

Aida Rudakova

List of Publications by Year in descending order

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687220

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43
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1015
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopic and Photoluminescence Studies of a Wide Band Gap Insulating Material: Powdered and Colloidal ZrO ₂ Sols. <i>Langmuir</i> , 1998, 14, 5011-5022.	1.6	268
2	Influence of the Dopant Concentration on the Photocatalytic Activity: Al-Doped TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2015, 119, 24695-24703.	1.5	81
3	Photostimulated Reactions at the Surface of Wide Band-Gap Metal Oxides (ZrO ₂ and TiO ₂): Interdependence of Rates of Reactions on Pressure Concentration and on Light Intensity. <i>Journal of Physical Chemistry B</i> , 1998, 102, 10906-10916.	1.2	60
4	Factors Affecting UV-Induced Superhydrophilic Conversion of a TiO ₂ Surface. <i>Journal of Physical Chemistry C</i> , 2013, 117, 12086-12092.	1.5	47
5	Thermo- and Photo-stimulated Effects on the Optical Properties of Rutile Titania Ceramic Layers Formed on Titanium Substrates. <i>Chemistry of Materials</i> , 2013, 25, 170-177.	3.2	38
6	Solid-state synthesis, characterization, UV-induced coloration and photocatalytic activity of The Sr ₆ Bi ₂ O ₁₁ , Sr ₃ Bi ₂ O ₆ and Sr ₂ Bi ₂ O ₅ bismuthates. <i>Catalysis Today</i> , 2020, 340, 70-85.	2.2	25
7	Effect of the TiO ₂ -ZnO Heterostructure on the Photoinduced Hydrophilic Conversion of TiO ₂ and ZnO Surfaces. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8884-8891.	1.5	24
8	Light-Controlled ZrO ₂ Surface Hydrophilicity. <i>Scientific Reports</i> , 2016, 6, 34285.	1.6	22
9	Self-cleaning properties of zirconium dioxide thin films. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 367, 397-405.	2.0	22
10	Considerations of Trends in Heterogeneous Photocatalysis. Correlations between Conduction and Valence Band Energies with Bandgap Energies of Various Photocatalysts. <i>ChemCatChem</i> , 2019, 11, 3534-3541.	1.8	19
11	Photoinduced hydrophilic conversion of hydrated ZnO surfaces. <i>Journal of Colloid and Interface Science</i> , 2016, 466, 452-460.	5.0	17
12	Influence of the Dopant Concentration on the Photoelectrochemical Behavior of Al-Doped TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2018, 122, 7975-7981.	1.5	17
13	Antibacterial and Osteogenic Properties of Ag Nanoparticles and Ag/TiO ₂ Nanostructures Prepared by Atomic Layer Deposition. <i>Journal of Functional Biomaterials</i> , 2022, 13, 62.	1.8	16
14	Dependences of ZnO Photoinduced Hydrophilic Conversion on Light Intensity and Wavelengths. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9824-9828.	1.5	14
15	UV-induced formation of color centers in dispersed TiO ₂ particles: Effect of thermal treatment, metal (Al) doping, and adsorption of molecules. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 354, 33-46.	2.0	13
16	Raman spectroscopy of SrZrO ₃ based proton conducting electrolyte: Effect of Y-doping and Sr-nonstoichiometry. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 17007-17018.	3.8	13
17	Photoactive Heterostructures: How They Are Made and Explored. <i>Catalysts</i> , 2021, 11, 294.	1.6	13
18	The origin of 1560 cm ⁻¹ band in experimental IR spectra of water adsorbed on TiO ₂ surface: Ab initio assessment. <i>Chemical Physics Letters</i> , 2016, 662, 97-101.	1.2	12

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19	Phenomenological Rule from Correlations of Conduction/Valence Band Energies and Bandgap Energies in Semiconductor Photocatalysts: Calcium Bismuthates versus Strontium Bismuthates. <i>ChemCatChem</i> , 2020, 12, 1551-1555.	1.8	12
20	Materials synthesis, characterization and DFT calculations of the visible-light-active perovskite-like barium bismuthate $\text{Ba}_{1.264(4)}\text{Bi}_{1.971(4)}\text{O}_{4-x}$ photocatalyst. <i>Journal of Materials Chemistry C</i> , 2020, 8, 3509-3519.	2.7	12
21	Photoinduced Hydrophilicity of Surfaces of Thin Films. <i>Colloid Journal</i> , 2021, 83, 20-48.	0.5	12
22	Photoinduced hydrophilic behavior of TiO ₂ thin film on Si substrate. <i>Journal of Alloys and Compounds</i> , 2021, 872, 159746.	2.8	12
23	FT-IR Study of Carbon Monoxide Adsorption on Li-Exchanged Zeolite X. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5212-5220.	1.2	11
24	Visible-NIR Light Absorption of Titania Thermochemically Fabricated from Titanium and its Alloys; UV- and Visible-Light-Induced Photochromism of Yellow Titania. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25852-25864.	1.5	10
25	Photoelectrochemical Behavior of the Ternary Heterostructured Systems CdS/WO ₃ /TiO ₂ . <i>Catalysts</i> , 2019, 9, 999.	1.6	10
26	Effect of resonance dipole-dipole interaction on the infrared spectra of adsorbed CF ₄ . Experimental investigation and theoretical modeling. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 354, 4-10.	2.0	7
27	Recent advances in composite and heterostructured photoactive materials for the photochemical conversion of solar energy. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 34, 100588.	3.2	7
28	IR Spectroscopic Testing of Surfaces in Water Ice and in Icy Mixtures with Prussic Acid or Ammonia. <i>Langmuir</i> , 2009, 25, 1482-1487.	1.6	6
29	Transmission IR cell for atmosphere-controlled studies of photoprocesses on powdered high surface area materials. <i>Review of Scientific Instruments</i> , 2019, 90, 105113.	0.6	6
30	IR spectroscopic study of surface properties of amorphous water ice. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2010, 109, 708-718.	0.2	5
31	UV-induced defect formation in cubic ZrO ₂ . Optical demonstration of Y, Yb and Er dopants interacting with photocarriers. <i>Chemical Physics Letters</i> , 2020, 742, 137136.	1.2	5
32	Effect of the Type of Heterostructures on Photostimulated Alteration of the Surface Hydrophilicity: TiO ₂ /BiVO ₄ vs. ZnO/BiVO ₄ Planar Heterostructured Coatings. <i>Catalysts</i> , 2021, 11, 1424.	1.6	5
33	Optical Properties of Various Strontium Bismuthates: Luminescence and UV-induced Photocoloration. <i>ChemPhotoChem</i> , 2020, 4, 5209-5222.	1.5	4
34	Effect of Cu ₂ O Substrate on Photoinduced Hydrophilicity of TiO ₂ and ZnO Nanocoatings. <i>Nanomaterials</i> , 2021, 11, 1526.	1.9	4
35	Surface Modification of Additively Manufactured Nitinol by Wet Chemical Etching. <i>Materials</i> , 2021, 14, 7683.	1.3	4
36	Effect of the Heterovalent Doping of TiO ₂ with Sc ³⁺ and Nb ⁵⁺ on the Defect Distribution and Photocatalytic Activity. <i>Catalysts</i> , 2022, 12, 484.	1.6	4

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37	Photoinduced Radical Processes on the Spinel (MgAl ₂ O ₄) Surface Involving Methane, Ammonia, and Methane/Ammonia. <i>Langmuir</i> , 2012, 28, 7368-7373.	1.6	2
38	MG-63 and FetMSC Cell Response on Atomic Layer Deposited TiO ₂ Nanolayers Prepared Using Titanium Tetrachloride and Tetraisopropoxide. <i>Coatings</i> , 2022, 12, 668.	1.2	2
39	Spectroscopic study of zeolite Na-ETS-10 and ethylene photopolymerization reaction on its surface. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2008, 105, 739-744.	0.2	1
40	The Study of Photoactive Materials. <i>Reviews and Advances in Chemistry</i> , 2020, 10, 73-111.	0.2	1
41	Spectroscopic studies of ozone in cryosolutions: FT-IR spectra of 16O ₃ in liquid nitrogen, oxygen, argon and krypton. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 193, 385-392.	2.0	0
42	Editorial: Special Issue on Photocatalytic Nanocomposite Materials (PNMs). <i>Catalysts</i> , 2021, 11, 587.	1.6	0