Sergey M Zharkov

List of Publications by Citations

105 papers	644 citations	14 h-index	19 g-index
118 ext. papers	770 ext. citations	2.4 avg, IF	4.03 L-index

#	Paper	IF	Citations
105	Oxidation of Ag nanoparticles in aqueous media: Effect of particle size and capping. *Applied Surface Science*, **2014**, 297, 75-83	6.7	51
104	Formation of bimetallic Au-Pd and Au-Pt nanoparticles under hydrothermal conditions and microwave irradiation. *Langmuir*, **2011**, 27, 11697-703	4	33
103	Electron microscopy studies of FCC carbon particles. *Carbon*, **1998**, 36, 595-597	10.4	32
102	Magnetic-field- and bias-sensitive conductivity of a hybrid Fe/SiO2/p-Si structure in planar geometry. *Journal of Applied Physics*, **2011**, 109, 123924	2.5	31
101	The influence of oxygen concentration on the formation of CuO and Cu2O crystalline phases during the synthesis in the plasma of low pressure arc discharge. *Vacuum*, **2016**, 128, 123-127	3.7	23
100	Study of the structural and magnetic characteristics of epitaxial Fe3Si/Si(111) films. *JETP Letters*, **2014**, 99, 527-530	1.2	23
99	Solid state synthesis and characterization of Fe□rO2 ferromagnetic nanocomposite thin films. *Journal of Alloys and Compounds*, **2015**, 636, 223-228	5.7	19
98	Preparation and characterization of colloidal copper xanthate nanoparticles. *New Journal of Chemistry*, **2016**, 40, 3059-3065	3.6	18
97	On the nature of citrate-derived surface species on Ag nanoparticles: Insights from X-ray photoelectron spectroscopy. *Applied Surface Science*, **2018**, 427, 687-694	6.7	15
96	Ultrafine particles derived from mineral processing: A case study of the Pb-Zn sulfide ore with emphasis on lead-bearing colloids. *Chemosphere*, **2016**, 147, 60-6	8.4	15
95	Study of solid-state reactions and order-disorder transitions in Pd/□Fe(001) thin films. *JETP Letters* , **2014**, 99, 405-409	1.2	15
94	Study of morphology, magnetic properties, and visible magnetic circular dichroism of Ni nanoparticles synthesized in SiO2 by ion implantation. *Physical Review B*, **2013**, 87,	3.3	15
93	Dependence of magnetic properties on ferromagnetic layer thickness in trilayer Co/Ge/Co films with granular semiconducting spacer. *Journal of Magnetism and Magnetic Materials*, **2006**, 306, 218-222	2.8	15
92	Systematic experimental investigation of filtration losses of drilling fluids containing silicon oxide nanoparticles. *Journal of Natural Gas Science and Engineering*, **2019**, 71, 102984	4.6	14
91	Thermite synthesis and characterization of Co□rO2ferromagnetic nanocomposite thin films. *Journal of Alloys and Compounds*, **2016**, 665, 197-203	5.7	12
90	Formation of NiAl Shape Memory Alloy Thin Films by a Solid-State Reaction. *Solid State Phenomena*, **2008**, 138, 377-384	0.4	12
89	L10 ordered phase formation at solid state reactions in Cu/Au and Fe/Pd thin films. *Journal of Solid State Chemistry*, **2019**, 269, 36-42	3.3	12

88	Magnetic and magneto-optical properties of Fe3O4 nanoparticles modified with Ag. *Journal of Magnetism and Magnetic Materials*, **2020**, 493, 165692	2.8	11
87	Solid-State Reactions in Fe/Si Multilayer Nanofilms. *Solid State Phenomena*, **2014**, 215, 144-149	0.4	10
86	Electron-beam-initiated crystallization of iron-carbon films. *Physics of the Solid State*, **2004**, 46, 969-974	0.8	10
85	Stress and growth of Ag monolayers on a Fe(100) whisker. *Physical Review B*, **2003**, 68,	3.3	10
84	Formation of the atomically ordered L10 structure with the [001] orientation during the solid-state reaction in Fe/Pd bilayer thin films. *Physics of the Solid State*, **2017**, 59, 1233-1237	0.8	9
83	FMR and TEM Studies of Co and Ni Nanoparticles Implanted in the SiO2 Matrix. *Applied Magnetic Resonance*, **2011**, 40, 363-375	0.8	9
82	Colloidal and Immobilized Nanoparticles of Lead Xanthates. *ACS Omega*, **2019**, 4, 11472-11480	3.9	8
81	Quick ellipsometric technique for determining the thicknesses and optical constant profiles of Fe/SiO2/Si(100) nanostructures during growth. *Technical Physics*, **2012**, 57, 1225-1229	0.5	8
80	In Situ Electron Diffraction and Resistivity Characterization of Solid State Reaction Process in Cu/Al Bilayer Thin Films. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 1428-1436	2.3	8
79	Heterostructures based on PdAu nanoparticles and cobalt phthalocyanine for hydrogen chemiresistive sensors. *International Journal of Hydrogen Energy*, **2021**, 46, 19682-19692	6.7	8
78	Structural Phase Transformations in Al/Pt Bilayer Thin Films during the Solid-State Reaction. *Physics of the Solid State*, **2018**, 60, 1413-1418	0.8	8
77	Structural Phase Transformations during a Solid-State Reaction in a Bilayer Al/Fe Thin-Film Nanosystem. *Physics of the Solid State*, **2020**, 62, 200-205	0.8	7
76	Monitoring MCM-41 synthesis by X-ray mesostructure analysis. *Microporous and Mesoporous Materials*, **2014**, 195, 21-30	5.3	7
75	Structural and magnetic resonance investigations of CuCr2S4 nanoclusters and nanocrystals. *Journal of Applied Physics*, **2014**, 116, 054302	2.5	7
74	Change in the particle size of highly dispersed palladium black in hydrochloric acid solutions at elevated temperatures. *Russian Journal of Physical Chemistry A*, **2007**, 81, 1303-1306	0.7	7
73	Bio-functionalization of phytogenic Ag and ZnO nanobactericides onto cellulose films for bactericidal activity against multiple drug resistant pathogens. *Journal of Microbiological Methods*, **2019**, 159, 42-50	2.8	7
72	The Influence of CuO Dopant Nanoparticles, Prepared via the Arc Plasma Synthesis Method, on the Critical Current of YBa2Cu3O7 Composites. *Inorganic Materials: Applied Research*, **2019**, 10, 999-1002	0.6	6
71	Template synthesis of CMK-3 nanostructured carbon material and study of its properties. *Glass Physics and Chemistry*, **2014**, 40, 79-87	0.7	6

70	Colloidal and Deposited Products of the Interaction of Tetrachloroauric Acid with Hydrogen Selenide and Hydrogen Sulfide in Aqueous Solutions. *Minerals (Basel, Switzerland)*, **2018**, 8, 492	2.4	6
69	Exchange bias in graphitic C/Co composites. *Carbon*, **2017**, 114, 642-648	10.4	5
68	Characterization of the iron oxide phases formed during the synthesis of core-shell FeO@C nanoparticles modified with Ag. *Nanotechnology*, **2020**, 31, 395703	3.4	5
67	Bio-hybridization of nanobactericides with cellulose films for effective treatment against members of ESKAPE multi-drug-resistant pathogens. *Applied Nanoscience (Switzerland)*, **2018**, 8, 1101-1110	3.3	5
66	Effect of visible and UV irradiation on the aggregation stability of CdTe quantum dots. *Journal of Nanoparticle Research*, **2016**, 18, 1	2.3	5
65	Synthesis and magnetic states of cobalt in three-layer Co/Ge/Co films. *Physics of the Solid State*, **2014**, 56, 302-309	0.8	5
64	The effect of microstructural features on the ferromagnetism of nickel oxide nanoparticles synthesized in a low-pressure arc plasma. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 124, 114352	3	5
63	Formation, evolution and characteristics of copper sulfide nanoparticles in the reactions of aqueous cupric and sulfide ions. *Materials Chemistry and Physics*, **2020**, 255, 123600	4.4	5
62	Iron silicide-based ferromagnetic metal/semiconductor nanostructures. *Physics of the Solid State*, **2016**, 58, 2277-2281	0.8	4
61	Fe-induced enhancement of antiferromagnetic spin correlations in Mn2□FexBO4. *Journal of Magnetism and Magnetic Materials*, **2018**, 452, 90-99	2.8	4
60	The effect of silver ions electrolytically introduced into colloidal nanodiamond solution on its viscosity and thermal conductivity. *Colloid Journal*, **2017**, 79, 258-263	1.1	3
59	Giant hydrogen effect on the structure and physical properties of ZnO and Co-doped ZnO films fabricated by the RF magnetron sputtering in Ar + H2 atmosphere. *Journal of Magnetism and Magnetic Materials*, **2019**, 489, 165461	2.8	3
58	Formation of Phases and Microstructure of ZnO and TiO2 Based Ceramic. *Glass and Ceramics (English Translation of Steklo I Keramika)*, **2015**, 72, 242-245	0.6	3
57	Effects of processing parameters on the morphology, structure, and magnetic properties of Cu1□FexCr2Se4 nanoparticles synthesized with chemical methods. *Journal of Alloys and Compounds*, **2015**, 650, 887-895	5.7	3
56	Agglomeration behavior of lipid-capped gold nanoparticles. *Journal of Nanoparticle Research*, **2018**, 20, 1	2.3	3
55	Controlling the microporosity of SBA-15 silicate material by background salt solution. *Glass Physics and Chemistry*, **2014**, 40, 69-78	0.7	3
54	Redox potentials of gold-palladium powders in aqueous solutions of H2PdCl4. *Russian Journal of Physical Chemistry A*, **2012**, 86, 484-488	0.7	3
53	Microstructure and magnetooptics of silicon oxide with implanted nickel nanoparticles. *Journal of Experimental and Theoretical Physics*, **2011**, 113, 1040-1049	1	3

52	Nickel-containing carbon nanotubes and nanoparticles prepared in a high-frequency arc plasma. *Physics of the Solid State*, **2009**, 51, 1972-1975	0.8	3
51	Microstructure and properties of Co-Sm-O nanogranular films. *Physics of the Solid State*, **2003**, 45, 2303-2308	0.8	3
50	New titania-based photocatalysts for hydrogen production from aqueous-alcoholic solutions of methylene blue.. *RSC Advances*, **2020**, 10, 34137-34148	3.7	3
49	Hybrid Nanoparticles Based on Cobalt Ferrite and Gold: Preparation and Characterization. *Metals*, **2021**, 11, 705	2.3	3
48	Structure and physical properties of hydrogenated (Co + Al)-doped ZnO films: Comparative study with co-doped ZnO films. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2021**, 264, 114943	3.1	3
47	Amino-Functionalized FeO@SiO Core-Shell Magnetic Nanoparticles for Dye Adsorption. *Nanomaterials*, **2021**, 11,	5.4	3
46	Effect of the Structural Properties on the Electrical Resistivity of the Al/Ag Thin Films during the Solid-State Reaction. *Physics of the Solid State*, **2020**, 62, 708-713	0.8	2
45	Magnetic circular dichroism of CdTe nanoparticles. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2018**, 382, 980-983	2.3	2
44	Magnetic resonance studies of mixed chalcospinel CuCr2SxSe4 (x = 0; 2) and CoxCu1Cr2S4 (x = 0.1; 0.2) nanocrystals with strong interparticle interactions. *Journal of Magnetism and Magnetic Materials*, **2018**, 452, 297-305	2.8	2
43	Analysis of the structure and magnetic properties of an interface in multilayered (Fe/Si) N nanostructures with the surface-sensitive XMCD method. *JETP Letters*, **2014**, 99, 706-711	1.2	2
42	Magnetic resonance in a Cu-Cr-S structure. *Journal of Experimental and Theoretical Physics*, **2013**, 117, 879-884	1	2
41	In situ electron microscopy investigations of solid-state synthesis in Al/Au thin bilayer films. *Bulletin of the Russian Academy of Sciences: Physics*, **2013**, 77, 1004-1007	0.4	2
40	Neutron investigations of the magnetic properties of Fe x Mn1 S under pressure up to 4.2 GPa. *JETP Letters*, **2017**, 106, 498-502	1.2	2
39	Particular Charactristics of the Synthesis of Titanium Nitride Nanopowders in the Plasma of Low Pressure Arc Discharge. *IOP Conference Series: Materials Science and Engineering*, **2017**, 255, 012006	0.4	2
38	Solid-state synthesis and atomic ordering in thin Cu/Au films (atomic ratio, Cu : Au = 3 : 1). *Bulletin of the Russian Academy of Sciences: Physics*, **2012**, 76, 1149-1151	0.4	2
37	Synthesis and magneto-optical properties of nanogranular Co-Ti-O films. *Physics of the Solid State*, **2009**, 51, 1866-1869	0.8	2
36	Crystalline texture and magnetic anisotropy of Co-P films prepared by chemical deposition. *Physics of Metals and Metallography*, **2007**, 103, 466-469	1.2	2
35	Iron-Fullerene Clusters. *Fullerenes Nanotubes and Carbon Nanostructures*, **2006**, 14, 499-502	1.8	2

34	Formation of tetrahedrally close-packed structures in Tb-Fe and Co-Pd nanocrystalline films. *Physics of the Solid State*, **2002**, 44, 1117-1121	0.8	2
33	Structural self-organization and the formation of perpendicular magnetic anisotropy in Co50Pd50 nanocrystalline films. *Physics of the Solid State*, **2001**, 43, 1543-1548	0.8	2
32	In Situ Electron Diffraction Investigation of Solid State Synthesis of Co-In2O3 Ferromagnetic Nanocomposite Thin Films. *Jom*, **2020**, 72, 2139-2145	2.1	2
31	Magnetic circular dichroism in the canted antiferromagnet □Fe2O3: Bulk single crystal and nanocrystals. *Journal of Magnetism and Magnetic Materials*, **2020**, 498, 166208	2.8	2
30	Phytogenic Synthesis of Ag Bionano-Antibiotics Against ESKAPE Drug Resistant Communities in Krasnoyarsk, Siberia. *Journal of Cluster Science*, **2019**, 30, 589-597	3	2
29	Peculiarities of Intermetallic Phase Formation in the Process of a Solid State Reaction in (Al/Cu)n Multilayer Thin Films. *Jom*, **2021**, 73, 580-588	2.1	2
28	Electron spin resonance in Cu1□FexCr2Se4 nanoparticles synthesized with the thermal decomposition method. *Journal of Magnetism and Magnetic Materials*, **2017**, 436, 21-30	2.8	1
27	Magneto-Optics of Cobalt and Nickel Nanoparticles Implanted in SiO2: Comparative Study. *Solid State Phenomena*, **2014**, 215, 214-217	0.4	1
26	Indium□in oxide films obtained by extraction pyrolysis. *Theoretical Foundations of Chemical Engineering*, **2015**, 49, 721-725	0.9	1
25	Morphology and Structure of the Interface Layers in Ni/Ge Thin Films. *Solid State Phenomena*, **2014**, 215, 259-263	0.4	1
24	The thermodynamic characteristics of aggregation of fine-dispersed palladium. *Russian Journal of Physical Chemistry A*, **2011**, 85, 35-40	0.7	1
23	Cluster structure and superlattices in Co and Fe films. *JETP Letters*, **1997**, 65, 915-918	1.2	1
22	Study of nanocrystalline nickel films deposited in a nitrogen atmosphere. *Technical Physics*, **1998**, 43, 1130-1132	0.5	1
21	Structure and the magnetic and magneto-optical properties of Co-Sm-O nanogranular films. *Physics of the Solid State*, **2008**, 50, 2109-2114	0.8	1
20	Effect of Gas Pressure on the Properties of Electric-Arc Titanium Nitride Powders. *Inorganic Materials*, **2003**, 39, 271-275	0.9	1
19	The Dependence of the PdCl2□/Pd0 Electrode Potential on the Dispersity of Metallic Palladium. *Russian Journal of Physical Chemistry A*, **2008**, 82, 647-650	0.7	1
18	Microstructure and phase composition of the two-phase ceramic synthesized from titanium oxide and zinc oxide. *Science of Sintering*, **2018**, 50, 173-181	0.7	1
17	Magnetic and Resonance Properties of the Y0.5Sr0.5Cr0.5Mn0.5O3 Polycrystal. *Physics of the Solid State*, **2020**, 62, 1350-1354	0.8	1

16	Pressure-induced metallization of the Mott insulator FeXMn1XS system. *Journal of Magnetism and Magnetic Materials*, **2018**, 465, 775-779	2.8	1
15	Valleriite, a Natural Two-Dimensional Composite: X-ray Absorption, Photoelectron, and M□ssbauer Spectroscopy, and Magnetic Characterization. *ACS Omega*, **2021**, 6, 7533-7543	3.9	0
14	M□ssbauer and MCD spectroscopy of the Fe3S4 nanoparticles synthesized by the thermal decomposition method with two different surfactants. *Current Applied Physics*, **2021**, 25, 55-61	2.6	0
13	Kinetic study of a solid-state reaction in Ag/Al multilayer thin films by in situ electron diffraction and simultaneous thermal analysis. *Journal of Alloys and Compounds*, **2021**, 871, 159474	5.7	0
12	Induced magnetic anisotropy of Co-P thin films obtained by electroless deposition. *Journal of Magnetism and Magnetic Materials*, **2021**, 537, 168129	2.8	0
11	The influence of magnetic field on the rate of cathode erosion at vacuum arc spraying. *IOP Conference Series: Materials Science and Engineering*, **2017**, 255, 012007	0.4	
10	The investigation of the influence of oxygen concentration in the gas mixture on nanodispersed oxides synthesis. *IOP Conference Series: Materials Science and Engineering*, **2017**, 255, 012008	0.4	
9	Magnetic Resonance in CuCr2S4 Nanoclusters and Nanocrystals. *Solid State Phenomena*, **2015**, 233-234, 542-545	0.4	
8	Synthesis of 6H-SiC single-crystal nanowires in a flow of carbon-silicon high-frequency arc plasma. *Physics of the Solid State*, **2014**, 56, 2107-2111	0.8	
7	Magnetooptics and magnetic ordering in ferrite nanoparticles in glass doped with iron and rare-earth elements. *Bulletin of the Russian Academy of Sciences: Physics*, **2011**, 75, 707-709	0.4	
6	Sequence of phase formation during solid-state synthesis in Al/Ni films (Al: Ni = 60: 40 at %). *Bulletin of the Russian Academy of Sciences: Physics*, **2007**, 71, 611-613	0.4	
5	Explosive crystallization initiated in nanocrystalline iron-carbon films by an electron beam. *Doklady Physics*, **2002**, 47, 281-285	0.8	
4	Experimental Study of Transport Coefficients of Aqueous Suspensions of Nanodiamonds. *Colloid Journal*, **2020**, 82, 705-712	1.1	
3	Magnetooptics of Nanocomposites Based on Iron Chalcogenide Nanoparticles. *Solid State Phenomena*,312, 160-165	0.4	
2	Ferromagnetic resonance line broadening and shift effect in nanocrystalline thin magnetic films: Relation with crystalline and magnetic structure. *Journal of Alloys and Compounds*, **2022**, 900, 163416	5.7	
1	Investigation of Microstructural Features, Phase Composition, and Magnetic Characteristics of YBCO-Based Composites and Additives of CuO Non-Superconducting Component Prepared in Low-Pressure Arc Discharge Plasma. *Inorganic Materials: Applied Research*, **2021**, 12, 142-146	0.6	