

Anatolii Malygin

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/3266348/anatolii-malygin-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

87
papers

349
citations

9
h-index

13
g-index

92
ext. papers

379
ext. citations

1
avg, IF

3.13
L-index

#	Paper	IF	Citations
87	Phase Transitions in the Bulk and on Surfaces of Titanium Dioxide during Heat Treatment. <i>Russian Journal of Physical Chemistry A</i> , 2022 , 96, 179-189	0.7	0
86	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. <i>Russian Journal of Applied Chemistry</i> , 2021 , 94, 1022-1037	0.8	1
85	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. <i>Russian Journal of Applied Chemistry</i> , 2021 , 94, 1189-1215	0.8	
84	Electret Materials Based on Fluoropolymers Modified with Vanadium- and Phosphorus-Containing Structures. <i>Russian Journal of Applied Chemistry</i> , 2021 , 94, 777-786	0.8	
83	Effect of Composition and Structure of Element Oxide Nanostructures Grafted at Polyethylene Film Surface on Electret Characteristics of the Polymer. <i>Russian Journal of General Chemistry</i> , 2021 , 91, 1075-1083	0.7	1
82	Quantum Chemical Analysis of the Processes of Synthesis of Vanadium Oxide Structures on the Silica Surface. <i>Russian Journal of General Chemistry</i> , 2020 , 90, 880-888	0.7	1
81	Influence of Structure of Chemically Grafted onto Polyethylene Surface Two-Component Titanium-Phosphoroxide Nanostructures on the Properties of Composite Material. <i>Russian Journal of Applied Chemistry</i> , 2020 , 93, 1192-1201	0.8	
80	Growth of Titanium Oxide Nanostructures on α -SiO ₂ by Atomic Layer Deposition. <i>Inorganic Materials</i> , 2020 , 56, 1234-1241	0.9	2
79	Structural and Morphological Features of Polycrystalline Aluminum Oxide Surface after Nanocoating with Titanium Oxide of Different Thickness. <i>Russian Journal of General Chemistry</i> , 2020 , 90, 1670-1676	0.7	0
78	Effect of a Thermal-Vacuum Treatment and X-Ray Radiation on the Morphology and Electrical Properties of Titanium Oxide Nanocoatings. <i>Russian Journal of Applied Chemistry</i> , 2019 , 92, 883-892	0.8	1
77	Properties of Polytetrafluoroethylene Films Modified with Titanium and Phosphorus Oxide Structures. <i>Russian Journal of Applied Chemistry</i> , 2019 , 92, 1128-1134	0.8	2
76	Experimental Assessment of the Structural Parameters of Highly Porous Silica: Probe Microscopy Data. <i>Glass Physics and Chemistry</i> , 2019 , 45, 365-371	0.7	
75	Oxidative Dehydrogenation of Ethane on Oxide Materials in a Pulsed Microcatalytic and a Membrane Reactor. <i>Inorganic Materials</i> , 2018 , 54, 1136-1143	0.9	2
74	Chemical assembly of a titanium oxide layer on microporous silica. <i>Russian Journal of General Chemistry</i> , 2017 , 87, 1786-1793	0.7	2
73	Scanning probe microscopy estimation of the wear resistance of the surface of a modified PVC film. <i>Russian Metallurgy (Metally)</i> , 2017 , 2017, 312-318	0.5	
72	Effect of the composition of (Mo, Nb, V, Ti)/ α -Al ₂ O ₃ surface oxide structures on the oxidative dehydrogenation of ethane to ethylene. <i>Russian Journal of Applied Chemistry</i> , 2016 , 89, 34-39	0.8	4
71	Chemical and physical modification and electret properties of polytetrafluoroethylene films. <i>Russian Journal of Applied Chemistry</i> , 2016 , 89, 930-936	0.8	2

70	Quantum-chemical analysis and experimental synthesis of titanium-vanadium-containing coatings on the silica surface from a mixture of $TiCl_4$ and $VOCl_3$ vapors. <i>Russian Journal of General Chemistry</i> , 2016 , 86, 2113-2123	0.7	5
69	Molecular layering of phosphorus oxide structures on the surface of gamma alumina. <i>Russian Journal of Applied Chemistry</i> , 2016 , 89, 1573-1578	0.8	1
68	Influence of ZrO_5 treatment temperature on the interaction with titanium tetrachloride. <i>Russian Journal of General Chemistry</i> , 2016 , 86, 1001-1007	0.7	1
67	Quantum-chemical approach to optimization of the synthesis conditions of two-component phosphorus-titanium oxide structures on silica surface. <i>Russian Journal of General Chemistry</i> , 2016 , 86, 2263-2272	0.7	4
66	Effect of the chemical modification of the filler surface on the structure and permeability of a composite film based on polyvinyl chloride. <i>Russian Journal of Applied Chemistry</i> , 2015 , 88, 110-117	0.8	2
65	Chemical transformations at the silica surface upon sequential interactions with titanium tetrachloride and ammonia vapors. <i>Russian Journal of General Chemistry</i> , 2015 , 85, 2533-2540	0.7	5
64	Structural and chemical transformations in the products of the interaction of silica gel with vapours of $TiCl_4$ and H_2O . <i>Applied Surface Science</i> , 2014 , 288, 584-590	6.7	2
63	Synthesis and thermochemical transformations of vanadium oxychloride groups on a silica surface. <i>Russian Journal of Physical Chemistry A</i> , 2014 , 88, 530-536	0.7	1
62	Effect of the composition and structure of the surface layer on the functional properties of a core(Al_2O_3)-Shell(VO_x/TiO_y) composite. <i>Russian Journal of Applied Chemistry</i> , 2014 , 87, 23-30	0.8	4
61	Temperature factor in interaction of nanotubular magnesium hydrosilicate, $Mg_3Si_2O_5(OH)_4$, with titanium tetrachloride and water vapors. <i>Russian Journal of Applied Chemistry</i> , 2014 , 87, 151-159	0.8	4
60	Mechanism of thermal oxidation of silicon carbide modified by chromium oxide structures. <i>Russian Journal of General Chemistry</i> , 2014 , 84, 2375-2381	0.7	4
59	The role of a reference sample in the study of the titanium-containing silicas by ultraviolet-visible diffuse reflectance spectroscopy. <i>Russian Journal of General Chemistry</i> , 2013 , 83, 231-237	0.7	4
58	Atomic force microscopic study of variations in the surface morphology of porous silica upon thermal treatment. <i>Colloid Journal</i> , 2012 , 74, 380-385	1.1	3
57	Synthesis and protective properties of titanium nitride coatings on willemite. <i>Russian Journal of Applied Chemistry</i> , 2012 , 85, 1070-1076	0.8	2
56	Effect of temperature treatment on the interaction of nanotubular magnesium silicate $Mg_3Si_2O_5(OH)_4$ with titanium tetrachloride and water vapors. <i>Russian Journal of Applied Chemistry</i> , 2012 , 85, 1319-1326	0.8	3
55	Interaction of titanium tetrachloride vapors with zirconium dioxide nanocrystals. <i>Russian Journal of Applied Chemistry</i> , 2012 , 85, 1950-1954	0.8	1
54	Temperature effect on polymorphic transformations in silica matrix-titania coating systems. <i>Inorganic Materials</i> , 2011 , 47, 495-501	0.9	1
53	Temperature influence on the formation of titanium-oxide structures on finely porous silica. <i>Russian Journal of General Chemistry</i> , 2011 , 81, 41-48	0.7	4

52	Chemical assembly of chromium oxide structures on the surface of disperse silicon carbide. <i>Russian Journal of Applied Chemistry</i> , 2011 , 84, 1299-1303	0.8	1
51	Synthesis of titanium oxide structures on mesoporous silicon dioxide surface by molecular layering. <i>Colloid Journal</i> , 2011 , 73, 495-503	1.1	5
50	Membranes Prepared via Molecular Layering Method 2011 , 357-369		2
49	Hydrolytic stability of the SiO ₂ /Ti bonds in the chemical assembly of titania nanostructures on silica surfaces. <i>Russian Chemical Reviews</i> , 2010 , 79, 907-920	6.8	9
48	Quantum-chemical approaches to identification of nanostructures synthesized by molecular layering technique. <i>Russian Journal of General Chemistry</i> , 2010 , 80, 643-657	0.7	5
47	Quantum-chemical analysis and experimental study of the process of the silica surface interaction with the CrO ₂ Cl ₂ and VOCl ₃ vapor mixture. <i>Russian Journal of General Chemistry</i> , 2010 , 80, 1168-1175	0.7	6
46	Structure of the products of TiCl ₄ chemisorption on the surface of porous silica in the process of vapor-phase hydrolysis. <i>Russian Journal of General Chemistry</i> , 2010 , 80, 1176-1182	0.7	4
45	Perspectives of application of the molecular layer deposition technique for controlling operational properties of materials for shipbuilding. <i>Russian Journal of General Chemistry</i> , 2010 , 80, 2181-2191	0.7	1
44	The effect exerted by temperature on the phase formation of titanium oxide layer on silica surface at different stages of molecular layering. <i>Russian Journal of Applied Chemistry</i> , 2010 , 83, 1511-1519	0.8	7
43	The effect of temperature on the formation of titanium dioxide structures on Al ₂ O ₃ surface. <i>Russian Journal of Applied Chemistry</i> , 2010 , 83, 1520-1524	0.8	2
42	Optimization of properties of inorganic catalytic membranes using molecular layering nanotechnology. <i>Nanotechnologies in Russia</i> , 2010 , 5, 153-159	0.6	4
41	Structural, chemical, and dynamic characteristics of ceramic membranes modified with self-organized supramolecular silicon oxide systems. <i>Russian Journal of Applied Chemistry</i> , 2009 , 82, 378-386	0.8	1
40	Effect of chemical modification on structural and energy characteristics of the surface of polyethylene and polyvinyl chloride films. <i>Russian Journal of Applied Chemistry</i> , 2009 , 82, 622-629	0.8	16
39	A study of phase transformations in the surface layer of titanium dioxide. <i>Russian Journal of Applied Chemistry</i> , 2009 , 82, 783-788	0.8	1
38	A new approach to processing electronic diffuse reflectance spectra. <i>Russian Journal of Physical Chemistry A</i> , 2009 , 83, 642-648	0.7	9
37	Phase transformations in titanium dioxide thin films during chemical synthesis under strongly nonequilibrium conditions. <i>Physics of the Solid State</i> , 2009 , 51, 495-497	0.8	5
36	METHOD OF ESR-SPECTRA PROCESSING FOR THE CHARACTERIZATION OF NANOSTRUCTURES AT THE SOLID'S SURFACE. <i>Integrated Ferroelectrics</i> , 2008 , 103, 41-51	0.8	1
35	Free charge carrier repartition over the surface of photosensitive materials: Why and how to manage?. <i>Russian Journal of General Chemistry</i> , 2008 , 78, 1070-1080	0.7	4

34	Thermal stability of polymer compositions with modified alumina. <i>Russian Journal of General Chemistry</i> , 2008 , 78, 2214-2219	0.7	3
33	Effect of the substrate nature on the formation of thin titanium dioxide films by molecular layering. <i>Russian Journal of Applied Chemistry</i> , 2008 , 81, 2051-2055	0.8	3
32	Preparation of tin oxide nanocoatings on borosilicate glass by the molecular layering method. <i>Glass Physics and Chemistry</i> , 2008 , 34, 534-542	0.7	3
31	Study of high-porous silica surface by atomic force microscopy re]20071018. <i>Journal of Surface Investigation</i> , 2008 , 2, 696-698	0.5	3
30	Features of sample preparation and atomic force microscopy study of dispersed nanomaterials. <i>Journal of Surface Investigation</i> , 2008 , 2, 699-704	0.5	4
29	Effect of the metallic modifier is nature on the surface microstructure of the phenolic carboplastic-steel interface. <i>Journal of Friction and Wear</i> , 2008 , 29, 470-476	0.9	1
28	AFM application for in situ study of adsorption processes. <i>Semiconductors</i> , 2007 , 41, 495-497	0.7	2
27	AFM examination of nanolayers synthesised by the molecular layering method on the surface of manufacturing glasses. <i>Semiconductors</i> , 2007 , 41, 498-501	0.7	4
26	Third Russian Conference Surface Chemistry and Nanotechnology (with international participation). <i>Russian Journal of General Chemistry</i> , 2007 , 77, 323-324	0.7	
25	Influence of chemical modification of the surface of low-density polyethylene on its electret properties. <i>Russian Journal of Applied Chemistry</i> , 2007 , 80, 461-465	0.8	12
24	Influence of chemical modification of the surface of polyethylene with phosphorus, boron, titanium, vanadium, and silicon halides on its vapor permeability. <i>Russian Journal of Applied Chemistry</i> , 2007 , 80, 1413-1418	0.8	3
23	Structure of products formed in chemisorption of titanium tetrachloride by porous silicas. <i>Russian Journal of Applied Chemistry</i> , 2007 , 80, 2057-2062	0.8	4
22	Thermal transformations of a polymeric composite consisting of poly(methyl methacrylate) and phosphorus-containing nanodispersed aluminum oxide. <i>Russian Journal of Applied Chemistry</i> , 2007 , 80, 2119-2123	0.8	2
21	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. <i>Russian Journal of Applied Chemistry</i> , 2006 , 79, 175-181	0.8	4
20	Synthesis and properties of polyvinyl chloride films with modified surface. <i>Russian Journal of Applied Chemistry</i> , 2006 , 79, 1316-1320	0.8	5
19	Influence of the physicochemical treatment procedure on the morphology and properties of the polyvinyl chloride film surface. <i>Russian Journal of Applied Chemistry</i> , 2006 , 79, 1857-1861	0.8	3
18	The influence of titanium oxide nanocoatings on the surface quality of glass products for electronic devices. <i>Glass Physics and Chemistry</i> , 2006 , 32, 70-74	0.7	4
17	Formation and properties of the nanocluster structure of iron oxides. <i>Russian Chemical Bulletin</i> , 2006 , 55, 1755-1767	1.7	2

16	Calculation of the Stoichiometric Composition of Nanostructures Synthesized by Molecular Layer Deposition on the Surface of Solid Matrices. <i>Russian Journal of Applied Chemistry</i> , 2005 , 78, 367-374	0.8	4
15	Thermal Transformations of Titanium Oxochloride Nanostructures on Silica Surface. <i>Russian Journal of Applied Chemistry</i> , 2005 , 78, 859-864	0.8	1
14	Influence of Chemical Modification of the Surface on the Electret Properties of Polytetrafluoroethylene. <i>Russian Journal of Applied Chemistry</i> , 2004 , 77, 276-280	0.8	12
13	Damping of the Growth of Titanium Oxide Nanolayer Formed by Molecular Layer Deposition Technique on Oxidized Silicon Surface. <i>Russian Journal of Applied Chemistry</i> , 2004 , 77, 1061-1065	0.8	4
12	Synthesis and in situ gravimetric monitoring of formation of titanium-oxide layer on silica surface. <i>Russian Journal of Applied Chemistry</i> , 2004 , 77, 1227-1231	0.8	6
11	Surface structure and thermal oxidative degradation of the reaction products of polyethylene with PCl ₃ and VOCl ₃ vapors. <i>Russian Journal of Applied Chemistry</i> , 2004 , 77, 1854-1858	0.8	5
10	Interaction of Titanium Tetrachloride with Products of Thermal Decomposition of Basic Magnesium Carbonate. <i>Russian Journal of Applied Chemistry</i> , 2003 , 76, 7-11	0.8	8
9	Synthesis of Porous Magnesium Oxide by Thermal Decomposition of Basic Magnesium Carbonate. <i>Russian Journal of General Chemistry</i> , 2003 , 73, 37-42	0.7	14
8	Synthesis of Multicomponent Oxide Low-Dimensional Systems on the Surface of Porous Silicon Dioxide Using the Molecular Layering Method. <i>Russian Journal of General Chemistry</i> , 2002 , 72, 575-589	0.7	10
7	Reactivity of Phenol-Formaldehyde Microspheres toward PCl ₃ , VOCl ₃ , and CrO ₂ Cl ₂ Vapors. <i>Russian Journal of Applied Chemistry</i> , 2002 , 75, 969-973	0.8	6
6	Effects of silica and titania modification additions on the microstructure of sintered alumina. <i>Inorganic Materials</i> , 2000 , 36, 1127-1132	0.9	2
5	CVD Titania/Silica Gel Carbonized Due to Pyrolysis of Cyclohexene. <i>Langmuir</i> , 2000 , 16, 3227-3243	4	37
4	Characteristics of the Hydration Layer Structure in Porous Titania/Silica Obtained by the Chemical Vapor Deposition Method. <i>Langmuir</i> , 1999 , 15, 8441-8446	4	17
3	The Molecular Layering Method as a Basis of Chemical Nanotechnology 1999 , 487-495		
2	Phase formation in a nanosize silicon oxide film on the surface of aluminum oxide. <i>Technical Physics Letters</i> , 1998 , 24, 1-3	0.7	2
1	Thermal oxidation of silicon carbide with surface modification by the molecular layering method. <i>Refractories</i> , 1985 , 26, 82-84		2