

Sergey M Zharkov

List of Publications by Year in descending order

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papers

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citations

516215

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642321

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118
all docs

118
docs citations

118
times ranked

934
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxidation of Ag nanoparticles in aqueous media: Effect of particle size and capping. Applied Surface Science, 2014, 297, 75-83.	3.1	61
2	Formation of Bimetallic Au-Pd and Au-Pt Nanoparticles under Hydrothermal Conditions and Microwave Irradiation. Langmuir, 2011, 27, 11697-11703.	1.6	40
3	Systematic experimental investigation of filtration losses of drilling fluids containing silicon oxide nanoparticles. Journal of Natural Gas Science and Engineering, 2019, 71, 102984.	2.1	34
4	Electron microscopy studies of FCC carbon particles. Carbon, 1998, 36, 595-597.	5.4	33
5	Magnetic-field- and bias-sensitive conductivity of a hybrid Fe/SiO ₂ /p-Si structure in planar geometry. Journal of Applied Physics, 2011, 109, .	1.1	33
6	Study of the structural and magnetic characteristics of epitaxial Fe ₃ Si/Si(111) films. JETP Letters, 2014, 99, 527-530.	0.4	25
7	The influence of oxygen concentration on the formation of CuO and Cu ₂ O crystalline phases during the synthesis in the plasma of low pressure arc discharge. Vacuum, 2016, 128, 123-127.	1.6	25
8	Solid state synthesis and characterization of Fe-ZrO ₂ ferromagnetic nanocomposite thin films. Journal of Alloys and Compounds, 2015, 636, 223-228.	2.8	22
9	Ultrafine particles derived from mineral processing: A case study of the Pb-Zn sulfide ore with emphasis on lead-bearing colloids. Chemosphere, 2016, 147, 60-66.	4.2	21
10	Study of solid-state reactions and order-disorder transitions in Pd _{1±} -Fe(001) thin films. JETP Letters, 2014, 99, 405-409.	0.4	19
11	Preparation and characterization of colloidal copper xanthate nanoparticles. New Journal of Chemistry, 2016, 40, 3059-3065.	1.4	19
12	On the nature of citrate-derived surface species on Ag nanoparticles: Insights from X-ray photoelectron spectroscopy. Applied Surface Science, 2018, 427, 687-694.	3.1	19
13	Amino-Functionalized Fe ₃ O ₄ @SiO ₂ Core-Shell Magnetic Nanoparticles for Dye Adsorption. Nanomaterials, 2021, 11, 2371.	1.9	19
14	Thermite synthesis and characterization of Co-ZrO ₂ ferromagnetic nanocomposite thin films. Journal of Alloys and Compounds, 2016, 665, 197-203.	2.8	18
15	Magnetic and magneto-optical properties of Fe ₃ O ₄ nanoparticles modified with Ag. Journal of Magnetism and Magnetic Materials, 2020, 493, 165692.	1.0	18
16	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.	1.4	17
17	Study of morphology, magnetic properties, and visible magnetic circular dichroism of Ni nanoparticles synthesized in SiO ₂ by ion implantation. Physical Review B, 2013, 87, .	1.1	16
18	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.	1.0	15

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19	Formation of NiAl Shape Memory Alloy Thin Films by a Solid-State Reaction. <i>Solid State Phenomena</i> , 2008, 138, 377-384.	0.3	14
20	<i></i></i></i>Solid-State Reactions in Fe/Si Multilayer Nanofilms. <i>Solid State Phenomena</i> , 0, 215, 144-149.	0.3	14
21	Formation, evolution and characteristics of copper sulfide nanoparticles in the reactions of aqueous cupric and sulfide ions. <i>Materials Chemistry and Physics</i> , 2020, 255, 123600.	2.0	14
22	Bio-functionalization of phytogetic Ag and ZnO nanobactericides onto cellulose films for bactericidal activity against multiple drug resistant pathogens. <i>Journal of Microbiological Methods</i> , 2019, 159, 42-50.	0.7	13
23	In Situ Electron Diffraction and Resistivity Characterization of Solid State Reaction Process in Cu/Al Bilayer Thin Films. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 1428-1436.	1.1	13
24	Stress and growth of Ag monolayers on a Fe(100) whisker. <i>Physical Review B</i> , 2003, 68, .	1.1	12
25	Electron-beam-initiated crystallization of iron-carbon films. <i>Physics of the Solid State</i> , 2004, 46, 969-974.	0.2	12
26	FMR and TEM Studies of Co and Ni Nanoparticles Implanted in the SiO ₂ Matrix. <i>Applied Magnetic Resonance</i> , 2011, 40, 363-375.	0.6	12
27	Formation of the atomically ordered L10 structure with the [001] orientation during the solid-state reaction in Fe/Pd bilayer thin films. <i>Physics of the Solid State</i> , 2017, 59, 1233-1237.	0.2	12
28	Structural Phase Transformations in Al/Pt Bilayer Thin Films during the Solid-State Reaction. <i>Physics of the Solid State</i> , 2018, 60, 1413-1418.	0.2	12
29	Heterostructures based on Pd@Au nanoparticles and cobalt phthalocyanine for hydrogen chemiresistive sensors. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 19682-19692.	3.8	12
30	Bio-hybridization of nanobactericides with cellulose films for effective treatment against members of ESKAPE multi-drug-resistant pathogens. <i>Applied Nanoscience (Switzerland)</i> , 2018, 8, 1101-1110.	1.6	11
31	Structural Phase Transformations during a Solid-State Reaction in a Bilayer Al/Fe Thin-Film Nanosystem. <i>Physics of the Solid State</i> , 2020, 62, 200-205.	0.2	11
32	Carbon Double Coated Fe ₃ O ₄ @C@C Nanoparticles: Morphology Features, Magnetic Properties, Dye Adsorption. <i>Nanomaterials</i> , 2022, 12, 376.	1.9	11
33	Monitoring MCM-41 synthesis by X-ray mesostructure analysis. <i>Microporous and Mesoporous Materials</i> , 2014, 195, 21-30.	2.2	10
34	Colloidal and Deposited Products of the Interaction of Tetrachloroauric Acid with Hydrogen Selenide and Hydrogen Sulfide in Aqueous Solutions. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 492.	0.8	10
35	Magnetic circular dichroism in the canted antiferromagnet $\hat{I}\pm$ -Fe ₂ O ₃ : Bulk single crystal and nanocrystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 498, 166208.	1.0	10
36	New titania-based photocatalysts for hydrogen production from aqueous-alcoholic solutions of methylene blue. <i>RSC Advances</i> , 2020, 10, 34137-34148.	1.7	9

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37	Characterization of the iron oxide phases formed during the synthesis of core-shell Fe _x O _y @C nanoparticles modified with Ag. Nanotechnology, 2020, 31, 395703.	1.3	9
38	Quick ellipsometric technique for determining the thicknesses and optical constant profiles of Fe/SiO ₂ /Si(100) nanostructures during growth. Technical Physics, 2012, 57, 1225-1229.	0.2	8
39	Structural and magnetic resonance investigations of CuCr ₂ S ₄ nanoclusters and nanocrystals. Journal of Applied Physics, 2014, 116, .	1.1	8
40	Colloidal and Immobilized Nanoparticles of Lead Xanthates. ACS Omega, 2019, 4, 11472-11480.	1.6	8
41	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.	1.3	8
42	Valleriite, a Natural Two-Dimensional Composite: X-ray Absorption, Photoelectron, and Mössbauer Spectroscopy, and Magnetic Characterization. ACS Omega, 2021, 6, 7533-7543.	1.6	8
43	Hybrid Nanoparticles Based on Cobalt Ferrite and Gold: Preparation and Characterization. Metals, 2021, 11, 705.	1.0	8
44	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.	0.1	7
45	Template synthesis of CMK-3 nanostructured carbon material and study of its properties. Glass Physics and Chemistry, 2014, 40, 79-87.	0.2	7
46	Synthesis and magnetic states of cobalt in three-layer Co/Ge/Co films. Physics of the Solid State, 2014, 56, 302-309.	0.2	6
47	Effect of visible and UV irradiation on the aggregation stability of CdTe quantum dots. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	6
48	Exchange bias in graphitic C/Co composites. Carbon, 2017, 114, 642-648.	5.4	6
49	Fe-induced enhancement of antiferromagnetic spin correlations in Mn _{2-x} Fe _x BO ₄ . Journal of Magnetism and Magnetic Materials, 2018, 452, 90-99.	1.0	6
50	The Influence of CuO Dopant Nanoparticles, Prepared via the Arc Plasma Synthesis Method, on the Critical Current of YBa ₂ Cu ₃ O _{7-δ} Composites. Inorganic Materials: Applied Research, 2019, 10, 999-1002.	0.1	6
51	In Situ Electron Diffraction Investigation of Solid State Synthesis of Co-In ₂ O ₃ Ferromagnetic Nanocomposite Thin Films. Jom, 2020, 72, 2139-2145.	0.9	6
52	Synthesis and characterization of nanoscale composite particles formed by 2D layers of Cu-Fe sulfide and Mg-based hydroxide. Journal of Materials Chemistry A, 2022, 10, 9621-9634.	5.2	6
53	Microstructure and properties of Co-Sm-O nanogranular films. Physics of the Solid State, 2003, 45, 2303-2308.	0.2	5
54	Iron silicide-based ferromagnetic metal/semiconductor nanostructures. Physics of the Solid State, 2016, 58, 2277-2281.	0.2	5

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55	Giant hydrogen effect on the structure and physical properties of ZnO and Co-doped ZnO films fabricated by the RF magnetron sputtering in $\text{Ar} + \text{H}_2$ atmosphere. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 489, 165461.	1.0	5
56	Structure and physical properties of hydrogenated (Co+Al)-doped ZnO films: Comparative study with co-doped ZnO films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 264, 114943.	1.7	5
57	Peculiarities of Intermetallic Phase Formation in the Process of a Solid State Reaction in (Al/Cu) _n Multilayer Thin Films. <i>Jom</i> , 2021, 73, 580-588.	0.9	5
58	Kinetic study of a solid-state reaction in Ag/Al multilayer thin films by in situ electron diffraction and simultaneous thermal analysis. <i>Journal of Alloys and Compounds</i> , 2021, 871, 159474.	2.8	5
59	Microstructure and magneto-optics of silicon oxide with implanted nickel nanoparticles. <i>Journal of Experimental and Theoretical Physics</i> , 2011, 113, 1040-1049.	0.2	4
60	Redox potentials of gold-palladium powders in aqueous solutions of H_2PdCl_4 . <i>Russian Journal of Physical Chemistry A</i> , 2012, 86, 484-488.	0.1	4
61	Formation of Phases and Microstructure of ZnO and TiO ₂ Based Ceramic. <i>Glass and Ceramics (English)</i> Tj ETQq1 1 0,784314 rgBT / Over	0,2	4
62	Magnetic resonance studies of mixed chalcospinel $\text{CuCr}_2\text{SxSe}_4$ ($x = 0; 2$) and $\text{Co}_x\text{Cu}_{1-x}\text{Cr}_2\text{S}_4$ ($x = 0.1$); <i>Materials</i> , 2018, 452, 297-305.	1.0	4
63	Induced magnetic anisotropy of Co-P thin films obtained by electroless deposition. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 537, 168129.	1.0	4
64	Microstructure and phase composition of the two-phase ceramic synthesized from titanium oxide and zinc oxide. <i>Science of Sintering</i> , 2018, 50, 173-181.	0.5	4
65	Structural self-organization and the formation of perpendicular magnetic anisotropy in Co ₅₀ Pd ₅₀ nanocrystalline films. <i>Physics of the Solid State</i> , 2001, 43, 1543-1548.	0.2	3
66	Nickel-containing carbon nanotubes and nanoparticles prepared in a high-frequency arc plasma. <i>Physics of the Solid State</i> , 2009, 51, 1972-1975.	0.2	3
67	In situ electron microscopy investigations of solid-state synthesis in Al/Au thin bilayer films. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2013, 77, 1004-1007.	0.1	3
68	Controlling the microporosity of SBA-15 silicate material by background salt solution. <i>Glass Physics and Chemistry</i> , 2014, 40, 69-78.	0.2	3
69	Effects of processing parameters on the morphology, structure, and magnetic properties of $\text{Cu}_x\text{Fe}_x\text{Cr}_2\text{Se}_4$ nanoparticles synthesized with chemical methods. <i>Journal of Alloys and Compounds</i> , 2015, 650, 887-895.	2.8	3
70	The effect of silver ions electrolytically introduced into colloidal nanodiamond solution on its viscosity and thermal conductivity. <i>Colloid Journal</i> , 2017, 79, 258-263.	0.5	3
71	Agglomeration behavior of lipid-capped gold nanoparticles. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	0.8	3
72	Effect of the Structural Properties on the Electrical Resistivity of the Al/Ag Thin Films during the Solid-State Reaction. <i>Physics of the Solid State</i> , 2020, 62, 708-713.	0.2	3

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73	Mössbauer and MCD spectroscopy of the Fe ₃ S ₄ nanoparticles synthesized by the thermal decomposition method with two different surfactants. <i>Current Applied Physics</i> , 2021, 25, 55-61.	1.1	3
74	The Dependence of the PdCl ₂ /Pd ₀ Electrode Potential on the Dispersity of Metallic Palladium. <i>Russian Journal of Physical Chemistry A</i> , 2008, 82, 647-650.	0.1	3
75	Heterostructures Based on Cobalt Phthalocyanine Films Decorated with Gold Nanoparticles for the Detection of Low Concentrations of Ammonia and Nitric Oxide. <i>Biosensors</i> , 2022, 12, 476.	2.3	3
76	Formation of tetrahedrally close-packed structures in Tb-Fe and Co-Pd nanocrystalline films. <i>Physics of the Solid State</i> , 2002, 44, 1117-1121.	0.2	2
77	Iron-Fullerene Clusters. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2006, 14, 499-502.	1.0	2
78	Crystalline texture and magnetic anisotropy of Co-P films prepared by chemical deposition. <i>Physics of Metals and Metallography</i> , 2007, 103, 466-469.	0.3	2
79	Synthesis and magneto-optical properties of nanogranular Co-Ti-O films. <i>Physics of the Solid State</i> , 2009, 51, 1866-1869.	0.2	2
80	Solid-state synthesis and atomic ordering in thin Cu/Au films (atomic ratio, Cu : Au = 3 : 1). <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012, 76, 1149-1151.	0.1	2
81	Magnetic resonance in a Cu-Cr-S structure. <i>Journal of Experimental and Theoretical Physics</i> , 2013, 117, 879-884.	0.2	2
82	Analysis of the structure and magnetic properties of an interface in multilayered (Fe/Si) N nanostructures with the surface-sensitive XMCD method. <i>JETP Letters</i> , 2014, 99, 706-711.	0.4	2
83	Electron spin resonance in Cu _{1-x} Fe _x Cr ₂ Se ₄ nanoparticles synthesized with the thermal decomposition method. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 436, 21-30.	1.0	2
84	Neutron investigations of the magnetic properties of Fe _x Mn _{1-x} S under pressure up to 4.2 GPa. <i>JETP Letters</i> , 2017, 106, 498-502.	0.4	2
85	Particular Characteristics of the Synthesis of Titanium Nitride Nanopowders in the Plasma of Low Pressure Arc Discharge. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 255, 012006.	0.3	2
86	Magnetic circular dichroism of CdTe nanoparticles. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2018, 382, 980-983.	0.9	2
87	Pressure-induced metallization of the Mott insulator FeXMn _{1-x} S system. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 465, 775-779.	1.0	2
88	Phylogenetic Synthesis of Ag Bionano-Antibiotics Against ESKAPE Drug Resistant Communities in Krasnoyarsk, Siberia. <i>Journal of Cluster Science</i> , 2019, 30, 589-597.	1.7	2
89	Magnetic and Resonance Properties of the Y _{0.5} Sr _{0.5} Cr _{0.5} Mn _{0.5} O ₃ Polycrystal. <i>Physics of the Solid State</i> , 2020, 62, 1350-1354.	0.2	2
90	Experimental Study of Transport Coefficients of Aqueous Suspensions of Nanodiamonds. <i>Colloid Journal</i> , 2020, 82, 705-712.	0.5	2

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91	Cluster structure and superlattices in Co and Fe films. JETP Letters, 1997, 65, 915-918.	0.4	1
92	Study of nanocrystalline nickel films deposited in a nitrogen atmosphere. Technical Physics, 1998, 43, 1130-1132.	0.2	1
93	Effect of Gas Pressure on the Properties of Electric-Arc Titanium Nitride Powders. Inorganic Materials, 2003, 39, 271-275.	0.2	1
94	Structure and the magnetic and magneto-optical properties of Co-Sm-O nanogranular films. Physics of the Solid State, 2008, 50, 2109-2114.	0.2	1
95	The thermodynamic characteristics of aggregation of fine-dispersed palladium. Russian Journal of Physical Chemistry A, 2011, 85, 35-40.	0.1	1
96	Morphology and Structure of the Interface Layers in Ni/Ge Thin Films. Solid State Phenomena, 2014, 215, 259-263.	0.3	1
97	Magneto-Optics of Cobalt and Nickel Nanoparticles Implanted in SiO ₂ : Comparative Study. Solid State Phenomena, 2014, 215, 214-217.	0.3	1
98	Indium-tin oxide films obtained by extraction pyrolysis. Theoretical Foundations of Chemical Engineering, 2015, 49, 721-725.	0.2	1
99	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.	0.3	1
100	Contribution of the Multiplicity Fluctuation in the Temperature Dependence of Phonon Spectra of Rare-Earth Cobaltites. Molecules, 2020, 25, 4316.	1.7	1
101	Iron Sulfide Nanoparticles: Preparation, Structure, Magnetic Properties. Journal of Siberian Federal University - Mathematics and Physics, 2017, 10, 244-247.	0.2	1
102	Explosive crystallization initiated in nanocrystalline iron-carbon films by an electron beam. Doklady Physics, 2002, 47, 281-285.	0.2	0
103	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.	0.1	0
104	Magneto-optics 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.	0.1	0
105	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.	0.2	0
106	Magnetic Resonance in CuCr ₂ S ₄ Nanoclusters and Nanocrystals. Solid State Phenomena, 2015, 233-234, 542-545.	0.3	0
107	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.	0.3	0
108	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.	0.1	0

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109	Synthesis, Morphology, and Visible Magnetic Circular dichroism of Ni-C nanoparticles. Journal of Siberian Federal University - Mathematics and Physics, 2016, 9, 481-484.	0.2	0
110	Magneto-optics of Nanocomposites Based on Iron Chalcogenide Nanoparticles. Solid State Phenomena, 0, 312, 160-165.	0.3	0
111	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.	2.8	0