

# Pratibha Sharma

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6659771/publications.pdf>

Version: 2024-02-01

43  
papers

1,011  
citations

430754

18  
h-index

434063

31  
g-index

43  
all docs

43  
docs citations

43  
times ranked

928  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat transfer techniques in metal hydride hydrogen storage: A review. International Journal of Hydrogen Energy, 2017, 42, 30661-30682.	3.8	130
2	Modeling and numerical simulation of a 5kg LaNi <sub>5</sub> -based hydrogen storage reactor with internal conical fins. International Journal of Hydrogen Energy, 2020, 45, 8794-8809.	3.8	66
3	Investigation of hydrogen storage behavior of silicon nanoparticles. International Journal of Hydrogen Energy, 2012, 37, 3741-3747.	3.8	61
4	Microstructure and first hydrogenation properties of TiFe alloy with Zr and Mn as additives. International Journal of Hydrogen Energy, 2020, 45, 787-797.	3.8	56
5	Efficient hydrogen generation from sodium borohydride hydrolysis using silica sulfuric acid catalyst. Journal of Power Sources, 2015, 275, 727-733.	4.0	53
6	Studies on 10kg alloy mass metal hydride based reactor for hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 5495-5506.	3.8	49
7	Effect of Co <sup>2+</sup> /BH <sub>4</sub> <sup>-</sup> ratio in the synthesis of Co-B catalysts on sodium borohydride hydrolysis. International Journal of Hydrogen Energy, 2014, 39, 406-413.	3.8	46
8	Design of a large-scale metal hydride based hydrogen storage reactor: Simulation and heat transfer optimization. International Journal of Hydrogen Energy, 2018, 43, 13356-13372.	3.8	45
9	Effect of annealing on microstructure and hydrogenation properties of TiFe <sub>x</sub> Zr (x=4, 8). International Journal of Hydrogen Energy, 2018, 43, 6238-6243.	3.8	35
10	Study of kinetics and thermal decomposition of ammonia borane in presence of silicon nanoparticles. International Journal of Hydrogen Energy, 2012, 37, 6741-6748.	3.8	34
11	Effect of zeolites on thermal decomposition of ammonia borane. International Journal of Hydrogen Energy, 2012, 37, 3712-3718.	3.8	29
12	Synthesis and characterization of bulk Cu <sub>2</sub> ZnSnX <sub>4</sub> (X: S, Se) via thermodynamically supported mechano-chemical process. Materials Characterization, 2015, 103, 42-49.	1.9	29
13	Preparation and characterization of hollow glass microspheres (HGMs) for hydrogen storage using urea as a blowing agent. Microelectronic Engineering, 2014, 126, 65-70.	1.1	28
14	Effect of cooling rate on the microstructure and hydrogen storage properties of TiFe with 4 wt% Zr as an additive. Journal of Materials Research and Technology, 2019, 8, 5623-5630.	2.6	28
15	Effect of doping and particle size on hydrogen absorption properties of BCC solid solution 52Ti-12V-36Cr. International Journal of Hydrogen Energy, 2017, 42, 11523-11527.	3.8	24
16	Experimental analysis of a metal hydride hydrogen storage system with hexagonal honeycomb-based heat transfer enhancements-part B. International Journal of Hydrogen Energy, 2021, 46, 13131-13141.	3.8	24
17	Magnesium and iron loaded hollow glass microspheres (HGMs) for hydrogen storage. International Journal of Hydrogen Energy, 2014, 39, 16451-16458.	3.8	23
18	Effect of addition of Zr, Ni, and Zr-Ni alloy on the hydrogen absorption of Body Centred Cubic 52Ti-12V-36Cr alloy. International Journal of Hydrogen Energy, 2018, 43, 7424-7429.	3.8	23

#	ARTICLE	IF	CITATIONS
19	Synthesis and characterization of kesterite $\text{Cu}_2\text{ZnSnTe}_4$ via ball-milling of elemental powder precursors. <i>RSC Advances</i> , 2016, 6, 68754-68759.	1.7	19
20	Reaction pathway for synthesis of $\text{Cu}_2\text{ZnSn(S/Se)}_4$ via mechano-chemical route and annealing studies. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 1199-1210.	1.1	18
21	Effect of Co loading on the hydrogen storage characteristics of hollow glass microspheres (HGMs). <i>International Journal of Hydrogen Energy</i> , 2014, 39, 3304-3312.	3.8	17
22	Kinetic Analysis and Modeling of Thermal Decomposition of Ammonia Borane. <i>International Journal of Chemical Kinetics</i> , 2013, 45, 452-461.	1.0	16
23	Effect of Ni-alloys on thermal decomposition of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2015, 645, S234-S238.	2.8	14
24	An <i>in situ</i> study on the solid state decomposition of ammonia borane: unmitigated by-product suppression by a naturally abundant layered clay mineral. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 301-309.	3.0	14
25	Kinetic model analysis and mechanistic correlation of ammonia borane thermolysis under dynamic heating conditions. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 10386-10395.	3.8	14
26	Hollow glass microspheres as potential adjunct with orthopaedic metal implants. <i>Microelectronic Engineering</i> , 2014, 126, 103-106.	1.1	10
27	Microwave-assisted solvothermal synthesis of $\text{Cu}_2\text{ZnSnS}_4$ (CZTS) nanocrystals for photovoltaic applications. <i>Materials Today: Proceedings</i> , 2016, 3, 2786-2794.	0.9	10
28	Investigating the effect of cobalt loading on thermal conductivity and hydrogen storage capacity of hollow glass microspheres (HGMs). <i>Materials Today: Proceedings</i> , 2017, 4, 11608-11616.	0.9	10
29	Preparation of Hollow Glass Microspheres (HGMs) from Amber Coloured and Borosilicate Glass Frits. <i>Advanced Materials Research</i> , 0, 678, 37-41.	0.3	9
30	Broadband Reflection Minimization Using Silver Ultra Thin Film Sandwiched Between Silicon Nitride Layers for c-Si Solar Cell Application. <i>Plasmonics</i> , 2014, 9, 1409-1416.	1.8	9
31	Parametric optimisation of core-shell ZnS:Mn/ZnS nanoparticles prepared by ultrasound-controlled wet chemical route. <i>Journal of Luminescence</i> , 2014, 145, 669-675.	1.5	9
32	Rapid microwave-assisted solvothermal synthesis of $\text{Cu}_2\text{ZnSnS}_4$ (CZTS) nanocrystals for low-cost thin film photovoltaic: investigation of synthesis parameters and morphology control. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 3370-3380.	1.1	9
33	Kinetics of borazine formation from ammonia borane dehydrocoupling reaction through Ab initio analysis. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 22022-22031.	3.8	9
34	Modeling and numerical simulation of an industrial scale metal hydride reactor based on CFD-Taguchi combined method. <i>Energy Storage</i> , 2021, 3, e227.	2.3	9
35	Fabrication of zinc-loaded hollow glass microspheres (HGMs) for hydrogen storage. <i>International Journal of Energy Research</i> , 2015, 39, 717-726.	2.2	8
36	Opto-Electrical Performance Improvement of Mono c-Si Solar Cells Using Dielectric-Metal-Dielectric (D-M-D) Sandwiched Structure-Based Plasmonic Anti-Reflector. <i>Plasmonics</i> , 2016, 11, 323-336.	1.8	8

#	ARTICLE	IF	CITATIONS
37	Regeneration of Supported Ammonia Borane to Achieve Higher Yield. ChemistrySelect, 2021, 6, 1276-1282.	0.7	5
38	Single junction a-Si:H solar cell with a-Si:H/nc-Si:H/a-Si:H quantum wells. Thin Solid Films, 2014, 550, 643-648.	0.8	4
39	Activation energy of obliquely deposited MmNi <sub>4.5</sub> Al <sub>0.5</sub> MmNi <sub>4.5</sub> Al <sub>0.5</sub> and MmNi <sub>4.5</sub> Al <sub>0.5</sub> HxMmNi <sub>4.5</sub> Al <sub>0.5</sub> Hx thin films. International Journal of Hydrogen Energy, 2008, 33, 408-412.	3.8	3
40	D-M-D Plasmonic Anti-Reflector for Next-Generation Thin c-Si Solar Cell Applications. Plasmonics, 2018, 13, 705-714.	1.8	2
41	Synthesis of Mg <sub>2</sub> Ni using stoichiometric and superstoichiometric compositions for hydrogen storage applications. Energy Storage, 0, , e262.	2.3	1
42	Parametric and sensitivity analysis of metal hydride hydrogen storage systems for development of novel design charts. Energy Storage, 2022, 4, .	2.3	1
43	Bioglass Based Nano-Materials for Bone Tissue Engineering. Advanced Science Letters, 2014, 20, 1129-1134.	0.2	0