Alexander V Agafonov

List of Publications by Year in descending order

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102 papers 1,285 citations

18 h-index 433756 31 g-index

102 all docs

102 docs citations

times ranked

102

1588 citing authors

#	Article	IF	CITATIONS
1	Doped TiO ₂ : the effect of doping elements on photocatalytic activity. Materials Advances, 2020, 1, 1193-1201.	2.6	151
2	Cellulose nanofiber–titania nanocomposites as potential drug delivery systems for dermal applications. Journal of Materials Chemistry B, 2015, 3, 1688-1698.	2.9	94
3	The sol–gel synthesis of cotton/TiO2 composites and their antibacterial properties. Surface and Coatings Technology, 2014, 253, 171-179.	2.2	70
4	Antibacterial and photochemical properties of cellulose nanofiber–titania nanocomposites loaded with two different types of antibiotic medicines. Journal of Materials Chemistry B, 2015, 3, 7125-7134.	2.9	53
5	Hybrid Drug Delivery Patches Based on Spherical Cellulose Nanocrystals and Colloid Titania—Synthesis and Antibacterial Properties. Nanomaterials, 2018, 8, 228.	1.9	52
6	Micro-mesoporous anatase TiO2 nanorods with high specific surface area possessing enhanced adsorption ability and photocatalytic activity. Microporous and Mesoporous Materials, 2016, 235, 185-194.	2.2	38
7	Photocatalytic and adsorption properties of TiO ₂ -pillared montmorillonite obtained by hydrothermally activated intercalation of titanium polyhydroxo complexes. Beilstein Journal of Nanotechnology, 2018, 9, 364-378.	1.5	33
8	Nanoparticle Self-Assembly Mechanisms in the Colloidal Synthesis of Iron Titanate Nanocomposite Photocatalysts for Environmental Applications. ACS Sustainable Chemistry and Engineering, 2016, 4, 2814-2821.	3.2	32
9	Sol–gel synthesis, preparation and characterization of photoactive TIO2 with ultrasound treatment. Journal of Sol-Gel Science and Technology, 2009, 49, 180-185.	1.1	30
10	Sol–gel synthesis, characterization and catalytic activity of mesoporous γ-alumina prepared from boehmite sol by different methods. Journal of Sol-Gel Science and Technology, 2010, 56, 333-339.	1.1	30
11	Structural and Thermal Properties of Montmorillonite/Ionic Liquid Composites. Materials, 2019, 12, 2578.	1.3	30
12	Highly reversible photochromism in composite WO3/nanocellulose films. Cellulose, 2019, 26, 9095-9105.	2.4	29
13	Synthesis and Photocatalytic Activity of WO3 Nanoparticles Prepared by Underwater Impulse Discharge. Plasma Chemistry and Plasma Processing, 2020, 40, 571-587.	1.1	28
14	Effect of the bentonite filler on structure and properties of composites based on hydroxyethyl cellulose. Arabian Journal of Chemistry, 2019, 12, 398-404.	2.3	27
15	Nanocrystalline ceria: a novel material for electrorheological fluids. RSC Advances, 2016, 6, 88851-88858.	1.7	24
16	Low-temperature sol–gel synthesis photochromic Cu/TiO2 films. Journal of Alloys and Compounds, 2012, 515, 1-3.	2.8	20
17	Hydroxyethyl cellulose/bentonite/magnetite hybrid materials: structure, physicochemical properties, and antifungal activity. Cellulose, 2017, 24, 1825-1836.	2.4	20
18	Composite nanomaterials based on 1-butyl-3-methylimidazolium dicianamide and clays. Journal of Materials Research and Technology, 2019, 8, 4387-4398.	2.6	19

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19	Catalytically active materials based on titanium dioxide: Ways of enhancement of photocatalytic activity. High Energy Chemistry, 2008, 42, 578-580.	0.2	18
20	Development of the low-temperature sol-gel synthesis of TiO2 to provide self-cleaning effect on the textile materials. Nanotechnologies in Russia, 2012, 7, 604-614.	0.7	18
21	Photocatalytic Activity of Biomorphic TiO ₂ Fibers Obtained by Ultrasound-Assisted Impregnation of Cellulose with Titanium Polyhydroxocomplexes. ACS Sustainable Chemistry and Engineering, 2017, 5, 5148-5155.	3.2	17
22	Low-temperature sol–gel synthesis of crystalline CoTiO3 coatings without annealing. Journal of Alloys and Compounds, 2012, 543, 172-175.	2.8	15
23	Electrorheological fluids. Russian Journal of General Chemistry, 2010, 80, 567-575.	0.3	14
24	Low-temperature sol–gel synthesis of nanosized pseudobrookite crystals without heat treatment. Journal of Alloys and Compounds, 2012, 535, 102-107.	2.8	14
25	Comparative study of the electrorheological effect in suspensions of needle-like and isotropic cerium dioxide nanoparticles. Rheologica Acta, 2018, 57, 307-315.	1.1	14
26	Sol-gel synthesis of photochromic films via silver–titania nanocomposites prepared without heat treatment. Mendeleev Communications, 2012, 22, 27-28.	0.6	13
27	Conductive sol–gel films. Journal of Materials Chemistry C, 2014, 2, 3914.	2.7	13
28	Dual-Mode Solution Plasma Processing for the Production of Chitosan/Ag Composites with the Antibacterial Effect. Materials, 2020, 13, 4821.	1.3	13
29	Bentonite/Magnetite Composite for Removal of Nitrofurazone. Clays and Clay Minerals, 2019, 67, 471-480.	0.6	12
30	Immobilization of Chitosan Onto Polypropylene Foil via Air/Solution Atmospheric Pressure Plasma Afterglow Treatment. Plasma Chemistry and Plasma Processing, 2020, 40, 207-220.	1.1	12
31	Superhydrofobic effect of hybrid organo-inorganic materials. Journal of Sol-Gel Science and Technology, 2010, 53, 312-315.	1.1	11
32	Controlling micro- and nanostructure and activity of the NaAlO2 biodiesel transesterification catalyst by its dissolution in a mesoporous \hat{I}^3 -Al2O3-matrix. Journal of Sol-Gel Science and Technology, 2015, 76, 90-97.	1.1	11
33	Synthesis, structure, and properties of a bentonite–magnetite composite. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 819-824.	0.3	11
34	First MnO2-based electrorheological fluids: high response at low filler concentration. Rheologica Acta, 2019, 58, 719-728.	1.1	11
35	Comparative study of adsorption capacity of mesoporous silica materials for molsidomine: Effects of functionalizing and solution pH. Materials Science and Engineering C, 2014, 40, 164-171.	3.8	10
36	Synthesis, structure and thermal properties of montmorillonite/ionic liquid ionogels. RSC Advances, 2020, 10, 34885-34894.	1.7	10

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37	Plasmaâ€assisted synthesis and deposition of molybdenum oxide nanoparticles on polyethylene terephthalate for photocatalytic degradation of rhodamine B. Plasma Processes and Polymers, 2020, 17, 2000012.	1.6	10
38	Application of polyethyleneimine to obtain a mesoporous CuO–Al2O3 composite. Mendeleev Communications, 2009, 19, 222-223.	0.6	9
39	A simple preparation of highly photoactive Fe(III)-doped titania nanocrystals by annealing-free approach. Journal of Alloys and Compounds, 2013, 581, 675-678.	2.8	9
40	Photocatalytic activity of titania nanopowders prepared by a sol-gel process at various pHs. Russian Journal of Inorganic Chemistry, 2015, 60, 906-912.	0.3	9
41	Effect of the Organobentonite Filler on Structure and Properties of Composites Based on Hydroxyethyl Cellulose. Journal of Chemistry, 2017, 2017, 1-11.	0.9	9
42	Bentonite filler effect on structure and properties of polystyrene-based composites. Iranian Polymer Journal (English Edition), 2019, 28, 123-133.	1.3	9
43	Sol-gel synthesis of titanium dioxide and titanium dioxide-hydroxypropyl cellulose hybrid material and electrorheological characteristics of their dispersions in poly(dimethylsiloxane). Colloid Journal, 2007, 69, 620-626.	0.5	8
44	Synthesis of organized mesoporous γ-alumina templated with polymer–colloidal complex. Journal of Sol-Gel Science and Technology, 2011, 60, 6-10.	1.1	8
45	Synthesis of mesoporous γ-alumina by sol–gel process and its characterization and application for sorption of Pu(IV). Journal of Sol-Gel Science and Technology, 2012, 61, 192-196.	1.1	8
46	The dielectric properties and flow of electrorheological fluids based on polymer-coated nanodispersed barium tetraacetate titanyl particles upon a dynamic shear in electric fields. Colloid Journal, 2017, 79, 204-211.	0.5	8
47	Moâ€doped <scp>TiO₂</scp> using plasma in contact with liquids: advantages and limitations. Journal of Chemical Technology and Biotechnology, 2021, 96, 1125-1131.	1.6	8
48	Structure, physicochemical properties, and adsorption performance of the ethyl cellulose/bentonite composite films. Cellulose, 2022, 29, 3947-3961.	2.4	8
49	Properties of electrorheological fluids based on nanocrystalline cerium dioxide. Russian Journal of Inorganic Chemistry, 2017, 62, 625-632.	0.3	7
50	Modification of polyester fabrics with nanosized titanium dioxide to impart photoactivity. Inorganic Materials: Applied Research, 2017, 8, 696-703.	0.1	7
51	Electrorheology of suspensions of mesostructured and mesoporous silica in poly(dimethylsiloxane). Colloid Journal, 2008, 70, 535-540.	0.5	6
52	Sol–gel synthesis of titanium dioxide-based films possessing highly ordered channel structures. Mendeleev Communications, 2009, 19, 340-341.	0.6	6
53	A new approach to apply crystalline titania hydrosols onto a polyester cloth. Mendeleev Communications, 2013, 23, 286-288.	0.6	6
54	Zirconium(IV) and hafnium(IV) coordination polymers with a tetra-acetyl-ethane (Bisacac) ligand: Synthesis, structure elucidation and gas sorption behavior. Polyhedron, 2015, 89, 297-303.	1.0	6

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55	The effect of silicon dioxide concentration on thermodynamic properties of polystyrene-based composites. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 253-256.	0.3	6
56	Effect of polyoxomolybdate nanocluster doping on the dielectric characteristics of polyvinyl alcohol nanocomposite films. Russian Journal of Inorganic Chemistry, 2016, 61, 477-481.	0.3	6
57	Synthesis of nanostructured iron titanates by soft chemistry methods. Russian Journal of Inorganic Chemistry, 2016, 61, 560-566.	0.3	6
58	Template-Free Synthesis and Properties of Mesoporous Calcium Titanate. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 667-670.	0.3	6
59	Surfactant-Switched Positive/Negative Electrorheological Effect in Tungsten Oxide Suspensions. Molecules, 2019, 24, 3348.	1.7	6
60	Volume Changes on Complex Formation of 18-Crown-6 with Amino Acids in Aqueus Solutions. Russian Journal of General Chemistry, 2003, 73, 312-314.	0.3	5
61	Thermodynamics of the effects of substituent, degree of substitution, and pH on complex formation of hydroxypropyl- \hat{l}^2 -cyclodextrins with ascorbic acid. Russian Chemical Bulletin, 2005, 54, 1883-1886.	0.4	5
62	Liquid-phase synthesis of barium acetatotitanyl and barium oxalatotitanyl as intermediates for preparing nanosized barium titanate. Russian Journal of Inorganic Chemistry, 2011, 56, 1025-1028.	0.3	5
63	Low-temperature approach to forming high-porous Fe(III)-TiO2 nanoparticles possessing high photoactivity. Nanotechnologies in Russia, 2014, 9, 15-20.	0.7	5
64	Magneto-Optical Modulation on Colloid Cu–Ni Nanocomposite. Journal of Physical Chemistry C, 2015, 119, 1500-1505.	1.5	5
65	Using Polymer-Colloid Complexes for Obtaining Mesoporous Aluminium Oxide by the Template Sol-Gel Method. Russian Journal of Inorganic Chemistry, 2018, 63, 1125-1130.	0.3	5
66	Deposition of Silver Nanostructures on Polymer Films by Glow Discharge. Plasma Chemistry and Plasma Processing, 2019, 39, 311-323.	1.1	5
67	Sol-gel synthesis of nanostructured materials based on aluminum oxide with preset texture properties. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 582-586.	0.3	4
68	Sol–gel synthesis, characterization and catalytic activity of γ-alumina with bimodal mesopore distribution. Journal of Sol-Gel Science and Technology, 2013, 68, 155-161.	1.1	4
69	The effect exerted by the type of the solvent and precursor in sol-gel preparation of titanium dioxide on its electrorheological activity. Russian Journal of Applied Chemistry, 2010, 83, 14-17.	0.1	3
70	Soft-chemistry synthesis of highly active TiO2-CuO heterostructures having high photoactivity and magnetic properties. Nanotechnologies in Russia, 2012, 7, 599-603.	0.7	3
71	Synthesis of doped and undoped γ-alumina spherical particles by a new sol–gel hybrid process and their application for methanol dehydration. Journal of Sol-Gel Science and Technology, 2013, 66, 145-154.	1.1	3
72	Dielectric parameters of polystyrene films modified with fullerenes. Russian Journal of Applied Chemistry, 2013, 86, 564-567.	0.1	3

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73	Ni Self-Organized Balls as a Promising Energy Storage Material. Journal of Physical Chemistry C, 2016, 120, 16453-16458.	1.5	3
74	Electrorheological Properties of α-Bi2O3 and Bi2O2CO3. Inorganic Materials, 2019, 55, 344-354.	0.2	3
75	Formation of mesoporous structure in Al2O3–NaAlO2-based materials produced by template synthesis. Journal of Sol-Gel Science and Technology, 2019, 92, 293-303.	1.1	3
76	Electrorheological Properties of Polydimethylsiloxane/TiO2-Based Composite Elastomers. Polymers, 2020, 12, 2137.	2.0	3
77	Enhancing the Thermal Stability of Ionogels: Synthesis and Properties of Triple Ionic Liquid/Halloysite/MCC Ionogels. Molecules, 2021, 26, 6198.	1.7	3
78	Study of surfaces of TiO2-based nanostructured films obtained under action of various templates. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 555-558.	0.3	2
79	Studies on the effect of the stabilizer activity on the structure and properties of titania-based hybrid films. Russian Chemical Bulletin, 2011, 60, 1862-1870.	0.4	2
80	New approach to obtaining nanosized pseudobrookite crystals. Nanotechnologies in Russia, 2012, 7, 452-456.	0.7	2
81	The influence of dielectric characteristics of suspensions of nanosize barium, barium-strontium, and barium-calcium acetate titanyls in polydimethyl siloxane on the electrorheological effect. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 75-79.	0.3	2
82	The influence of silver particles of different morphologies on the photoactivity of coatings in the Ag-TiO2 system. Nanotechnologies in Russia, 2013, 8, 616-620.	0.7	2
83	Comparative parameters of the electrorheological effect in suspensions of nanosized barium titanyl acetates and titanyl oxalates in PMS-20 silicon oil. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 484-487.	0.3	2
84	Growth of optically active multilayer metal oxide films on a plastic substrate. Inorganic Materials, 2016, 52, 962-967.	0.2	2
85	Effect of the structure of Fe-doped titania-based nanocomposites on the photocatalytic activity of polyester fabrics modified by them. Inorganic Materials, 2017, 53, 1336-1342.	0.2	2
86	Kinetics of Thermal Degradation of Polystyrene/Silica Film Composites. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 1070-1074.	0.3	2
87	Thermodynamics of intermolecular interactions between saccharides and 18-crown-6 in water. Mendeleev Communications, 2002, 12, 80.	0.6	1
88	Effect of nature of templates on formation mechanism of aluminum oxide mesoporous structure. Colloid Journal, 2010, 72, 163-167.	0.5	1
89	Physicochemical properties of hybrid silicon dioxide–polyethylene glycol organoinorganic materials as potential antioxidants. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 662-665.	0.3	1
90	High-Induced Photo-emf and Photocatalytic Properties of Nanostructured TiO2-Based Powders and Films Obtained by the Sol–Gel Template Synthesis. Journal of Inorganic and Organometallic Polymers and Materials, 2012, 22, 1034-1040.	1.9	1

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91	Low-Temperature Sol-Gel Synthesis, Spectroscopic Properties and Conductivity of the Thin Films of TiO2–CuO Nanoparticles. Mendeleev Communications, 2012, 22, 307-309.	0.6	1
92	Structure and properties of hybrid composites based on hydroxyethyl cellulose and laminar alumosilicate. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 300-303.	0.3	1
93	Photoelectrochemical properties of thin films on titanium obtained by thermal, electrochemical, or sol-gel method. Journal of Solid State Electrochemistry, 2017, 21, 1777-1784.	1.2	1
94	Solution process-based technologies: A new way for textile nanofunctionalization. Russian Journal of General Chemistry, 2017, 87, 1412-1417.	0.3	1
95	Polydimethylsiloxane Elastomers Filled with Rod-Like α-MnO2 Nanoparticles: An Interplay of Structure and Electrorheological Performance. Polymers, 2020, 12, 2810.	2.0	1
96	Electrorheological behavior of the hybrid material prepared by cohydrolysis of titanium(IV) isopropoxide with minor additions of a liquid crystal. Russian Journal of Applied Chemistry, 2011, 84, 951-956.	0.1	0
97	Summary of the 3rd sol–gel conference of the CIS countries. Journal of Sol-Gel Science and Technology, 2016, 80, 233-238.	1.1	0
98	Preparation and Properties of Organic-Inorganic Composites Based on Hydroxyethyl Cellulose. Fibre Chemistry, 2018, 50, 349-353.	0.0	0
99	Sorption of Methylene Blue on Polystyrene/Bentonite Film Composites. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 763-768.	0.3	0
100	Thermal behaviour of polystyrene/silica composites. Philosophical Magazine Letters, 2018, 98, 107-117.	0.5	0
101	Dielectric Properties of Multilayer Optically Transparent TiO2-Nanosilver Coating on Polyester Substrate Obtained by Solvent Method. Inorganic Materials: Applied Research, 2018, 9, 973-977.	0.1	0
102	Kinetics of Methylene Blue Sorption on Polystyrene/Bentonite/Magnetite-Film Composites. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 569-573.	0.3	0