

Victor Ralchenko

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3455205/publications.pdf>

Version: 2024-02-01

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	Chemical Vapor Deposition Single-Crystal Diamond: A Review. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, 2100354.	1.2	36
2	Diamond-germanium composite films grown by microwave plasma CVD. <i>Carbon</i> , 2022, 190, 10-21.	5.4	17
3	CVD diamond-SiC composite films: Structure and electrical properties. <i>Diamond and Related Materials</i> , 2022, 125, 108975.	1.8	7
4	Luminescent diamond composites. <i>Functional Diamond</i> , 2022, 2, 53-63.	1.7	9
5	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
6	Tailoring of Typical Color Centers in Diamond for Photonics. <i>Advanced Materials</i> , 2021, 33, e2000891.	11.1	31
7	Isotope Effect in Thermal Conductivity of Polycrystalline CVD-Diamond: Experiment and Theory. <i>Crystals</i> , 2021, 11, 322.	1.0	2
8	Epitaxial growth of 3C-SiC film by microwave plasma chemical vapor deposition in H ₂ -CH ₄ -SiH ₄ mixtures: Optical emission spectroscopy study. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, 023002.	0.9	5
9	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
10	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. <i>Materials</i> , 2021, 14, 1780.	1.3	8
11	A new approach to precise mapping of local temperature fields in submicrometer aqueous volumes. <i>Scientific Reports</i> , 2021, 11, 14228.	1.6	20
12	Microscopic Insight into the Inhomogeneous Broadening of Zero-Phonon Lines of GeV ⁺ 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
13	Propagation of Laser-Induced Hypersound Waves in Polycrystalline Diamond with Submicron Crystallites. <i>Journal of Russian Laser Research</i> , 2021, 42, 580-585.	0.3	2
14	Optically Transparent Flexible Broadband Metamaterial Absorber Based on Topology Optimization Design. <i>Micromachines</i> , 2021, 12, 1419.	1.4	17
15	Synthesis of Multilayered Diamond Films in Microwave Plasma with Periodic Nitrogen Injections. <i>Doklady Physics</i> , 2021, 66, 42-44.	0.2	0
16	Engineering of defects in fast neutron irradiated synthetic diamonds. <i>Journal of Physics: Conference Series</i> , 2021, 2103, 012076.	0.3	1
17	Study of color centers in radiation-modified diamonds. <i>Journal of Physics: Conference Series</i> , 2021, 2103, 012223.	0.3	0
18	Novel reparation method for polymethyl methacrylate optical windows of aircrafts damaged by service environment. <i>Science China Technological Sciences</i> , 2020, 63, 1585-1590.	2.0	2

#	ARTICLE	IF	CITATIONS
19	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. <i>Materials</i> , 2020, 13, 3697.	1.3	11
20	The Frenkel-Poole Effect in the Ionization of an Acceptor Impurity of Boron in Diamond in a Strong Electric Field. <i>Journal of Communications Technology and Electronics</i> , 2020, 65, 1336-1338.	0.2	0
21	Laser-Assisted Formation of High-Quality Polycrystalline Diamond Membranes. <i>Journal of Russian Laser Research</i> , 2020, 41, 321-326.	0.3	8
22	On the thermal conductivity of single crystal AlN. <i>Journal of Applied Physics</i> , 2020, 127, 205109.	1.1	16
23	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
24	Evolution of surface relief of epitaxial diamond films upon growth resumption by microwave plasma chemical vapor deposition. <i>CrystEngComm</i> , 2020, 22, 2138-2146.	1.3	7
25	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
26	Double-Crystal X-Ray Diffractometry and Topography Methods in the Analysis of the Real Structure of Crystals. <i>Journal of Surface Investigation</i> , 2020, 14, 1113-1120.	0.1	2
27	Optical spectroscopy characterization of growth hillocks on the surface of homoepitaxial CVD diamond films. <i>Journal of Physics: Conference Series</i> , 2019, 1199, 012006.	0.3	0
28	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
29	Photoluminescence Spectra of the 580-nm Center in Irradiated Diamonds. <i>Journal of Applied Spectroscopy</i> , 2019, 86, 597-605.	0.3	12
30	Specific Features of Distribution and Relaxation of Elastic Stresses in Homoepitaxial CVD Films of Germanium and Diamond. <i>Crystallography Reports</i> , 2019, 64, 392-397.	0.1	1
31	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
32	Microwave plasma-assisted chemical vapor deposition of microcrystalline diamond films via graphite etching under different hydrogen flow rates. <i>CrystEngComm</i> , 2019, 21, 2502-2507.	1.3	9
33	Nondestructive diagnostics of diamond coatings of hard-alloy cutters. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
34	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 ETQq000TgBT /Over</i>	3.2	29
35	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
36	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

#	ARTICLE	IF	CITATIONS
37	Thermal conductivity of high purity synthetic single crystal diamonds. Physical Review B, 2018, 97, .	1.1	76
38	Hydrated magnesium-carbon films with conductivity and wide-range visible-to-far-infrared transparency. Materials Letters, 2018, 216, 88-91.	1.3	8
39	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.	1.8	11
40	Growth of three-dimensional diamond mosaics by microwave plasma-assisted chemical vapor deposition. CrystEngComm, 2018, 20, 198-203.	1.3	8
41	Effect of neutron irradiation on the hydrogen state in CVD diamond films. Journal of Physics: Conference Series, 2018, 1135, 012019.	0.3	4
42	Luminescent diamond window of the sandwich type for X-ray visualization. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	9
43	Very long laser-induced graphitic pillars buried in single-crystal CVD-diamond for 3D detectors realization. Diamond and Related Materials, 2018, 90, 84-92.	1.8	18
44	Diamond Raman laser emitting at 1194, 1419, and 597 nm. Quantum Electronics, 2018, 48, 201-205.	0.3	4
45	Diamond-EuF ₃ nanocomposites with bright orange photoluminescence. Diamond and Related Materials, 2017, 72, 47-52.	1.8	33
46	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.	0.7	30
47	Growth of 4â€³ diameter polycrystalline diamond wafers with high thermal conductivity by 915 MHz microwave plasma chemical vapor deposition. Plasma Science and Technology, 2017, 19, 035503.	0.7	18
48	Placeholder 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.	1.8	24
49	Single crystal diamond UV detector with a groove-shaped electrode structure and enhanced sensitivity. Sensors and Actuators A: Physical, 2017, 259, 121-126.	2.0	30
50	Thermal conductivity of free-standing CVD diamond films by growing on both nuclear and growth sides. Diamond and Related Materials, 2017, 76, 9-13.	1.8	11
51	Using Si-doped diamond plate of sandwich type for spatial profiling of laser beam. Laser Physics Letters, 2017, 14, 026003.	0.6	2
52	Express in situ measurement of epitaxial CVD diamond film growth kinetics. Diamond and Related Materials, 2017, 72, 61-70.	1.8	45
53	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
54	Diamond micropowder synthesis via graphite etching in a microwave hydrogen plasma. Powder Technology, 2017, 322, 124-130.	2.1	14

#	ARTICLE	IF	CITATIONS
55	Application of Raman Spectroscopy for Analyzing Diamond Coatings on a Hard Alloy. Journal of Applied Spectroscopy, 2017, 84, 312-318.	0.3	3
56	SiV Color Centers in Si-doped Isotopically Enriched ¹² C and ¹³ C CVD Diamonds. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700198.	0.8	14
57	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.	0.8	22
58	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.	0.1	8
59	2D inverse periodic opal structures in single crystal diamond with incorporated silicon-vacancy color centers. Diamond and Related Materials, 2017, 73, 204-209.	1.8	13
60	Nano-carbon pixels array for ionizing particles monitoring. Diamond and Related Materials, 2017, 73, 132-136.	1.8	16
61	Near-infrared refractive index of synthetic single crystal and polycrystalline diamonds at high temperatures. Journal of Applied Physics, 2017, 122, 243106.	1.1	11
62	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
63	High-rate ultrasonic polishing of polycrystalline diamond films. Diamond and Related Materials, 2016, 66, 171-176.	1.8	36
64	Color Centers in Si-doped Diamond Films. Journal of Applied Spectroscopy, 2016, 83, 229-233.	0.3	4
65	Growth of CVD diamond nanopillars with imbedded silicon-vacancy color centers. Optical Materials, 2016, 61, 25-29.	1.7	11
66	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.	1.1	16
67	Diamond x-ray refractive lenses produced by femto-second laser ablation. Proceedings of SPIE, 2016, , .	0.8	5
68	X-ray diffraction characterization of epitaxial CVD diamond films with natural and isotopically modified compositions. Crystallography Reports, 2016, 61, 979-986.	0.1	4
69	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
70	External-cavity diamond Raman laser performance at 1240 nm and 1485 nm wavelengths with high pulse energy. Laser Physics Letters, 2016, 13, 065001.	0.6	14
71	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
72	Fabrication of polycrystalline diamond refractive X-ray lens by femtosecond laser processing. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	28

#	ARTICLE	IF	CITATIONS
73	Confocal luminescence study of nitrogen-vacancy distribution within nitrogen-rich single crystal CVD diamond. <i>Laser Physics</i> , 2016, 26, 015202.	0.6	2
74	Efficient nitrogen doping of graphene by plasma treatment. <i>Carbon</i> , 2016, 96, 196-202.	5.4	136
75	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
76	Photoluminescence of SiV centers in single crystal CVD diamond <i>in situ</i> doped with Si from silane. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2525-2532.	0.8	65
77	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
78	CVD-diamond 13C: A new SRS-active crystal. <i>Doklady Physics</i> , 2015, 60, 529-532.	0.2	2
79	Measurement of the complex permittivity of polycrystalline diamond by the resonator method in the millimeter range. <i>Physics of Wave Phenomena</i> , 2015, 23, 202-208.	0.3	5
80	Observation of the Ge-vacancy color center in microcrystalline diamond films. <i>Bulletin of the Lebedev Physics Institute</i> , 2015, 42, 165-168.	0.1	51
81	Si-doped nano- and microcrystalline diamond films with controlled bright photoluminescence of silicon-vacancy color centers. <i>Diamond and Related Materials</i> , 2015, 56, 23-28.	1.8	66
82	Surface damage of YAG crystal induced by broadband nanosecond laser pulses: morphology of craters and material deformation. <i>Laser Physics Letters</i> , 2015, 12, 056102.	0.6	6
83	Strength of synthetic diamonds under tensile stresses produced by picosecond laser action. <i>Journal of Applied Mechanics and Technical Physics</i> , 2015, 56, 143-149.	0.1	6
84	Synthesis and doping of microcolumn diamond photoemitters with silicon-vacancy color centers. <i>Bulletin of the Lebedev Physics Institute</i> , 2015, 42, 63-66.	0.1	1
85	X-ray diffraction characterization of synthetic garnet, diamond and sapphire crystals. <i>Journal of Surface Investigation</i> , 2015, 9, 471-478.	0.1	0
86	Stimulated Raman scattering in CVD diamond 12C. <i>Doklady Physics</i> , 2015, 60, 437-439.	0.2	4
87	Crystal Growth of Diamond. , 2015, , 671-713.		27
88	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
89	Photoluminescence of Si-vacancy color centers in diamond films grown in microwave plasma in methane-hydrogen-silane mixtures. <i>Bulletin of the Lebedev Physics Institute</i> , 2014, 41, 359-363.	0.1	7
90	Investigation of free charge carrier dynamics in single-crystalline CVD diamond by two-photon absorption. <i>Quantum Electronics</i> , 2014, 44, 1055-1060.	0.3	3

#	ARTICLE	IF	CITATIONS
91	Semiconductor properties of nanocrystalline diamond electrodes. Russian Journal of Electrochemistry, 2014, 50, 101-107.	0.3	6
92	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
93	Microwave plasma deposition and mechanical treatment of single crystals and polycrystalline diamond films. Inorganic Materials: Applied Research, 2014, 5, 230-236.	0.1	2
94	Multi-octave frequency comb generation by $\chi^{(3)}$ -nonlinear optical processes in CVD diamond at low temperatures. Laser Physics Letters, 2014, 11, 086101.	0.6	18
95	Muonic atom as an acceptor centre in diamond. Journal of Physics: Conference Series, 2014, 551, 012046.	0.3	3
96	Photonic crystals of diamond spheres with the opal structure. Physics of the Solid State, 2013, 55, 1120-1123.	0.2	7
97	Analysis of synthetic diamond single crystals by X-ray topography and double-crystal diffractometry. Crystallography Reports, 2013, 58, 1010-1016.	0.1	18
98	Radiation Damage Effects on Optical, Electrical, and Thermophysical Properties of CVD Diamond Films. Journal of Applied Spectroscopy, 2013, 80, 707-714.	0.3	15
99	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.	0.1	0
100	Core-shell designs of photoluminescent nanodiamonds with porous silica coatings for bioimaging and drug delivery II: application. Nanoscale, 2013, 5, 3713.	2.8	111
101	Polycrystalline CVD diamond pixel array detector for nuclear particles monitoring. Journal of Instrumentation, 2013, 8, C02043-C02043.	0.5	21
102	Diamond-graphite pixel array for particles detection. Journal of Instrumentation, 2013, 8, C10013-C10013.	0.5	4
103	Optimization of X-ray beam profilers based on CVD diamond detectors. Journal of Instrumentation, 2012, 7, C11005-C11005.	0.5	15
104	Optical and paramagnetic properties of polycrystalline CVD-diamonds implanted with deuterium ions. Journal of Applied Spectroscopy, 2012, 79, 600-609.	0.3	3
105	Growth of single-crystal diamonds in microwave plasma. Plasma Physics Reports, 2012, 38, 1113-1118.	0.3	11
106	Fracture strength of optical quality and black polycrystalline CVD diamonds. Diamond and Related Materials, 2012, 23, 172-177.	1.8	48
107	Benzene Oxidation at Diamond Electrodes: Comparison of Microcrystalline and Nanocrystalline Diamonds. ChemPhysChem, 2012, 13, 3047-3052.	1.0	12
108	Strength of optical quality polycrystalline CVD diamond. Inorganic Materials: Applied Research, 2011, 2, 439-444.	0.1	7

#	ARTICLE	IF	CITATIONS
109	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
110	Methane conversion in a multielectrode slipping surface discharge in the two-phase water-gas medium. <i>Technical Physics</i> , 2011, 56, 1588-1592.	0.2	4
111	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
112	Diamond electrophoretic microchipsâ€™ Joule heating effects. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011, 176, 326-330.	1.7	6
113	Evaluation of thermal parameters of layers and interfaces in silicon-on-diamond structures by a photothermal method. <i>Journal of Physics: Conference Series</i> , 2010, 214, 012108.	0.3	1
114	Electrodes of strongly nitrogenated nanocrystalline diamond. <i>Russian Journal of Electrochemistry</i> , 2010, 46, 1063-1068.	0.3	7
115	Polycrystal diamond growth in a microwave plasma torch. <i>Plasma Physics Reports</i> , 2010, 36, 1272-1277.	0.3	2
116	UV detectors based on epitaxial diamond films grown on single-crystal diamond substrates by vapor-phase synthesis. <i>Journal of Applied Spectroscopy</i> , 2010, 77, 658-662.	0.3	1
117	Creation of strong adhesive diamond coatings on hard alloy by electric-spark alloying. <i>Metallurgist</i> , 2010, 54, 523-529.	0.2	15
118	Nanodiamond Photoemitters Based on Strong Narrowâ€”Band Luminescence from Siliconâ€”Vacancy Defects. <i>Advanced Materials</i> , 2009, 21, 808-812.	11.1	122
119	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
120	Analysis of photoluminescence spectra for detection of stress-induced defects in silicon substrates after the polycrystalline diamond film deposition. <i>Physica B: Condensed Matter</i> , 2009, 404, 4616-4618.	1.3	0
121	Photoluminescence of silicon after deposition of polycrystalline diamond films. <i>Semiconductors</i> , 2009, 43, 1159-1163.	0.2	1
122	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
123	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
124	Laser "Nano"ablation of Ultrananocrystalline Diamond Films. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2009, 4, 286-289.	0.1	7
125	Thermal conductivity of polycrystalline CVD diamond: effect of annealingâ€”induced transformations of defects and grain boundaries. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 2226-2232.	0.8	11
126	Nanocrystalline nitrogenated diamond: An N-type electrode material. <i>Russian Journal of Electrochemistry</i> , 2008, 44, 861-865.	0.3	3

#	ARTICLE	IF	CITATIONS
127	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
128	Neutron irradiation effects in chemical-vapor-deposited diamond. <i>Physical Review B</i> , 2008, 78, .	1.1	15
129	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
130	Fast bolometric sensor built-in into polycrystalline CVD diamond. <i>Journal of Physics: Conference Series</i> , 2007, 92, 012181.	0.3	1
131	Nitrogenated nanocrystalline diamond films: Thermal and optical properties. <i>Diamond and Related Materials</i> , 2007, 16, 2067-2073.	1.8	43
132	High-order stimulated Raman scattering in CVD single crystal diamond. <i>Laser Physics Letters</i> , 2007, 4, 350-353.	0.6	67
133	Electrochemical behavior of nitrogenated nanocrystalline diamond electrodes. <i>Russian Journal of Electrochemistry</i> , 2007, 43, 827-836.	0.3	10
134	Considerable increase in thermal conductivity of a polycrystalline CVD diamond upon isotope enrichment. <i>Bulletin of the Lebedev Physics Institute</i> , 2007, 34, 329-333.	0.1	6
135	Bulk and surface-enhanced Raman spectroscopy of nitrogen-doped ultrananocrystalline diamond films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 3028-3035.	0.8	61
136	The state of the art in the growth of diamond crystals and films. <i>Inorganic Materials</i> , 2006, 42, S1-S18.	0.2	25
137	CVD diamond coating of AlN ceramic substrates to enhance heat removal. <i>Russian Microelectronics</i> , 2006, 35, 205-209.	0.1	11
138	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
139	Polycrystalline diamond film UV detectors for excimer lasers. <i>Quantum Electronics</i> , 2006, 36, 487-488.	0.3	8
140	<title>Nanocrystalline diamond films: laser assisted fabrication, optical and electronic properties</title>. , 2005, , .		5
141	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
142	Synthetic diamond electrodes: Photoelectrochemical behavior of vacuum-annealed undoped polycrystalline diamond films. <i>Russian Journal of Electrochemistry</i> , 2005, 41, 304-309.	0.3	2
143	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
144	Observation of stimulated raman scattering in CVD-diamond. <i>JETP Letters</i> , 2004, 80, 267-270.	0.4	18

#	ARTICLE	IF	CITATIONS
145	Oxidation improvement of field electron emission from diamond nanomaterials. Surface and Interface Analysis, 2004, 36, 455-460.	0.8	2
146	Experimental evidence for charge state of 3H defect in diamond. Physica Status Solidi A, 2003, 199, 103-107.	1.7	3
147	Laser-induced transient gratings application for measurement of thermal conductivity of CVD diamond. , 2003, , .		3
148	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
149	Measurement of thermal conductivity of polycrystalline CVD diamond by laser-induced transient grating technique. Quantum Electronics, 2002, 32, 367-372.	0.3	31
150	Diamond refractive lens for hard x-ray focusing. , 2002, 4783, 1.		24
151	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
152	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.	1.6	35
153	Optical Properties and Defect Structure of CVD Diamond Films Annealed at 900-1600 $\frac{1}{2}$ C. Physica Status Solidi A, 2000, 181, 37-44.	1.7	29
154	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
155	Fabrication of CVD Diamond Optics with Antireflective Surface Structures. Physica Status Solidi A, 1999, 174, 171-176.	1.7	22
156	<title>CVD diamond films for synchrotron radiation beam monitoring</title>. , 1999, , .		2
157	Carbon Structures with Three-Dimensional Periodicity at Optical Wavelengths. , 1998, 282, 897-901.		1,005
158	<title>Oxygen-assisted laser cutting and drilling of CVD diamond</title>. , 1998, , .		5
159	<title>Precision shaping of a diamond surface by using interferometrically controlled laser-ablation method</title>. , 1998, 3484, 112.		1
160	<title>Spatial distribution of thermal conductivity of diamond wafers as measured by laser flash technique</title>. , 1998, 3484, 214.		2
161	<title>Deposition and laser damage tests of DLC coatings on silica optical fibers and plates</title>. , 1998, , .		0
162	<title>Raman spectroscopy for 3D mapping of stress in CVD diamond</title>. , 1998, , .		1

#	ARTICLE	IF	CITATIONS
163	Stress mapping of chemical-vapor-deposited diamond film surface by micro-Raman spectroscopy. Applied Physics Letters, 1997, 71, 1789-1791.	1.5	34
164	Structural studies of diamond thin films grown from dc arc plasma. Journal of Materials Research, 1997, 12, 2533-2542.	1.2	14
165	Chemical Vapor Deposition of Diamond Films on Diamond Compacts. , 1997, , 39-52.		1
166	<title>Nanocrystalline diamond films: new material for IR optics</title>. , 1995, , .		1
167	Stress in Thin Diamond Films on Various Materials Measured by Microraman Spectroscopy. Materials Research Society Symposia Proceedings, 1995, 383, 153.	0.1	13
168	<title>Picosecond photoconductivity of natural and CVD diamonds</title>. , 1995, , .		0
169	Measurements of thermal conductivity of diamond films by photothermal deflection technique. Journal of Applied Physics, 1994, 75, 7795-7798.	1.1	33
170	Direct observation of laser-induced crystallization of a-C:H films. Applied Physics A: Solids and Surfaces, 1994, 58, 137-144.	1.4	117
171	<title>Laser microprocessing of diamond and diamond-like films</title>. , 1994, 2045, 184.		7
172	Optical monitoring of nucleation and growth of diamond films. Applied Physics Letters, 1993, 62, 3449-3451.	1.5	53
173	<title>KrF excimer laser etching of diamondlike carbon films</title>. , 1992, 1759, 106.		9
174	<title>Applications of diamondlike carbon films for write-once optical recording</title>. , 1991, , .		0
175	Hydrogen loss from laser-annealed amorphous hydrogenated carbon films studied by secondary-ion mass spectrometry. Applied Physics Letters, 1991, 58, 2758-2760.	1.5	11
176	Growth and dissolution of oxide films during laser-assisted combustion of Ti and Zr. Applied Physics Letters, 1987, 50, 563-565.	1.5	4
177	Surface nitridation of zirconium and hafnium by powerful cw CO ₂ laser irradiation in air. Applied Optics, 1986, 25, 2720.	2.1	11
178	Nitridation of Ti and Zr by multi-pulse TEA CO ₂ laser irradiation in liquid nitrogen. Journal Physics D: Applied Physics, 1986, 19, 1183-1188.	1.3	20
179	Mechanism of surface compound formations by cw CO ₂ laser irradiation of zirconium samples in air. Journal of Applied Physics, 1986, 59, 668-670.	1.1	8
180	Nitrication of zirconium by cw CO ₂ laser irradiation in ambient atmosphere. Applied Physics Letters, 1985, 46, 110-112.	1.5	15