Marian Varga

List of Publications by Year
in descending order

69 papers	1,240 citations	471509 17 h-index	395702 33 g-index
70 all docs	70 docs citations	70 times ranked	1612 citing authors

#	Article	IF	Citations
1	Diamond/carbon nanotube composites: Raman, FTIR and XPS spectroscopic studies. Carbon, 2017, 111, 54-61.	10.3	247
2	Size and Purity Control of HPHT Nanodiamonds down to 1 nm. Journal of Physical Chemistry C, 2015, 119, 27708-27720.	3.1	144
3	High-yield fabrication and properties of 1.4â€‰nm nanodiamonds with narrow size distribution. Scientific Reports, 2016, 6, 38419.	3.3	63
4	Ultrathin Nanocrystalline Diamond Films with Silicon Vacancy Color Centers via Seeding by 2 nm Detonation Nanodiamonds. ACS Applied Materials & Interfaces, 2017, 9, 38842-38853.	8.0	52
5	Low temperature diamond growth by linear antenna plasma CVD over large area. Physica Status Solidi (B): Basic Research, 2012, 249, 2600-2603.	1.5	44
6	Osteogenic cell differentiation on H-terminated and O-terminated nanocrystalline diamond films. International Journal of Nanomedicine, 2015, 10, 869.	6.7	41
7	Enhanced Extraction of Silicon-Vacancy Centers Light Emission Using Bottom-Up Engineered Polycrystalline Diamond Photonic Crystal Slabs. ACS Nano, 2017, 11, 2972-2981.	14.6	38
8	Covalent Diamondâ€"Graphite Bonding: Mechanism of Catalytic Transformation. ACS Nano, 2019, 13, 4621-4630.	14.6	38
9	Bias enhanced nucleation of diamond thin films in a modified HFCVD reactor. Vacuum, 2009, 84, 49-52.	3.5	27
10	Nanocrystalline glass-coated FeNiMoB microwires. Applied Physics Letters, 2008, 93, 062502.	3.3	23
11	Preparation and optical properties of nanocrystalline diamond coatings for infrared planar waveguides. Thin Solid Films, 2016, 618, 130-133.	1.8	23
12	Design and investigation of properties of nanocrystalline diamond optical planar waveguides. Optics Express, 2013, 21, 8417.	3.4	22
13	Study of Ni-Catalyzed Graphitization Process of Diamond by in Situ X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 6629-6636.	3.1	22
14	Diamond photonic crystal slab: Leaky modes and modified photoluminescence emission of surface-deposited quantum dots. Scientific Reports, 2012, 2, 914.	3.3	19
15	Influence of non-diamond carbon phase on recombination mechanisms of photoexcited charge carriers in microcrystalline and nanocrystalline diamond studied by time resolved photoluminescence spectroscopy. Optical Materials Express, 2014, 4, 624.	3.0	19
16	Optical study of defects in nanoâ€diamond films grown in linear antenna microwave plasma CVD from H₂/CH₄/CO₂ gas mixture. Physica Status Solidi (B): Basic Research, 2012, 249, 2635-2639.	1.5	18
17	Erbium ion implantation into diamond â€" measurement and modelling of the crystal structure. Physical Chemistry Chemical Physics, 2017, 19, 6233-6245.	2.8	18
18	Coherent phonon dynamics in micro- and nanocrystalline diamond. Optics Express, 2013, 21, 31521.	3.4	17

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19	Great Variety of Man-Made Porous Diamond Structures: Pulsed Microwave Cold Plasma System with a Linear Antenna Arrangement. ACS Omega, 2019, 4, 8441-8450.	3.5	17
20	Templated diamond growth on porous carbon foam decorated with polyvinyl alcohol-nanodiamond composite. Carbon, 2017, 119, 124-132.	10.3	15
21	Investigation of residual stress in structured diamond films grown on silicon. Thin Solid Films, 2015, 589, 857-863.	1.8	14
22	Silicon nanocrystal-based photonic crystal slabs with broadband and efficient directional light emission. Scientific Reports, 2017, 7, 5763.	3.3	14
23	Diamond nucleation and growth on horizontally and vertically aligned Si substrates at low pressure in a linear antenna microwave plasma system. Diamond and Related Materials, 2018, 82, 41-49.	3.9	14
24	Microsphere lithography for scalable polycrystalline diamond-based near-infrared photonic crystals fabrication. Materials and Design, 2018, 139, 363-371.	7.0	14
25	Electron affinity of undoped and boron-doped polycrystalline diamond films. Diamond and Related Materials, 2018, 87, 208-214.	3.9	14
26	Influence of gas chemistry on Si-V color centers in diamond films. Physica Status Solidi (B): Basic Research, 2015, 252, 2580-2584.	1.5	13
27	Photonic crystal cavity-enhanced emission from silicon vacancy centers in polycrystalline diamond achieved without postfabrication fine-tuning. Nanoscale, 2020, 12, 13055-13063.	5.6	13
28	HFCVD growth of various carbon nanostructures on SWCNT paper controlled by surface treatment. Physica Status Solidi (B): Basic Research, 2012, 249, 2399-2403.	1.5	12
29	Effects of fiber density and plasma modification of nanofibrous membranes on the adhesion and growth of HaCaT keratinocytes. Journal of Biomaterials Applications, 2015, 29, 837-853.	2.4	12
30	Residual- and linker-free metal/polymer nanofluids prepared by direct deposition of magnetron-sputtered Cu nanoparticles into liquid PEG. Journal of Molecular Liquids, 2021, 336, 116319.	4.9	12
31	Study of diamond film nucleation by ultrasonic seeding in different solutions. Open Physics, 2012, 10, .	1.7	11
32	Structural and electrical characterization of diamond films deposited in nitrogen/oxygen containing gas mixture by linear antenna microwave CVD process. Applied Surface Science, 2014, 312, 226-230.	6.1	11
33	Ferromagnetism appears in nitrogen implanted nanocrystalline diamond films. Journal of Magnetism and Magnetic Materials, 2015, 394, 477-480.	2.3	11
34	Polymerâ€based nucleation for chemical vapour deposition of diamond. Journal of Applied Polymer Science, 2016, 133, .	2.6	11
35	Silicon-Vacancy Centers in Ultra-Thin Nanocrystalline Diamond Films. Micromachines, 2018, 9, 281.	2.9	11
36	Study of adhesion of carbon nitride thin films on medical alloy substrates. Vacuum, 2009, 84, 65-67.	3.5	10

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37	Diamond thin film nucleation on silicon by ultrasonication in various mixtures. Vacuum, 2012, 86, 681-683.	3.5	10
38	Two-dimensional photonic crystal slab with embedded silicon nanocrystals: Efficient photoluminescence extraction. Applied Physics Letters, 2013, 102, .	3.3	10
39	Quartz crystal microbalance gas sensor with nanocrystalline diamond sensitive layer. Physica Status Solidi (B): Basic Research, 2015, 252, 2591-2597.	1.5	10
40	Diamond growth on copper rods from polymer composite nanofibres. Applied Surface Science, 2014, 312, 220-225.	6.1	9
41	Hydrogen-Terminated Diamond Sensors for Electrical Monitoring of Cells. Key Engineering Materials, 2014, 605, 577-580.	0.4	7
42	Size decrease of detonation nanodiamonds by air annealing investigated by AFM. MRS Advances, 2016, 1, 1067-1073.	0.9	7
43	Coâ€implantation of Er and Yb ions into singleâ€crystalline and nanoâ€crystalline diamond. Surface and Interface Analysis, 2018, 50, 1218-1223.	1.8	7
44	Diamond nucleation and seeding techniques for tissue regeneration. , 2013, , 206-255.		6
45	Carbon nanotubes overgrown and ingrown with nanocrystalline diamond deposited by different CVD plasma systems. Physica Status Solidi (B): Basic Research, 2014, 251, 2413-2419.	1.5	6
46	Ni-mediated reactions in nanocrystalline diamond on Si substrates: the role of the oxide barrier. RSC Advances, 2020, 10, 8224-8232.	3.6	6
47	Fabrication of Diamond Based Quartz Crystal Microbalance Gas Sensor. Key Engineering Materials, 0, 605, 589-592.	0.4	5
48	Influence of air annealing on the luminescence dynamics of HPHT nanodiamonds. Diamond and Related Materials, 2016, 68, 62-65.	3.9	5
49	Erbium Luminescence Centres in Single- and Nano-Crystalline Diamondâ€"Effects of Ion Implantation Fluence and Thermal Annealing. Micromachines, 2018, 9, 316.	2.9	5
50	Maximized vertical photoluminescence from optical material with losses employing resonant excitation and extraction of photonic crystal modes. Nanophotonics, 2019, 8, 1041-1050.	6.0	5
51	Growth Rate Enhancement and Morphology Engineering of Diamond Films by Adding CO₂ or N₂ in Hydrogen Rich Gas Chemistry. Advanced Science, Engineering and Medicine, 2014, 6, 749-755.	0.3	5
52	Electrochemical corrosion behavior of amorphous carbon nitride thin films. Vacuum, 2012, 86, 696-698.	3.5	4
53	Optical Characterization of Few-Layer PtSe₂ Nanosheet Films. ACS Omega, 2021, 6, 35398-35403.	3.5	4
54	A Raman spectroscopy study on differently deposited DLC layers in pulse arc system. Chemical Papers, 2010, 64, .	2.2	3

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55	Fabrication of free-standing pure carbon-based composite material with the combination of sp2â€“sp3 hybridizations. Applied Surface Science, 2014, 308, 211-215.	6.1	3
56	Fabrication and Characterization of N-Type Zinc Oxide/P-Type Boron Doped Diamond Heterojunction. Journal of Electrical Engineering, 2015, 66, 277-281.	0.7	3
57	Technological Aspects in Fabrication of Micro- and Nano-Sized Carbon Based Features: Nanorods, Periodical Arrays and Self-Standing Membranes. Journal of Electrical Engineering, 2015, 66, 282-286.	0.7	3
58	Spectral tuning of diamond photonic crystal slabs by deposition of a thin layer with silicon vacancy centers. Nanophotonics, 2021, 10, 3895-3905.	6.0	3
59	Diamond Films Deposited by Oxygen-Enhanced Linear Plasma Chemistry. Advanced Science, Engineering and Medicine, 2013, 5, 509-514.	0.3	3
60	Sub-picosecond electron dynamics in polycrystalline diamond films. Diamond and Related Materials, 2020, 108, 107935.	3.9	2
61	Detection of globular and fibrillar proteins by quartz crystal microbalance sensor coated with a functionalized diamond thin film. Applied Surface Science, 2022, 589, 153017.	6.1	2
62	Erratum to â€œStudy of diamond film nucleation by ultrasonic seeding in different solutionsâ€•by MariÃ¡n Varga, Tibor lÅ¾Ã¡k, Alexander Kromka, Marian VeselÃ½, Karel HruÅ¡ka and Miroslav Michalka. Open Physics, 2012, 10, .	1.7	1
63	Microcrystalline Diamond Membrane for Electronic Monitoring of Cells in Microfluidic Perfusion Systems. Procedia Engineering, 2016, 168, 1442-1445.	1.2	1
64	Two-dimensional photonic crystals increasing vertical light emission from Si nanocrystal-rich thin layers. Beilstein Journal of Nanotechnology, 2018, 9, 2287-2296.	2.8	1
65	Electrical characterization of diamond films deposited in nitrogen and oxygen containing gas mixture. , 2014, , .		0
66	Multimodal Analysis of Diamond Crystals and Layers Using RISE Microscopy. Microscopy and Microanalysis, 2017, 23, 2280-2281.	0.4	0
67	Polycrystalline diamond photonic crystal slabs prepared by focused ion beam milling. , 2018, , .		0
68	Photonic nanostructures with optical centers in polycrystalline diamond. , 2019, , .		0
69	Optimization of diamond growth on structured, soft and brittle substrates. , 2020, , .		0