Vitalii P Petranovskii

List of Publications by Year
in descending order

93	814	623188	642321
papers	citations	14 h-index	23 g-index

95	95	95	738
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A comparative analysis of natural zeolites from various Cuban and Mexican deposits: structure, composition, thermal properties and hierarchical porosity. Journal of Thermal Analysis and Calorimetry, 2022, 147, 6147-6159.	2.0	8
2	Aluminum distribution in mordenite-zeolite framework: A new outlook based on density functional theory calculations. Journal of Solid State Chemistry, 2022, 306, 122725.	1.4	7
3	Basic Aspects in the Application of QCMs as Sensors: A Tutorial. IEEE Sensors Journal, 2022, 22, 10163-10172.	2.4	6
4	Chabazite Synthesis and Its Exchange with Ti, Zn, Cu, Ag and Au for Efficient Photocatalytic Degradation of Methylene Blue Dye. International Journal of Molecular Sciences, 2022, 23, 1730.	1.8	5
5	Bimetallic Copper-Silver Systems Supported on Natural Clinoptilolite: Long-Term Changes in Nanospeciesâ€™ Composition and Stability. Inorganics, 2022, 10, 34.	1.2	3
6	Nanoporosity and Isosteric Enthalpy of Adsorption of CH4, H2, and CO2 on Natural Chabazite and Exchanged. Separations, 2022, 9, 150.	1.1	0
7	Frequency Shifts Estimation for Sensors Based on Optoelectronic Oscillators. IEEE Sensors Journal, 2021, 21, 11283-11290.	2.4	6
8	Applications of Quartz Crystal Microbalances Modified With Metal Organic Frameworks. Advances in Chemical and Materials Engineering Book Series, 2021, , 56-73.	0.2	2
9	QCM modified with FAU zeolite nanostructures for analysis of temperature induced adsorbed mass changes. Measurement: Journal of the International Measurement Confederation, 2021, 172, 108935.	2.5	9
10	Formation of admixed phase during microwave assisted Cu ion exchange in mordenite. Materials Chemistry and Physics, 2021, 261, 124235.	2.0	4
11	Nanoparticles of Î³-Sitoesterol and Ag on Clinoptilolite Zeolites. Journal of Nanomaterials, 2021, 2021, 1-11.	1.5	1
12	The effect of chemical composition on the properties of LTA zeolite: A theoretical study. Computational Materials Science, 2021, 196, 110557.	1.4	14
13	Recent Advances in Catalysis Based on Transition Metals Supported on Zeolites. Frontiers in Chemistry, 2021, 9, 716745.	1.8	20
14	Photocatalytic Degradation of Rhodamine B Dye in Aqueous Suspension by ZnO and M-ZnO (M = La3+,) Tj ETQq0 0 0 rgBT /Overlock 10	1.3	9
15	Phase effect in frequency measurements of a quartz crystal using the pulse coincidence principle. , 2020, , .		2
16	Properties of Iron-Modified-by-Silver Supported on Mordenite as Catalysts for NOx Reduction. Catalysts, 2020, 10, 1156.	1.6	7
17	Local Structures of Two-Dimensional Zeolitesâ€”Mordenite and ZSM-5â€”Probed by Multinuclear NMR. Molecules, 2020, 25, 4678.	1.7	10
18	Application of the Principle of Rational Approximations for Measuring Dynamic Frequency Values Generated by an IMU. Advances in Computational Intelligence and Robotics Book Series, 2020, , 26-51.	0.4	3

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19	Analysis of Spatial Localization Trough Frequency Counting for Accelerometers Embedded in INS. , 2019, , .		0
20	Theoretical study of the effect of isomorphous substitution by $$hbox {Al}^{3+}$$ and/or $$hbox {Fe}^{3+}$$ cations to tetrahedral positions in the framework of a zeolite with erionite topology. Journal of Materials Science, 2019, 54, 13190-13199.	1.7	5
21	Fe Speciation in Iron Modified Natural Zeolites as Sustainable Environmental Catalysts. Catalysts, 2019, 9, 866.	1.6	5
22	Effect of phase in fast frequency measurements for sensors embedded in robotic systems. International Journal of Advanced Robotic Systems, 2019, 16, 172988141986972.	1.3	7
23	Recognition of depth composition profiles of copper-exchanged mordenites applying analytical methods with different depth vision. Materials Chemistry and Physics, 2019, 236, 121787.	2.0	6
24	Analysis of theoretical and experimental X-ray diffraction patterns for distinct mordenite frameworks. Journal of Materials Science, 2019, 54, 7745-7757.	1.7	17
25	Comprehensive Analysis of the Copper Exchange Implemented in Ammonia and Protonated Forms of Mordenite Using Microwave and Conventional Methods. Molecules, 2019, 24, 4216.	1.7	14
26	Experimental analysis of measurement process for a QCM using the pulse coincidence method. , 2019, , .		3
27	One-pot synthesis of lamellar mordenite and ZSM-5 zeolites and subsequent pillaring by amorphous SiO2. Applied Nanoscience (Switzerland), 2019, 9, 557-565.	1.6	8
28	Bimetallic AgFe Systems on Mordenite: Effect of Cation Deposition Order in the NO Reduction with C3H6/CO. Catalysts, 2019, 9, 58.	1.6	18
29	Zeolite-Based Optical Detectors. Advances in Computational Intelligence and Robotics Book Series, 2019, , 1-16.	0.4	1
30	Thermal analysis and EPR study of copper species in mordenites prepared by conventional and microwave-assisted methods. Journal of Thermal Analysis and Calorimetry, 2018, 134, 71-79.	2.0	8
31	Ammonium modified natural clinoptilolite to remove manganese, cobalt and nickel ions from wastewater: Favorable conditions to the modification and selectivity to the cations. Microporous and Mesoporous Materials, 2018, 255, 200-210.	2.2	31
32	Filling of Irregular Channels with Round Cross-Section: Modeling Aspects to Study the Properties of Porous Materials. Materials, 2018, 11, 1901.	1.3	7
33	Adsorption of N2, NO2 and CO2 on Epistilbite Natural Zeolite from Jalisco, Mexico after Acid Treatment. Minerals (Basel, Switzerland), 2018, 8, 196.	0.8	4
34	Light intensity-induced phase transitions in graphene oxide doped polyvinylidene fluoride. Optical Materials Express, 2018, 8, 2579.	1.6	15
35	Optimization of pulse width for frequency measurement by the method of rational approximations principle. Measurement: Journal of the International Measurement Confederation, 2018, 125, 463-470.	2.5	14
36	ADSORCIÃ“N DE CO2, H2 Y CH4 EN ZEOLITAS NATURALES DE PORO ANGOSTO. Revista Internacional De Contaminacion Ambiental, 2018, 34, 685-696.	0.1	3

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37	A New Approach to Measurement of Frequency Shifts Using the Principle of Rational Approximations. Metrology and Measurement Systems, 2017, 24, 45-56.	1.4	10
38	Nanoporosity of MCM-41 Materials and Y-Zeolites Created by Deposition of Tournefortia hirsutissima L. Plant Extract. Journal of Nanomaterials, 2017, 2017, 1-10.	1.5	1
39	Thermal analysis and porosimetry of natural zeolites from mexican and cuban deposits. Applied Solid State Chemistry, 2017, 1, 35-41.	0.1	4
40	Textural Properties of Hybrid Biomedical Materials Made from Extracts ofTournefortia hirsutissimaL. Imbibed and Deposited on Mesoporous and Microporous Materials. Journal of Nanomaterials, 2016, 2016, 1-10.	1.5	6
41	Iron exchanged natural mordenite: UV-Vis diffuse reflectance and MÃ¶ssbauer spectroscopy characterisation. International Journal of Nanotechnology, 2016, 13, 112.	0.1	4
42	High resolution measurement of physical variables change for INS. , 2016, , .		3
43	Resolution improvement of accelerometers measurement for drones in agricultural applications. , 2016, , .		11
44	Pulse width influence in fast frequency measurements using rational approximations. Measurement: Journal of the International Measurement Confederation, 2016, 86, 67-78.	2.5	26
45	Synthesis of nanostructured metalâ€“, semiconductorâ€“, and metal/semiconductorâ€“mordenite composites from geothermal waste. Journal of Applied Research and Technology, 2016, 14, 232-238.	0.6	3
46	Plasmon spectra of binary Ag-Cu mixtures supported in mordenite. , 2016, , .		0
47	High resolution measurement of water levels in optical components. , 2016, , .		1
48	A comparative analysis of the protonated and copper exchanged mordenites with SiO<SUB align="right">2/Al<SUB align="right">2O<SUB align="right">3 molar ratio equal to 10. International Journal of Nanotechnology, 2016, 13, 136.	0.1	6
49	Disperse orange 30 dye degradation by assisted plasmonic photocatalysis using Ag-CdZnSO/zeolitic matrix nanocomposites. Catalysis Communications, 2016, 75, 103-107.	1.6	11
50	Use of natural mordenite to remove chromium (III) and to neutralize pH of alkaline waste waters. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2016, 51, 425-433.	0.9	3
51	Frequency Domain Sensors and Frequency Measurement Techniques. Applied Mechanics and Materials, 2015, 756, 575-584.	0.2	12
52	Instability measurement in time-frequency references used on autonomous navigation systems. , 2015, , .		3
53	Rational approximations principle for frequency shifts measurement in frequency domain sensors. , 2015, , .		5
54	Insight into copper-mordeniteâ€“silica mixtures (CuMORâ€“SiO2). Comptes Rendus Chimie, 2015, 18, 474-477.	0.2	1

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55	A DFT study of copper-oxide clusters embedded in dry and water-immersed siliceous mordenite. Computational Materials Science, 2015, 106, 140-148.	1.4	8
56	Mathematical Modelling of molecular adsorption in zeolite coated frequency domain sensors. IFAC-PapersOnLine, 2015, 48, 41-46.	0.5	22
57	Optical spectra of noble metal nanoparticles supported on zeolites. Proceedings of SPIE, 2014, , .	0.8	1
58	Engineering of Supported Nanomaterials. Procedia Chemistry, 2014, 10, 25-30.	0.7	7
59	Two Different States of Copper Ions in Zeolites. Advanced Materials Research, 2014, 880, 151-154.	0.3	1
60	Transport of Reactants in Ultrathin Channels during the Etching Reaction. Advanced Materials Research, 2014, 1040, 202-207.	0.3	0
61	Acceleration measurement improvement by application of novel frequency measurement technique for FDS based INS. , 2014, , .		9
62	A theoretical study of Cu clusters in siliceous erionite. Journal of Molecular Structure, 2014, 1059, 232-238.	1.8	7
63	Plasmon resonance of gold nanoparticles supported on Y-zeolite in the presence of various co-cations. Applied Surface Science, 2014, 321, 136-143.	3.1	7
64	Atomic and Electronic Structure of Quaternary Cd_xZn_yS_{Î´}O_{Î³} Nanoparticles Grown on Mordenite. Chemistry of Materials, 2014, 26, 6152-6159.	3.2	14
65	Ion-exchange of amino- and aqua-complexes of nickel and cobalt in natural clinoptilolite. Journal of Environmental Chemical Engineering, 2014, 2, 1221-1227.	3.3	9
66	Plasmon Features of Coinage Metal Nanoparticles Supported on Zeolites. Plasmonics, 2013, 8, 1551-1558.	1.8	12
67	Monosized sphere packing approach in the nanoporous structure modeling. , 2012, , .		3
68	Formation of active surface of copper catalysts in methanol oxidation. , 2012, , .		0
69	Optical response of Cu clusters in zeolite template. Journal of Colloid and Interface Science, 2012, 375, 60-64.	5.0	9
70	Copper-Silver Bimetallic System on Natural Clinoptilolite: Thermal Reduction of Cu²⁺ and Ag⁺ Exchanged. Journal of Nanoscience and Nanotechnology, 2011, 11, 5580-5586.	0.9	23
71	Inception and Trapping of ZnO Nanoparticles within Desilicated Mordenite and ZSMâ€5 Zeolites. Particle and Particle Systems Characterization, 2010, 27, 100-111.	1.2	16
72	Structure and stability of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mrow><mml:mi>X</mml:mi></mml:mrow></mml:msubsup><mml:mo>(</mml:mo><mml:msubsup><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mrow><mml:mi>X</mml:mi></mml:mrow></mml:msubsup><mml:msub><mml:mrow><mml:mtext>O</mml:mtext></mml:mrow><mml:mrow><mml:mi>Y</mml:mi></mml:mrow></mml:msub><mml:mo>)</mml:mo></mml:mrow></mml:math> (Xâ©½ 9; Z= â^'1, 0, 1) clusters. Theoretical insights. Chemical Physics Letters, 2008, 464, 58-68.	1.2	0

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73	Spectral-Optic Response of ZnS and Mixed CdxZnyS Nanoclusters on Synthetic Mordenites. Journal of Physical Chemistry C, 2007, 111, 10260-10266.	1.5	7
74	Characterization of Binary Ag-Cu Ion Mixtures in Zeolites: Their Reduction Products and Stability to Air Oxidation. AIP Conference Proceedings, 2007, , .	0.3	1
75	PdO/Al2O3â€“(Ce1-X Zr X)O2 catalysts: effect of the sol-gel support composition. Catalysis Letters, 2006, 110, 53-60.	1.4	43
76	Spectroscopic observation and ab initio simulation of copper clusters in zeolites. Catalysis Today, 2005, 107-108, 892-900.	2.2	14
77	The influence of gold on the optical properties of solâ€“gel derived titania. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 396, 70-76.	2.6	38
78	The effect of gold on the phase transitions of titania. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 396, 61-69.	2.6	27
79	Optical appearance of copper clusters and nanoparticles in zeolites. , 2004, , .		1
80	A novel organic-free sol-gel route to ceria-zirconia-alumina thin films and glassy products. , 2004, 5513, 242.		1
81	Formation of copper nanospecies of de-NO x catalysts based on Cu-mordenite: role of variable silica-alumina ratio and effects of adsorbed water. , 2004, , .		0
82	Microbiologically active nanocomposite media. , 2003, 5218, 244.		6
83	Reduction of binary silverâ€“copper ion mixture in mordenite: an example of synergetic behavior. Studies in Surface Science and Catalysis, 2002, 141, 569-574.	1.5	2
84	‹title›Effect of zeolite type upon properties of copper nanoparticles and the clusters produced within them‹/title›. , 2002, 4806, 233.		1
85	Plasmon resonance of copper nanoparticles within zeolites: the effect of matrix composition and agglomeration temperature. , 2001, , .		2
86	Few-Atomic Silver Clusters in Zeolites:Â Ab Initio MO LCAO Calculation and Optical Spectroscopy. Journal of Physical Chemistry B, 2000, 104, 12105-12110.	1.2	18
87	Stability of silver clusters in mordenites with different SiO2/Al2O3 molar ratio. Applied Surface Science, 1999, 150, 58-64.	3.1	49
88	A Cationic Cesium Continuum in Zeolite X. The Journal of Physical Chemistry, 1994, 98, 5768-5772.	2.9	44
89	Catalysts Based on Nanopowders Supported on Foam Materials for Deep Oxidation of Organic Substances. Advanced Materials Research, 0, 872, 10-14.	0.3	0
90	Some Aspects of Computer Approaches to Simulation of Bimodal Sphere Packing in Material Engineering. Advanced Materials Research, 0, 1040, 585-591.	0.3	3

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91	Effect of the Zeolitic Matrix on the Reduction Process of Cu²⁺ Cations in Clinoptilolite, Mordenite and Erionite. Advanced Materials Research, 0, 880, 48-52.	0.3	6
92	Tessellation Methods for Modeling the Material Structure. Applied Mechanics and Materials, 0, 756, 426-435.	0.2	7
93	Mechanical Properties of Viscous Liquids and Nanosuspensions. Solid State Phenomena, 0, 271, 119-123.	0.3	1