## Ankur Jain

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

89	2,348 citations	21	47
papers		h-index	g-index
93	2,732 ext. citations	5	5.25
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
89	Electrochemical Performance of Graphene-Modulated Sulfur Composite Cathodes Using LiBH4 Electrolyte for All-Solid-State Li-S Battery. <i>Energies</i> , <b>2021</b> , 14, 7362	3.1	O
88	Significance of Hydrogen as Economic and Environmentally Friendly Fuel. <i>Energies</i> , <b>2021</b> , 14, 7389	3.1	12
87	Structural and Morphological Modifications Induced by Fe Ion Implantation in Sb2Te3 Thin Films. <i>Macromolecular Symposia</i> , <b>2021</b> , 399, 2100079	0.8	1
86	Hydrogen storage behavior of TiFe alloy activated by different methods. <i>Materials Letters: X</i> , <b>2021</b> , 9, 100061	0.5	О
85	Lithiation mechanism of antimony chalcogenides (Sb2X3; X = S, Se, Te) electrodes for high-capacity all-solid-state Li-ion battery. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 11135-11145	4.5	3
84	Enhanced performance of MgH2 composite electrode using glass-ceramic electrolytes for all-solid-state Li-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 863, 158729	5.7	6
83	Conversion reaction of TiFe hydride as anode material for all-solid-state Lithium-ion batteries. <i>Materials Letters: X</i> , <b>2021</b> , 10, 100067	0.5	
82	All-Solid-State Li-Ion Batteries Using a Combination of Sb2S3/Li2S-P2S5/Acetylene Black as the Electrode Composite and LiBH4 as the Electrolyte. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 6269-6276	6.1	1
81	Effect of multiwall carbon nanotubes on photo catalytic activity of CdS nanocrystals. <i>Materials Today: Proceedings</i> , <b>2021</b> , 38, 1218-1221	1.4	
80	High capacity MgH2 composite electrodes for all-solid-state Li-ion battery operating at ambient temperature. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 1030-1037	6.7	4
79	Carbon nanotube-sulfur nanocomposite electrodes for high energyfoldable lithium sulfur battery. <i>Materials Today: Proceedings</i> , <b>2021</b> , 42, 1638-1641	1.4	2
78	Enhancement in hydrogenation dehydrogenation kinetics of KSiH3 by the addition of Ti-based catalysts. <i>Materials Letters: X</i> , <b>2021</b> , 11, 100086	0.5	0
77	The Catalytic Role of D-block Elements and Their Compounds for Improving Sorption Kinetics of Hydride Materials: A Review. <i>Reactions</i> , <b>2021</b> , 2, 333-364	1.5	O
76	Growth and structural characterization of BiSbTe3-ySey single crystals. <i>Materials Today: Proceedings</i> , <b>2020</b> , 31, 622-624	1.4	2
75	Effect of isovalent substitution on the structural and electrical properties of BixSb2-xTe3 topological insulator single crystals. <i>Materials Today: Proceedings</i> , <b>2020</b> , 31, 616-621	1.4	2
74	Highly stable nanostructured Bi2Se3 anode material for all solid-state lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 838, 155403	5.7	12
73	Eutectic melting in x(2LiBH4-MgH2) hydrogen storage system by the addition of KH. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 17000-17005	6.7	3

72	Iron based catalyst for the improvement of the sorption properties of KSiH3. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 33681-33686	6.7	4
71	Electrochemical reaction mechanism for Bi2Te3-based anode material in highly durable all solid-state lithium-ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2020</b> , 31, 16429-1	643 <del>1</del> 6	6
70	Critical Temperature and Pressure Conditions of Degradation during Thermochemical Hydrogen Compression: A Case Study of V-Based Hydrogen Storage Alloy. <i>Energies</i> , <b>2020</b> , 13, 2324	3.1	3
69	Destabilization of LiBH4 by the infusion of Bi2X3 (X = S, Se, Te): an in situ TEM investigation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 25706-25715	13	3
68	Implementation of Bismuth Chalcogenides as an Efficient Anode: A Journey from Conventional Liquid Electrolyte to an All-Solid-State Li-Ion Battery. <i>Molecules</i> , <b>2020</b> , 25,	4.8	5
67	The destabilization of LiBH4 through the addition of Bi2Se3 nanosheets. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 23947-23953	6.7	7
66	Nanostructured Bi2Te3 as anode material as well as a destabilizing agent for LiBH4. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 16992-16999	6.7	11
65	Eutectic Phenomenon of LiNHEKH Composite in MH-NHEHydrogen Storage System. <i>Molecules</i> , <b>2019</b> , 24,	4.8	1
64	Highly efficient & stable Bi & Sb anodes using lithium borohydride as solid electrolyte in Li-ion batteries <i>RSC Advances</i> , <b>2019</b> , 9, 13077-13081	3.7	12
63	Hydrogen Sorption and Cyclic Compressor Performance of V40Ti21.5Cr33.5M5 (M= Nb, Zr, Fe) Alloys. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , <b>2019</b> , 98, 157-164	0.5	4
62	Flower-like BiS nanostructures as highly efficient anodes for all-solid-state lithium-ion batteries <i>RSC Advances</i> , <b>2019</b> , 9, 29549-29555	3.7	15
61	LiBH4 as solid electrolyte for Li-ion batteries with Bi2Te3 nanostructured anode. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 21709-21714	6.7	13
60	Study of cyclic performance of V-Ti-Cr alloys employed for hydrogen compressor. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 2881-2889	6.7	23
59	The enhanced de/re-hydrogenation performance of MgH2 with TiH2 additive. <i>International Journal of Energy Research</i> , <b>2018</b> , 42, 1139-1147	4.5	32
58	Nitrogen-Based Hydrogen Storage Systems: A Detailed Overview <b>2018</b> , 39-88		
57	Catalytic Tuning of Sorption Kinetics of Lightweight Hydrides: A Review of the Materials and Mechanism. <i>Catalysts</i> , <b>2018</b> , 8, 651	4	21
56	Improved hydrogen release from magnesium borohydride by ZrCl4 additive. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22342-22347	6.7	20
55	Development of vanadium based hydrogen storage material: A review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 72, 791-800	16.2	99

54	Surface modification of MgH 2 by ZrCl 4 to tailor the reversible hydrogen storage performance. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 6152-6159	6.7	46
53	Study on the thermal decomposition of NaBH 4 catalyzed by ZrCl 4. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22432-22437	6.7	30
52	Enhancement of hydrogen desorption kinetics in magnesium hydride by doping with lithium metatitanate. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 711, 400-405	5.7	38
51	Thermodynamics and kinetics of hydrogen absorptiondesorption of vanadium synthesized by aluminothermy. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2017</b> , 130, 721-726	4.1	6
50	How does TiF4 affect the decomposition of MgH2 and its complex variants? [An XPS investigation. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 15543-15551	13	43
49	Catalytic effect of bis (cyclopentadienyl) nickel II on the improvement of the hydrogenation-dehydrogenation of Mg-MgH2 system. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 17178-17183	6.7	16
48	Ammonia suppression during decomposition of sodium amide by the addition of metal hydride. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22388-22394	6.7	6
47	Development of Mg Li B based advanced material for onboard hydrogen storage solution. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 3963-3970	6.7	19
46	A new synthesis route of ammonia production through hydrolysis of metal [Nitrides. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 24897-24903	6.7	19
45	Hydrogen Sorption Characteristics of ZrCrAl Ternary Alloy as a Function of Milling Time. <i>Macromolecular Symposia</i> , <b>2017</b> , 376, 1700047	0.8	1
44	Two-Peak Mystery of LiNH2NaH Dehydrogenation Is Solved? A Study of the Analogous Sodium Amide/Lithium Hydride System. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 27903-27909	3.8	11
43	Destabilization of lithium hydride by the substitution of group 14 elements: A review. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 5969-5978	6.7	18
42	Catalytic effect of TiF4 in improving hydrogen storage properties of MgH2. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 14178-14183	6.7	45
41	Effect of ZrCrCo alloy on hydrogen storage properties of Mg. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S518-S523	5.7	23
40	Tailoring the absorptiondesorption properties of KSiH3 compound using nano-metals (Ni, Co, Nb) as catalyst. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S144-S147	5.7	7
39	Effect of Magnesium Fluoride on Hydrogenation Properties of Magnesium Hydride. <i>Energies</i> , <b>2015</b> , 8, 12546-12556	3.1	16
38	Catalytic modification in dehydrogenation properties of KSiH3. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 26163-7	3.6	13
37	Structural and Hydrogen Storage Properties Of Mg-x Wt% ZrCrMn Composites. <i>Advanced Materials Letters</i> , <b>2014</b> , 5, 692-698	2.4	4

## (2009-2013)

36	Phase and morphology evolution study of ball milled Mgto hydrogen storage alloys. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 7070-7076	6.7	35
35	Correlation between electrochemical behavior and hydrogen storage properties of LiBn system. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 580, S211-S215	5.7	12
34	Kinetic Enhancement in the Sorption Properties by Forming Mg☑ wt % ZrCrCu Composites. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 11953-11959	3.8	8
33	Destabilization of LiH by Li Insertion into Ge. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 5650-5657	3.8	26
32	Hydrogen storage properties of Mg2Ni affected by Cr catalyst. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 16013-16017	6.7	24
31	Comparative study on hydrogenation properties of Pd capped Mg and Mg/Al films. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3779-3785	6.7	9
30	Effect of La-content on the hydrogenation properties of the Ce1⊠LaxNi3Cr2 (x=0.2, 0.4, 0.6, 0.8, 1) alloys. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3683-3688	6.7	12
29	Hydriding behavior of Mg-50Iwt% ZrCrFe composite Prepared by high energy ball milling. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3665-3670	6.7	6
28	Effect of Cu catalyst on the hydrogenation and thermodynamic properties of Mg2Ni. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3755-3760	6.7	35
27	Impurity Gas Analysis of the Decomposition of Complex Hydrides. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 17220-17226	3.8	34
26	Mobility and dynamics in the complex hydrides LiAlH4 and LiBH4. <i>Faraday Discussions</i> , <b>2011</b> , 151, 213-30; discussion 285-95	3.6	25
25	The effects of Ni and Mg2Ni interlayer on hydrogenation properties of Pd sandwiched Mg films. Journal of Alloys and Compounds, <b>2011</b> , 509, 2105-2110	5.7	12
24	Structural and H2 sorption properties of MgH2🗓0 wt%ZrCrM (M = Cu, Ni) nano-composites. Journal of Nanoparticle Research, <b>2011</b> , 13, 5719-5726	2.3	5
23	Novel hydrogen storage materials: A review of lightweight complex hydrides. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 503, 303-339	5.7	352
22	Hydrogen storage in Mg: A most promising material. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 5133-5144	6.7	784
21	Synthesis of nano-crystalline Zr-M (M=Ni, Co, Fe, Cu) bilayer films and their thermodynamics of hydrogen uptake by resistance measurement. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 9893-	9900	6
20	Correlation between the milling time and hydrogen storage properties of ZrCrFe ternary alloy. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 9910-9915	6.7	10
19	Catalytic effect of ZrCrNi alloy on hydriding properties of MgH2. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 9157-9162	6.7	40

18	Correlation between the milling time and hydrogen-storage properties of nanostructured ZrFeNi ternary alloy. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 480, 325-328	5.7	14
17	Structural and M\(\text{B}\)sbauer spectroscopic study of cubic phase ZrFe2\(\text{M}\)Mnx hydrogen storage alloy. Journal of Alloys and Compounds, <b>2008</b> , 454, 31-37	5.7	17
16	Ion beam induced mixing at Co/Si interface. <i>Vacuum</i> , <b>2008</b> , 83, 397-400	3.7	10
15	Structural and thermodynamical investigations of La0.23Ni0.34Co0.33Nd0.08Ti0.01Al0.01 hydrogen storage alloy. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 356-359	6.7	5
14	Electrical and optical properties of hydrogenated RNi5/Co (R=Ce, La) bi-layer systems. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 1916-1921	6.7	
13	Thermodynamics and structural aspects of hydrogen absorption in Zr1-xCrxFe2 alloys. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 2445-2449	6.7	23
12	Synthesis, characterization and hydrogenation of ZrFe2-xNixZrFe2-xNix (x=0.2,0.4,0.6,0.8)(x=0.2,0.4,0.6,0.8) alloys. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 3965-397	, <sub>1</sub> 6.7	24
11	Hydrogen absorption effects in ZrFe2\(\mathbb{N}\)ix compounds by means of 57Fe M\(\mathbb{S}\)sbauer spectroscopy. Journal of Magnetism and Magnetic Materials, 2007, 318, 44-48	2.8	6
10	Surface morphology and the phase formation at Cr/Si system. <i>Applied Surface Science</i> , <b>2007</b> , 253, 4721-	48 <i>2</i> 6	6
9	Characterization and hydrogenation of CeNi5\(\mathbb{R}\)Crx (x=0, 1, 2) alloys. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 430, 165-169	5.7	18
8	Improving hydrogen sorption kinetics of MgH2 by mechanical milling with TiF3. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 432, L1-L4	5.7	56
7	Crystal structure, hydrogen absorption and thermodynamics of Zr1\(\mathbb{Z}\)CoxFe2 alloys. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 438, 106-109	5.7	17
6	Hydrogenation behaviour of Ce-based AB5 intermetallic compounds. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 440, 84-88	5.7	13
5	Hydrogen uptake characteristics of mischmetal based alloy. <i>Journal of Power Sources</i> , <b>2006</b> , 159, 132-13	<b>3\$</b> .9	5
4	Structural and electrical properties of swift heavy ion beam irradiated Co/Si interface. <i>Bulletin of Materials Science</i> , <b>2006</b> , 29, 187-191	1.7	5
3	Structural, electrical and thermodynamical aspects of hydrogenated La-Ni-Si alloy. <i>Bulletin of Materials Science</i> , <b>2006</b> , 29, 67-72	1.7	3
2	Chalcogenides as Anode Material for All-Solid-State Li-Ion Batteries. ACS Symposium Series, 57-86	0.4	
1	Application of Metal Hydrides for All-Solid-State Li-Ion Batteries. ACS Symposium Series,87-112	0.4	