Alexander Samokhvalov

List of Publications by Year
in descending order

47	1,317	361413	345221
papers	citations	20 h-index	36 g-index

48	48	48	1818
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Review of Experimental Characterization of Active Sites and Determination of Molecular Mechanisms of Adsorption, Desorption and Regeneration of the Deep and Ultradeep Desulfurization Sorbents for Liquid Fuels. Catalysis Reviews - Science and Engineering, 2010, 52, 381-410.	12.9	116
2	Characterization of active sites, determination of mechanisms of H2S, COS and CS2 sorption and regeneration of ZnO low-temperature sorbents: past, current and perspectives. Physical Chemistry Chemical Physics, 2011, 13, 3197.	2.8	106
3	Aluminum metalâ€“organic frameworks for sorption in solution: A review. Coordination Chemistry Reviews, 2018, 374, 236-253.	18.8	89
4	Copper-Promoted ZnO/SiO₂ Regenerable Sorbents for the Room Temperature Removal of H₂S from Reformate Gas Streams. Industrial & Engineering Chemistry Research, 2010, 49, 8388-8396.	3.7	76
5	Regenerable Feâ€“Mnâ€“ZnO/SiO₂sorbents for room temperature removal of H₂S from fuel reformates: performance, active sites, Operando studies. Physical Chemistry Chemical Physics, 2011, 13, 2179-2187.	2.8	67
6	Density Functional Study of Neutral and Charged Silver Clusters Ag_n with n = 2â€“22. Evolution of Properties and Structure. Journal of Physical Chemistry A, 2017, 121, 5018-5028.	2.5	67
7	Oxidation Potentials of Human Eumelanosomes and PheomelanosomesÂ¶. Photochemistry and Photobiology, 2005, 81, 145.	2.5	67
8	Hydrogen by photocatalysis with nitrogen codoped titanium dioxide. Renewable and Sustainable Energy Reviews, 2017, 72, 981-1000.	16.4	65
9	Characterization of the Fe(III)-binding Site in Sepia Eumelanin by Resonance Raman Confocal MicrospectroscopyÂ¶. Photochemistry and Photobiology, 2004, 80, 84.	2.5	55
10	Adsorption on Mesoporous Metalâ€“Organic Frameworks in Solution: Aromatic and Heterocyclic Compounds. Chemistry - A European Journal, 2015, 21, 16726-16742.	3.3	53
11	Desulfurization of Real and Model Liquid Fuels Using Light: Photocatalysis and Photochemistry. Catalysis Reviews - Science and Engineering, 2012, 54, 281-343.	12.9	47
12	Analysis of various solid samples by synchronous fluorescence spectroscopy and related methods: A review. Talanta, 2020, 216, 120944.	5.5	42
13	Surface characterization of Ag/Titania adsorbents. Applied Surface Science, 2010, 256, 3647-3652.	6.1	38
14	Production of Hydrogen by Glycerol Photoreforming Using Binary Nitrogenâ€“Metalâ€Promoted Nâ€Mâ€TiO₂ Photocatalysts. ChemPhysChem, 2014, 15, 942-949.	2.1	33
15	Heterogeneous Photocatalytic Reactions of Sulfur Aromatic Compounds. ChemPhysChem, 2011, 12, 2870-2885.	2.1	30
16	Adsorption of naphthalene and indole on F300 MOF in liquid phase by the complementary spectroscopic, kinetic and DFT studies. Journal of Porous Materials, 2014, 21, 709-727.	2.6	28
17	â€œOne-Potâ€•Synthesis and Photocatalytic Hydrogen Generation with Nanocrystalline Ag(0)/CaTiO₃ and in Situ Mechanistic Studies. Journal of Physical Chemistry C, 2016, 120, 19970-19979.	3.1	27
18	Photoionization Threshold of Eumelanosomes Determined Using UV Free Electron Laserâ^'Photoelectron Emission Microscopy. Journal of Physical Chemistry B, 2004, 108, 16334-16338.	2.6	23

#	Article	IF	Citations
19	Adsorption and desorption of dibenzothiophene on Ag-titania studied by the complementary temperature-programmed XPS and ESR. Applied Surface Science, 2011, 257, 3226-3232.	6.1	22
20	An in situ temperatureâ€programmed XPS study of the surface chemical reactions of thiophene with Ag/titania. Surface and Interface Analysis, 2010, 42, 1476-1482.	1.8	21
21	Study of the Surface Chemical Reactions of Thiophene with Ag/Titania by the Complementary Temperature-Programmed Electron Spin Resonance, Temperature-Programmed Desorption, and X-ray Photoelectron Spectroscopy: Adsorption, Desorption, and Sorbent Regeneration Mechanisms. Journal of Physical Chemistry C, 2010, 114, 4075-4085.	3.1	20
22	Reactive adsorption of hydrogen sulfide by promoted sorbents Cuâ€ZnO/SiO₂: active sites by experiment and simulation. Surface and Interface Analysis, 2013, 45, 865-872.	1.8	20
23	Fluorescence of A100 MOF and Adsorption of Water, Indole, and Naphthalene on A100 by the Spectroscopic, Kinetic, and DFT Studies. Journal of Physical Chemistry C, 2015, 119, 2491-2502.	3.1	20
24	Oxidation Potentials of Human Eumelanosomes and Pheomelanosomes. Photochemistry and Photobiology, 2004, 81, 145-8.	2.5	18
25	Assemblies of CdS Quantum Particles Studied by the Attenuated Low Energy Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2000, 104, 8631-8634.	2.6	13
26	Interactions of thiophenes with C300 Basolite MOF in solution by the temperature-programmed adsorption and desorption, spectroscopy and simulations. Adsorption, 2014, 20, 829-842.	3.0	12
27	Conventional and cryo-synchronous luminescence spectra of orthorhombic calcium titanate. Journal of Luminescence, 2016, 178, 430-436.	3.1	12
28	Hygroscopic metal-organic framework MIL-160(Al): In-situ time-dependent ATR-FTIR and gravimetric study of mechanism and kinetics of water vapor sorption. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 267, 120550.	3.9	12
29	Oxidation Potentials of Human Eumelanosomes and Pheomelanosomes^{Â¶}. Photochemistry and Photobiology, 2005, 81, 145-148.	2.5	11
30	Selective Activation of C=C Bond in Sustainable Phenolic Compounds from Lignin via Photooxidation: Experiment and Density Functional Theory Calculations. Photochemistry and Photobiology, 2015, 91, 1332-1339.	2.5	10
31	Exploring the electronic structure of aluminum metalâ€“organic framework Basolite A100: solid-state synchronous fluorescence spectroscopy reveals new charge excitation/relaxation pathways. Physical Chemistry Chemical Physics, 2018, 20, 26947-26956.	2.8	9
32	Photoelectron Transmission Through â€œCascade-Likeâ€•Langmuir-Blodgett Films Containing CdS Quantum Particles. Advanced Materials, 2001, 13, 584-587.	21.0	8
33	Porphyrin aluminum MOF with ultra-high water sorption capacity: In-situ time-dependent ATR-FTIR spectroscopy and gravimetry to study mechanism of water bonding and desorption. Vibrational Spectroscopy, 2022, 119, 103356.	2.2	8
34	Water as probe molecule for midgap states in nanocrystalline strontium titanate by conventional and synchronous luminescence spectroscopy under ambient conditions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 174, 54-61.	3.9	7
35	Visible Emission in Nanocrystalline Rutile: Free Exciton and Water as Probes for Midgap States in Adsorption/Desorption Using â€œConventionalâ€•and Synchronous Luminescence Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 21985-21994.	3.1	7
36	The solid-state synchronous vs. conventional fluorescence spectroscopy and complementary methods to study the interactions of aluminum metal-organic framework Basolite A100 with dimethyl sulfoxide. Journal of Luminescence, 2019, 210, 485-492.	3.1	7

#	Article	IF	Citations
37	Characterization of the Fe(III)â€binding Site in Sepia Eumelanin by Resonance Raman Confocal Microspectroscopy^{Â¶}. Photochemistry and Photobiology, 2004, 80, 84-88.	2.5	6
38	One-pot photoassisted synthesis, in situ photocatalytic testing for hydrogen generation and the mechanism of binary nitrogen and copper promoted titanium dioxide. Photochemical and Photobiological Sciences, 2017, 16, 916-924.	2.9	6
39	Porous calcium titanate and sorption and desorption of water under ambient conditions: a study by conventional and synchronous luminescence spectroscopy. Journal of Porous Materials, 2017, 24, 1145-1154.	2.6	6
40	Photochemical synthesis, characterization, photoinduced electron transfer, charging and discharging in copper-titania colloid. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 317, 1-8.	3.9	5
41	Trap emission by nanocrystalline anatase in visible range studied by conventional and synchronous luminescence spectroscopy: Adsorption and desorption of water vapor. Journal of Luminescence, 2017, 192, 388-396.	3.1	5
42	Interactions of Multiple Water Molecules with MIL-53(Al) and Understanding the Mechanism of Breathing: The DFT Study. Journal of Physical Chemistry C, 2020, 124, 9281-9288.	3.1	5
43	Understanding the structure, bonding and reactions of nanocrystalline semiconductors: a novel high-resolution instrumental method of solid-state synchronous luminescence spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 7022-7036.	2.8	4
44	Wavelength- and Time-Dependent Two-Photon Photoemission Spectroscopy of Dye-Coated Silicon Surface. Journal of Physical Chemistry B, 2000, 104, 11248-11252.	2.6	3
45	Distance-dependent Fluorescence Quenching on a Silver Nanoparticle Surface. Chemistry Letters, 2019, 48, 1504-1506.	1.3	2
46	One-pot photo-synthesis and in-situ generation of hydrogen by silver/strontium titanate photocatalyst under visible or near-UV light and role of midgap states: Experiment and DFT computations. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 342, 143-152.	3.9	1
47	Note: Heated sample platform for in situ temperature-programmed XPS. Review of Scientific Instruments, 2011, 82, 076106.	1.3	0