Tomasz JaroÅ„

List of Publications by Year
in descending order

51	1,265	331538	377752
papers	citations	21 h-index	34 g-index

59	59	59	1050
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structures and Potential Superconductivity inSiH4at High Pressure: En Route to â€œMetallic Hydrogenâ€• Physical Review Letters, 2006, 96, 017006.	2.9	187
2	Y(BH4)3â€”an oldâ€“new ternary hydrogen store akalearning from a multitude of failures. Dalton Transactions, 2010, 39, 160-166.	1.6	73
3	Na[Li(NH2BH3)2] â€“ the first mixed-cation amidoborane with unusual crystal structure. Dalton Transactions, 2011, 40, 4407.	1.6	70
4	Structural properties and the fluoriteâ€“pyrochlore phase transition in La 2 Zr 2 O 7 : The role of oxygen to induce local disordered states. Journal of Alloys and Compounds, 2016, 686, 130-136.	2.8	65
5	A multifaceted approach to hydrogen storage. Physical Chemistry Chemical Physics, 2011, 13, 16955.	1.3	64
6	Metal (boro-) hydrides for high energy density storage and relevant emerging technologies. International Journal of Hydrogen Energy, 2020, 45, 33687-33730.	3.8	53
7	Silver route to cuprate analogs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1495-1500.	3.3	47
8	Probing Lewis acidity of Y(BH4)3via its reactions with MBH4 (M = Li, Na, K, NMe4). Dalton Transactions, 2011, 40, 12808.	1.6	43
9	Hydrogen Storage Materials: Roomâ€Temperature Wetâ€Chemistry Approach toward Mixedâ€Metal Borohydrides. Angewandte Chemie - International Edition, 2015, 54, 1236-1239.	7.2	42
10	KAgF3, K2AgF4 and K3Ag2F7: important steps towards a layered antiferromagnetic fluoroargentate(II),. CrystEngComm, 2009, 11, 1702.	1.3	38
11	M[Y(BH4)4] and M2Li[Y(BH4)6â^'xClx] (M = Rb, Cs): new borohydride derivatives of yttrium and their hydrogen storage properties. Dalton Transactions, 2013, 42, 6886.	1.6	36
12	Influence of electrolyte composition and temperature on behaviour of AB5 hydrogen storage alloy used as negative electrode in Niâ€“MH batteries. Journal of Power Sources, 2014, 263, 304-309.	4.0	31
13	Facile Formation of Thermodynamically Unstable Novel Borohydride Materials by a Wet Chemistry Route. Chemistry - A European Journal, 2015, 21, 5689-5692.	1.7	29
14	Phase transition induced improvement in H2 desorption kinetics: the case of the high-temperature form of Y(BH4)3. Physical Chemistry Chemical Physics, 2011, 13, 8847.	1.3	28
15	Prediction of giant antiferromagnetic coupling in exotic fluorides of Ag^{II}. Physica Status Solidi - Rapid Research Letters, 2008, 2, 71-73.	1.2	27
16	High-Pressure Behavior of Silver Fluorides up to 40 GPa. Inorganic Chemistry, 2017, 56, 14651-14661.	1.9	26
17	Tetrabutylammonium cation in a homoleptic environment of borohydride ligands: [(n-Bu)4N][BH4] and [(n-Bu)4N][Y(BH4)4]. Journal of Solid State Chemistry, 2012, 191, 279-282.	1.4	25
18	Complete Series of Alkali-Metal M(BH₃NH₂BH₂NH₂BH₃) Hydrogen-Storage Salts Accessed via Metathesis in Organic Solvents. Inorganic Chemistry, 2016, 55, 37-45.	1.9	24

#	Article	IF	Citations
19	Polymorphism and hydrogen discharge from holmium borohydride, Ho(BH4)3, and KHo(BH4)4. International Journal of Hydrogen Energy, 2014, 39, 20024-20030.	3.8	23
20	Preparation of a series of lanthanide borohydrides and their thermal decomposition to refractory lanthanide borides. Journal of Alloys and Compounds, 2018, 744, 57-63.	2.8	22
21	M(BH₃NH₂BH₂NH₂BH₃) â€“ the missing link in the mechanism of the thermal decomposition of light alkali metal amidoboranes. Physical Chemistry Chemical Physics, 2014, 16, 23340-23346.	1.3	21
22	Organic derivatives of Mg(BH₄)₂as precursors towards MgB₂and novel inorganic mixed-cation borohydrides. Dalton Transactions, 2016, 45, 14370-14377.	1.6	21
23	Metal fluoride nanotubes featuring square-planar building blocks in a high-pressure polymorph of AgF₂. Dalton Transactions, 2017, 46, 14742-14745.	1.6	20
24	Persistence of Mixed and Non-intermediate Valence in the High-Pressure Structure of Silver(I,III) Oxide, AgO: A Combined Raman, X-ray Diffraction (XRD), and Density Functional Theory (DFT) Study. Inorganic Chemistry, 2017, 56, 5804-5812.	1.9	19
25	MYb(BH4)4(M= K, Na) from laboratory X-ray powder data. Acta Crystallographica Section C: Crystal Structure Communications, 2013, 69, 1289-1291.	0.4	18
26	Anomalous chemical shifts in X-ray photoelectron spectra of sulfur-containing compounds of silver (I) and (II). Journal of Electron Spectroscopy and Related Phenomena, 2015, 202, 38-45.	0.8	15
27	New hydrogen-rich ammonium metal borohydrides, NH₄[M(BH₄)₄], M = Y, Sc, Al, as potential H₂sources. Dalton Transactions, 2018, 47, 4442-4448.	1.6	15
28	How do electrons travel in unusual metallic fluorides of Ag2+?. Physica Status Solidi (B): Basic Research, 2005, 242, R1-R3.	0.7	14
29	Salts of highly fluorinated weakly coordinating anions as versatile precursors towards hydrogen storage materials. Dalton Transactions, 2015, 44, 19469-19477.	1.6	14
30	Building blocks for the chemistry of perfluorinated alkoxyaluminates [Al{OC(CF₃)₃}₄]^{â^'}: simplified preparation and characterization of Li⁺â€“Cs⁺, Ag⁺, NH₄⁺, N₂H₅⁺ and N₂H₇⁺ salts. Dalton Transactions, 2020, 49, 7766-7773.	1.6	14
31	Local and Cooperative Jahnâ€“Teller Effect and Resultant Magnetic Properties of M₂AgF₄ (M = Naâ€“Cs) Phases. Inorganic Chemistry, 2016, 55, 11479-11489.	1.9	12
32	Synthesis, structural characterization and thermal decomposition studies of (N2H5)2B12H12 and its solvates. International Journal of Hydrogen Energy, 2019, 44, 27030-27038.	3.8	12
33	Tetramethylammonium borohydride from powder data. Acta Crystallographica Section E: Structure Reports Online, 2011, 67, o2171-o2171.	0.2	11
34	Prediction of thermodynamic stability and electronic structure of novel ternary lanthanide hydrides. Journal of Materials Chemistry, 2006, 16, 1154.	6.7	10
35	New Ag(F 1â^'x Cl x) phases for energy storage applications. Journal of Fluorine Chemistry, 2015, 174, 22-29.	0.9	10
36	Amidoboranes of rubidium and caesium: the last missing members of the alkali metal amidoborane family. Dalton Transactions, 2017, 46, 16315-16320.	1.6	10

#	ARTICLE	IF	CITATIONS
37	Synthesis and characterization of a series of mixed-cation borohydrides of scandium: [Cat][Sc(BH 4) 4], [Cat] = [Me 4 N], [n -Bu 4 N], and [Ph 4 P]. Inorganica Chimica Acta, 2015, 437, 70-73.	1.2	9
38	Two new derivatives of scandium borohydride, MSc(BH₄)₄, M = Rb, Cs, preparedviaa one-pot solvent-mediated method. Dalton Transactions, 2019, 48, 11829-11837.	1.6	7
39	Structural and thermal study of solvent-free tetrabutylammonium chloride and its novel solvates. Journal of Molecular Structure, 2020, 1206, 127748.	1.8	7
40	Towards superconductivity in hydrides: computational studies of two hypothetical ternary compounds, % MathType!Translator!2!1!AMS LaTeX.tdl!TeX -- AMS-LaTeX! % MathType!MTEF!2!1!+- % feaaeaart1ev0aaatCvAUfeBSjuyZL2yd9gzLbvyNv2CaerbbjxAHX % garmWu51MyVXgatuuDJXwAK1uy0HwmaeHbfv3ySLgzG0uy0Hgip5wz % aebbnrfifHhDYfgasaacH8qrps0lbbf9q8WrFfeuY-Hhbbf9v8qqaq % Fr0xc9pk0xbba9q8WqFfea0-yr0RYxir-Jbba9q8aq0-yq-He9q8qq % O8f-Fve9Fve9Ff0dmeaabaqaciGacaGaaeq	0.8	6
41	Y(BD4)3, an efficient store of deuterium, and impact of isotope effects on its thermal decomposition. Journal of Nuclear Materials, 2012, 420, 307-313.	1.3	6
42	Ag₂S₂O₈ meets AgSO₄: the second example of metalâ€“ligand redox isomerism among inorganic systems. Dalton Transactions, 2016, 45, 18202-18207.	1.6	5
43	Insights into reactivity patterns of Ag(II)SO4 with respect to fluoro- and trifluoromethyl-substituted aromatics. Journal of Fluorine Chemistry, 2019, 218, 105-110.	0.9	5
44	Extending the chemistry of weakly basic ligands: solvates of Ag⁺ and Cu⁺ stabilized by [Al{OC(CF₃)₃}₄]^{â^'} anion as model examples in the screening of useful weakly interacting solvents. Dalton Transactions, 2021, 50, 2050-2056.	1.6	4
45	Synthesis, Polymorphism and Thermal Decomposition Process of (n-C4H9)4NRE(BH4)4 for RE = Ho, Tm and Yb. Materials, 2021, 14, 1329.	1.3	4
46	On the peculiarities of phase developments involving Zn 2+ -doped ZrO 2 system. Scripta Materialia, 2017, 138, 71-74.	2.6	4
47	Polycyclic Aromatic Hydrocarbons and their Adducts with Solvents from Ag(II)SO₄-Based Oxidative C-C Coupling. Polycyclic Aromatic Compounds, 2021, 41, 795-804.	1.4	3
48	Novel lanthanide borohydrides: magnetism of all flavours. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C275-C275.	0.0	3
49	Synthesis, Structure, and Electric Conductivity of Higher Hydrides of Ytterbium at High Pressure. Inorganic Chemistry, 2022, 61, 8694-8702.	1.9	3
50	Inclusion of Neon into an Yttrium Borohydride Structure at Elevated Pressure â€“ An Experimental and Theoretical Study. European Journal of Inorganic Chemistry, 2020, 2020, 3846-3851.	1.0	2
51	Laser-induced crystallization and phase transitions of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>As</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> under high pressure. Physical Review B, 2021, 103, .	1.1	0