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List of Publications by Year
in descending order

50 papers	790 citations	516710 16 h-index	526287 27 g-index
50 all docs	50 docs citations	50 times ranked	884 citing authors

#	Article	IF	Citations
1	Reactive magnetron sputtering of hard Siâ€“Bâ€“Câ€“N films with a high-temperature oxidation resistance. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1513-1522.	2.1	76
2	Nanodiamond as Promising Material for Bone Tissue Engineering. Journal of Nanoscience and Nanotechnology, 2009, 9, 3524-3534.	0.9	69
3	Influence of substrate bias voltage on structure and properties of hard Siâ€“Bâ€“Câ€“N films prepared by reactive magnetron sputtering. Diamond and Related Materials, 2007, 16, 29-36.	3.9	55
4	Investigation of nanocrystalline diamond films grown on silicon and glass at substrate temperature below 400ÂÂ°C. Diamond and Related Materials, 2007, 16, 744-747.	3.9	51
5	Bone and vascular endothelial cells in cultures on nanocrystalline diamond films. Diamond and Related Materials, 2008, 17, 1405-1409.	3.9	47
6	Growth of nanocrystalline diamond films deposited by microwave plasma CVD system at low substrate temperatures. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 3011-3015.	1.8	45
7	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
8	Early stage of diamond growth at low temperature. Diamond and Related Materials, 2008, 17, 1252-1255.	3.9	41
9	Bone cells in cultures on nanocarbon-based materials for potential bone tissue engineering: A review. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2688-2702.	1.8	36
10	Antibacterial behavior of diamond nanoparticles against <i>Escherichia coli</i>. Physica Status Solidi (B): Basic Research, 2012, 249, 2581-2584.	1.5	35
11	Mechanical and optical properties of quaternary Siâ€“Bâ€“Câ€“N films prepared by reactive magnetron sputtering. Thin Solid Films, 2008, 516, 7286-7293.	1.8	23
12	Linear antenna microwave plasma CVD diamond deposition at the edge of noâ€growth region of Cï£¿Hï£¿O ternary diagram. Physica Status Solidi (B): Basic Research, 2012, 249, 2612-2615.	1.5	20
13	The effect of argon on the structure of amorphous SiBCN materials: an experimental andab initiostudy. Journal of Physics Condensed Matter, 2006, 18, 2337-2348.	1.8	19
14	Deterioration of bonding capacity of plasma-treated polymer fiber reinforcement. Cement and Concrete Composites, 2018, 89, 205-215.	10.7	19
15	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
16	Perspectives of linear antenna microwave system for growth of various carbon nano-forms and its plasma study. Physica Status Solidi (B): Basic Research, 2013, 250, 2723-2726.	1.5	16
17	Structured and graphitized boron doped diamond electrodes: Impact on electrochemical detection of Cd2+ and Pb2+ ions. Vacuum, 2019, 170, 108953.	3.5	15
18	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

#	ARTICLE	IF	CITATIONS
19	Grazing angle reflectance spectroscopy of organic monolayers on nanocrystalline diamond films. Diamond and Related Materials, 2011, 20, 882-885.	3.9	13
20	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
21	Coating Ti6Al4V implants with nanocrystalline diamond functionalized with BMP-7 promotes extracellular matrix mineralization in vitro and faster osseointegration in vivo. Scientific Reports, 2022, 12, 5264.	3.3	13
22	Influence of surface wave plasma deposition conditions on diamond growth regime. Surface and Coatings Technology, 2015, 271, 74-79.	4.8	12
23	Generation of plasmas in water: utilization of a high-frequency, low-voltage bipolar pulse power supply with impedance control. Plasma Sources Science and Technology, 2011, 20, 034017.	3.1	10
24	Diamond growth on copper rods from polymer composite nanofibres. Applied Surface Science, 2014, 312, 220-225.	6.1	9
25	Alterations to the adhesion, growth and osteogenic differentiation of human osteoblast-like cells on nanofibrous polylactide scaffolds with diamond nanoparticles. Diamond and Related Materials, 2019, 97, 107421.	3.9	9
26	Uptake and intracellular accumulation of diamond nanoparticles â€“ a metabolic and cytotoxic study. Beilstein Journal of Nanotechnology, 2017, 8, 1649-1657.	2.8	8
27	Transformation of polymer composite nanofibers to diamond fibers and films by microwave plasma-enhanced CVD process. Applied Surface Science, 2014, 312, 188-191.	6.1	7
28	Diamond-coated three-dimensional GaN micromembranes: Effect of nucleation and deposition techniques. Physica Status Solidi (B): Basic Research, 2015, 252, 2585-2590.	1.5	7
29	Influence of the growth temperature on the Si-V photoluminescence in diamond thin films. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	7
30	Siâ€related color centers in nanocrystalline diamond thin films. Physica Status Solidi (B): Basic Research, 2014, 251, 2603-2606.	1.5	6
31	Determination of temperature dependent parameters of zero-phonon line in photo-luminescence spectrum of silicon-vacancy centre in CVD diamond thin films. Journal of Electrical Engineering, 2017, 68, 74-78.	0.7	6
32	Growth of Primary Human Osteoblasts on Plasmaâ€Treated and Nanodiamondâ€Coated PTFE Polymer Foils. Physica Status Solidi (B): Basic Research, 2018, 255, 1700595.	1.5	6
33	The Application of Nanodiamond in Biotechnology and Tissue Engineering. , 0, , .		5
34	Nucleation of diamond micro-patterns with photoluminescent SiV centers controlled by amorphous silicon thin films. Applied Surface Science, 2019, 480, 1008-1013.	6.1	4
35	Nanofibrous Scaffolds as Promising Cell Carriers for Tissue Engineering. , 0, , .		3
36	CHAPTER 13. Low Temperature Diamond Growth. RSC Nanoscience and Nanotechnology, 2014, , 290-342.	0.2	3

#	Article	IF	Citations
37	Growth of carbon allotropes and plasma characterization in linear antenna microwave plasma CVD system. Japanese Journal of Applied Physics, 2014, 53, 05FP04.	1.5	2
38	Influence of substrate material on spectral properties and thermal quenching of photoluminescence of silicon vacancy colour centres in diamond thin films. Journal of Electrical Engineering, 2017, 68, 3-9.	0.7	2
39	Impact of electrolyte solution on electrochemical oxidation treatment of Escherichia coli K-12 by boron-doped diamond electrodes. Letters in Applied Microbiology, 2022, 74, 924-931.	2.2	2
40	Changes of morphological, optical and electrical properties induced by hydrogen plasma on (0001) ZnO Surface. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100427.	1.8	1
41	HYDRATION OF PLASMA-TREATED ALUMOSILICATE BINDERS. Acta Polytechnica, 2014, 54, 348-351.	0.6	0
42	Bone cells in cultures on nanocarbon-based materials for potential bone tissue engineering: A review (Phys. Status Solidi A 12â˜•2014). Physica Status Solidi (A) Applications and Materials Science, 2014, 211, n/a-n/a.	1.8	0
43	AlGaN/GaN micromembranes with diamond coating for high electron mobility transistors operated at high temperatures. , 2014, , .		0
44	Time Depend Wettability Deterioration of Plasma Treated Polymeric Macro-Fibers. Key Engineering Materials, 2017, 731, 43-48.	0.4	0
45	PLASMA TREATMENT IMPACT ON PHYSICAL AND CHEMICAL PROPERTIES OF POLYMERIC FIBERS. Acta Polytechnica CTU Proceedings, 2017, 13, 49.	0.3	0
46	Fabrication of Structured Boron-Doped Diamond Films for Electrochemical Applications. Proceedings (mdpi), 2018, 2, 984.	0.2	0
47	PLASMA MODIFICATION OF MICROFIBERS - APPLICATION TO LIGHTWEIGHT CEMENT COMPOSITE CONTAINING RECYCLED CONCRETE. Acta Polytechnica CTU Proceedings, 0, 30, 7-11.	0.3	0
48	Direct Deposition of CVD Diamond Layers on Top of GaN Membranes. Proceedings (mdpi), 2020, 56, .	0.2	0
49	GROWTH AND PROPERTIES OF DIAMOND FILMS PREPARED ON 4-INCH SUBSTRATES BY CAVITY PLASMA SYSTEMs. , 2020, , .		0
50	Emergence of DARK ZnO Nanorods by Hydrogen Plasma Treatment. , 2021, , .		0