <i>CrystEngComm</i> , 2018, 20, 198-203.	1.3	8
105	Laser-Assisted Formation of High-Quality Polycrystalline Diamond Membranes. <i>Journal of Russian Laser Research</i> , 2020, 41, 321-326.	0.3	8
106	Past Achievements and Future Challenges in the Development of Infrared Antireflective and Protective Coatings. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 2000149.	0.8	8
107	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. <i>Materials</i> , 2021, 14, 1780.	1.3	8
108	<title>Laser microprocessing of diamond and diamond-like films</title>. , 1994, 2045, 184.		7

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109	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.	1.6	7
110	Electrodes of strongly nitrogenated nanocrystalline diamond. Russian Journal of Electrochemistry, 2010, 46, 1063-1068.	0.3	7
111	Strength of optical quality polycrystalline CVD diamond. Inorganic Materials: Applied Research, 2011, 2, 439-444.	0.1	7
112	Photonic crystals of diamond spheres with the opal structure. Physics of the Solid State, 2013, 55, 1120-1123.	0.2	7
113	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.	0.1	7
114	Evolution of surface relief of epitaxial diamond films upon growth resumption by microwave plasma chemical vapor deposition. CrystEngComm, 2020, 22, 2138-2146.	1.3	7
115	Laser "Nano"ablation of Ultrananocrystalline Diamond Films. Journal of Nanoelectronics and Optoelectronics, 2009, 4, 286-289.	0.1	7
116	CVD diamond-SiC composite films: Structure and electrical properties. Diamond and Related Materials, 2022, 125, 108975.	1.8	7
117	Considerable increase in thermal conductivity of a polycrystalline CVD diamond upon isotope enrichment. Bulletin of the Lebedev Physics Institute, 2007, 34, 329-333.	0.1	6
118	Diamond electrophoretic microchipsâ€™ Joule heating effects. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 326-330.	1.7	6
119	Semiconductor properties of nanocrystalline diamond electrodes. Russian Journal of Electrochemistry, 2014, 50, 101-107.	0.3	6
120	Surface damage of YAG crystal induced by broadband nanosecond laser pulses: morphology of craters and material deformation. Laser Physics Letters, 2015, 12, 056102.	0.6	6
121	Strength of synthetic diamonds under tensile stresses produced by picosecond laser action. Journal of Applied Mechanics and Technical Physics, 2015, 56, 143-149.	0.1	6
122	<title>Oxygen-assisted laser cutting and drilling of CVD diamond</title>. , 1998, , .		5
123	<title>Nanocrystalline diamond films: laser assisted fabrication, optical and electronic properties</title>. , 2005, , .		5
124	Measurement of the complex permittivity of polycrystalline diamond by the resonator method in the millimeter range. Physics of Wave Phenomena, 2015, 23, 202-208.	0.3	5
125	Diamond x-ray refractive lenses produced by femto-second laser ablation. Proceedings of SPIE, 2016, , .	0.8	5
126	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.	0.9	5

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127	Growth and dissolution of oxide films during laser-assisted combustion of Ti and Zr. Applied Physics Letters, 1987, 50, 563-565.	1.5	4
128	Methane conversion in a multielectrode slipping surface discharge in the two-phase water-gas medium. Technical Physics, 2011, 56, 1588-1592.	0.2	4
129	Diamond-graphite pixel array for particles detection. Journal of Instrumentation, 2013, 8, C10013-C10013.	0.5	4
130	Stimulated Raman scattering in CVD diamond 12C. Doklady Physics, 2015, 60, 437-439.	0.2	4
131	Color Centers in Silic On-Doped Diamond Films. Journal of Applied Spectroscopy, 2016, 83, 229-233.	0.3	4
132	X-ray diffraction characterization of epitaxial CVD diamond films with natural and isotopically modified compositions. Crystallography Reports, 2016, 61, 979-986.	0.1	4
133	Effect of neutron irradiation on the hydrogen state in CVD diamond films. Journal of Physics: Conference Series, 2018, 1135, 012019.	0.3	4
134	Diamond Raman laser emitting at 1194, 1419, and 597 nm. Quantum Electronics, 2018, 48, 201-205.	0.3	4
135	Experimental evidence for charge state of 3H defect in diamond. Physica Status Solidi A, 2003, 199, 103-107.	1.7	3
136	Laser-induced transient gratings application for measurement of thermal conductivity of CVD diamond. , 2003, , .		3
137	Nanocrystalline nitrogenated diamond: An N-type electrode material. Russian Journal of Electrochemistry, 2008, 44, 861-865.	0.3	3
138	Optical and paramagnetic properties of polycrystalline CVD-diamonds implanted with deuterium ions. Journal of Applied Spectroscopy, 2012, 79, 600-609.	0.3	3
139	Investigation of free charge carrier dynamics in single-crystalline CVD diamond by two-photon absorption. Quantum Electronics, 2014, 44, 1055-1060.	0.3	3
140	Experimental investigation into polycrystalline and single-crystal diamonds under negative pressures formed by picosecond laser pulses. Doklady Physics, 2014, 59, 309-312.	0.2	3
141	Muonic atom as an acceptor centre in diamond. Journal of Physics: Conference Series, 2014, 551, 012046.	0.3	3
142	High-order Stokes and anti-Stokes Raman generation in monoisotopic CVD ¹² C diamond. Physica Status Solidi - Rapid Research Letters, 2016, 10, 471-474.	1.2	3
143	Temperature quenching of the luminescence of SiV centers in CVD diamond films. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 1154-1158.	0.1	3
144	Application of Raman Spectroscopy for Analyzing Diamond Coatings on a Hard Alloy. Journal of Applied Spectroscopy, 2017, 84, 312-318.	0.3	3

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145	<title>Spatial distribution of thermal conductivity of diamond wafers as measured by laser flash technique</title>. , 1998, 3484, 214.		2
146	<title>CVD diamond films for synchrotron radiation beam monitoring</title>. , 1999, , .		2
147	Oxidation improvement of field electron emission from diamond nanomaterials. Surface and Interface Analysis, 2004, 36, 455-460.	0.8	2
148	Synthetic diamond electrodes: Photoelectrochemical behavior of vacuum-annealed undoped polycrystalline diamond films. Russian Journal of Electrochemistry, 2005, 41, 304-309.	0.3	2
149	Polycrystal diamond growth in a microwave plasma torch. Plasma Physics Reports, 2010, 36, 1272-1277.	0.3	2
150	Microwave plasma deposition and mechanical treatment of single crystals and polycrystalline diamond films. Inorganic Materials: Applied Research, 2014, 5, 230-236.	0.1	2
151	CVD-diamond 13C: A new SRS-active crystal. Doklady Physics, 2015, 60, 529-532.	0.2	2
152	Growth of nano-crystalline diamond on single-crystalline diamond by CVD method. Bulletin of the Lebedev Physics Institute, 2016, 43, 378-381.	0.1	2
153	Confocal luminescence study of nitrogen-vacancy distribution within nitrogen-rich single crystal CVD diamond. Laser Physics, 2016, 26, 015202.	0.6	2
154	Using Si-doped diamond plate of sandwich type for spatial profiling of laser beam. Laser Physics Letters, 2017, 14, 026003.	0.6	2
155	Nondestructive diagnostics of diamond coatings of hard-alloy cutters. AIP Conference Proceedings, 2019, , .	0.3	2
156	Novel reparation method for polymethyl methacrylate optical windows of aircrafts damaged by service environment. Science China Technological Sciences, 2020, 63, 1585-1590.	2.0	2
157	Isotope Effect in Thermal Conductivity of Polycrystalline CVD-Diamond: Experiment and Theory. Crystals, 2021, 11, 322.	1.0	2
158	Propagation of Laser-Induced Hypersound Waves in Polycrystalline Diamond with Submicron Crystallites. Journal of Russian Laser Research, 2021, 42, 580-585.	0.3	2
159	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.	0.1	2
160	<title>Nanocrystalline diamond films: new material for IR optics</title>. , 1995, , .		1
161	<title>Precision shaping of a diamond surface by using interferometrically controlled laser-ablation method</title>. , 1998, 3484, 112.		1
162	<title>Raman spectroscopy for 3D mapping of stress in CVD diamond</title>. , 1998, , .		1

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163	Fast bolometric sensor built-in into polycrystalline CVD diamond. Journal of Physics: Conference Series, 2007, 92, 012181.	0.3	1
164	Photoluminescence of silicon after deposition of polycrystalline diamond films. Semiconductors, 2009, 43, 1159-1163.	0.2	1
165	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	1
166	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.	0.3	1
167	Synthesis and doping of microcolumn diamond photoemitters with silicon-vacancy color centers. Bulletin of the Lebedev Physics Institute, 2015, 42, 63-66.	0.1	1
168	Specific Features of Distribution and Relaxation of Elastic Stresses in Homoepitaxial CVD Films of Germanium and Diamond. Crystallography Reports, 2019, 64, 392-397.	0.1	1
169	Chemical Vapor Deposition of Diamond Films on Diamond Compacts. , 1997, , 39-52.		1
170	Engineering of defects in fast neutron irradiated synthetic diamonds. Journal of Physics: Conference Series, 2021, 2103, 012076.	0.3	1
171	<title>Applications of diamondlike carbon films for write-once optical recording</title>. , 1991, , .		0
172	<title>Picosecond photoconductivity of natural and CVD diamonds</title>. , 1995, , .		0
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