Irina Kurzina

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9563503/publications.pdf

Version: 2024-02-01

112	672	687363 13	752698 20
papers	citations	h-index	g-index

112	112	112	610
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Low-temperature plasma treatment of polylactic acid and PLA/HA composite material. Journal of Materials Science, 2019, 54, 11726-11738.	3.7	42
2	Influence of ion implantation on nanoscale intermetallic-phase formation in Tiâ€“Al, Niâ€“Al and Niâ€“Ti systems. Surface and Coatings Technology, 2007, 201, 8463-8468.	4.8	41
3	Formation of intermetallic layers at high intensity ion implantation. Surface and Coatings Technology, 2002, 158-159, 343-348.	4.8	35
4	Direct synthesis of dimethyl ether from synthesis gas: Experimental study and mathematical modeling. Chemical Engineering Journal, 2017, 329, 135-141.	12.7	26
5	Selective oxidation of alcohols over Ag-containing Si3N4 catalysts. Catalysis Today, 2013, 203, 127-132.	4.4	25
6	Influence of the Composition, Structure, and Physical and Chemical Properties of Aluminium-Oxide-Based Sorbents on Water Adsorption Ability. Materials, 2018, 11, 132.	2.9	25
7	Total oxidation of methane over Pd catalysts supported on silicon nitrideInfluence of support nature. Chemical Engineering Journal, 2005, 107, 45-53.	12.7	24
8	Pd catalysts supported on silicon nitride for the combustion of methane: Influence of the crystalline and amorphous phases of the support and of the preparation method on the catalytic performances. Catalysis Today, 2006, 117, 518-524.	4.4	22
9	Selective oxidation of alcohols over Si3N4-supported silver catalysts. Kinetics and Catalysis, 2012, 53, 477-481.	1.0	19
10	Synthesis of Magnesium- and Silicon-modified Hydroxyapatites by Microwave-Assisted Method. Scientific Reports, 2019, 9, 14836.	3.3	18
11	Surface property modification of biocompatible material based on polylactic acid by ion implantation. Surface and Coatings Technology, 2020, 388, 125529.	4.8	18
12	Effects of ion- and electron-beam treatment on surface physicochemical properties of polylactic acid. Applied Surface Science, 2017, 422, 856-862.	6.1	17
13	Synthesis and Properties of Zinc-Modified Hydroxyapatite. Journal of Functional Biomaterials, 2020, 11, 10.	4.4	15
14	Modification of Polymer Materials by Electron Beam Treatment. Key Engineering Materials, 0, 670, 118-125.	0.4	14
15	Preparation of Biocompatible Composites based on Poly-<i>L</i>-Lactide/Hydroxyapatite and Investigation of their Anti-Inflammatory Activity. Key Engineering Materials, 0, 683, 475-480.	0.4	14
16	Influence of the Method of Preparation of the Pd-Bi/Al2O3 Catalyst on Catalytic Properties in the Reaction of Liquid-Phase Oxidation of Glucose into Gluconic Acid. Catalysts, 2020, 10, 271.	3.5	13
17	New magnesium cobalt iron double hydroxides with hydrotalcite structure: Synthesis and characterization. Russian Journal of Inorganic Chemistry, 2014, 59, 1403-1410.	1.3	11
18	Modification of polyvinyl alcohol surface properties by ion implantation. Nuclear Instruments & Methods in Physics Research B, 2017, 399, 28-33.	1.4	11

#	Article	IF	Citations
19	Effect of Li, Na and K Modification of Alumina on its Physical and Chemical Properties and Water Adsorption Ability. Materials, 2019, 12, 4212.	2.9	11
20	Effect of silver ion implantation on surface physicochemical properties of composite materials based on polylactic acid and hydroxyapatite. Vacuum, 2020, 175, 109251.	3.5	11
21	Modifying the structural phase state of fine-grained titanium under conditions of ion irradiation. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 1238-1245.	0.6	10
22	Effects of ion- and electron-beam treatment on surface physicochemical properties of polytetrafluoroethylene. Surface and Coatings Technology, 2018, 334, 134-141.	4.8	10
23	Cobalt(II) and copper(II) complexes with carboxylic acids, imidazole, and 2-methylimidazole. Russian Journal of Inorganic Chemistry, 2015, 60, 729-735.	1.3	9
24	Intense formation of intermetallic phases during implantation of aluminum ions in titanium. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 64-68.	0.6	8
25	Influence of Modifying Mixtures on Si Crystal Formation in Al-7%Si Alloy. Metals, 2018, 8, 98.	2.3	8
26	High Efficient YVPO4 Luminescent Materials Activated by Europium. Crystals, 2019, 9, 658.	2.2	8
27	Modification of PCL Scaffolds by Reactive Magnetron Sputtering: A Possibility for Modulating Macrophage Responses. ACS Biomaterials Science and Engineering, 2020, 6, 3967-3974.	5.2	8
28	Efficient Adsorbent-Desiccant Based on Aluminium Oxide. Applied Sciences (Switzerland), 2021, 11, 2457.	2.5	7
29	Preparation and Investigation of Pd and Bimetallic Pd-Sn Nanocrystals on Î³-Al2O3. Crystals, 2021, 11, 444.	2.2	7
30	Influence of the aluminum ion implantation dose on the phase composition of submicrocrystalline titanium. Vacuum, 2021, 189, 110230.	3.5	7
31	Features of the formation of silver nanoparticles on the silicon nitride surface. Russian Journal of Applied Chemistry, 2010, 83, 1725-1730.	0.5	6
32	Preparation of composite materials based on hydroxyapatite and lactide and glycolide copolymer. AIP Conference Proceedings, 2017, , .	0.4	6
33	The Influence of Modification on Crystal Lattice Stability of Austenite in Stainless Steel. Russian Physics Journal, 2018, 61, 715-721.	0.4	6
34	The Structural and Phase State of the TiAl System Alloyed with Rare-Earth Metals of the Controlled Composition Synthesized by the â€œHydride Technologyâ€• Metals, 2020, 10, 859.	2.3	6
35	Cryo-Structured Materials Based on Polyvinyl Alcohol and Hydroxyapatite for Osteogenesis. Journal of Functional Biomaterials, 2021, 12, 18.	4.4	6
36	High-current vacuum-arc ion and plasma source â€œRaduga-5â€•application to intermetallic phase formation. Review of Scientific Instruments, 2006, 77, 03C115.	1.3	5

#	Article	IF	Citations
37	Role of polycrystalline titanium grain size in the formation of the concentration profiles of implanted aluminum ions. Journal of Surface Investigation, 2010, 4, 353-358.	0.5	5
38	Dynamic capacity of desiccants based on modified alumina at elevated pressures. Catalysis in Industry, 2017, 9, 91-98.	0.7	5
39	Study of water vapour adsorption kinetics on aluminium oxide materials. AIP Conference Proceedings, 2017, , .	0.4	5
40	The effect of aluminum ion implantation on the grain size and structure of UFG titanium. Surface and Coatings Technology, 2020, 393, 125750.	4.8	5
41	The Influence of Scandium on the Composition and Structure of the Ti-Al Alloy Obtained by â€œHydride Technologyâ€• Nanomaterials, 2021, 11, 918.	4.1	5
42	Bioactive materials for bone regeneration based on zinc-modified hydroxyapatite. Mendeleev Communications, 2021, 31, 382-384.	1.6	5
43	Results of industry testing of multiple use rock-cutting picks. Gornyi Zhurnal, 2015, , 67-71.	0.1	5
44	Structural-phase and morphological characteristics of silver catalysts on modified ceramic supports for selective oxidation of alcohols. Russian Journal of Physical Chemistry A, 2013, 87, 376-381.	0.6	4
45	Structure and phase composition of manganese steels modified by alloying elements. AIP Conference Proceedings, 2017, , .	0.4	4
46	Studies of Water-Vapour Adsorption Dynamics of High-Efficiency Desiccant Based on Aluminium Oxide and NaX Zeolite. Applied Sciences (Switzerland), 2020, 10, 5320.	2.5	4
47	Influence of the Pdâ€‰:â€‰Bi ratio on Pdâ€“Bi/Al₂O₃ catalysts: structure, surface and activity in glucose oxidation. Physical Chemistry Chemical Physics, 2021, 23, 14889-14897.	2.8	4
48	Regularities of PLA mechanical property modification under ion implantation conditions. Vacuum, 2021, 187, 110105.	3.5	4
49	Reactive Magnetron Plasma Modification of Electrospun PLLA Scaffolds with Incorporated Chloramphenicol for Controlled Drug Release. Polymers, 2022, 14, 373.	4.5	4
50	Interaction of methane and oxygen with the surface of Liâ€“Mnâ€“O catalyst. Catalysis Today, 1998, 42, 263-265.	4.4	3
51	Palladium catalysts deposited on silicon nitride in the deep oxidation of methane. Russian Journal of Physical Chemistry A, 2006, 80, 1661-1665.	0.6	3
52	Supported silver-containing systems based on silicon nitride. Russian Journal of Applied Chemistry, 2009, 82, 356-365.	0.5	3
53	Effect of Model Biological Media of Stability of Complex of Silver Nanoparticles Applied onto Silicon Nitride Substrate. Bulletin of Experimental Biology and Medicine, 2010, 150, 160-164.	0.8	3
54	Decrease of ceramic surface resistance by implantation using a vacuum arc metal ion source. , 2012, , .		3

#	Article	IF	Citations
55	Bimetallic Ni-Mo Nitride as the Carbon Dioxide Hydrogenation Catalyst. Advanced Materials Research, 2013, 872, 3-9.	0.3	3
56	Influence of the modifying ability of various compositions on the microstructure and properties of the AK7ch alloy. Russian Journal of Non-Ferrous Metals, 2015, 56, 593-598.	0.6	3
57	Fine structure and phase composition of Feâ€“14Mnâ€“1.2C steel: influence of a modified mixture based on refractory metals. International Journal of Minerals, Metallurgy and Materials, 2017, 24, 523-529.	4.9	3
58	Oxidative Destruction of Organic Pollutants on the Polypropylene Fiber Modified by Nanodispersed Iron. Environments - MDPI, 2018, 5, 82.	3.3	3
59	Photocatalytic Activity of the Iron-Containing Natural Composites in the Reaction of Oxidative Destruction of Oxalic Acid and Phenol. Environments - MDPI, 2018, 5, 16.	3.3	3
60	A High-Performance Aluminum Oxide Desiccant. Catalysis in Industry, 2020, 12, 169-175.	0.7	3
61	Biocompatible Composite Materials Based on Porous Hydroxyapatite Ceramics and Copolymer of Lactide and Glycolide. Materials, 2021, 14, 2168.	2.9	3
62	Effect of the polymer component on biocompatibility and physicochemical properties of porous zirconium ceramics. Mendeleev Communications, 2021, 31, 881-883.	1.6	3
63	Phase Composition of the Lead-Tin Oxide System. Russian Journal of Applied Chemistry, 2002, 75, 5-8.	0.5	2
64	STEP REARRANGEMENT UPON LOW PRESSURE OXIDATION OF THE Pt3Ti(510) SURFACE: A STUDY BY SCANNING TUNNELING MICROSCOPY. Surface Review and Letters, 2003, 10, 861-866.	1.1	2
65	Deep Oxidation of Methane on a Pt/Si3N4Catalyst. Theoretical and Experimental Chemistry, 2004, 40, 241-245.	0.8	2
66	Formation of concentration profiles of implanted ions in metallic materials under polyenergetic implantation. Journal of Surface Investigation, 2008, 2, 301-304.	0.5	2
67	Ion-implanted nanodimensional intermetallic phases. Inorganic Materials: Applied Research, 2010, 1, 254-269.	0.5	2
68	Structure and properties of nanostructured, ultrafine grained and coarse grained titanium implanted with aluminium ions. Russian Metallurgy (Metally), 2012, 2012, 339-343.	0.5	2
69	Structural State, Phase Composition and Mechanical Properties of Wear-Resistant Cast Iron Modified by Ultrafine Powders. Advanced Materials Research, 2013, 872, 84-88.	0.3	2
70	The Catalysts Synthesis Methanol for Direct Synthesis of Dimethyl Ether from Synthesis Gas. Advanced Materials Research, 2015, 1085, 29-33.	0.3	2
71	Hardening by ion implantation of VT1-0 alloy having different grain size. AIP Conference Proceedings, 2016, , .	0.4	2
72	Grain size effect on yield strength of titanium alloy implanted with aluminum ions. AIP Conference Proceedings, 2016, , .	0.4	2

#	Article	IF	Citations
73	Effect of ultrafine powders on the structural formation processes and mechanical properties of Alâ€“7%Si alloy. AIP Conference Proceedings, 2016, , .	0.4	2
74	Synthesis and investigation of physico-chemical, antibacterial, biomymetic properties of silver and zinc containing hydroxyapatite. AIP Conference Proceedings, 2017, , .	0.4	2
75	Chemical state and morphology of Zn and Mg ion-implanted polyvinyl alcohol. Surface and Coatings Technology, 2020, 389, 125558.	4.8	2
76	Title is missing!. Theoretical and Experimental Chemistry, 2003, 39, 64-69.	0.8	1
77	Formation of Nanosized Intermetallic Phases upon High-Intensity Implantation of Aluminum Ions into Titanium. Glass Physics and Chemistry, 2005, 31, 452-458.	0.7	1
78	Relationships in formation of silicon nitride-supported metal nanoparticles. Russian Journal of Applied Chemistry, 2010, 83, 755-767.	0.5	1
79	Analysis of concentration field formation in titanium under aluminum ion implantation via a gas-and-metal film deposited on a target surface. Journal of Surface Investigation, 2012, 6, 251-254.	0.5	1
80	Complex Catalysts for Direct Synthesis of Dimethyl Ether from Synthesis Gas. Part I: Study of the Catalytic Properties. Advanced Materials Research, 2013, 872, 15-22.	0.3	1
81	Physical Base of the Metallic Gradient Surface Layers of Titanium Alloys Formed under Ion Implantation. Advanced Materials Research, 2013, 872, 184-190.	0.3	1
82	Grain Size Effect on the Type VT1-0 Alloy Modified by Aluminum Ion Implantation. Key Engineering Materials, 0, 670, 144-151.	0.4	1
83	Influence of the Grain Size on the Dispersion Strengthening of VT1-0 Alloy Implanted with Aluminum Ions. Advanced Materials Research, 0, 1085, 294-298.	0.3	1
84	Influence of Refractory Metal Oxide Ultrafine Particles on the Structure and Mechanical Properties of High-Manganese Steel. Advanced Materials Research, 0, 1085, 260-264.	0.3	1
85	Influence of the C and Mn concentration on the grains size of the Fe-Mn-C alloy. AIP Conference Proceedings, 2016, , .	0.4	1
86	Grain shape and size and structural and phase conditions modified by aluminum ion implantation in UFG titanium. AIP Conference Proceedings, 2016, , .	0.4	1
87	Suppression of Prebreakdown Emission Activity Inside the On-board Spacecraft Equipment by Local Polymerization in Discharge. , 2018, , .		1
88	Influence of Ultrafine Particles on Structure, Mechanical Properties, and Strengthening of Ductile Cast Iron. Metals, 2018, 8, 559.	2.3	1
89	Structural-Phase State of UFG-Titanium Implanted with Aluminum Ions. Solid State Phenomena, 2020, 303, 161-168.	0.3	1
90	Synthesis of titanium hydrides and obtaining of alloys based on them. Vestnik Đ¢omskogo Gosudarstvennogo Universiteta Khimiya, 2015, , 69-75.	0.1	1

#	Article	IF	Citations
91	Non-Oxidative Conversion of Methane over a Mo/HZSM-5 Catalyst. Petroleum Chemistry, 2021, 61, 1234.	1.4	1
92	Wood composite materials based on glycoluril-modified urea-formaldehyde resins. Vestnik Tomskogo Gosudarstvennogo Universiteta, 2015, , 238-241.	0.1	1
93	Effect of external parameters and mass-transfer on the glucose oxidation process catalyzed by Pd-Bi/Al2O3. New Journal of Chemistry, 0, , .	2.8	1
94	Obtaining Biocompatible Porous Composite Material Based on Zinc-Modified Hydroxyapatite and Lactide-Glycolide Copolymer. Crystals, 2021, 11, 1519.	2.2	1
95	The high intensity implantation of aluminium ions into titanium. , 0, , .		0
96	Silicon nitride supported platinum catalysts for the total oxidation of methane. , 0, , .		0
97	Structural state and phase composition of nickel surface layers modified by high-intensity implantation of titanium ions. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 187-190.	0.6	0
98	Modification of the physicomechanical properties of metallic materials by formation of nanoscale intermetallic phases under ion implantation. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 1125-1128.	0.6	0
99	Structural regularities of formation of intermetallic nanodimensional phases in ion implantation. Doklady Physics, 2010, 55, 214-216.	0.7	0
100	Catalytic activity of the dehydration catalysts for dimethyl ether synthesis. , 2012, , .		0
101	Structural regularities of formation of intermetallic nanodimensional phases in ion implantation. , 2012, , .		0
102	Influence of a metal-oxide modifying mixture in ultrafine powder form on the physicochemical characteristics of IChKh28N2 cast iron. Steel in Translation, 2013, 43, 495-498.	0.3	0
103	Complex Catalysts for Direct Synthesis of Dimethyl Ether From Synthesis Gas. Part II. The Interaction of the Process Reactants and Products with the Catalyst Surfaces. Advanced Materials Research, 2013, 872, 23-29.	0.3	0
104	Effect of Bicyclic Polyfunctional Modifier (BPM) on the Characteristics of Wood Composite Materials Based on Urea Formaldehyde Oligomers. Advanced Materials Research, 2014, 880, 32-35.	0.3	0
105	Metal and gas ion source for modification of organic polymers surfaces. , 2015, , .		0
106	Development of biocomposed material based on zirconium oxide for regeneration of bone tissue. AIP Conference Proceedings, 2017, , .	0.4	0
107	Corrosion resistance of neodymium and dysprosium hydrides. AIP Conference Proceedings, 2017, , .	0.4	0
108	Influence of implantation on the grain size and structural-phase state of UFG-titanium. AIP Conference Proceedings, 2019, , .	0.4	0

#	Article	IF	Citations
109	Bioactive materials for bone regeneration based on zinc-modified hydroxyapatite. Mendeleev Communications, 2021, 31, 382-384.	1.6	0
110	Phase Composition of Ultra-Fine Grain Titanium After Aluminum Ion Implantation. Russian Physics Journal, 2021, 64, 302.	0.4	0
111	Research of the biocompatibility of composite materials based on hydroxyapatitis and copolymer lactide-glycolide on laboratory mice Laboratory. Laboratornye Zhivotnye Dlya Nauchnych Issledovanii (Laboratory Animals for Science), 2020, , 43-48.	0.2	0
112	Research of the Influence of Zinc Ions on Synthesis and Properties of Hydroxyapatite. Proceedings (mdpi), 2020, 67, 25.	0.2	0