

Jiřka Kratochvíl

List of Publications by Year in descending order

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Version: 2024-02-01

39
papers

595
citations

623734

14
h-index

642732

23
g-index

39
all docs

39
docs citations

39
times ranked

640
citing authors

#	ARTICLE	IF	CITATIONS
1	Model of early stage of dislocation structure formation in cyclically deformed metal crystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1991, 64, 497-511.	0.6	45
2	Fabrication of Cu nanoclusters and their use for production of Cu/plasma polymer nanocomposite thin films. Thin Solid Films, 2014, 550, 46-52.	1.8	41
3	From super-hydrophilic to super-hydrophobic surfaces using plasma polymerization combined with gas aggregation source of nanoparticles. Vacuum, 2014, 110, 58-61.	3.5	39
4	Large-scale Ag nanoislands stabilized by a magnetron-sputtered polytetrafluoroethylene film as substrates for highly sensitive and reproducible surface-enhanced Raman scattering (SERS). Journal of Materials Chemistry C, 2015, 3, 11478-11485.	5.5	37
5	Instability origin of dislocation substructure. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1990, 61, 281-290.	0.6	34
6	Control of Wettability of Plasma Polymers by Application of Ti Nano-Clusters. Plasma Processes and Polymers, 2012, 9, 180-187.	3.0	33
7	Comparison of magnetron sputtering and gas aggregation nanoparticle source used for fabrication of silver nanoparticle films. Surface and Coatings Technology, 2015, 275, 296-302.	4.8	32
8	Nucleation and Growth of Magnetron-Sputtered Ag Nanoparticles as Witnessed by Time-Resolved Small Angle X-Ray Scattering. Particle and Particle Systems Characterization, 2020, 37, 1900436.	2.3	30
9	State-of-the-Art, and Perspectives of, Silver/Plasma Polymer Antibacterial Nanocomposites. Antibiotics, 2018, 7, 78.	3.7	28
10	Antibacterial effect of Cu/C:F nanocomposites deposited on PEEK substrates. Materials Letters, 2018, 230, 96-99.	2.6	26
11	Tailoring properties of indium tin oxide thin films for their work in both electrochemical and optical label-free sensing systems. Sensors and Actuators B: Chemical, 2021, 343, 130173.	7.8	23
12	Noble metal nanostructures for double plasmon resonance with tunable properties. Optical Materials, 2017, 64, 276-281.	3.6	22
13	Ag/C:F Antibacterial and hydrophobic nanocomposite coatings. Functional Materials Letters, 2017, 10, 1750029.	1.2	21
14	Towards high quality ITO coatings: The impact of nitrogen admixture in HiPIMS discharges. Surface and Coatings Technology, 2018, 335, 126-133.	4.8	18
15	Wetting and drying on gradient-nanostructured C:F surfaces synthesized using a gas aggregation source of nanoparticles combined with magnetron sputtering of polytetrafluoroethylene. Vacuum, 2019, 166, 50-56.	3.5	15
16	Plasma polymerized C:H:N:O thin films for controlled release of antibiotic substances. Plasma Processes and Polymers, 2018, 15, 1700160.	3.0	14
17	Superwetable antibacterial textiles for versatile oil/water separation. Plasma Processes and Polymers, 2019, 16, 1900003.	3.0	13
18	Gas-aggregated Ag nanoparticles for detection of small molecules using LDI MS. Analytical and Bioanalytical Chemistry, 2020, 412, 1037-1047.	3.7	12

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19	Superhydrophobic fluorine-free hierarchical coatings produced by vacuum based method. Materials Letters, 2016, 167, 30-33.	2.6	11
20	Enhanced oxidation of TiO ₂ films prepared by high power impulse magnetron sputtering running in metallic mode. Journal of Applied Physics, 2017, 121, .	2.5	11
21	Gas aggregated Ag nanoparticles as the inorganic matrix for laser desorption/ionization mass spectrometry. Applied Surface Science, 2021, 541, 148469.	6.1	10
22	A crystal plasticity model of a formation of a deformation band structure. Philosophical Magazine, 2015, 95, 3621-3639.	1.6	9
23	Modified high frequency probe approach for diagnostics of highly reactive plasma. Plasma Sources Science and Technology, 2019, 28, 115009.	3.1	9
24	Silver nanoparticles for solvent-free detection of small molecules and mass-to-charge calibration of laser desorption/ionization mass spectrometry. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2019, 37, 012906.	1.2	9
25	Tailored wettability of plasma polymers made of C ⁺ F, C ⁺ H, and N ⁺ H. Plasma Processes and Polymers, 2019, 16, 1900076.	3.0	8
26	Effect of Ag Nanoparticle Size on Ion Formation in Nanoparticle Assisted LDI MS. Applied Nano, 2020, 1, 3-13.	2.0	8
27	Theoretical and experimental analysis of defined 2D-graded two-metal nanoparticle-build surfaces. Applied Surface Science, 2020, 511, 145530.	6.1	7
28	Nitrogen enriched C:H:N:O thin films for improved antibiotics doping. Applied Surface Science, 2019, 494, 301-308.	6.1	5
29	Characterization of radical-enhanced atomic layer deposition process based on microwave surface wave generated plasma. Journal of Applied Physics, 2021, 130, .	2.5	5
30	Growth of hard nanostructured ZrN surface induced by copper nanoparticles. Applied Surface Science, 2021, 562, 150230.	6.1	5
31	Surface anchored Ag nanoparticles prepared by gas aggregation source: Antibacterial effect and the role of surface free energy. Surfaces and Interfaces, 2022, 30, 101818.	3.0	4
32	Ag nanoparticles immobilized on C:H:N:O plasma polymer film by elevated temperature for LSPR sensing. Plasma Processes and Polymers, 0, , e2100144.	3.0	3
33	Reactive sputtering deposition of plasma polymerized nylon films with embedded NH _x groups. Surface and Coatings Technology, 2019, 363, 120-127.	4.8	2
34	Physicochemical and Mechanical Performance of Freestanding Boron-Doped Diamond Nanosheets Coated with C:H:N:O Plasma Polymer. Materials, 2020, 13, 1861.	2.9	2
35	Influence of solidification of binary eutectic lamellar systems on surface tension driven convection in zero gravity conditions. Crystal Research and Technology, 1984, 19, 1507-1513.	1.3	1
36	Low cycle fatigue cracking of Al 20wt% Zn multicrystals. European Physical Journal D, 1987, 37, 619-624.	0.4	1

#	ARTICLE	IF	CITATIONS
37	Gas aggregated Ag NPs as a matrix for small molecules: a study on natural amino acids. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	1
38	Crystal Plasticity Treated as a Quasi-Static Material Flow through Adjustable Crystal Lattice. Acta Physica Polonica A, 2012, 122, 482-484.	0.5	1
39	A Model of Microstructure Evolution in Metals Exposed to Large Strains. Acta Physica Polonica A, 2018, 134, 753-756.	0.5	0