Victor Ralchenko

List of Publications by Year
in descending order

180 papers	4,057 citations	186265 28 h-index	233421 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.	10.3	136
3	Nanodiamond Photoemitters Based on Strong Narrowâ€Band Luminescence from Siliconâ€Vacancy Defects. Advanced Materials, 2009, 21, 808-812.	21.0	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	Coreâ€"shell designs of photoluminescent nanodiamonds with porous silica coatings for bioimaging and drug delivery II: application. Nanoscale, 2013, 5, 3713.	5.6	111
6	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	78
7	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.	3.9	77
8	Thermal conductivity of high purity synthetic single crystal diamonds. Physical Review B, 2018, 97, .	3.2	76
9	High-order stimulated Raman scattering in CVD single crystal diamond. Laser Physics Letters, 2007, 4, 350-353.	1.4	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.	3.9	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.	1.8	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.	1.8	61
13	Optical monitoring of nucleation and growth of diamond films. Applied Physics Letters, 1993, 62, 3449-3451.	3.3	53
14	Observation of the Ge-vacancy color center in microcrystalline diamond films. Bulletin of the Lebedev Physics Institute, 2015, 42, 165-168.	0.6	51
15	Fracture strength of optical quality and black polycrystalline CVD diamonds. Diamond and Related Materials, 2012, 23, 172-177.	3.9	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.	3.9	45
18	Nitrogenated nanocrystalline diamond films: Thermal and optical properties. Diamond and Related Materials, 2007, 16, 2067-2073.	3.9	43

#	ARTICLE	IF	CITATIONS
19	CVD-diamond â€“ a novel Ï‡(3)-nonlinear active crystalline material for SRS generation in very wide spectral range. Laser Physics Letters, 2006, 3, 171-177.	1.4	37
20	High-rate ultrasonic polishing of polycrystalline diamond films. Diamond and Related Materials, 2016, 66, 171-176.	3.9	36
21	Chemical Vapor Deposition Singleâ€Crystal Diamond: A Review. Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100354.	2.4	36
22	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
23	Predicting the distribution and stability of photoactive defect centers in nanodiamond biomarkers. Journal of Materials Chemistry, 2009, 19, 360-365.	6.7	35
24	Stress mapping of chemical-vapor-deposited diamond film surface by micro-Raman spectroscopy. Applied Physics Letters, 1997, 71, 1789-1791.	3.3	34
25	Measurements of thermal conductivity of diamond films by photothermal deflection technique. Journal of Applied Physics, 1994, 75, 7795-7798.	2.5	33
26	Diamond-EuF 3 nanocomposites with bright orange photoluminescence. Diamond and Related Materials, 2017, 72, 47-52.	3.9	33
27	Measurement of thermal conductivity of polycrystalline CVD diamond by laser-induced transient grating technique. Quantum Electronics, 2002, 32, 367-372.	1.0	31
28	Tailoring of Typical Color Centers in Diamond for Photonics. Advanced Materials, 2021, 33, e2000891.	21.0	31
29	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.	1.5	30
30	Single crystal diamond UV detector with a groove-shaped electrode structure and enhanced sensitivity. Sensors and Actuators A: Physical, 2017, 259, 121-126.	4.1	30
31	Optical Properties and Defect Structure of CVD Diamond Films Annealed at 900-1600 ï¿½C. Physica Status Solidi A, 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 H₂â€“CH₄â€“^[<i>x</i>]SiH₄ Gas Mixtures (<i>x</i> = 28,) Tj ETQq0 0 0 rgBT /Over	6.6	29
33	Fabrication of polycrystalline diamond refractive X-ray lens by femtosecond laser processing. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	28
34	Crystal Growth of Diamond. , 2015, , 671-713.		27
35	The state of the art in the growth of diamond crystals and films. Inorganic Materials, 2006, 42, S1-S18.	0.8	25
36	Diamond refractive lens for hard x-ray focusing. , 2002, 4783, 1.		24

#	Article	IF	Citations
37	High-order Stokes and anti-Stokes Raman generation in CVD diamond. Physica Status Solidi (B): Basic Research, 2005, 242, R4-R6.	1.5	24
38	Gas-phase growth of silicon-doped luminescent diamond films and isolated nanocrystals. Bulletin of the Lebedev Physics Institute, 2011, 38, 291-296.	0.6	24
39	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.	3.9	24
40	Sizeâ€dependent luminescence of color centers in composite nanodiamonds. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2600-2605.	1.8	23
41	Fabrication of CVD Diamond Optics with Antireflective Surface Structures. Physica Status Solidi A, 1999, 174, 171-176.	1.7	22
42	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.	1.8	22
43	Etching Kinetics of (100) Single Crystal Diamond Surfaces in a Hydrogen Microwave Plasma, Studied with In Situ Lowâ€Coherence Interferometry. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700177.	1.8	22
44	Polycrystalline CVD diamond pixel array detector for nuclear particles monitoring. Journal of Instrumentation, 2013, 8, C02043-C02043.	1.2	21
45	Nitridation of Ti and Zr by multi-pulse TEA CO2laser irradiation in liquid nitrogen. Journal Physics D: Applied Physics, 1986, 19, 1183-1188.	2.8	20
46	Diamondâ€"Rare 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.	5.0	20
47	A new approach to precise mapping of local temperature fields in submicrometer aqueous volumes. Scientific Reports, 2021, 11, 14228.	3.3	20
48	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.	2.3	19
49	Investigation with Î²-particles and protons of buried graphite pillars in single-crystal CVD diamond. Diamond and Related Materials, 2018, 84, 1-10.	3.9	19
50	Observation of stimulated raman scattering in CVD-diamond. JETP Letters, 2004, 80, 267-270.	1.4	18
51	Analysis of synthetic diamond single crystals by X-ray topography and double-crystal diffractometry. Crystallography Reports, 2013, 58, 1010-1016.	0.6	18
52	Multi-octave frequency comb generation by<i>Ï‡</i>^{(3)}-nonlinear optical processes in CVD diamond at low temperatures. Laser Physics Letters, 2014, 11, 086101.	1.4	18
53	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.	1.5	18
54	Very long laser-induced graphitic pillars buried in single-crystal CVD-diamond for 3D detectors realization. Diamond and Related Materials, 2018, 90, 84-92.	3.9	18

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55	Diamond Detector With Laser-Formed Buried Graphitic Electrodes: Micron-Scale Mapping of Stress and Charge Collection Efficiency. IEEE Sensors Journal, 2019, 19, 11908-11917.	4.7	18
56	Optically Transparent Flexible Broadband Metamaterial Absorber Based on Topology Optimization Design. Micromachines, 2021, 12, 1419.	2.9	17
57	Diamond-germanium composite films grown by microwave plasma CVD. Carbon, 2022, 190, 10-21.	10.3	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. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	16
59	Nano-carbon pixels array for ionizing particles monitoring. Diamond and Related Materials, 2017, 73, 132-136.	3.9	16
60	Vertical-substrate epitaxial growth of single-crystal diamond by microwave plasma-assisted chemical vapor deposition. Journal of Crystal Growth, 2018, 486, 104-110.	1.5	16
61	On the thermal conductivity of single crystal AlN. Journal of Applied Physics, 2020, 127, 205109.	2.5	16
62	Nitrification of zirconium by cw CO2laser irradiation in ambient atmosphere. Applied Physics Letters, 1985, 46, 110-112.	3.3	15
63	Neutron irradiation effects in chemical-vapor-deposited diamond. Physical Review B, 2008, 78, .	3.2	15
64	Creation of strong adhesive diamond coatings on hard alloy by electric-spark alloying. Metallurgist, 2010, 54, 523-529.	0.6	15
65	Diamond direct and inverse opal matrices produced by chemical vapor deposition. Physics of the Solid State, 2011, 53, 1131-1134.	0.6	15
66	Optimization of X-ray beam profilers based on CVD diamond detectors. Journal of Instrumentation, 2012, 7, C11005-C11005.	1.2	15
67	Radiation Damage Effects on Optical, Electrical, and Thermophysical Properties of CVD Diamond Films. Journal of Applied Spectroscopy, 2013, 80, 707-714.	0.7	15
68	Structural studies of diamond thin films grown from dc arc plasma. Journal of Materials Research, 1997, 12, 2533-2542.	2.6	14
69	External-cavity diamond Raman laser performance at 1240â€‰nm and 1485â€‰nm wavelengths with high pulse energy. Laser Physics Letters, 2016, 13, 065001.	1.4	14
70	Diamond micropowder synthesis via graphite etching in a microwave hydrogen plasma. Powder Technology, 2017, 322, 124-130.	4.2	14
71	SiV Color Centers in Siâ€Doped Isotopically Enriched ¹²C and ¹³C CVD Diamonds. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700198.	1.8	14
72	Diamond composite with embedded YAG:Ce nanoparticles as a source of fast X-ray luminescence in the visible and near-IR range. Carbon, 2021, 174, 52-58.	10.3	14

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73	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.	3.9	14
74	Stress in Thin Diamond Films on Various Materials Measured by Microraman Spectroscopy. Materials Research Society Symposia Proceedings, 1995, 383, 153.	0.1	13
75	Effect of microstructure and grain size on the thermal conductivity of high-pressure-sintered diamond composites. Inorganic Materials, 2008, 44, 224-229.	0.8	13
76	Wettability of Ultrananocrystalline Diamond and Graphite Nanowalls Films: A Comparison with Their Single Crystal Analogs. Journal of Nanoscience and Nanotechnology, 2009, 9, 3665-3671.	0.9	13
77	2D inverse periodic opal structures in single crystal diamond with incorporated silicon-vacancy color centers. Diamond and Related Materials, 2017, 73, 204-209.	3.9	13
78	Benzene Oxidation at Diamond Electrodes: Comparison of Microcrystalline and Nanocrystalline Diamonds. ChemPhysChem, 2012, 13, 3047-3052.	2.1	12
79	Photoluminescence Spectra of the 580-nm Center in Irradiated Diamonds. Journal of Applied Spectroscopy, 2019, 86, 597-605.	0.7	12
80	Surface nitridation of zirconium and hafnium by powerful cw CO_2 laser irradiation in air. Applied Optics, 1986, 25, 2720.	2.1	11
81	Hydrogen loss from laserâ€annealed amorphous hydrogenated carbon films studied by secondaryâ€ion mass spectrometry. Applied Physics Letters, 1991, 58, 2758-2760.	3.3	11
82	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.	2.9	11
83	CVD diamond coating of AlN ceramic substrates to enhance heat removal. Russian Microelectronics, 2006, 35, 205-209.	0.5	11
84	Thermal conductivity of polycrystalline CVD diamond: effect of annealingâ€induced transformations of defects and grain boundaries. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2226-2232.	1.8	11
85	Growth of single-crystal diamonds in microwave plasma. Plasma Physics Reports, 2012, 38, 1113-1118.	0.9	11
86	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	11
87	Growth of CVD diamond nanopillars with imbedded silicon-vacancy color centers. Optical Materials, 2016, 61, 25-29.	3.6	11
88	Thermal conductivity of free-standing CVD diamond films by growing on both nuclear and growth sides. Diamond and Related Materials, 2017, 76, 9-13.	3.9	11
89	Near-infrared refractive index of synthetic single crystal and polycrystalline diamonds at high temperatures. Journal of Applied Physics, 2017, 122, 243106.	2.5	11
90	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.	3.9	11

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91	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. Materials, 2020, 13, 3697.	2.9	11
92	Electrochemical behavior of nitrogenated nanocrystalline diamond electrodes. Russian Journal of Electrochemistry, 2007, 43, 827-836.	0.9	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. Chinese Physics Letters, 2007, 24, 2088-2090.	3.3	9
95	Luminescent diamond window of the sandwich type for X-ray visualization. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	9
96	Effect of americiumâ€241 source activity on total conversion efficiency of diamond alphaâ€voltaic battery. International Journal of Energy Research, 2019, 43, 6038-6044.	4.5	9
97	Microwave plasma-assisted chemical vapor deposition of microcrystalline diamond films <i>via</i> graphite etching under different hydrogen flow rates. CrystEngComm, 2019, 21, 2502-2507.	2.6	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. Journal of Physical Chemistry C, 2021, 125, 17774-17785.	3.1	9
99	Luminescent diamond composites. Functional Diamond, 2022, 2, 53-63.	3.8	9
100	Mechanism of surface compound formations by cw CO2laser irradiation of zirconium samples in air. Journal of Applied Physics, 1986, 59, 668-670.	2.5	8
101	Polycrystalline diamond film UV detectors for excimer lasers. Quantum Electronics, 2006, 36, 487-488.	1.0	8
102	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.	0.5	8
103	Hydrated magnesium-carbon films with conductivity and wide-range visible-to-far-infrared transparency. Materials Letters, 2018, 216, 88-91.	2.6	8
104	Growth of three-dimensional diamond mosaics by microwave plasma-assisted chemical vapor deposition. CrystEngComm, 2018, 20, 198-203.	2.6	8
105	Laser-Assisted Formation of High-Quality Polycrystalline Diamond Membranes. Journal of Russian Laser Research, 2020, 41, 321-326.	0.6	8
106	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.	1.8	8
107	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. Materials, 2021, 14, 1780.	2.9	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.	0.9	7
111	Strength of optical quality polycrystalline CVD diamond. Inorganic Materials: Applied Research, 2011, 2, 439-444.	0.5	7
112	Photonic crystals of diamond spheres with the opal structure. Physics of the Solid State, 2013, 55, 1120-1123.	0.6	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.	0.6	7
114	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
115	Laser "Nano"ablation of Ultrananocrystalline Diamond Films. Journal of Nanoelectronics and Optoelectronics, 2009, 4, 286-289.	0.5	7
116	CVD diamond-SiC composite films: Structure and electrical properties. Diamond and Related Materials, 2022, 125, 108975.	3.9	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.	0.6	6
118	Diamond electrophoretic microchipsâ€"Joule heating effects. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 326-330.	3.5	6
119	Semiconductor properties of nanocrystalline diamond electrodes. Russian Journal of Electrochemistry, 2014, 50, 101-107.	0.9	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.	1.4	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.	0.5	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.	1.1	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.	2.1	5

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127	Growth and dissolution of oxide films during laserâ€assisted combustion of Ti and Zr. Applied Physics Letters, 1987, 50, 563-565.	3.3	4
128	Methane conversion in a multielectrode slipping surface discharge in the two-phase water-gas medium. Technical Physics, 2011, 56, 1588-1592.	0.7	4
129	Diamond-graphite pixel array for particles detection. Journal of Instrumentation, 2013, 8, C10013-C10013.	1.2	4
130	Stimulated Raman scatting in CVD diamond 12C. Doklady Physics, 2015, 60, 437-439.	0.7	4
131	Color Centers in Silic On-Doped Diamond Films. Journal of Applied Spectroscopy, 2016, 83, 229-233.	0.7	4
132	X-ray diffraction characterization of epitaxial CVD diamond films with natural and isotopically modified compositions. Crystallography Reports, 2016, 61, 979-986.	0.6	4
133	Effect of neutron irradiation on the hydrogen state in CVD diamond films. Journal of Physics: Conference Series, 2018, 1135, 012019.	0.4	4
134	Diamond Raman laser emitting at 1194, 1419, and 597 nm. Quantum Electronics, 2018, 48, 201-205.	1.0	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.	0.9	3
138	Optical and paramagnetic properties of polycrystalline CVD-diamonds implanted with deuterium ions. Journal of Applied Spectroscopy, 2012, 79, 600-609.	0.7	3
139	Investigation of free charge carrier dynamics in single-crystalline CVD diamond by two-photon absorption. Quantum Electronics, 2014, 44, 1055-1060.	1.0	3
140	Experimental investigation into polycrystalline and single-crystal diamonds under negative pressures formed by picosecond laser pulses. Doklady Physics, 2014, 59, 309-312.	0.7	3
141	Muonic atom as an acceptor centre in diamond. Journal of Physics: Conference Series, 2014, 551, 012046.	0.4	3
142	Highâ€order Stokes and antiâ€Stokes Raman generation in monoisotopic CVD ¹²Câ€diamond. Physica Status Solidi - Rapid Research Letters, 2016, 10, 471-474.	2.4	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.	0.6	3
144	Application of Raman Spectroscopy for Analyzing Diamond Coatings on a Hard Alloy. Journal of Applied Spectroscopy, 2017, 84, 312-318.	0.7	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.	1.8	2
148	Synthetic diamond electrodes: Photoelectrochemical behavior of vacuum-annealed undoped polycrystalline diamond films. Russian Journal of Electrochemistry, 2005, 41, 304-309.	0.9	2
149	Polycrystal diamond growth in a microwave plasma torch. Plasma Physics Reports, 2010, 36, 1272-1277.	0.9	2
150	Microwave plasma deposition and mechanical treatment of single crystals and polycrystalline diamond films. Inorganic Materials: Applied Research, 2014, 5, 230-236.	0.5	2
151	CVD-diamond 13C: A new SRS-active crystal. Doklady Physics, 2015, 60, 529-532.	0.7	2
152	Growth of nano-crystalline diamond on single-crystalline diamond by CVD method. Bulletin of the Lebedev Physics Institute, 2016, 43, 378-381.	0.6	2
153	Confocal luminescence study of nitrogen-vacancy distribution within nitrogen-rich single crystal CVD diamond. Laser Physics, 2016, 26, 015202.	1.2	2
154	Using Si-doped diamond plate of sandwich type for spatial profiling of laser beam. Laser Physics Letters, 2017, 14, 026003.	1.4	2
155	Nondestructive diagnostics of diamond coatings of hard-alloy cutters. AIP Conference Proceedings, 2019, , .	0.4	2
156	Novel reparation method for polymethyl methacrylate optical windows of aircrafts damaged by service environment. Science China Technological Sciences, 2020, 63, 1585-1590.	4.0	2
157	Isotope Effect in Thermal Conductivity of Polycrystalline CVD-Diamond: Experiment and Theory. Crystals, 2021, 11, 322.	2.2	2
158	Propagation of Laser-Induced Hypersound Waves in Polycrystalline Diamond with Submicron Crystallites. Journal of Russian Laser Research, 2021, 42, 580-585.	0.6	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.	0.5	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.	0.4	1
164	Photoluminescence of silicon after deposition of polycrystalline diamond films. Semiconductors, 2009, 43, 1159-1163.	0.5	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.	0.4	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.	0.7	1
167	Synthesis and doping of microcolumn diamond photoemitters with silicon-vacancy color centers. Bulletin of the Lebedev Physics Institute, 2015, 42, 63-66.	0.6	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.	0.6	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.	0.4	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
173	<title>Deposition and laser damage tests of DLC coatings on silica optical fibers and plates</title>. , 1998, , .		0
174	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.	2.7	0
175	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.	0.6	0
176	X-ray diffraction characterization of synthetic garnet, diamond and sapphire crystals. Journal of Surface Investigation, 2015, 9, 471-478.	0.5	0
177	Optical spectroscopy characterization of growth hillocks on the surface of homoepitaxial CVD diamond films. Journal of Physics: Conference Series, 2019, 1199, 012006.	0.4	0
178	The Frenkelâ€"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	0
179	Synthesis of Multilayered Diamond Films in Microwave Plasma with Periodic Nitrogen Injections. Doklady Physics, 2021, 66, 42-44.	0.7	0
180	Study of color centers in radiation-modified diamonds. Journal of Physics: Conference Series, 2021, 2103, 012223.	0.4	0