Imre MiklÃ³s SzilÃ¡gyi

List of Publications by Year
in descending order

117 papers	3,123 citations	182225 30 h-index	206121 51 g-index
121 all docs	121 docs citations	121 times ranked	4485 citing authors

#	Article	IF	Citations
1	Experimental Study of Halloysite Nanofluids in Pool Boiling Heat Transfer. Molecules, 2022, 27, 729.	1.7	10
2	A CFD Study on Heat Transfer Performance of SiO2-TiO2 Nanofluids under Turbulent Flow. Nanomaterials, 2022, 12, 299.	1.9	8
3	Multi-Centered Solid-Phase Quasi-Intramolecular Redox Reactions of [(Chlorido)Pentaamminecobalt(III)] Permanganateâ€"An Easy Route to Prepare Phase Pure CoMn2O4 Spinel. Inorganics, 2022, 10, 18.	1.2	8
4	Growth and Characterization of Graphene Layers on Different Kinds of Copper Surfaces. Molecules, 2022, 27, 1789.	1.7	3
5	Preparation of TiO2â€"MoO3 composite nanofibers by water-based electrospinning process and their application in photocatalysis. Materials Science in Semiconductor Processing, 2022, 147, 106699.	1.9	12
6	Thermal Conductivity Enhancement of Atomic Layer Deposition Surface-Modified Carbon Nanosphere and Carbon Nanopowder Nanofluids. Nanomaterials, 2022, 12, 2226.	1.9	3
7	Comparative study of the thermal behavior of Srâ€"Cuâ€"O gels obtained by solâ€"gel and microwave-assisted solâ€"gel method. Journal of Thermal Analysis and Calorimetry, 2021, 143, 2893-2900.	2.0	5
8	Thermal decomposition and spectral characterization of di[carbonatotetraamminecobalt(III)] sulfate trihydrate and the nature of its thermal decomposition products. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2907-2923.	2.0	17
9	Experimental investigation of rheological properties and thermal conductivity of SiO2â€"P25 TiO2 hybrid nanofluids. Journal of Thermal Analysis and Calorimetry, 2021, 146, 493-507.	2.0	14
10	Deuteration and Vibrational Spectra of Dimethylammonium Paratungstateâ€B Hydrates. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 593-598.	0.6	9
11	(Me₂NH₂)₁₀[H₂-Dodecatungstate] polymorphs: dodecatungstate cages embedded in a variable dimethylammonium cation + water of crystallization matrix. RSC Advances, 2021, 11, 3713-3724.	1.7	2
12	Preparation of TiO2/WO3/C/N Composite Nanofibers by Electrospinning Using Precursors Soluble in Water and Their Photocatalytic Activity in Visible Light. Nanomaterials, 2021, 11, 351.	1.9	4
13	Comparative Study of Carbon Nanosphere and Carbon Nanopowder on Viscosity and Thermal Conductivity of Nanofluids. Nanomaterials, 2021, 11, 608.	1.9	12
14	Thermal analysis of solvatomorphic decakis (dimethylammonium) dihydrogendodecatungstate hydrates. Journal of Thermal Analysis and Calorimetry, 2021, 144, 81-90.	2.0	7
15	Solid-Phase Quasi-Intramolecular Redox Reaction of [Ag(NH₃)₂]MnO₄: An Easy Way to Prepare Pure AgMnO₂. Inorganic Chemistry, 2021, 60, 3749-3760.	1.9	15
16	AgNO 3 â‹…NH 4 NO 3 â€" an enigmatic doubleâ€salt type â€œdecomposition intermediateâ€•of diamminesilver(I) permanganate. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1166-1174.	0.6	4
17	A Quasi-Intramolecular Solid-Phase Redox Reaction of Ammonia Ligands and Perchlorate Anion in Diamminesilver(I) Perchlorate. Inorganics, 2021, 9, 38.	1.2	14
18	Solid-Phase â€œSelf-Hydrolysisâ€•of [Zn(NH3)4MoO4@2H2O] Involving Enclathrated Waterâ€"An Easy Route to a Layered Basic Ammonium Zinc Molybdate Coordination Polymer. Molecules, 2021, 26, 4022.	1.7	9

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19	Dynamic disorder in the high-temperature polymorph of bis[diamminesilver(I)] sulfateâ€”reasons and consequences of simultaneous ammonia release from two different polymorphs. Journal of Coordination Chemistry, 2021, 74, 2144-2162.	0.8	9
20	Photocatalytic Crystalline and Amorphous TiO2 Nanotubes Prepared by Electrospinning and Atomic Layer Deposition. Molecules, 2021, 26, 5917.	1.7	11
21	EDITORIAL 2021: Journal of Thermal Analysis and Calorimetry. Journal of Thermal Analysis and Calorimetry, 2021, 143, 1-17.	2.0	6
22	Polyethylene glycolâ€"based functional composite phase change materials with excellent electrical and thermal conductivities. International Journal of Energy Research, 2021, 45, 7675-7688.	2.2	14
23	Thermal behavior of Cu-doped TiO2 gels synthesized by the sol-gel method. Revue Roumaine De Chimie, 2021, 66, 219-229.	0.4	2
24	Synthesis of TiO2 nanofibers by electrospinning using water-soluble Ti-precursor. Journal of Thermal Analysis and Calorimetry, 2020, 139, 57-66.	2.0	18
25	Comparing different reaction models for combustion kinetics of solid recovered fuel. Journal of Thermal Analysis and Calorimetry, 2020, 139, 555-565.	2.0	9
26	Effect of pH in the hydrothermal preparation of monoclinic tungsten oxide. Journal of Solid State Chemistry, 2020, 281, 121044.	1.4	14
27	Carbon nanosphere templates for the preparation of inverse opal titania photonic crystals by atomic layer deposition. Applied Surface Science, 2020, 504, 144443.	3.1	23
28	EDITORIAL 2020: Journal of Thermal Analysis and Calorimetry. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1-15.	2.0	10
29	A Novel Experimental Study on the Rheological Properties and Thermal Conductivity of Halloysite Nanofluids. Nanomaterials, 2020, 10, 1834.	1.9	30
30	Electric and Photocatalytic Properties of Graphene Oxide Depending on the Degree of Its Reduction. Nanomaterials, 2020, 10, 2313.	1.9	5
31	Recent advances in thermal analysis and calorimetry presented at the 2nd Journal of Thermal Analysis and Calorimetry Conference and 7th V4 (Joint Czechâ€“Hungarianâ€“Polishâ€“Slovakian) Thermoanalytical Conference (2019). Journal of Thermal Analysis and Calorimetry, 2020, 142, 1-4.	2.0	6
32	Synthesis of TiO2/WO3 Composite Nanofibers by a Water-Based Electrospinning Process and Their Application in Photocatalysis. Nanomaterials, 2020, 10, 882.	1.9	27
33	Hydrothermal Synthesis and Gas Sensing of Monoclinic MoO3 Nanosheets. Nanomaterials, 2020, 10, 891.	1.9	37
34	Editorial 2020 - Obituaries. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2937-2937.	2.0	0
35	Nitrogen doped carbon aerogel composites with TiO₂ and ZnO prepared by atomic layer deposition. Journal of Materials Chemistry C, 2020, 8, 6891-6899.	2.7	10
36	Review on the recent progress in the preparation and stability of graphene-based nanofluids. Journal of Thermal Analysis and Calorimetry, 2020, 142, 1145-1172.	2.0	92

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37	Photocatalytic and Gas Sensitive Multiwalled Carbon Nanotube/TiO2-ZnO and ZnO-TiO2 Composites Prepared by Atomic Layer Deposition. Nanomaterials, 2020, 10, 252.	1.9	17
38	Thermal investigations of the Snâ€“Znâ€“O gels obtained by solâ€“gel method. Journal of Thermal Analysis and Calorimetry, 2019, 136, 461-470.	2.0	5
39	The latest international recognition of the Hungarian thermal analysis, the Judit Simon ESTAC Award. Journal of Thermal Analysis and Calorimetry, 2019, 135, 2915-2915.	2.0	0
40	Thermal and spectroscopic studies on a double-salt-type pyridineâ€“silver perchlorate complex having Î¹1-O coordinated perchlorate ions. Journal of Thermal Analysis and Calorimetry, 2019, 138, 1193-1205.	2.0	17
41	Utilization of Carbon Nanospheres in Photocatalyst Production: From Composites to Highly Active Hollow Structures. Materials, 2019, 12, 2537.	1.3	6
42	Effect of sonication characteristics on stability, thermophysical properties, and heat transfer of nanofluids: A comprehensive review. Ultrasonics Sonochemistry, 2019, 58, 104701.	3.8	188
43	Detecting Silver in Silver-Enabled Textiles by a Newly-Developed Portable Device. AATCC Journal of Research, 2019, 6, 22-29.	0.3	0
44	An unknown component of a selective and mild oxidant: structure and oxidative ability of a double salt-type complex having Î¹¹O-coordinated permanganate anions and three- and four-fold coordinated silver cations. RSC Advances, 2019, 9, 28387-28398.	1.7	19
45	Effect of pH in the Hydrothermal Preparation of Bi2WO6 Nanostructures. Materials, 2019, 12, 1728.	1.3	18
46	Gas Antisolvent Fractionation: A New Approach for the Optical Resolution of 4-chloromandelic Acid. Periodica Polytechnica: Chemical Engineering, 2019, 63, 303-311.	0.5	2
47	Decoration of Vertically Aligned Carbon Nanotubes with Semiconductor Nanoparticles Using Atomic Layer Deposition. Materials, 2019, 12, 1095.	1.3	6
48	Photocatalytic properties of TiO2@polymer and TiO2@carbon aerogel composites prepared by atomic layer deposition. Carbon, 2019, 147, 476-482.	5.4	51
49	Thermal properties of electrospun polyvinylpyrrolidone/titanium tetraisopropoxide composite nanofibers. Journal of Thermal Analysis and Calorimetry, 2019, 137, 1249-1254.	2.0	21
50	Effect of silver-nanoparticles generated in poly (vinyl alcohol) membranes on ethanol dehydration via pervaporation. Chinese Journal of Chemical Engineering, 2019, 27, 1595-1607.	1.7	20
51	Effect of Different Anions Upon the WO3 Morphology and Structure. Journal of Nanoscience and Nanotechnology, 2019, 19, 498-501.	0.9	0
52	Editorial 2019: Journal of Thermal Analysis and Calorimetry. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1-22.	2.0	4
53	Synthesis and characterization of copper, nickel, cobalt, zinc complexes with 4-nitro-3-pyrazolecarboxylic acid ligand. Journal of Thermal Analysis and Calorimetry, 2018, 133, 813-821.	2.0	19
54	Evidence of quasi-intramolecular redox reactions during thermal decomposition of ammonium hydroxodisulfitoferriate(III), (NH4)2[Fe(OH)(SO3)2]Â·H2O. Journal of Thermal Analysis and Calorimetry, 2018, 132, 493-502.	2.0	20

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55	Thermal analysis of the improved Hummersâ€™ synthesis of graphene oxide. Journal of Thermal Analysis and Calorimetry, 2018, 131, 2267-2272.	2.0	60
56	Synthesis and characterization of diazine-ring containing hydrazones and their Zn(II) complexes. Journal of Thermal Analysis and Calorimetry, 2018, 133, 443-452.	2.0	2
57	Editorial 2018. Journal of Thermal Analysis and Calorimetry, 2018, 131, 1-14.	2.0	3
58	Recycling the industrial waste ZnFe2O4 from hot-dip galvanization sludge. Journal of Thermal Analysis and Calorimetry, 2018, 134, 1863-1872.	2.0	5
59	Synthesis and characterization of Sr and Mg-doped hydroxyapatite by a simple precipitation method. Ceramics International, 2018, 44, 22976-22982.	2.3	33
60	Unexpected Sequential NH₃/H₂O Solid/Gas Phase Ligand Exchange and Quasi-Intramolecular Self-Protonation Yield [NH₄Cu(OH)MoO₄], a Photocatalyst Misidentified before as (NH₄)₂Cu(MoO₄)₂. Inorganic Chemistry, 2018, 57, 13679-13692.	1.9	20
61	Preparation of graphene oxide/semiconductor oxide composites by using atomic layer deposition. Applied Surface Science, 2018, 453, 245-251.	3.1	32
62	The chemical identity of â€œ[Ag(py)₂]MnO₄â€•organic solvent soluble oxidizing agent and new synthetic routes for the preparation of [Ag(py)_n]XO₄(Xâ€‰=â€‰Mn,) Tj ET Q q 0 0 1 0 rg BT /Ov	3.8	11
63	Strategies on Cyclometalating Ligand Substitution of Several Ir(III) Complexes: Theoretical Investigation of Different Molecular Behaviors. Organometallics, 2018, 37, 2491-2499.	1.1	13
64	Preparation and characterization of a nitrogen-doped mesoporous carbon aerogel and its polymer precursor. Journal of Thermal Analysis and Calorimetry, 2018, 134, 933-939.	2.0	17
65	Recent advances in thermal analysis and calorimetry presented at the 1st Journal of Thermal Analysis and Calorimetry Conference and 6th V4 (Joint Czech-Hungarian-Polish-Slovakian) Thermoanalytical Conference (2017). Journal of Thermal Analysis and Calorimetry, 2018, 133, 1-4.	2.0	19
66	Improved fire resistance by using Portland-pozzolana or Portland-fly ash cements. Journal of Thermal Analysis and Calorimetry, 2017, 129, 925-936.	2.0	31
67	Characterization of PLD grown WO 3 thin films for gas sensing. Applied Surface Science, 2017, 417, 218-223.	3.1	47
68	TiO2/ZnO and ZnO/TiO2 core/shell nanofibers prepared by electrospinning and atomic layer deposition for photocatalysis and gas sensing. Applied Surface Science, 2017, 424, 190-197.	3.1	59
69	WO₃â€“EDA hybrid nanoplates and nanowires: synthesis, characterization, formation mechanism and thermal decomposition. RSC Advances, 2017, 7, 46726-46737.	1.7	4
70	Preparation of iron tungstate (FeWO4) nanosheets by hydrothermal method. Materials Research Bulletin, 2017, 95, 563-569.	2.7	29
71	Photocatalytic C60-amorphous TiO2 composites prepared by atomic layer deposition. Applied Surface Science, 2017, 419, 497-502.	3.1	36
72	Photocatalytic hollow TiO2 and ZnO nanospheres prepared by atomic layer deposition. Scientific Reports, 2017, 7, 4337.	1.6	31

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73	Fibers and fiber cocktails to improve fire resistance of concrete. Journal of Thermal Analysis and Calorimetry, 2017, 128, 1453-1461.	2.0	16
74	WO₃nanopaticles and PEDOT:PSS/WO₃composite thin films studied for photocatalytic and electrochromic applications. Journal of Physics: Conference Series, 2016, 700, 012019.	0.3	3
75	Preparation and characterization of WO3 nanoparticles, WO3/TiO2 core/shell nanocomposites and PEDOT:PSS/WO3 composite thin films for photocatalytic and electrochromic applications. AIP Conference Proceedings, 2016, , .	0.3	3
76	Photocatalytic properties of h-WO3 nanoparticles obtained by annealing and h-WO3 nanorods prepared by hydrothermal method. AIP Conference Proceedings, 2016, , .	0.3	0
77	Effect of the morphology and phases of WO₃ nanocrystals on their photocatalytic efficiency. RSC Advances, 2016, 6, 33743-33754.	1.7	54
78	Photocatalytic WO₃/TiO₂ nanowires: WO₃ polymorphs influencing the atomic layer deposition of TiO₂. RSC Advances, 2016, 6, 95369-95377.	1.7	44
79	Diastereomeric salt precipitation based resolution of ibuprofen by gas antisolvent method. Journal of Supercritical Fluids, 2016, 118, 48-53.	1.6	16
80	Coating and functionalization of high density ion track structures by atomic layer deposition. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 832, 254-258.	0.7	1
81	High Influence of Potassium Bromide on Thermal Decomposition of Ammonia Borane^{â€}. Journal of Physical Chemistry C, 2016, 120, 25276-25288.	1.5	13
82	Thermal study on the synthesis of the doped ZnO to be used in TCO films. Journal of Thermal Analysis and Calorimetry, 2016, 124, 71-80.	2.0	30
83	Improved fire resistance by using slag cements. Journal of Thermal Analysis and Calorimetry, 2016, 125, 271-279.	2.0	32
84	Preparation and characterization of ALD deposited ZnO thin films studied for gas sensors. Applied Surface Science, 2016, 387, 1230-1235.	3.1	59
85	Thermal decomposition of ammonium molybdates. Journal of Thermal Analysis and Calorimetry, 2016, 124, 1013-1021.	2.0	56
86	Investigating the solidâ€“gas phase reaction between WO 3 powder, NH 3 and H 2 O vapors to prepare ammonium paratungstate. Inorganica Chimica Acta, 2016, 444, 29-35.	1.2	7
87	Thermal decomposition of ammonium tetrathiotungstate. Journal of Thermal Analysis and Calorimetry, 2015, 120, 209-215.	2.0	22
88	Quantification of low drug concentration in model formulations with multivariate analysis using surface enhanced Raman chemical imaging. Journal of Pharmaceutical and Biomedical Analysis, 2015, 107, 318-324.	1.4	9
89	Synthesis of novel metal-containing epoxy polymers and their structural characterization by means of FT-IR and coupled TG/MS measurements. Journal of Thermal Analysis and Calorimetry, 2015, 119, 1011-1021.	2.0	7
90	Crystallization and Resolution of cisâ€Permethric Acid with Carbon Dioxide Antisolvent. Chemical Engineering and Technology, 2014, 37, 1417-1421.	0.9	14

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91	Review on one-dimensional nanostructures prepared by electrospinning and atomic layer deposition. Journal of Physics: Conference Series, 2014, 559, 012010.	0.3	34
92	Structure and thermal decomposition of ammonium metatungstate. Journal of Thermal Analysis and Calorimetry, 2014, 116, 329-337.	2.0	64
93	Synthesis, characterisation and antimicrobial activity of bis(phthalazine-1-hydrazone)-2,6-diacetylpyridine and its complexes with CoIII, NiII, CuII and ZnII. Polyhedron, 2014, 80, 142-150.	1.0	35
94	Influence of the Support Crystal Structure of WO3/Au Catalysts in CO Oxidation. Catalysis Letters, 2014, 144, 831-836.	1.4	11
95	Solid-state thermal degradation behaviour of 1-D coordination polymers of Ni(II) and Cu(II) bridged by conjugated ligand. Journal of Thermal Analysis and Calorimetry, 2013, 114, 653-664.	2.0	8
96	New Scientific Editor. Journal of Thermal Analysis and Calorimetry, 2013, 111, 7-8.	2.0	0
97	Photocatalytic Properties of WO₃/TiO₂ Core/Shell Nanofibers prepared by Electrospinning and Atomic Layer Deposition. Chemical Vapor Deposition, 2013, 19, 149-155.	1.4	62
98	TiO2-doped resorcinolâ€“formaldehyde (RF) polymer and carbon gels with photocatalytic activity. Nanomaterials and the Environment, 2013, 1, .	0.3	9
99	Programming nanostructured soft biological surfaces by atomic layer deposition. Nanotechnology, 2013, 24, 245701.	1.3	27
100	WO3 photocatalysts: Influence of structure and composition. Journal of Catalysis, 2012, 294, 119-127.	3.1	299
101	Thermal study on electrospun polyvinylpyrrolidone/ammonium metatungstate nanofibers: optimising the annealing conditions for obtaining WO3 nanofibers. Journal of Thermal Analysis and Calorimetry, 2011, 105, 73-81.	2.0	95
102	Gas sensing selectivity of hexagonal and monoclinic WO3 to H2S. Solid State Sciences, 2010, 12, 1857-1860.	1.5	100
103	Structural and thermal study of asymmetric Î±-dioxime complexes of Co(III) with Cl and methyl-pyridines. Polyhedron, 2010, 29, 2185-2189.	1.0	12
104	Co-crystal of (R,R)-1,2-cyclohexanediol with (R,R)-tartaric acid, a key structure in resolution of the (Â±)-trans-diol by supercritical extraction, and the related ternary phase system. Thermochimica Acta, 2010, 497, 129-136.	1.2	28
105	Preparation of hexagonal WO3 from hexagonal ammonium tungsten bronze for sensing NH3. Materials Research Bulletin, 2009, 44, 505-508.	2.7	79
106	Phase transformations of ammonium tungsten bronzes. Journal of Thermal Analysis and Calorimetry, 2009, 98, 707-716.	2.0	35
107	Cu-doped resorcinolâ€“formaldehyde (RF) polymer and carbon aerogels. Journal of Colloid and Interface Science, 2009, 337, 513-522.	5.0	21
108	Synthesis and Examination of Hexagonal Tungsten Oxide Nanocrystals for Electrochromic and Sensing Applications. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 77-91.	0.1	5

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109	Nanosize hexagonal tungsten oxide for gas sensing applications. Journal of the European Ceramic Society, 2008, 28, 913-917.	2.8	95
110	Stability and Controlled Composition of Hexagonal WO₃. Chemistry of Materials, 2008, 20, 4116-4125.	3.2	192
111	Controlling the Composition of Nanosize Hexagonal WO₃ for Gas Sensing. Materials Science Forum, 2008, 589, 161-166.	0.3	18
112	Nanostructured hexagonal tungsten oxides for ammonia sensing. Proceedings of SPIE, 2007, 6769, 105.	0.8	8
113	Atomic Layer Deposition of Tungsten(III) Oxide Thin Films from W2(NMe2)6and Water:Â Precursor-Based Control of Oxidation State in the Thin Film Material. Journal of the American Chemical Society, 2006, 128, 9638-9639.	6.6	39
114	In situ HT-XRD Study on the Formation of Hexagonal Ammonium Tungsten Bronze by Partial Reduction of Ammonium Paratungstate Tetrahydrate. European Journal of Inorganic Chemistry, 2006, 2006, 3413-3418.	1.0	46
115	Online evolved gas analyses (EGA by TG-FTIR and TG/DTA-MS) and solid state (FTIR, XRD) studies on thermal decomposition and partial reduction of ammonium paratungstate tetrahydrate. Solid State Ionics, 2004, 172, 583-586.	1.3	19
116	Comparative evolved gas analyses (TG-FTIR, TG/DTA-MS) and solid state (FTIR, XRD) studies on thermal decomposition of ammonium paratungstate tetrahydrate (APT) in air. Journal of Analytical and Applied Pyrolysis, 2004, 72, 197-201.	2.6	46
117	Influence of the Microwaves on the Sol-Gel Syntheses and on the Properties of the Resulting Oxide Nanostructures. , 0, , .		0