VÃ-t JirÃ¡sek

List of Publications by Year
in descending order

23 papers	322 citations	1163117 8 h-index	839539 18 g-index
23 all docs	23 docs citations	23 times ranked	468 citing authors

#	Article	IF	Citations
1	Treatment of phenylalanine and tyrosine in phosphateâ€buffered saline by plasmaâ€supplied oxygen atoms: Chemical characterization and bactericidal effects. Plasma Processes and Polymers, 2022, 19, .	3.0	2
2	FTIR Measurement of the Hydrogenated Si(100) Surface: The Structure-Vibrational Interpretation by Means of Periodic DFT Calculation. Journal of Physical Chemistry C, 2021, 125, 9219-9228.	3.1	2
3	Leucine modifications by He/O₂ plasma treatment in phosphate-buffered saline: bactericidal effects and chemical characterization. Journal Physics D: Applied Physics, 2021, 54, 505206.	2.8	4
4	Molecular dynamics simulations of singlet oxygen atoms reactions with water leading to hydrogen peroxide. Journal Physics D: Applied Physics, 2020, 53, 275204.	2.8	11
5	Competitive reactions in Cl^{â”} solutions treated by plasma-supplied O atoms. Journal Physics D: Applied Physics, 2020, 53, 505206.	2.8	14
6	Investigation of Oxychlorine Chemistry in Plasma Treated Saline Solutions. , 2020, , .		0
7	Nanocrystalline diamond-based impedance sensors for real-time monitoring of adipose tissue-derived stem cells. Colloids and Surfaces B: Biointerfaces, 2019, 177, 130-136.	5.0	2
8	Structural and Electronic Properties of Oxidized and Amorphous Nanodiamond Surfaces with Covalently Grafted Polypyrrole. Physica Status Solidi (B): Basic Research, 2019, 256, 1900176.	1.5	2
9	DFT calculations reveal pronounced HOMOâ€“LUMO spatial separation in polypyrroleâ€“nanodiamond systems. Physical Chemistry Chemical Physics, 2019, 21, 11033-11042.	2.8	15
10	Formation of reactive chlorine species in saline solution treated by non-equilibrium atmospheric pressure He/O₂ plasma jet. Plasma Sources Science and Technology, 2019, 28, 035015.	3.1	42
11	Hydroxylation and self-assembly of colloidal hydrogenated nanodiamonds by aqueous oxygen radicals from atmospheric pressure plasma jet. RSC Advances, 2018, 8, 37681-37692.	3.6	11
12	Surface chemistry of water-dispersed detonation nanodiamonds modified by atmospheric DC plasma afterglow. RSC Advances, 2017, 7, 38973-38980.	3.6	6
13	Computational study of physisorption and chemisorption of polypyrrole on Hâ€terminated (111) and (100) nanodiamond facets. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2672-2679.	1.8	7
14	Temperature-dependent stress in diamond-coated AlGaN/GaN heterostructures. Materials and Design, 2016, 106, 305-312.	7.0	8
15	Plasma treatment of detonation and HPHT nanodiamonds in diffuse coplanar surface barrier discharge in H₂/N₂ flow. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2680-2686.	1.8	13
16	Filamentation of diamond nanoparticles treated in underwater corona discharge. RSC Advances, 2016, 6, 2352-2360.	3.6	6
17	Investigation of residual stress in structured diamond films grown on silicon. Thin Solid Films, 2015, 589, 857-863.	1.8	14
18	Size and Purity Control of HPHT Nanodiamonds down to 1 nm. Journal of Physical Chemistry C, 2015, 119, 27708-27720.	3.1	144

#	Article	IF	Citations
19	Selective area deposition of diamond films on AlGaN/GaN heterostructures. Physica Status Solidi (B): Basic Research, 2014, 251, 2574-2580.	1.5	15
20	Measurement of Small-Signal Gain on COIL With Chemically Generated Molecular Iodine. IEEE Journal of Quantum Electronics, 2010, 46, 1350-1353.	1.9	1
21	Advanced Concept of Discharge Oxygen-Iodine Laser. , 2007, , .		2
22	Advances in the Development of Chemical Oxygen-iodine Laser. European Physical Journal D, 2004, 54, 561-574.	0.4	1
23	CFD Modeling of Chemical Oxygen-Iodine Laser with Chemically Generated Atomic Iodine. , 2003, , .		0