Vadim S Sedov

List of Publications by Year
in descending order

57	805	471509 17	552781 26
papers	citations	h-index	g-index

59	59	59	529
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	Observation of the Ge-vacancy color center in microcrystalline diamond films. Bulletin of the Lebedev Physics Institute, 2015, 42, 165-168.	0.6	51
4	Growth of polycrystalline and single-crystal CVD diamonds with bright photoluminescence of Ge-V color centers using germane GeH4 as the dopant source. Diamond and Related Materials, 2018, 90, 47-53.	3.9	39
5	Deposition of diamond films on Si by microwave plasma CVD in varied CH4-H2 mixtures: Reverse nanocrystalline-to-microcrystalline structure transition at very high methane concentrations. Diamond and Related Materials, 2020, 109, 108072.	3.9	37
6	Diamond-EuF 3 nanocomposites with bright orange photoluminescence. Diamond and Related Materials, 2017, 72, 47-52.	3.9	33
7	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 ETQq1 1 0.784314 rg	6.6	29
8	Optical Magnetism and Fundamental Modes of Nanodiamonds. ACS Photonics, 2017, 4, 1153-1158.	6.6	26
9	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
10	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
11	Morphology of Diamond Layers Grown on Different Facets of Single Crystal Diamond Substrates by a Microwave Plasma CVD in CH4-H2-N2 Gas Mixtures. Crystals, 2017, 7, 166.	2.2	24
12	Sizeâ€dependent luminescence of color centers in composite nanodiamonds. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2600-2605.	1.8	23
13	Effect of Substrate Holder Design on Stress and Uniformity of Large-Area Polycrystalline Diamond Films Grown by Microwave Plasma-Assisted CVD. Coatings, 2020, 10, 939.	2.6	21
14	Growth dynamics of nanocrystalline diamond films produced by microwave plasma enhanced chemical vapor deposition in methane/hydrogen/air mixture: Scaling analysis of surface morphology. Diamond and Related Materials, 2015, 58, 172-179.	3.9	20
15	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
16	A new approach to precise mapping of local temperature fields in submicrometer aqueous volumes. Scientific Reports, 2021, 11, 14228.	3.3	20
17	A comparative study of the growth dynamics and tribological properties of nanocrystalline diamond films deposited on the (110) single crystal diamond and Si(100) substrates. Diamond and Related Materials, 2019, 92, 159-167.	3.9	19
18	Co-deposition of diamond and Î²-SiC by microwave plasma CVD in H2-CH4-SiH4 gas mixtures. Diamond and Related Materials, 2019, 98, 107520.	3.9	18

#	Article	IF	Citations
19	Diamond-germanium composite films grown by microwave plasma CVD. Carbon, 2022, 190, 10-21.	10.3	17
20	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
21	GaN-based heterostructures with CVD diamond heat sinks: A new fabrication approach towards efficient electronic devices. Applied Materials Today, 2022, 26, 101338.	4.3	15
22	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
23	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
24	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
25	Growth of Si-Doped Polycrystalline Diamond Films on AlN Substrates by Microwave Plasma Chemical Vapor Deposition. Journal of Coating Science and Technology, 0, , 38-45.	0.3	13
26	Cerium-doped gadolinium-scandium-aluminum garnet powders: synthesis and use in X-ray luminescent diamond composites. Ceramics International, 2022, 48, 12962-12970.	4.8	12
27	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. Materials, 2020, 13, 3697.	2.9	11
28	Luminescent diamond window of the sandwich type for X-ray visualization. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	9
29	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
30	Luminescent diamond composites. Functional Diamond, 2022, 2, 53-63.	3.8	9
31	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
32	Laser-Assisted Formation of High-Quality Polycrystalline Diamond Membranes. Journal of Russian Laser Research, 2020, 41, 321-326.	0.6	8
33	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. Materials, 2021, 14, 1780.	2.9	8
34	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
35	Lowâ€Temperature Siliconâ€Vacancy Luminescence of Individual Chemical Vapor Deposition Nanodiamonds Grown by Seeding and Spontaneous Nucleation. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000274.	1.8	7
36	CVD diamond-SiC composite films: Structure and electrical properties. Diamond and Related Materials, 2022, 125, 108975.	3.9	7

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37	X-ray luminescence of diamond composite films containing yttrium-aluminum garnet nanoparticles with varied composition of Scâ€“Ce doping. Ceramics International, 2021, 47, 13922-13926.	4.8	6
38	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
39	Color Centers in Silic On-Doped Diamond Films. Journal of Applied Spectroscopy, 2016, 83, 229-233.	0.7	4
40	Microwave CVD deposition and properties of nano / microcrystalline diamond multilayer coatings on tungsten carbide cutting tools. , 2017, , .		4
41	Femtosecond and nanosecond laser polishing of rough polycrystalline diamond. Laser Physics, 2022, 32, 084003.	1.2	4
42	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
43	Application of Raman Spectroscopy for Analyzing Diamond Coatings on a Hard Alloy. Journal of Applied Spectroscopy, 2017, 84, 312-318.	0.7	3
44	Laser Ablated Nanocrystalline Diamond Membrane for Infrared Applications. Sensors, 2022, 22, 829.	3.8	3
45	Stimulation of the diamond nucleation on silicon substrates with a layer of a polymeric precursor in deposition of diamond films by microwave plasma. Journal of Superhard Materials, 2012, 34, 37-43.	1.2	2
46	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
47	Polycarbynes: A new synthetic approach and application to the nucleation of CVD diamond. Diamond and Related Materials, 2017, 74, 65-69.	3.9	2
48	Using Si-doped diamond plate of sandwich type for spatial profiling of laser beam. Laser Physics Letters, 2017, 14, 026003.	1.4	2
49	Nondestructive diagnostics of diamond coatings of hard-alloy cutters. AIP Conference Proceedings, 2019, , .	0.4	2
50	Propagation of Laser-Induced Hypersound Waves in Polycrystalline Diamond with Submicron Crystallites. Journal of Russian Laser Research, 2021, 42, 580-585.	0.6	2
51	Nanocarbon colloid produced by electro-spark discharge in ethanol for seeding the substrates in MPACVD synthesis of polycrystalline diamond films. Journal of Physics: Conference Series, 2018, 1094, 012030.	0.4	1
52	Fluorescence and Raman Spectroscopy of Doped Nanodiamonds. Journal of Applied Spectroscopy, 2018, 85, 295-299.	0.7	1
53	Group growth of polycrystalline diamond coating by MPCVD technique on a hard alloy tool with a thin blade. Journal of Physics: Conference Series, 2019, 1353, 012072.	0.4	1
54	Diamond-fluoride luminescent film composite.. , 2018, , .		0

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55	ÐÐ•ÐÐ¢Ð“Ð•ÐÐžÐ›Ð®ÐœÐ˜ÐÐ•Ð¡Ð¦Ð•ÐÐ¢ÐÐ«Ð• ÐšÐžÐœÐŸÐžÐ—Ð˜Ð¢Ð« ÐÐ•ÐžÐ¡ÐÐžÐ'Ð• ÐŸÐžÐ›Ð˜ÐšÐÐ˜Ð¡Ð¢ÐÐ›Ð›Ð˜Ð§Ð•Ð¡	[illegible]	0
56	Diamond-NaGdF4: Eu and Diamond-YAG: Ce composites as photo- and X-Ray luminescent materials for photonics. , 2020, , .		0
57	Substrates with Diamond Heat Sink for Epitaxial GaN Growth. Technical Physics Letters, 2021, 47, 353-356.	0.7	0