Andrei Choukourov

List of Publications by Year
in descending order

134 papers	2,938 citations	147801 31 h-index	254184 43 g-index
137 all docs	137 docs citations	137 times ranked	2702 citing authors

#	Article	IF	Citations
1	Thermally-driven morphogenesis of niobium nanoparticles as witnessed by in-situ x-ray scattering. Materials Chemistry and Physics, 2022, 277, 125466.	4.0	11
2	Plasma technology in antimicrobial surface engineering. Journal of Applied Physics, 2022, 131, .	2.5	15
3	Novel gas aggregation cluster source based on post magnetron. Plasma Processes and Polymers, 2021, 18, 2100068.	3.0	4
4	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
5	Thin films of cross-linked polylactic acid as tailored platforms for controlled drug release. Surface and Coatings Technology, 2021, 421, 127402.	4.8	5
6	The sputter-based synthesis of tantalum oxynitride nanoparticles with architecture and bandgap controlled by design. Applied Surface Science, 2021, 559, 149974.	6.1	11
7	In-flight coating of Ag nanoparticles with Cu. Journal Physics D: Applied Physics, 2021, 54, 015302.	2.8	4
8	Immobilization of Chitosan Onto Polypropylene Foil via Air/Solution Atmospheric Pressure Plasma Afterglow Treatment. Plasma Chemistry and Plasma Processing, 2020, 40, 207-220.	2.4	12
9	Nucleation and Growth of Magnetronâ€Sputtered Ag Nanoparticles as Witnessed by Timeâ€Resolved Small Angle Xâ€Ray Scattering. Particle and Particle Systems Characterization, 2020, 37, 1900436.	2.3	30
10	Plasma Polymerization of Acrylic Acid for the Tunable Synthesis of Glassy and Carboxylated Nanoparticles. Journal of Physical Chemistry B, 2020, 124, 668-678.	2.6	12
11	Nanophaseâ€separated poly(acrylic acid)/poly(ethylene oxide) plasma polymers for the spatially localized attachment of biomolecules. Plasma Processes and Polymers, 2020, 17, 1900220.	3.0	8
12	Plasmaâ€based synthesis of iron carbide nanoparticles. Plasma Processes and Polymers, 2020, 17, 2000105.	3.0	6
13	Dual-Mode Solution Plasma Processing for the Production of Chitosan/Ag Composites with the Antibacterial Effect. Materials, 2020, 13, 4821.	2.9	13
14	Self-organization of vapor-deposited polyolefins at the solid/vacuum interface. Progress in Organic Coatings, 2020, 143, 105630.	3.9	5
15	Convex vs concave surface nano-curvature of Ta2O5 thin films for tailoring the osteoblast adhesion. Surface and Coatings Technology, 2020, 393, 125805.	4.8	4
16	Synthesis and microstructure investigation of heterogeneous metalâ€plasma polymer Ag/HMDSO nanoparticles. Surface and Interface Analysis, 2020, 52, 1023-1028.	1.8	3
17	Effect of magnetic field on the formation of Cu nanoparticles during magnetron sputtering in the gas aggregation cluster source. Plasma Processes and Polymers, 2019, 16, 1900133.	3.0	7
18	The evolution of Ag nanoparticles inside a gas aggregation cluster source. Plasma Processes and Polymers, 2019, 16, 1900079.	3.0	20

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19	Magnetron Sputtering of Polymeric Targets: From Thin Films to Heterogeneous Metal/Plasma Polymer Nanoparticles. Materials, 2019, 12, 2366.	2.9	29
20	Infrared Absorption Spectroscopy of Albumin Binding with Amine-Containing Plasma Polymer Coatings on Nanoporous Diamond Surfaces. Langmuir, 2019, 35, 13844-13852.	3.5	9
21	In-flight modification of Ni nanoparticles by tubular magnetron sputtering. Journal Physics D: Applied Physics, 2019, 52, 205302.	2.8	14
22	Plasma-assisted growth of polyethylene fractal nano-islands on polyethylene oxide films: Impact of film confinement and glassy dynamics on fractal morphologies. Applied Surface Science, 2019, 489, 55-65.	6.1	11
23	Silver/plasma polymer strawberry-like nanoparticles produced by gas-phase synthesis. Materials Letters, 2019, 253, 238-241.	2.6	19
24	Plasma Jet and Dielectric Barrier Discharge Treatment of Wheat Seeds. Plasma Chemistry and Plasma Processing, 2019, 39, 913-928.	2.4	25
25	Superwettable antibacterial textiles for versatile oil/water separation. Plasma Processes and Polymers, 2019, 16, 1900003.	3.0	13
26	Cu nanoparticles constrain segmental dynamics of cross-linked polyethers: a trade-off between non-fouling and antibacterial properties. Soft Matter, 2019, 15, 2884-2896.	2.7	15
27	Wetting on a-C:H coatings decorated with sub-micron structures. Surface and Coatings Technology, 2019, 367, 165-172.	4.8	7
28	SOLUTION PLASMA PROCESSING OF NATURAL POLYMER-BASED MATERIALS. ChemChemTech, 2019, 62, 4-30.	0.3	5
29	Nanostructuring of PMMA, GaAs, SiC and Si samples by focused XUV laser beam. , 2019, , .		2
30	Nanoscale morphogenesis of nylon-sputtered plasma polymer particles. Journal Physics D: Applied Physics, 2018, 51, 215304.	2.8	4
31	In situ electrochemical AFM monitoring of the potential-dependent deterioration of platinum catalyst during potentiodynamic cycling. Ultramicroscopy, 2018, 187, 64-70.	1.9	25
32	Carboxyl-Functionalized Nanoparticles Produced by Pulsed Plasma Polymerization of Acrylic Acid. Journal of Physical Chemistry B, 2018, 122, 4187-4194.	2.6	16
33	Core@shell Cu/hydrocarbon plasma polymer nanoparticles prepared by gas aggregation cluster source followed by inâ€flight plasma polymer coating. Plasma Processes and Polymers, 2018, 15, 1700109.	3.0	14
34	Magnetron-sputtered copper nanoparticles: lost in gas aggregation and found by <i>in situ</i> X-ray scattering. Nanoscale, 2018, 10, 18275-18281.	5.6	46
35	A novel effective approach of nanocrystalline cellulose production: oxidationâ€“hydrolysis strategy. Cellulose, 2018, 25, 5035-5048.	4.9	23
36	Calorimetric investigations in a gas aggregation source. Journal of Applied Physics, 2018, 124, .	2.5	21

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37	RMS roughness-independent tuning of surface wettability by tailoring silver nanoparticles with a fluorocarbon plasma polymer. Nanoscale, 2017, 9, 2616-2625.	5.6	24
38	Ablation-erosion analyses of various fusion material surfaces and developments of surface erosion monitors for notification of fusion chamber maintenance times, as an example: Visible light transparent SiC and up-conversion phosphors applied to plasma facing surface structures, useful for versatile purposes to protect and diagnose fusion chambers and so on. , 2017, , .		0
39	Fabrication of Ni@Ti coreâ€“shell nanoparticles by modified gas aggregation source. Journal Physics D: Applied Physics, 2017, 50, 475307.	2.8	28
40	Monitoring of conditions inside gas aggregation cluster source during production of Ti/TiO_xnanoparticles. Plasma Sources Science and Technology, 2017, 26, 105003.	3.1	15
41	Single-step generation of metal-plasma polymer multicore@shell nanoparticles from the gas phase. Scientific Reports, 2017, 7, 8514.	3.3	27
42	Deposition of Ag/a-C:H nanocomposite films with Ag surface enrichment. Plasma Processes and Polymers, 2017, 14, 1600256.	3.0	17
43	Targets for high repetition rate laser facilities: needs, challenges and perspectives. High Power Laser Science and Engineering, 2017, 5, .	4.6	106
44	Chemical derivatization of Nâ€functionalized plasma polymers: Do we miss radicals as important players and should we care for amines after all?. Plasma Processes and Polymers, 2017, 14, 1700198.	3.0	0
45	Plasma polymers: From thin films to nanocolumnar coatings. Thin Solid Films, 2017, 630, 86-91.	1.8	8
46	Advances and challenges in the field of plasma polymer nanoparticles. Beilstein Journal of Nanotechnology, 2017, 8, 2002-2014.	2.8	35
47	Preparation of biomimetic nano-structured films with multi-scale roughness. Journal Physics D: Applied Physics, 2016, 49, 254001.	2.8	21
48	Deposition of Poly(Ethylene Oxide)â€Like Plasma Polymers on Inner Surfaces of Cavities by Means of Atmosphericâ€Pressure SDBDâ€Based Jet. Plasma Processes and Polymers, 2016, 13, 823-833.	3.0	7
49	Surfaces With Roughness Gradient and Invariant Surface Chemistry Produced by Means of Gas Aggregation Source and Magnetron Sputtering. Plasma Processes and Polymers, 2016, 13, 663-671.	3.0	27
50	In Situ Nanocalorimetric Investigations of Plasma Assisted Deposited Poly(ethylene oxide)-like Films by Specific Heat Spectroscopy. Journal of Physical Chemistry B, 2016, 120, 3954-3962.	2.6	7
51	Antibacterial nanocomposite coatings produced by means of gas aggregation source of silver nanoparticles. Surface and Coatings Technology, 2016, 294, 225-230.	4.8	52
52	In situ coupling of chitosan onto polypropylene foils by an Atmospheric Pressure Air Glow Discharge with a liquid cathode. Carbohydrate Polymers, 2016, 154, 30-39.	10.2	14
53	Dielectric properties of plasma polymerized poly(ethylene oxide) thin films. Thin Solid Films, 2016, 616, 279-286.	1.8	17
54	Deposition of Cu/a-C:H Nanocomposite Films. Plasma Processes and Polymers, 2016, 13, 879-887.	3.0	20

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55	Kinetics and Mechanism of Cr(VI) Reduction in a Water Cathode Induced by Atmospheric Pressure DC Discharge in Air. Plasma Chemistry and Plasma Processing, 2016, 36, 1253-1269.	2.4	22
56	Microphase-Separated PE/PEO Thin Films Prepared by Plasma-Assisted Vapor Phase Deposition. ACS Applied Materials & Interfaces, 2016, 8, 8201-8212.	8.0	13
57	Glancing Angle Deposition of Silver Promoted by Preâ€Deposited Nanoparticles. Plasma Processes and Polymers, 2015, 12, 486-492.	3.0	6
58	Amination of NCD Films for Possible Application in Biosensing. Plasma Processes and Polymers, 2015, 12, 336-346.	3.0	20
59	Back Cover: Plasma Process. Polym. 5âˆ•2015. Plasma Processes and Polymers, 2015, 12, 502-502.	3.0	0
60	Plasma Polymerization on Mesoporous Surfaces: <i>n</i>-Hexane on Titanium Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 28906-28916.	3.1	7
61	Soft x-ray source based on the high-current capillary-discharge system. Proceedings of SPIE, 2015, , .	0.8	0
62	Direct covalent coupling of proteins to nanostructured plasma polymers: a route to tunable cell adhesion. Applied Surface Science, 2015, 351, 537-545.	6.1	13
63	Preparation of metal oxide nanoparticles by gas aggregation cluster source. Vacuum, 2015, 120, 162-169.	3.5	46
64	Treatment of poly(ethylene terephthalate) foils by atmospheric pressure air dielectric barrier discharge and its influence on cell growth. Applied Surface Science, 2015, 357, 689-695.	6.1	29
65	Effect of various concentrations of Ti in hydrocarbon plasma polymer films on the adhesion, proliferation and differentiation of human osteoblast-like MG-63 cells. Applied Surface Science, 2015, 357, 459-472.	6.1	3
66	Nylon-sputtered plasma polymer particles produced by a semi-hollow cathode gas aggregation source. Vacuum, 2015, 111, 124-130.	3.5	13
67	Laser-driven high-energy proton beam with homogeneous spatial profile from a nanosphere target. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	43
68	Hydrophobic and super-hydrophobic coatings based on nanoparticles overcoated by fluorocarbon plasma polymer. Vacuum, 2014, 100, 57-60.	3.5	48
69	Deposition of Al nanoparticles and their nanocomposites using a gas aggregation cluster source. Journal of Materials Science, 2014, 49, 3352-3360.	3.7	28
70	Study of the effect of atmospheric pressure air dielectric barrier discharge on nylon 6,6 foils. Polymer Degradation and Stability, 2014, 110, 378-388.	5.8	21
71	Poly(tetrafluoroethylene) sputtering in a gas aggregation source for fabrication of nano-structured deposits. Surface and Coatings Technology, 2014, 254, 319-326.	4.8	18
72	Dynamic scaling and kinetic roughening of poly(ethylene) islands grown by vapor phase deposition. Thin Solid Films, 2014, 565, 249-260.	1.8	10

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73	Constrained Swelling of Polymer Networks: Characterization of Vapor-Deposited Cross-Linked Polymer Thin Films. Macromolecules, 2014, 47, 4417-4427.	4.8	21
74	Nitrogenâ€Doped TiO₂ Nanoparticles and Their Composites with Plasma Polymer as Deposited by Atmospheric Pressure DBD. Plasma Processes and Polymers, 2014, 11, 864-877.	3.0	21
75	Generation and application of the soft X-ray laser beam based on capillary discharge. Journal of Physics: Conference Series, 2014, 511, 012035.	0.4	4
76	Gas barrier properties of hydrogenated amorphous carbon films coated on polyethylene terephthalate by plasma polymerization in argon/n-hexane gas mixture. Thin Solid Films, 2013, 540, 65-68.	1.8	10
77	Nanostructured plasma polymers. Thin Solid Films, 2013, 548, 1-17.	1.8	54
78	Characterization of nanoparticle flow produced by gas aggregation source. Vacuum, 2013, 96, 32-38.	3.5	48
79	A new method of determination of ablation threshold contour in the spot of focused XUV laser beam of nanosecond duration. , 2013, , .		5
80	Variability in Plasma Polymerization Processes â€" An International Roundâ€<scp>R</scp>obin Study. Plasma Processes and Polymers, 2013, 10, 767-778.	3.0	40
81	Application of EUV optics to surface modification of materials. , 2013, , .		3
82	Non-thermal surface modification of solids induced by EUV laser pulses. , 2012, , .		0
83	Nano-structuring of solid surface by extreme ultraviolet Ar8+ laser. Laser and Particle Beams, 2012, 30, 57-63.	1.0	19
84	Nylon-sputtered nanoparticles: fabrication and basic properties. Journal Physics D: Applied Physics, 2012, 45, 495301.	2.8	32
85	Effect of sterilization procedures on properties of plasma polymers relevant to biomedical applications. Thin Solid Films, 2012, 520, 7115-7124.	1.8	16
86	Nanocomposite and nanostructured films with plasma polymer matrix. Surface and Coatings Technology, 2012, 211, 127-137.	4.8	24
87	Surface DBD for Deposition of PEOâ€Like Plasma Polymers. Plasma Processes and Polymers, 2012, 9, 83-89.	3.0	13
88	Control of Wettability of Plasma Polymers by Application of Ti Nanoâ€Clusters. Plasma Processes and Polymers, 2012, 9, 180-187.	3.0	33
89	Does Crossâ€Link Density of PEOâ€Like Plasma Polymers Influence their Resistance to Adsorption of Fibrinogen?. Plasma Processes and Polymers, 2012, 9, 48-58.	3.0	43
90	Deposition of Fluorocarbon Nanoclusters by Gas Aggregation Cluster Source. Plasma Processes and Polymers, 2012, 9, 390-397.	3.0	19

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91	PEOâ€like Plasma Polymers Prepared by Atmospheric Pressure Surface Dielectric Barrier Discharge. Plasma Processes and Polymers, 2012, 9, 782-791.	3.0	21
92	Deposition of Pt nanoclusters by means of gas aggregation cluster source. Materials Letters, 2012, 79, 229-231.	2.6	40
93	Structure and Composition of Titanium Nanocluster Films Prepared by a Gas Aggregation Cluster Source. Journal of Physical Chemistry C, 2011, 115, 20937-20944.	3.1	43
94	Deposition of amino-rich coatings by RF magnetron sputtering of Nylon: In-situ characterization of the deposition process. Surface and Coatings Technology, 2011, 205, S558-S561.	4.8	6
95	Nanostructured thin films prepared from cluster beams. Surface and Coatings Technology, 2011, 205, S42-S47.	4.8	33
96	Aging of nanocluster Ti/TiOx films prepared by means of gas aggregation cluster source. Surface and Coatings Technology, 2011, 205, S48-S52.	4.8	13
97	Deposition of amino-rich coatings by RF magnetron sputtering of Nylon: Investigation of their properties related to biomedical applications. Surface and Coatings Technology, 2011, 205, S529-S533.	4.8	7
98	Morphology of Titanium Nanocluster Films Prepared by Gas Aggregation Cluster Source. Plasma Processes and Polymers, 2011, 8, 640-650.	3.0	41
99	Nanocomposite gold/poly(ethylene oxide)-like plasma polymers prepared by plasma-assisted vacuum evaporation and magnetron sputtering. Surface and Coatings Technology, 2011, 205, 2830-2837.	4.8	5
100	Deposition of nanostructured fluorocarbon plasma polymer films by RF magnetron sputtering of polytetrafluoroethylene. Thin Solid Films, 2011, 519, 6426-6431.	1.8	38
101	Structured Ti/Hydrocarbon Plasma Polymer Nanocomposites Produced By Magnetron Sputtering with Glancing Angle Deposition. Plasma Processes and Polymers, 2010, 7, 25-32.	3.0	30
102	Poly(ethylene oxide)â€like Plasma Polymers Produced by Plasmaâ€Assisted Vacuum Evaporation. Plasma Processes and Polymers, 2010, 7, 445-458.	3.0	56
103	Superâ€Hydrophobic Coatings Prepared by RF Magnetron Sputtering of PTFE. Plasma Processes and Polymers, 2010, 7, 544-551.	3.0	86
104	Deposition of amino-rich thin films by RF magnetron sputtering of nylon. Journal Physics D: Applied Physics, 2009, 42, 142001.	2.8	22
105	Nanocomposite Ti/hydrocarbon plasma polymer films from reactive magnetron sputtering as growth support for osteoblastâ€like and endothelial cells. Journal of Biomedical Materials Research - Part A, 2009, 88A, 952-966.	4.0	15
106	Behavior of Polymeric Matrices Containing Silver Inclusions, 2 â€“ Oxidative Aging of Nanocomposite Ag/C:H and Ag/C:H:O Films. Plasma Processes and Polymers, 2009, 6, 34-44.	3.0	16
107	PEO-Like Coatings Prepared by Plasma-Based Techniques. Plasma Processes and Polymers, 2009, 6, S21-S24.	3.0	7
108	NMR Study of Polyethyleneâ€Like Plasma Polymer Films. Plasma Processes and Polymers, 2009, 6, S362.	3.0	5

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109	In Situ Diagnostics of RF Magnetron Sputtering of Nylon. Plasma Processes and Polymers, 2009, 6, S803.	3.0	22
110	Vacuum Thermal Degradation of Poly(ethylene oxide). Journal of Physical Chemistry B, 2009, 113, 2984-2989.	2.6	53
111	A Comparative Study of Poly(propylene) Surface Oxidation in DC Lowâ€Pressure Oxygen and Water Vapor Discharges and in Flowing Afterglow of Water Vapor Discharge. Plasma Processes and Polymers, 2008, 5, 778-787.	3.0	8
112	Behavior of Polymeric Matrices Containing Silver Inclusions, 1 â€“ Review of Adsorption and Oxidation of Hydrocarbons on Silver Surfaces/Interfaces as Witnessed by FTâ€IR Spectroscopy. Plasma Processes and Polymers, 2008, 5, 807-824.	3.0	17
113	Scanning probe microscopy for the analysis of composite Ti/hydrocarbon plasma polymer thin films. Surface Science, 2008, 602, 1011-1019.	1.9	3
114	A plasma polymerization technique to overcome cerebrospinal fluid shunt infections. Biomedical Materials (Bristol), 2007, 2, 39-47.	3.3	11
115	SPM analysis of fibrinogen adsorption on solid surfaces. Surface Science, 2007, 601, 3948-3951.	1.9	12
116	Composite plasma polymer films prepared by RF magnetron sputtering of SiO2 and polyimide. Vacuum, 2007, 81, 920-927.	3.5	33
117	Composite TiO_{<i>x</i>}/Hydrocarbon Plasma Polymer Films Prepared by Magnetron Sputtering of TiO₂ and Poly(propylene). Plasma Processes and Polymers, 2007, 4, 654-663.	3.0	21
118	RF Magnetron Sputtering of Poly(propylene) in a Mixture of Argon and Nitrogen. Plasma Processes and Polymers, 2007, 4, S806-S811.	3.0	7
119	Nanocrystalline diamond surface functionalization in radio frequency plasma. Diamond and Related Materials, 2006, 15, 745-748.	3.9	31
120	Thin polymer films from polyimide vacuum thermal degradation with and without a glow discharge. Vacuum, 2006, 80, 923-929.	3.5	39
121	Composite SiOx/hydrocarbon plasma polymer films prepared by RF magnetron sputtering of SiO2 and polyethylene or polypropylene. Vacuum, 2006, 81, 32-37.	3.5	35
122	Composite SiOx/fluorocarbon plasma polymer films prepared by r.f. magnetron sputtering of SiO2 and PTFE. Vacuum, 2006, 81, 38-44.	3.5	34
123	Plasma polymer films from sputtered polyimide. Vacuum, 2006, 81, 517-526.	3.5	26
124	A comparison of polyatomic ion deposited, RF magnetron sputtered and plasma polymer organosilicon films. Thin Solid Films, 2006, 502, 40-43.	1.8	4
125	RF magnetron sputtering and evaporation of polyisobutylene and low density polyethylene. Surface and Coatings Technology, 2005, 200, 472-475.	4.8	13
126	Mechanistic Studies of Plasma Polymerization of Allylamine. Journal of Physical Chemistry B, 2005, 109, 23086-23095.	2.6	107

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127	Properties of amine-containing coatings prepared by plasma polymerization. Journal of Applied Polymer Science, 2004, 92, 979-990.	2.6	78
128	Growth of primary and secondary amine films from polyatomic ion deposition. Vacuum, 2004, 75, 195-205.	3.5	46
129	Composite Ag/C:H films prepared by DC planar magnetron deposition. Thin Solid Films, 2003, 442, 86-92.	1.8	23
130	Plasma polymers prepared by RF sputtering of polyethylene. Vacuum, 2003, 70, 505-509.	3.5	42
131	RF sputtering of hydrocarbon polymers and their derivatives. Surface and Coatings Technology, 2003, 174-175, 27-32.	4.8	36
132	The influence of pulse parameters on film composition during pulsed plasma polymerization of diaminocyclohexane. Surface and Coatings Technology, 2003, 174-175, 863-866.	4.8	60
133	Rf sputtering of composite SiOx/plasma polymer films and their basic properties. Surface and Coatings Technology, 2002, 151-152, 214-217.	4.8	35
134	Nanocomposite and Nanostructured Carbon-based Films as Growth Substrates for Bone Cells. , 0, , .		4