Anatolii Malygin

List of Publications by Year
in descending order

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89	425	1039880 9	996849 15
papers	citations	h-index	g-index

92	92	92	303
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CVDâ˜Titania/Silica Gel Carbonized Due to Pyrolysis of Cyclohexene. Langmuir, 2000, 16, 3227-3243.	1.6	41
2	Characteristics of the Hydration Layer Structure in Porous Titaniaâ˜Silica Obtained by the Chemical Vapor Deposition Method. Langmuir, 1999, 15, 8441-8446.	1.6	22
3	Synthesis of Porous Magnesium Oxide by Thermal Decomposition of Basic Magnesium Carbonate. Russian Journal of General Chemistry, 2003, 73, 37-42.	0.3	19
4	Effect of chemical modification on structural and energy characteristics of the surface of polyethylene and polyvinyl chloride films. Russian Journal of Applied Chemistry, 2009, 82, 622-629.	0.1	18
5	Title is missing!. Russian Journal of General Chemistry, 2002, 72, 575-589.	0.3	17
6	Influence of Chemical Modification of the Surface on the Electret Properties of Polytetrafluoroethylene. Russian Journal of Applied Chemistry, 2004, 77, 276-280.	0.1	13
7	Influence of chemical modification of the surface of low-density polyethylene on its electret properties. Russian Journal of Applied Chemistry, 2007, 80, 461-465.	0.1	13
8	A new approach to processing electronic diffuse reflectance spectra. Russian Journal of Physical Chemistry A, 2009, 83, 642-648.	0.1	12
9	Hydrolytic stability of the Siâ€“Oâ€“Ti bonds in the chemical assembly of titania nanostructures on silica surfaces. Russian Chemical Reviews, 2010, 79, 907-920.	2.5	12
10	Title is missing!. Russian Journal of Applied Chemistry, 2003, 76, 7-11.	0.1	9
11	Reactivity of Phenol-Formaldehyde Microspheres toward PCl3, VOCl3, and CrO2Cl2 Vapors. Russian Journal of Applied Chemistry, 2002, 75, 969-973.	0.1	8
12	Synthesis and properties of polyvinyl chloride films with modified surface. Russian Journal of Applied Chemistry, 2006, 79, 1316-1320.	0.1	7
13	Quantum-chemical approaches to identification of nanostructures synthesized by molecular layering technique. Russian Journal of General Chemistry, 2010, 80, 643-657.	0.3	7
14	The effect exerted by temperature on the phase formation of titanium oxide layer on silica surface at different stages of molecular layering. Russian Journal of Applied Chemistry, 2010, 83, 1511-1519.	0.1	7
15	Effect of the composition of (Mo, Nb, V, Ti)/Î³-Al2O3 surface oxide structures on the oxidative dehydrogenation of ethane to ethylene. Russian Journal of Applied Chemistry, 2016, 89, 34-39.	0.1	7
16	Synthesis and in situ gravimetric monitoring of formation of titanium-oxide layer on silica surface. Russian Journal of Applied Chemistry, 2004, 77, 1227-1231.	0.1	6
17	Surface structure and thermal oxidative degradation of the reaction products of polyethylene with PCl3 and VOCl3 vapors. Russian Journal of Applied Chemistry, 2004, 77, 1854-1858.	0.1	6
18	Phase transformations in titanium dioxide thin films during chemical synthesis under strongly nonequilibrium conditions. Physics of the Solid State, 2009, 51, 495-497.	0.2	6

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19	Quantum-chemical analysis and experimental study of the process of the silica surface interaction with the CrO2Cl2 and VOCl3 vapor mixture. Russian Journal of General Chemistry, 2010, 80, 1168-1175.	0.3	6
20	Structure of products formed in chemisorption of titanium tetrachloride by porous silicas. Russian Journal of Applied Chemistry, 2007, 80, 2057-2062.	0.1	5
21	Thermal stability of polymer compositions with modified alumina. Russian Journal of General Chemistry, 2008, 78, 2214-2219.	0.3	5
22	Features of sample preparation and atomic force microscopy study of dispersed nanomaterials. Journal of Surface Investigation, 2008, 2, 699-704.	0.1	5
23	Structure of the products of TiCl4 chemisorption on the surface of porous silica in the process of vapor-phase hydrolysis. Russian Journal of General Chemistry, 2010, 80, 1176-1182.	0.3	5
24	Optimization of properties of inorganic catalytic membranes using molecular layering nanotechnology. Nanotechnologies in Russia, 2010, 5, 153-159.	0.7	5
25	Temperature influence on the formation of titanium-oxide structures on finely porous silica. Russian Journal of General Chemistry, 2011, 81, 41-48.	0.3	5
26	Synthesis of titanium oxide structures on mesoporous silicon dioxide surface by molecular layering. Colloid Journal, 2011, 73, 495-503.	0.5	5
27	Effect of the composition and structure of the surface layer on the functional properties of a core(Al2O3)-Shell(VO x /TiO y) composite. Russian Journal of Applied Chemistry, 2014, 87, 23-30.	0.1	5
28	Chemical transformations at the silica surface upon sequential interactions with titanium tetrachloride and ammonia vapors. Russian Journal of General Chemistry, 2015, 85, 2533-2540.	0.3	5
29	Quantum-chemical analysis and experimental synthesis of titanium-vanadium-containing coatings on the silica surface from a mixture of TiCl4 and VOCl3 vapors. Russian Journal of General Chemistry, 2016, 86, 2113-2123.	0.3	5
30	Phase formation in a nanosize silicon oxide film on the surface of aluminum oxide. Technical Physics Letters, 1998, 24, 1-3.	0.2	4
31	Damping of the Growth of Titanium Oxide Nanolayer Formed by Molecular Layer Deposition Technique on Oxidized Silicon Surface. Russian Journal of Applied Chemistry, 2004, 77, 1061-1065.	0.1	4
32	Calculation of the Stoichiometric Composition of Nanostructures Synthesized by Molecular Layer Deposition on the Surface of Solid Matrices. Russian Journal of Applied Chemistry, 2005, 78, 367-374.	0.1	4
33	Possibility of quantum chemical evaluation of the probability of various chemical transformations in syntheses of phosphorus-, titanium-, silicon-, and vanadium-containing structures on the silica surface. Russian Journal of Applied Chemistry, 2006, 79, 175-181.	0.1	4
34	The influence of titanium oxide nanocoatings on the surface quality of glass products for electronic devices. Glass Physics and Chemistry, 2006, 32, 70-74.	0.2	4
35	AFM examination of nanolayers synthesised by the molecular layering method on the surface of manufacturing glasses. Semiconductors, 2007, 41, 498-501.	0.2	4
36	Free charge carrier repartition over the surface of photosensitive materials: Why and how to manage?. Russian Journal of General Chemistry, 2008, 78, 1070-1080.	0.3	4

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37	Study of high-porous silica surface by atomic force microscopy re]20071018. Journal of Surface Investigation, 2008, 2, 696-698.	0.1	4
38	Effect of temperature treatment on the interaction of nanotubular magnesium silicate Mg3Si2O5(OH)4 with titanium tetrachloride and water vapors. Russian Journal of Applied Chemistry, 2012, 85, 1319-1326.	0.1	4
39	The role of a reference sample in the study of the titanium-containing silicas by ultraviolet-visible diffuse reflectance spectroscopy. Russian Journal of General Chemistry, 2013, 83, 231-237.	0.3	4
40	Mechanism of thermal oxidation of silicon carbide modified by chromium oxide structures. Russian Journal of General Chemistry, 2014, 84, 2375-2381.	0.3	4
41	Temperature factor in interaction of nanotubular magnesium hydrosilicate, Mg3Si2O5(OH)4, with titanium tetrachloride and water vapors. Russian Journal of Applied Chemistry, 2014, 87, 151-159.	0.1	4
42	Quantum-chemical approach to optimization of the synthesis conditions of two-component phosphorus-titanium oxide structures on silica surface. Russian Journal of General Chemistry, 2016, 86, 2263-2272.	0.3	4
43	Quantum Chemical Analysis of the Processes of Synthesis of Vanadium Oxide Structures on the Silica Surface. Russian Journal of General Chemistry, 2020, 90, 880-888.	0.3	4
44	Influence of the physicochemical treatment procedure on the morphology and properties of the polyvinyl chloride film surface. Russian Journal of Applied Chemistry, 2006, 79, 1857-1861.	0.1	3
45	Influence of chemical modification of the surface of polyethylene with phosphorus, boron, titanium, vanadium, and silicon halides on its vapor permeability. Russian Journal of Applied Chemistry, 2007, 80, 1413-1418.	0.1	3
46	Effect of the substrate nature on the formation of thin titanium dioxide films by molecular layering. Russian Journal of Applied Chemistry, 2008, 81, 2051-2055.	0.1	3
47	Preparation of tin oxide nanocoatings on borosilicate glass by the molecular layering method. Glass Physics and Chemistry, 2008, 34, 534-542.	0.2	3
48	Atomic force microscopic study of variations in the surface morphology of porous silica upon thermal treatment. Colloid Journal, 2012, 74, 380-385.	0.5	3
49	Synthesis and thermochemical transformations of vanadium oxychloride groups on a silica surface. Russian Journal of Physical Chemistry A, 2014, 88, 530-536.	0.1	3
50	Chemical and physical modification and electret properties of polytetrafluoroethylene films. Russian Journal of Applied Chemistry, 2016, 89, 930-936.	0.1	3
51	Oxidative Dehydrogenation of Ethane on Oxide Materials in a Pulsed Microcatalytic and a Membrane Reactor. Inorganic Materials, 2018, 54, 1136-1143.	0.2	3
52	Growth of Titanium Oxide Nanostructures on Î³-Ð‰2Ðž3 by Atomic Layer Deposition. Inorganic Materials, 2020, 56, 1234-1241.	0.2	3
53	Nanotechnology of Molecular Layering in Production of Inorganic and Hybrid Materials for Various Functional Purposes (a Review): I. History of the Development of the Molecular Layering Method. Russian Journal of Applied Chemistry, 2021, 94, 1022-1037.	0.1	3
54	Thermal oxidation of silicon carbide with surface modification by the molecular layering method. Refractories, 1985, 26, 82-84.	0.0	2

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55	Effects of silica and titania modification additions on the microstructure of sintered alumina. Inorganic Materials, 2000, 36, 1127-1132.	0.2	2
56	Formation and properties of the nanocluster structure of iron oxides. Russian Chemical Bulletin, 2006, 55, 1755-1767.	0.4	2
57	AFM application for in situ study of adsorption processes. Semiconductors, 2007, 41, 495-497.	0.2	2
58	Thermal transformations of a polymeric composite consisting of poly(methyl methacrylate) and phosphorus-containing nanodispersed aluminum oxide. Russian Journal of Applied Chemistry, 2007, 80, 2119-2123.	0.1	2
59	A study of phase transformations in the surface layer of titanium dioxide. Russian Journal of Applied Chemistry, 2009, 82, 783-788.	0.1	2
60	The effect of temperature on the formation of titanium dioxide structures on Î³-Al2O3 surface. Russian Journal of Applied Chemistry, 2010, 83, 1520-1524.	0.1	2
61	Synthesis and protective properties of titanium nitride coatings on willemite. Russian Journal of Applied Chemistry, 2012, 85, 1070-1076.	0.1	2
62	Structural and chemical transformations in the products of the interaction of silica gel with vapours of TiCl4 and H2O. Applied Surface Science, 2014, 288, 584-590.	3.1	2
63	Effect of the chemical modification of the filler surface on the structure and permeability of a composite film based on polyvinyl chloride. Russian Journal of Applied Chemistry, 2015, 88, 110-117.	0.1	2
64	Chemical assembly of a titanium oxide layer on microporous silica. Russian Journal of General Chemistry, 2017, 87, 1786-1793.	0.3	2
65	Properties of Polytetrafluoroethylene Films Modified with Titanium and Phosphorus Oxide Structures. Russian Journal of Applied Chemistry, 2019, 92, 1128-1134.	0.1	2
66	Structural and Morphological Features of Polycrystalline Aluminum Oxide Surface after Nanocoating with Titanium Oxide of Different Thickness. Russian Journal of General Chemistry, 2020, 90, 1670-1676.	0.3	2
67	The Molecular Layering Method as a Basis of Chemical Nanotechnology. , 1999, , 487-495.		2
68	Thermal Transformations of Titanium Oxochloride Nanostructures on Silica Surface. Russian Journal of Applied Chemistry, 2005, 78, 859-864.	0.1	1
69	The molecular layering method: progress in science and practical works for creation of functional nanomaterials. , 2006, , 35-44.		1
70	Effect of the metallic modifier is nature on the surface microstructure of the phenolic carboplastic-steel interface. Journal of Friction and Wear, 2008, 29, 470-476.	0.1	1
71	METHOD OF ESDR-SPECTRA PROCESSING FOR THE CHARACTERIZATION OF NANOSTRUCTURES AT THE SOLID'S SURFACE. Integrated Ferroelectrics, 2008, 103, 41-51.	0.3	1
72	Structural, chemical, and dynamic characteristics of ceramic membranes modified with self-organized supramolecular silicon oxide systems. Russian Journal of Applied Chemistry, 2009, 82, 378-386.	0.1	1

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73	Perspectives of application of the molecular layer deposition technique for controlling operational properties of materials for shipbuilding. Russian Journal of General Chemistry, 2010, 80, 2181-2191.	0.3	1
74	Temperature effect on polymorphic transformations in silica matrixâ€“titania coating systems. Inorganic Materials, 2011, 47, 495-501.	0.2	1
75	Chemical assembly of chromium oxide structures on the surface of disperse silicon carbide. Russian Journal of Applied Chemistry, 2011, 84, 1299-1303.	0.1	1
76	Interaction of titanium tetrachloride vapors with zirconium dioxide nanocrystals. Russian Journal of Applied Chemistry, 2012, 85, 1950-1954.	0.1	1
77	Molecular layering of phosphorus oxide structures on the surface of gamma alumina. Russian Journal of Applied Chemistry, 2016, 89, 1573-1578.	0.1	1
78	Influence of ZrO5 treatment temperature on the interaction with titanium tetrachloride. Russian Journal of General Chemistry, 2016, 86, 1001-1007.	0.3	1
79	Effect of a Thermal-Vacuum Treatment and X-Ray Radiation on the Morphology and Electrical Properties of Titanium Oxide Nanocoatings. Russian Journal of Applied Chemistry, 2019, 92, 883-892.	0.1	1
80	Electret Materials Based on Fluoropolymers Modified with Vanadium- and Phosphorus-Containing Structures. Russian Journal of Applied Chemistry, 2021, 94, 777-786.	0.1	1
81	Effect of Composition and Structure of Element Oxide Nanostructures Grafted at Polyethylene Film Surface on Electret Characteristics of thePolymer. Russian Journal of General Chemistry, 2021, 91, 1075-1083.	0.3	1
82	Nanotechnology of Molecular Layering in Production of Inorganic and Hybrid Materials for Various Functional Purposes: II. Molecular Layering Technology and Prospects for Its Commercialization and Development in the XXI Century. Russian Journal of Applied Chemistry, 2021, 94, 1189-1215.	0.1	1
83	Phase Transitions in the Bulk and on Surfaces of Titanium Dioxide during Heat Treatment. Russian Journal of Physical Chemistry A, 2022, 96, 179-189.	0.1	1
84	Synthesis of Multicomponent Oxide Low-Dimensional Systems on the Surface of Porous Silicon Dioxide Using the Molecular Layering Method. ChemInform, 2003, 34, no.	0.1	0
85	Third Russian Conference â€œSurface Chemistry and Nanotechnologyâ€•(with international) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.3	0
86	Fourth Russian Conference on â€œChemistry of Surface and Nanotechnologyâ€• Russian Journal of General Chemistry, 2010, 80, 1051-1052.	0.3	0
87	Scanning probe microscopy estimation of the wear resistance of the surface of a modified PVC film. Russian Metallurgy (Metally), 2017, 2017, 312-318.	0.1	0
88	Experimental Assessment of the Structural Parameters of Highly Porous Silica: Probe Microscopy Data. Glass Physics and Chemistry, 2019, 45, 365-371.	0.2	0
89	Influence of Structure of Chemically Grafted onto Polyethylene Surface Two-Component Titanium-Phosphoroxide Nanostructures on the Properties of Composite Material. Russian Journal of Applied Chemistry, 2020, 93, 1192-1201.	0.1	0