

# Eb Modin

## List of Publications by Year in descending order

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81  
papers

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citations

257101

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301761

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docs citations

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times ranked

2279  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combination of Functional Nanoengineering and Nanosecond Laser Texturing for Design of Superhydrophobic Aluminum Alloy with Exceptional Mechanical and Chemical Properties. ACS Nano, 2017, 11, 10113-10123.	7.3	188
2	Modus Operandi of Protective and Anti-icing Mechanisms Underlying the Design of Longstanding Outdoor Icephobic Coatings. ACS Nano, 2019, 13, 4335-4346.	7.3	146
3	Highly Stable Single-Atom Catalyst with Ionic Pd Active Sites Supported on N-Doped Carbon Nanotubes for Formic Acid Decomposition. ChemSusChem, 2018, 11, 3724-3727.	3.6	99
4	Large-Scale Plasmonic Pyramidal Supercrystals via Templated Self-Assembly of Monodisperse Gold Nanospheres. Journal of Physical Chemistry C, 2017, 121, 10899-10906.	1.5	78
5	Selective anodes for seawater splitting via functionalization of manganese oxides by a plasma-assisted process. Applied Catalysis B: Environmental, 2021, 284, 119684.	10.8	73
6	Mechanism of Au(III) reduction by chitosan: Comprehensive study with <sup>13</sup> C and <sup>1</sup> H NMR analysis of chitosan degradation products. Carbohydrate Polymers, 2015, 117, 70-77.	5.1	61
7	H <sub>2</sub> S optical waveguide gas sensors based on chitosan/Au and chitosan/Ag nanocomposites. Sensors and Actuators B: Chemical, 2016, 225, 348-353.	4.0	52
8	Chitosan Gels and Cryogels Cross-Linked with Diglycidyl Ethers of Ethylene Glycol and Polyethylene Glycol in Acidic Media. Biomacromolecules, 2019, 20, 1635-1643.	2.6	51
9	Fabrication and optical properties of chitosan/Ag nanoparticles thin film composites. Chemical Engineering Journal, 2014, 244, 457-463.	6.6	45
10	Effective Antibacterial Nanotextured Surfaces Based on Extreme Wettability and Bacteriophage Seeding. ACS Applied Nano Materials, 2018, 1, 1348-1359.	2.4	44
11	A complex approach to assessing porous structure of structured ceramics obtained by SPS technique. Materials Characterization, 2018, 145, 294-302.	1.9	42
12	Cobalt-containing oxide layers on titanium, their composition, morphology, and catalytic activity in CO oxidation. Applied Surface Science, 2010, 257, 1239-1246.	3.1	40
13	Fibrin glue as a local drug-delivery system for bacteriophage PA5. Scientific Reports, 2019, 9, 2091.	1.6	39
14	Deep Subwavelength Laser-Induced Periodic Surface Structures on Silicon as a Novel Multifunctional Biosensing Platform. ACS Applied Materials & Interfaces, 2021, 13, 54551-54560.	4.0	39
15	One-pot green synthesis of luminescent gold nanoparticles using imidazole derivative of chitosan. Carbohydrate Polymers, 2016, 151, 649-655.	5.1	37
16	Variation of magnetic anisotropy and temperature-dependent FORC probing of compositionally tuned Co-Ni alloy nanowires. Journal of Alloys and Compounds, 2018, 732, 683-693.	2.8	36
17	Hierarchical organization and molecular diffusion in gold nanorod/silica supercrystal nanocomposites. Nanoscale, 2016, 8, 7914-7922.	2.8	35
18	Black Au-Decorated TiO <sub>2</sub> Produced via Laser Ablation in Liquid. ACS Applied Materials & Interfaces, 2021, 13, 6522-6531.	4.0	32

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19	Spark Plasma Sintering as a high-tech approach in a new generation of synthesis of nanostructured functional ceramics. <i>Nanotechnologies in Russia</i> , 2017, 12, 49-61.	0.7	30
20	Sol-gel and SPS combined synthesis of highly porous wollastonite ceramic materials with immobilized Au-NPs. <i>Ceramics International</i> , 2017, 43, 8509-8516.	2.3	27
21	Metal-chelate sorbents based on carboxyalkylchitosans: Ciprofloxacin uptake by Cu(II) and Al(III)-chelated cryogels of N-(2-carboxyethyl)chitosan. <i>International Journal of Biological Macromolecules</i> , 2019, 131, 806-811.	3.6	27
22	Characterization and Electrochemical Properties of Nanostructured Zr-Doped Anatase TiO <sub>2</sub> Tubes Synthesized by Sol-Gel Template Route. <i>Journal of Materials Science and Technology</i> , 2017, 33, 527-534.	5.6	25
23	Effect of Hf-doping on electrochemical performance of anatase TiO <sub>2</sub> as an anode material for lithium storage. <i>Royal Society Open Science</i> , 2018, 5, 171811.	1.1	25
24	Direct laser printing of tunable IR resonant nanoantenna arrays. <i>Applied Surface Science</i> , 2019, 469, 514-520.	3.1	25
25	Sol-gel (template) synthesis of osteoplastic CaSiO <sub>3</sub> /HAp powder biocomposite: <i>in vitro</i> and <i>in vivo</i> biocompatibility assessment. <i>Powder Technology</i> , 2020, 367, 762-773.	2.1	25
26	Nanoscale coupling of MoS <sub>2</sub> and graphene via rapid thermal decomposition of ammonium tetrathiomolybdate and graphite oxide for boosting capacity of Li-ion batteries. <i>Carbon</i> , 2021, 173, 194-204.	5.4	25
27	Hydrogen Production from Formic Acid over Au Catalysts Supported on Carbon: Comparison with Au Catalysts Supported on SiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> . <i>Catalysts</i> , 2019, 9, 376.	1.6	24
28	Atomic structure and crystallization processes of amorphous (Co,Ni)-P metallic alloy. <i>Journal of Alloys and Compounds</i> , 2015, 641, 139-143.	2.8	22
29	Single Au Atoms on the Surface of N-Free and N-Doped Carbon: Interaction with Formic Acid and Methanol Molecules. <i>Topics in Catalysis</i> , 2019, 62, 508-517.	1.3	19
30	Role of Au(III) coordination by polymer in <i>green</i> synthesis of gold nanoparticles using chitosan derivatives. <i>International Journal of Biological Macromolecules</i> , 2016, 91, 457-464.	3.6	17
31	Coupling HAADF-STEM Tomography and Image Reconstruction for the Precise Characterization of Particle Morphology of Composite Polymer Latexes. <i>Macromolecules</i> , 2019, 52, 5298-5306.	2.2	17
32	Ultrathin Hybrid SiAlCOH Dielectric Films through Ring-Opening Molecular Layer Deposition of Cyclic Tetrasiloxane. <i>Chemistry of Materials</i> , 2021, 33, 1022-1030.	3.2	17
33	Enhanced photocatalytic removal of NO <sub>x</sub> gases by $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> /CuO and $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> /WO <sub>3</sub> nanoheterostructures. <i>Chemical Engineering Journal</i> , 2022, 430, 132757.	6.6	16
34	Wollastonite ceramics with bimodal porous structures prepared by sol-gel and SPS techniques. <i>RSC Advances</i> , 2016, 6, 34066-34073.	1.7	15
35	Over 6% Efficient Cu(In,Ga)Se <sub>2</sub> Solar Cell Screen-Printed from Oxides on Fluorine-Doped Tin Oxide. <i>ACS Applied Energy Materials</i> , 2020, 3, 3120-3126.	2.5	13
36	Ligand-assisted synthesis and cytotoxicity of ZnSe quantum dots stabilized by N-(2-carboxyethyl)chitosans. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 182, 110342.	2.5	12

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37	Quasi-1D Mn <sub>2</sub> O <sub>3</sub> Nanostructures Functionalized with First-Row Transition-Metal Oxides as Oxygen Evolution Catalysts. ACS Applied Nano Materials, 2020, 3, 9889-9898.	2.4	12
38	Plasma-Assisted Synthesis of Co <sub>3</sub> O <sub>4</sub> -Based Electrocatalysts on Ni Foam Substrates for the Oxygen Evolution Reaction. Advanced Materials Interfaces, 2021, 8, 2100763.	1.9	12
39	Staircase polymetasilicon nanocomplexes – Polymetalphenyl siloxanes: Structure and properties. Journal of Molecular Structure, 2018, 1156, 424-432.	1.8	11
40	Beneficial role of the nitrogen-doped carbon nanotubes in the synthesis of the active palladium supported catalyst. Diamond and Related Materials, 2019, 98, 107484.	1.8	11
41	Double-Lattice Packing of Pentagonal Gold Bipyramids in Supercrystals with Triclinic Symmetry. Advanced Materials, 2022, 34, e2200883.	11.1	11
42	Structure relaxation and crystallization of the CoW-CoNiW-NiW electrodeposited alloys. Nanoscale Research Letters, 2014, 9, 66.	3.1	9
43	Nondestructive Femtosecond Laser Lithography of Ni Nanocavities by Controlled Thermo-Mechanical Spallation at the Nanoscale. Nano Letters, 2020, 20, 7912-7918.	4.5	9
44	Structure and Formation Kinetics of Millimeter-Size Single Domain Supercrystals. Advanced Functional Materials, 2021, 31, 2101869.	7.8	9
45	Sol-gel (template) synthesis of macroporous Mo-based catalysts for hydrothermal oxidation of radionuclide-organic complexes. Solid State Sciences, 2017, 69, 31-37.	1.5	8
46	Molecular layer deposition of hybrid siloxane thin films by ring opening of cyclic trisiloxane (V <sub>3</sub> D <sub>3</sub> ) and azasilane. Chemical Communications, 2020, 56, 8778-8781.	2.2	8
47	Nanoporous thin films obtained by oblique angle deposition of aluminum on porous surfaces. Surface and Coatings Technology, 2018, 347, 350-357.	2.2	7
48	Radical-triggered cross-linking for molecular layer deposition of SiAlCOH hybrid thin films. Chemical Communications, 2021, 57, 2160-2163.	2.2	7
49	Tailored Co <sub>3</sub> O <sub>4</sub> -Based Nanosystems: Toward Photocatalysts for Air Purification. ACS Applied Materials & Interfaces, 2021, 13, 44520-44530.	4.0	7
50	Composite sorbents for recovery of cesium radionuclides. Russian Journal of Applied Chemistry, 2010, 83, 2115-2120.	0.1	6
51	Granulated catalytic materials based on chitosan and its derivatives. Polymer Science - Series B, 2016, 58, 730-735.	0.3	6
52	Uranium sorption on reduced porous iron oxides. Doklady Physical Chemistry, 2016, 468, 67-71.	0.2	6
53	Submicron pillars of ferromagnetic shape memory alloys: Thermomechanical behavior. Applied Materials Today, 2018, 12, 9-14.	2.3	6
54	Transmission electron microscopy study of the microstructure of amorphous Co-P alloy films on various spatial scales. Russian Metallurgy (Metally), 2011, 2011, 465-470.	0.1	5

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55	Electrodeposited Co <sub>93.2</sub> P <sub>6.8</sub> nanowire arrays with core-shell microstructure and perpendicular magnetic anisotropy. <i>Journal of Applied Physics</i> , 2015, 117, 17E715.	1.1	5
56	Au-Manganese Oxide Nanostructures by a Plasma-Assisted Process as Electrocatalysts for Oxygen Evolution: A Chemico-Physical Investigation. <i>Advanced Sustainable Systems</i> , 2020, , 2000177.	2.7	5
57	Electron tomography and STEM investigations of the structure of multilayer amorphous and nanocrystalline alloys of CoP-CoNiP, CoW-CoNiW systems under external action. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2011, 75, 1209-1212.	0.1	4
58	Laser Printing of Plasmonic Nanosponges. <i>Nanomaterials</i> , 2020, 10, 2427.	1.9	4
59	HAADF-STEM investigation of the structures of electrolytically deposited CoP and CoNiP alloys. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2014, 78, 886-889.	0.1	3
60	Biocompatible Silicon-Based Hybrid Nanolayers for Functionalization of Complex Surface Morphologies. <i>ACS Applied Nano Materials</i> , 2022, 5, 2762-2768.	2.4	3
61	Investigating the structure of electrolytically deposited alloys of the CoP-CoNiP system under thermal action. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2011, 75, 1205-1208.	0.1	2
62	Electron tomography and morphological analysis of the structure of multicomponent amorphous and nanocrystalline alloys. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012, 76, 999-1001.	0.1	2
63	An influence of mechanical deformations on crystal structure and spin configuration in magnetic nanowires. <i>Journal of Applied Physics</i> , 2013, 113, 17A334.	1.1	2
64	Atomic Structure Design of Rapidly Quenched Amorphous Cobalt-Based Alloys. <i>Solid State Phenomena</i> , 2017, 265, 569-574.	0.3	2
65	Crystallization processes in an amorphous Co-Fe-Cr-Si-B alloy under isothermal annealing. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	2
66	Structure and Composition Investigation of Amorphous Alloy Fe <sub>78</sub> Ni <sub>1</sub> Si <sub>9</sub> B <sub>12</sub> during Thermal Processing. <i>Advanced Materials Research</i> , 0, 590, 13-16.	0.3	1
67	In-situ investigation of the structure of electrolytically deposited cobalt-phosphorous alloy upon heating. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012, 76, 1012-1014.	0.1	1
68	Electron tomography algorithms in scanning transmission electron microscopy. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2013, 77, 995-998.	0.1	1
69	Magnetic Behavior of Single Ni Nanowires and its Arrays Embedded in Highly Ordered Nanoporous Alumina Templates. <i>Solid State Phenomena</i> , 0, 215, 298-305.	0.3	1
70	Analyzing the fractal properties of a structure via microscopic images. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2015, 79, 1345-1349.	0.1	1
71	Electron tomography as a tool for studying the structures of amorphous alloys. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2016, 80, 1455-1458.	0.1	1
72	Sol-gel synthesis of magnetic sorbents based on porous iron oxides for the removal of U(VI) from aqueous solution. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	1

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73	Rabbit's cranial defect regeneration using a fine-grained ZrO <sub>2</sub> - (15Åwt%)HAp ceramic implant fabricated by SPS-RS technique. <i>Ceramics International</i> , 2022, 48, 13817-13825.	2.3	1
74	Synthesis of fractal electron micrographs. <i>Russian Physics Journal</i> , 2009, 52, 1205-1211.	0.2	0
75	Characterizing the structure of Co/Cu and NiFe/Cu multilayered magnetic nanowires. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012, 76, 1025-1026.	0.1	0
76	Structural relaxation in the CoP-CoNiP system upon low-temperature annealing. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2014, 78, 890-893.	0.1	0
77	Composition-dependent reorientation of magnetic anisotropy in electrodeposited CoNi nanowire arrays. , 2015, , .		0
78	Investigation of the Structure of the Electrodeposited Alloy CoNiW by Methods HAADF STEM and AFM. , 2015, , .		0
79	Nanostructured anatase TiO <sub>2</sub> microtubes doped by Zr(IV), Hf(IV) and Mo(VI). <i>AIP Conference Proceedings</i> , 2017, , .	0.3	0
80	Plasma-Assisted Synthesis of Co <sub>3</sub> O <sub>4</sub> -Based Electrocatalysts on Ni Foam Substrates for the Oxygen Evolution Reaction ( <i>Adv. Mater. Interfaces</i> 18/2021). <i>Advanced Materials Interfaces</i> , 2021, 8, 2170099.	1.9	0
81	REMOVAL OF ALIZARIN RED BY SUPERMACROPOROUS CROSS-LINKED CHITOSAN MONOLITH SORBENTS. <i>Progress on Chemistry and Application of Chitin and Its Derivatives</i> , 2019, XXIV, 164-171.	0.1	0