Pukazhselvan D

List of Publications by Year
in descending order

50	1,206	361045	377514
papers	citations	20 h-index	34 g-index

50	50	50	1090
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High capacity hydrogen storage: Basic aspects, new developments and milestones. Nano Energy, 2012, 1, 566-589.	8.2	203
2	Evolution of reduced Ti containing phase(s) in MgH 2 /TiO 2 system and its effect on the hydrogen storage behavior of MgH 2. Journal of Power Sources, 2017, 362, 174-183.	4.0	83
3	Investigations on hydrogen storage behavior of CNT doped NaAlH4. Journal of Alloys and Compounds, 2005, 403, 312-317.	2.8	64
4	Studies on the synthesis of cubic ZnS quantum dots, capping and opticalâ€“electrical characteristics. Journal of Alloys and Compounds, 2012, 517, 139-148.	2.8	53
5	Studies on metal oxide nanoparticles catalyzed sodium aluminum hydride. Energy, 2010, 35, 5037-5042.	4.5	50
6	Role of chemical interaction between MgH 2 and TiO 2 additive on the hydrogen storage behavior of MgH 2. Applied Surface Science, 2017, 420, 740-745.	3.1	49
7	Hydrogen energy in changing environmental scenario: Indian context. International Journal of Hydrogen Energy, 2009, 34, 7358-7367.	3.8	45
8	Investigations on the desorption kinetics of Mm-doped NaAlH4. Journal of Alloys and Compounds, 2007, 439, 243-248.	2.8	41
9	Hydrogen storage characteristics of magnesium impregnated on the porous channels of activated charcoal scaffold. International Journal of Hydrogen Energy, 2014, 39, 20045-20053.	3.8	41
10	Structural, optical and electrical characterization of Mn2+ and Cd2+ doped/co-doped PbS nanocrystals. Journal of Alloys and Compounds, 2015, 627, 69-77.	2.8	34
11	Formation of Mgâ€“Nbâ€“O rock salt structures in a series of mechanochemically activated MgH2Â+ÂnNb2O5 (nÂ=Â0.083â€“1.50) mixtures. International Journal of Hydrogen Energy, 2016, 41, 2677-2688.	3.8	31
12	Conductivity recovery by redox cycling of yttrium doped barium zirconate proton conductors and exsolution of Ni-based sintering additives. Journal of Power Sources, 2017, 339, 93-102.	4.0	30
13	Studies on synthesis and dehydrogenation behavior of magnesium alanate and magnesiumâ€“sodium alanate mixture. International Journal of Hydrogen Energy, 2007, 32, 4933-4938.	3.8	29
14	Chemically transformed additive phases in Mg2TiO4 and MgTiO3 loaded hydrogen storage system MgH2. Applied Surface Science, 2019, 472, 99-104.	3.1	29
15	Effects of helical GNF on improving the dehydrogenation behavior of LiMg(AlH4)3 and LiAlH4. International Journal of Hydrogen Energy, 2010, 35, 2083-2090.	3.8	28
16	Formation of Mg_xNb_yO_{x+y} through the Mechanochemical Reaction of MgH₂ and Nb₂O₅, and Its Effect on the Hydrogenâ€Storage Behavior of MgH₂. ChemPhysChem, 2016, 17, 178-183.	1.0	28
17	Crystal structure, phase stoichiometry and chemical environment of MgxNbyOx+y nanoparticles and their impact on hydrogen storage in MgH2. International Journal of Hydrogen Energy, 2016, 41, 11709-11715.	3.8	26
18	Investigation on the synthesis and quantum confinement effects of pure and Mn2+ added Zn(1â^'x)CdxS nanocrystals. Journal of Alloys and Compounds, 2011, 509, 4065-4072.	2.8	25

#	ARTICLE	IF	CITATIONS
19	Carbon nanostructures as catalyst for improving the hydrogen storage behavior of sodium aluminum hydride. International Journal of Hydrogen Energy, 2012, 37, 2750-2755.	3.8	24
20	Transformation of Metallic Ti to TiH₂ Phase in the Ti/MgH₂ Composite and Its Influence on the Hydrogen Storage Behavior of MgH₂. ChemPhysChem, 2020, 21, 1195-1201.	1.0	23
21	Chemical transformation of additive phase in MgH2/CeO2 hydrogen storage system and its effect on catalytic performance. Applied Surface Science, 2021, 561, 150062.	3.1	23
22	Studies on the synthesis and characterization of Zn_{1â^'}_xCd_xS and Zn_{1â^'}_xCd_xS:Mn²⁺semiconductor quantum dots. Philosophical Magazine, 2011, 91, 389-403.	0.7	19
23	Highly branched Pt Cu nanodandelion with high activity for oxygen reduction reaction. International Journal of Hydrogen Energy, 2019, 44, 174-179.	3.8	18
24	Active catalytic species generated in situ in zirconia incorporated hydrogen storage material magnesium hydride. Journal of Magnesium and Alloys, 2022, 10, 786-796.	5.5	18
25	Direct synthesis of sodium alanate using mischmetal nanocatalyst. International Journal of Hydrogen Energy, 2012, 37, 3697-3704.	3.8	16
26	Dehydrogenation Properties of Magnesium Hydride Loaded with Fe, Feâ^'C, and Feâ^'Mg Additives. ChemPhysChem, 2017, 18, 287-291.	1.0	16
27	Effect of crystallite size of Al on the reversible hydrogen storage of NaAlH4 and few aspects of catalysts and catalysis. International Journal of Hydrogen Energy, 2012, 37, 9696-9705.	3.8	15
28	Synthesis of catalytically active rock salt structured Mg x Nb 1â^'x O nanoparticles for MgH 2 system. International Journal of Hydrogen Energy, 2014, 39, 18984-18988.	3.8	15
29	Two step mechanochemical synthesis of Nb doped MgO rock salt nanoparticles and its application for hydrogen storage in MgH2. International Journal of Hydrogen Energy, 2016, 41, 11716-11722.	3.8	15
30	Increased performance by use of a mixed conducting buffer layer, terbia-doped ceria, for Nd2NiO4+Î´ SOFC/SOEC oxygen electrodes. International Journal of Hydrogen Energy, 2019, 44, 31466-31474.	3.8	14
31	One step high pressure mechanochemical synthesis of reversible alanates NaAlH4 and KAlH4. International Journal of Hydrogen Energy, 2015, 40, 4916-4924.	3.8	13
32	Towards Sustainable Green Energy Development and Insights on Few Scientific Problems Leading to Less Carbon Economy. Reviews in Advanced Sciences and Engineering, 2012, 1, 302-318.	0.6	12
33	Hydrogen energy in Indian context and R&D efforts at Banaras Hindu University. International Journal of Environmental Studies, 2007, 64, 761-776.	0.7	9
34	A detailed study of hydrostatic press, sintering aids and temperature on the densification behavior of Ba(Zr,Y)O3â^'d electrolyte. International Journal of Hydrogen Energy, 2016, 41, 11510-11519.	3.8	9
35	Interaction of zirconia with magnesium hydride and its influence on the hydrogen storage behavior of magnesium hydride. International Journal of Hydrogen Energy, 2022, 47, 21760-21771.	3.8	8
36	Effect of Ni concentration on the structural and hydrogen storage characteristics of Zrâ€“Mn based laves phase system. Materials for Renewable and Sustainable Energy, 2013, 2, 1.	1.5	6

#	ARTICLE	IF	CITATIONS
37	Simulation studies and safety analysis of high pressure milling vials for the direct synthesis ofÂhigh capacity metal hydrides. International Journal of Hydrogen Energy, 2015, 40, 5006-5012.	3.8	6
38	Elucidating Evidence for the In Situ Reduction of Graphene Oxide by Magnesium Hydride and the Consequence of Reduction on Hydrogen Storage. Catalysts, 2022, 12, 735.	1.6	6
39	Unique dielectric features of a ceramic-semiconductor nanocomposite MgNb2O6+ 0.25Zn0.5Cd0.5S. Applied Surface Science, 2017, 424, 127-131.	3.1	5
40	Electrochemical behaviour of magnesium hydride-added titania anode for Li-ion battery. Electrochimica Acta, 2021, 394, 139142.	2.6	5
41	Interaction of magnesium hydride clusters with Nb doped MgO additive studied by density functional calculations. RSC Advances, 2016, 6, 61200-61206.	1.7	4
42	STUDIES ON TiO2 NANOPARTICLES AS CATALYST FOR ENHANCED DESORPTION CHARACTERISTICS OF NaAlH4. International Journal of Nanoscience, 2011, 10, 717-721.	0.4	3
43	Hydrogen absorption/desorption characteristics of room temperature ZrMn2â€“x Ni x system (x =) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	3
44	Anatase titania as magnesium host in Mg ion rechargeable battery with magnesium perchlorate/ethylmagnesium bromide electrolytes. Journal of Materials Science, 2022, 57, 8442-8454.	1.7	3
45	Bias polarization study of steam electrolysis by composite oxygen electrode Ba0.5Sr0.5Co0.8Fe0.2O3-Î´/BaCe0.4Zr0.4Y0.2O3-Î´. Applied Surface Science, 2017, 424, 82-86.	3.1	2
46	Metal Oxide Additives Incorporated Hydrogen Storage Systems: Formation of In Situ Catalysts and Mechanistic Understanding. Environmental Chemistry for A Sustainable World, 2019, , 215-245.	0.3	2
47	Unravelling the Effects of Calcium Substitution in BaGd₂CoO₅ Haldane Gap 1D Material and Its Thermoelectric Performance. Journal of Physical Chemistry C, 2020, 124, 13017-13025.	1.5	2
48	Nanostructured advanced materials for hydrogen storage. , 2020, , 97-163.		2
49	Hydrogen Storage Characteristics of MmNi_{5â^'<I>x</I>}M_{<I>x</I>} (M = Cu,) Tj ETQq1 1 0.784314 rg	0.4	1
50	Hydrogen Sorption Characteristics of Zr-Mn-Ni-Fe Alloys. Advanced Science, Engineering and Medicine, 2013, 5, 796-800.	0.3	0