

Xue-Zhang Xiao

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#	Paper	IF	Citations
158	All-temperature batteries enabled by fluorinated electrolytes with non-polar solvents. <i>Nature Energy</i> , 2019 , 4, 882-890	62.3	267
157	Low-Temperature Combustion-Synthesized Nickel Oxide Thin Films as Hole-Transport Interlayers for Solution-Processed Optoelectronic Devices. <i>Advanced Energy Materials</i> , 2014 , 4, 1301460	21.8	97
156	Enhanced hydrogen storage properties of MgH ₂ with numerous hydrogen diffusion channels provided by Na ₂ Ti ₃ O ₇ nanotubes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6178-6185	13	69
155	ZIF-67 derived Co@CNTs nanoparticles: Remarkably improved hydrogen storage properties of MgH ₂ and synergetic catalysis mechanism. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 1059-1069	6.7	67
154	Transition metal (Co, Ni) nanoparticles wrapped with carbon and their superior catalytic activities for the reversible hydrogen storage of magnesium hydride. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 4019-4029	3.6	63
153	Novel AgPd hollow spheres anchored on graphene as an efficient catalyst for dehydrogenation of formic acid at room temperature. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 657-666	13	59
152	Remarkably Improved Hydrogen Storage Performance of MgH ₂ Catalyzed by Multivalence NbH _x Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 8554-8562	3.8	58
151	Carbon encapsulated 3D hierarchical Fe ₃ O ₄ spheres as advanced anode materials with long cycle lifetimes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 14641-14648	13	57
150	Novel 1D carbon nanotubes uniformly wrapped nanoscale MgH ₂ for efficient hydrogen storage cycling performances with extreme high gravimetric and volumetric capacities. <i>Nano Energy</i> , 2019 , 61, 540-549	17.1	56
149	In situ synthesis of SnO ₂ nanoparticles encapsulated in micro/mesoporous carbon foam as a high-performance anode material for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 18367-18374	13	56
148	Excellent catalysis of TiO nanosheets with high-surface-energy {001} facets on the hydrogen storage properties of MgH. <i>Nanoscale</i> , 2019 , 11, 7465-7473	7.7	52
147	Enhanced hydriding/dehydriding performance of 2LiBH ₄ /MgH ₂ composite by the catalytic effects of transition metal chlorides. <i>Journal of Materials Chemistry</i> , 2012 , 22, 20764		51
146	Remarkable hydrogen desorption properties and mechanisms of the Mg ₂ FeH ₆ @MgH ₂ core-shell nanostructure. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 5517-5524	13	49
145	Enhanced hydrogen storage capacity and reversibility of LiBH ₄ nanoconfined in the densified zeolite-templated carbon with high mechanical stability. <i>Nano Energy</i> , 2015 , 15, 244-255	17.1	48
144	Active species of CeAl(4) in the CeCl(3)-doped sodium aluminium hydride and its enhancement on reversible hydrogen storage performance. <i>Chemical Communications</i> , 2009 , 6857-9	5.8	47
143	Low-Temperature Reversible Hydrogen Storage Properties of LiBH ₄ : A Synergetic Effect of Nanoconfinement and Nanocatalysis. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 11252-11260	3.8	46
142	Development of TiCrMnFe based alloys with high hydrogen desorption pressures for hybrid hydrogen storage vessel application. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 12803-12810	6.7	45

141	Synergistic Catalytic Activity of Porous Rod-like TMTiO ₃ (TM = Ni and Co) for Reversible Hydrogen Storage of Magnesium Hydride. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 27973-27982	3.8	43
140	Superior de/hydrogenation performances of MgH ₂ catalyzed by 3D flower-like TiO ₂ @C nanostructures. <i>Journal of Energy Chemistry</i> , 2020 , 46, 191-198	12	42
139	Facile synthesis of Co/Pd supported by few-walled carbon nanotubes as an efficient bidirectional catalyst for improving the low temperature hydrogen storage properties of magnesium hydride. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5277-5287	13	40
138	Catalytic Mechanism of New TiC-Doped Sodium Alanate for Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 20745-20751	3.8	40
137	Highly synergetic catalytic mechanism of Ni@g-C ₃ N ₄ on the superior hydrogen storage performance of Li-Mg-B-H system. <i>Energy Storage Materials</i> , 2018 , 13, 199-206	19.4	39
136	Effects of NbF ₅ addition on the de/rehydrogenation properties of 2LiBH ₄ /MgH ₂ hydrogen storage system. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 13147-13154	6.7	39
135	Effects of fluoride additives on dehydrogenation behaviors of 2LiBH ₄ /MgH ₂ system. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 1021-1026	6.7	38
134	Non-noble trimetallic Cu-Ni-Co nanoparticles supported on metal-organic frameworks as highly efficient catalysts for hydrolysis of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2018 , 741, 501-508	5.7	37
133	Enhanced Hydriding/Dehydriding Performance of CeAl ₂ -Doped NaAlH ₄ and the Evolvement of Ce-Containing Species in the Cycling. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 2537-2543	3.8	36
132	High catalytic efficiency of amorphous TiB ₂ and NbB ₂ nanoparticles for hydrogen storage using the 2LiBH ₄ /MgH ₂ system. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 11368	13	35
131	Excellent synergistic catalytic mechanism of in-situ formed nanosized Mg ₂ Ni and multiple valence titanium for improved hydrogen desorption properties of magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 1750-1759	6.7	35
130	Facile preparation of MgH ₂ /nanocomposites under mild conditions and pathways to rapid dehydrogenation. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 10492-8	3.6	34
129	Influence of Ti super-stoichiometry on the hydrogen storage properties of Ti _{1+x} Cr _{1.2} Mn _{0.2} Fe _{0.6} (x = 0.1) alloys for hybrid hydrogen storage application. <i>Journal of Alloys and Compounds</i> , 2014 , 585, 307-311	5.7	34
128	Size effect on hydrogen storage properties of NaAlH ₄ confined in uniform porous carbons. <i>Nano Energy</i> , 2013 , 2, 995-1003	17.1	34
127	Synergistic catalysis in monodispersed transition metal oxide nanoparticles anchored on amorphous carbon for excellent low-temperature dehydrogenation of magnesium hydride. <i>Materials Today Energy</i> , 2019 , 12, 146-154	7	33
126	Effect of rare earth doping on the hydrogen storage performance of Ti _{1.02} Cr _{1.1} Mn _{0.3} Fe _{0.6} alloy for hybrid hydrogen storage application. <i>Journal of Alloys and Compounds</i> , 2018 , 731, 524-530	5.7	33
125	Carbon coated sodium-titanate nanotube as an advanced intercalation anode material for sodium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017 , 712, 365-372	5.7	32
124	Reversible hydrogen storage properties and favorable co-doping mechanism of the metallic Ti and Zr co-doped sodium aluminum hydride. <i>International Journal of Hydrogen Energy</i> , 2008 , 33, 64-73	6.7	32

123	Direct synthesis of nanocrystalline NaAlH ₄ complex hydride for hydrogen storage. <i>Applied Physics Letters</i> , 2009 , 94, 041907	3.4	31
122	SnLi 4.4 nanoparticles encapsulated in carbon matrix as high performance anode material for lithium-ion batteries. <i>Nano Energy</i> , 2014 , 9, 196-203	17.1	29
121	Significantly improved hydrogen storage properties of NaAlH ₄ catalyzed by Ce-based nanoparticles. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9752	13	28
120	Hydriding-dehydriding kinetics and the microstructure of La- and Sm-doped NaAlH ₄ prepared via direct synthesis method. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 10861-10869	6.7	27
119	Enhanced hydrogen storage properties of LiBH ₄ modified by NbF ₅ . <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 11675-11682	6.7	26
118	Hydrogen storage performance of 5LiBH ₄ + Mg ₂ FeH ₆ composite system. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 6733-6740	6.7	26
117	Microstructure and hydrogen storage properties of Ti ₁₀ V _{84-x} Fe ₆ Zr _x (x = 18) alloys. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 3080-3086	6.7	26
116	The hydrogen storage properties and microstructure of Ti-doped sodium aluminum hydride prepared by ball-milling. <i>International Journal of Hydrogen Energy</i> , 2007 , 32, 2475-2479	6.7	25
115	Facile synthesis of bowl-like 3D Mg(BH ₄) ₂ /NaBH ₄ /fluorographene composite with unexpected superior dehydrogenation performances. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9723-9732	13	24
114	Fluorographene nanosheets enhanced hydrogen absorption and desorption performances of magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 12715-12726	6.7	23
113	Influence of heat treatment on the microstructure and hydrogen storage properties of Ti ₁₀ V ₇₇ Cr ₆ Fe ₆ Zr alloy. <i>Journal of Alloys and Compounds</i> , 2012 , 529, 128-133	5.7	23
112	Microstructure and hydrogen storage characteristics of nanocrystalline Mg+xwt% LaMg ₂ Ni (x=0-30) composites. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 2786-2790	6.7	23
111	Ternary perovskite cobalt titanate/graphene composite material as long-term cyclic anode for lithium-ion battery. <i>Journal of Alloys and Compounds</i> , 2017 , 700, 54-60	5.7	22
110	Synergistic Effect of LiBH ₄ and LiAlH ₄ Additives on Improved Hydrogen Storage Properties of Unexpected High Capacity Magnesium Hydride. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2528-2538	3.8	22
109	Enhanced hydriding-dehydriding performance of a 2LiH/MgB ₂ composite by the catalytic effects of NiB nanoparticles. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 10184	13	22
108	Improvement on the kinetic and thermodynamic characteristics of Zr _{1-x} Nb _x Co (x = 0-0.2) alloys for hydrogen isotope storage and delivery. <i>Journal of Alloys and Compounds</i> , 2019 , 784, 1062-1070	5.7	21
107	Enhanced hydrogen desorption properties of LiBH ₄ /La(BH ₄) ₂ by a synergetic effect of nanoconfinement and catalysis. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 17462-17470	6.7	21
106	Composite cooperative enhancement on the hydrogen desorption kinetics of LiBH ₄ by co-doping with NbCl ₅ and hexagonal BN. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 10527-10535	6.7	20

105	GeP5/C composite as anode material for high power sodium-ion batteries with exceptional capacity. <i>Journal of Alloys and Compounds</i> , 2018 , 744, 15-22	5.7	20
104	Thermodynamics, Kinetics, and Modeling Investigation on the Dehydrogenation of CeAl4-Doped NaAlH4 Hydrogen Storage Material. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 22680-22687	3.8	20
103	La2O3-modified highly dispersed AuPd alloy nanoparticles and their superior catalysis on the dehydrogenation of formic acid. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 9353-9360	6.7	19
102	Remarkable enhancement in dehydrogenation properties of Mg(BH4)2 modified by the synergetic effect of fluorographite and LiBH4. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 14163-14172	6.7	19
101	Building robust architectures of carbon-wrapped transition metal nanoparticles for high catalytic enhancement of the 2LiBH4-MgH2 system for hydrogen storage cycling performance. <i>Nanoscale</i> , 2016 , 8, 14898-908	7.7	19
100	Fast hydrogen release under moderate conditions from NaBH4 destabilized by fluorographite. <i>RSC Advances</i> , 2014 , 4, 2550-2556	3.7	19
99	Highly dispersed metal nanoparticles on TiO2 acted as nano redox reactor and its synergistic catalysis on the hydrogen storage properties of magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 15100-15109	6.7	18
98	AuPd Nanoparticles Anchored on Nitrogen-Decorated Carbon Nanosheets with Highly Efficient and Selective Catalysis for the Dehydrogenation of Formic Acid. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4792-4801	3.8	18
97	Ternary perovskite nickel titanate/reduced graphene oxide nano-composite with improved lithium storage properties. <i>RSC Advances</i> , 2016 , 6, 61312-61318	3.7	18
96	A low temperature mechanochemical synthesis and characterization of amorphous NiB ultrafine nanoparticles. <i>Materials Letters</i> , 2013 , 109, 203-206	3.3	18
95	A comparative study of the hydrogen storage properties of LiBH4 doping with CaHCl and CaH2. <i>Journal of Alloys and Compounds</i> , 2012 , 539, 103-107	5.7	18
94	Investigation on the nature of active species in the CeCl3-doped sodium alanate system. <i>Journal of Alloys and Compounds</i> , 2011 , 509, S750-S753	5.7	18
93	Influence of Fe content on the microstructure and hydrogen storage properties of Ti16Zr5Cr22V57NiFex (x=28) alloys. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 8143-8148	6.7	18
92	Enhanced low temperature hydrogen desorption properties and mechanism of Mg(BH4)2 composited with 2D MXene. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 24292-24300	6.7	17
91	Superior dehydrogenation performance of nanoscale lithium borohydride modified with fluorographite. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 896-904	6.7	17
90	Effect of Mn substitution for Co on the structural, kinetic, and thermodynamic characteristics of ZrCo1-xMn (x=0.1) alloys for tritium storage. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 28498-28506	6.7	17
89	Reversible hydrogen storage behaviors and microstructure of TiC-doped sodium aluminum hydride. <i>Journal of Materials Science</i> , 2009 , 44, 4700-4704	4.3	17
88	Electrochemical properties of amorphous MgBe alloys mixed with Ni prepared by ball-milling. <i>Journal of Alloys and Compounds</i> , 2006 , 413, 312-318	5.7	17

87	In situ synthesis of ultrasmall SnO ₂ quantum dots on nitrogen-doped reduced graphene oxide composite as high performance anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017 , 727, 1-7	5.7	16
86	Study on the dehydrogenation properties and reversibility of Mg(BH ₄) ₂ AlH ₃ composite under moderate conditions. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 8050-8056	6.7	16
85	Self-templated carbon enhancing catalytic effect of ZrO ₂ nanoparticles on the excellent dehydrogenation kinetics of MgH ₂ . <i>Carbon</i> , 2020 , 166, 46-55	10.4	16
84	Formation mechanism of MgB ₂ in 2LiBH ₄ + MgH ₂ system for reversible hydrogen storage. <i>Transactions of Nonferrous Metals Society of China</i> , 2011 , 21, 1040-1046	3.3	16
83	Hydrogen storage behaviors and microstructure of MF ₃ (M=Ti, Fe)-doped magnesium hydride. <i>Transactions of Nonferrous Metals Society of China</i> , 2010 , 20, 1879-1884	3.3	16
82	Effect of Ni content on the electrochemical performance of the ball-milled La ₂ Mg ₁₇ Ni _x + 200 wt.% Ni (x = 0, 1, 3, 5) composites. <i>Journal of Alloys and Compounds</i> , 2007 , 428, 338-343	5.7	16
81	A new strategy for remarkably improving anti-disproportionation performance and cycling stabilities of ZrCo-based hydrogen isotope storage alloys by Cu substitution and controlling cutoff desorption pressure. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 28242-28251	6.7	16
80	Influence of annealing treatment on the microstructure and hydrogen storage performance of Ti _{1.02} Cr _{1.1} Mn _{0.3} Fe _{0.6} alloy for hybrid hydrogen storage application. <i>Journal of Alloys and Compounds</i> , 2015 , 636, 117-123	5.7	15
79	Comprehensive hydrogen storage properties and catalytic mechanism studies of 2LiBH ₄ /MgH ₂ system with NbF ₅ in various addition amounts. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 7050-7059	6.7	15
78	Microstructures and electrochemical hydrogen storage properties of novel Mg _{1-x} Ni _x amorphous composites. <i>Electrochemistry Communications</i> , 2009 , 11, 515-518	5.1	15
77	Influence of temperature and hydrogen pressure on the hydriding/dehydriding behavior of Ti-doped sodium aluminum hydride. <i>International Journal of Hydrogen Energy</i> , 2007 , 32, 3954-3958	6.7	15
76	Remarkable hydrogen absorption/desorption behaviors and mechanism of sodium alanates in-situ doped with Ti-based 2D MXene. <i>Materials Chemistry and Physics</i> , 2020 , 242, 122529	4.4	15
75	PdCoNi nanoparticles supported on nitrogen-doped porous carbon nanosheets for room temperature dehydrogenation of formic acid. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 11675-11683	6.7	14
74	Insights into 2D graphene-like TiO ₂ (B) nanosheets as highly efficient catalyst for improved low-temperature hydrogen storage properties of MgH ₂ . <i>Materials Today Energy</i> , 2020 , 16, 100411	7	14
73	The effect of Cr content on the structural and hydrogen storage characteristics of Ti ₁₀ V ₈₀ Fe ₆ Zr ₄ Cr _x (x = 0-4) alloys. <i>Journal of Alloys and Compounds</i> , 2010 , 493, 396-400	5.7	14
72	In-situ synthesis of amorphous Mg(BH ₄) ₂ and chloride composite modified by NbF ₅ for superior reversible hydrogen storage properties. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 2044-2053	6.7	13
71	Significantly enhanced hydrogen desorption properties of Mg(AlH ₄) ₂ nanoparticles synthesized using solvent free strategy. <i>Progress in Natural Science: Materials International</i> , 2017 , 27, 112-120	3.6	12
70	Facile formation of NiCo ₂ O ₄ yolk-shell spheres for highly reversible sodium storage. <i>Journal of Alloys and Compounds</i> , 2019 , 800, 125-133	5.7	12

69	Rational design of Sn-Sb-S composite with yolk-shell hydrangea-like structure as advanced anode material for sodium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019 , 793, 620-626	5.7	12
68	Superior Reversible Hydrogen Storage Properties and Mechanism of LiBH ₄ /MgH ₂ /Al Doped with NbF ₅ Additive. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7613-7620	3.8	12
67	Synergetic Effect of in Situ Formed Nano NbH and LiH _{1-x} F _x for Improving Reversible Hydrogen Storage Properties of the Li/Mg/B/H System. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 12019-12025	3.8	12
66	Synthesis and hydriding/dehydriding properties of nanosized sodium alanates prepared by reactive ball-milling. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 539-548	6.7	12
65	Hydriding/dehydriding behaviors of La _{1.8} Ca _{0.2} Mg ₁₄ Ni ₃ alloy modified by mechanical ball-milling under argon. <i>Journal of Alloys and Compounds</i> , 2005 , 399, 178-182	5.7	12
64	Electrode properties of La ₂ Mg ₁₇ alloy ball-milled with xwt.% cobalt powder (x=50, 100, 150 and 200). <i>Journal of Alloys and Compounds</i> , 2006 , 414, 248-252	5.7	12
63	Effects of ball-milling time and Bi ₂ O ₃ addition on electrochemical performance of ball-milled La ₂ Mg ₁₇ +200wt.% Ni composites. <i>Journal of Alloys and Compounds</i> , 2006 , 416, 194-198	5.7	12
62	Study on the modification of Zr-Mn-V based alloys for hydrogen isotopes storage and delivery. <i>Journal of Alloys and Compounds</i> , 2019 , 797, 185-193	5.7	11
61	Extreme high reversible capacity with over 8.0 wt% and excellent hydrogen storage properties of MgH ₂ combined with LiBH ₄ and Li ₃ AlH ₆ . <i>Journal of Energy Chemistry</i> , 2020 , 50, 296-306	12	11
60	Improved de/hydrogenation properties and favorable reaction mechanism of CeH ₂ + KH co-doped sodium aluminum hydride. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 6577-6587	6.7	11
59	Synthesis of nanoscale CeAl ₄ and its high catalytic efficiency for hydrogen storage of sodium alanate. <i>Rare Metals</i> , 2017 , 36, 77-85	5.5	11
58	A new strategy to remarkably improve the low-temperature reversible hydrogen desorption performances of LiBH ₄ by compositing with fluorographene. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 20046-20055	6.7	11
57	Significantly improved de/rehydrogenation properties of lithium borohydride modified with hexagonal boron nitride. <i>RSC Advances</i> , 2015 , 5, 51110-51115	3.7	11
56	Investigation on synthesis, structure and catalytic modification of Ca(AlH ₄) ₂ complex hydride. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 936-941	6.7	11
55	Probing an intermediate state by X-ray absorption near-edge structure in nickel-doped 2LiBH ₄ /MgH ₂ reactive hydride composite at moderate temperature. <i>Materials Today Nano</i> , 2020 , 12, 100090	9.7	11
54	An in-depth study on the thermodynamics and kinetics of disproportionation behavior in ZrCo ₃ systems. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9322-9330	13	11
53	LiAlH ₄ as a "Microlighter" on the Fluorographite Surface Triggering the Dehydrogenation of Mg(BH ₄) ₂ : Toward More than 7 wt % Hydrogen Release below 70 °C. <i>ACS Applied Energy Materials</i> , 2020 , 3, 3033-3041	6.1	10
52	Superior Catalytic Effects of Transition Metal Boride Nanoparticles on the Reversible Hydrogen Storage Properties of Li-Mg-B-H System. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 195-200	3.1	10

51	Effects of Fluoride Additives on the Hydrogen Storage Performance of $2\text{LiBH}_4\text{-}3\text{AlH}_6$ Destabilized System. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 22226-22230	3.8	10
50	Synthesis and dehydrogenation of CeAl ₄ -doped calcium alanate. <i>Journal of Alloys and Compounds</i> , 2011 , 509, S743-S746	5.7	10
49	Enhanced hydrogen storage properties of high-loading nanoconfined $\text{LiBH}_4\text{-Mg(BH}_4)_2$ composites with porous hollow carbon nanospheres. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 852-864	6.7	10
48	Tuning electrolyte enables micro-sized Sn as an advanced anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1812-1821	13	10
47	Development of Ti-Zr-Mn-Cr-V based alloys for high-density hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2021 , 875, 160035	5.7	10
46	Enhancing the reversibility of SnCoS ₄ microflower for sodium-ion battery anode material. <i>Journal of Alloys and Compounds</i> , 2020 , 825, 154104	5.7	9
45	Synthesis of calcium alanate and its dehydriding performance enhanced by FeF ₃ doping. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 590-595	5.7	9
44	Enhanced reversible hydrogen desorption properties and mechanism of $\text{Mg(BH}_4)_2\text{-AlH}_3\text{-LiH}$ composite. <i>Journal of Alloys and Compounds</i> , 2018 , 762, 548-554	5.7	9
43	Facile synthesis of AuPd nanoparticles anchored on TiO ₂ nanosheets for efficient dehydrogenation of formic acid. <i>Nanotechnology</i> , 2018 , 29, 335402	3.4	9
42	Investigation on Ti ₂ Zr ₂ Cr ₂ Fe ₂ V based alloys for metal hydride hydrogen compressor at moderate working temperatures. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 21580-21589	6.7	8
41	Highly efficient ZrH ₂ nanocatalyst for the superior hydrogenation kinetics of magnesium hydride under moderate conditions: Investigation and mechanistic insights. <i>Applied Surface Science</i> , 2021 , 541, 148375	6.7	8
40	In situ synthesized SnO nanorod/reduced graphene oxide low-dimensional structure for enhanced lithium storage. <i>Nanotechnology</i> , 2018 , 29, 105705	3.4	7
39	Effects of Ti-based additives on Mg_2FeH_6 dehydrogenation properties. <i>Transactions of Nonferrous Metals Society of China</i> , 2016 , 26, 791-798	3.3	7
38	Enhanced reversible hydrogen storage performance of NbCl ₅ doped 2LiH-MgB_2 composite. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 2132-2141	6.7	7
37	Enhanced dehydrogenation performances and mechanism of $\text{LiBH}_4\text{-Mg}_{17}\text{Al}_{12}$ -hydride composite. <i>Transactions of Nonferrous Metals Society of China</i> , 2014 , 24, 152-157	3.3	7
36	Enhanced hydrogen storage properties of a dual-cation (Li ⁺ , Mg ²⁺) borohydride and its dehydrogenation mechanism. <i>RSC Advances</i> , 2017 , 7, 36852-36859	3.7	7
35	Direct synthesis and hydrogen storage behaviors of nanocrystalline $\text{Na}_2\text{LiAlH}_6$. <i>Journal of Materials Science</i> , 2011 , 46, 3314-3318	4.3	7
34	The functioning mechanism of Al valid substitution for Co in improving the cycling performance of ZrCoAl based hydrogen isotope storage alloys. <i>Journal of Alloys and Compounds</i> , 2020 , 848, 156618	5.7	7

33	Excellent Catalysis of Various TiO ₂ Dopants with Na _{0.46} TiO ₂ in Situ Formed on the Enhanced Dehydrogenation Properties of NaMgH ₃ . <i>Journal of Physical Chemistry C</i> , 2019 , 123, 22832-22841	3.8	6
32	Influence of lanthanon hydride catalysts on hydrogen storage properties of sodium alanates. <i>Journal of Rare Earths</i> , 2013 , 31, 502-506	3.7	6
31	Effects of supplementing sow diets with refermented sorghum dried distiller's grains with solubles from late gestation to weaning on the performance of sows and progeny. <i>Journal of Animal Science</i> , 2017 , 95, 2025-2031	0.7	6
30	Influence of TiC catalyst on absorption/desorption behaviors and microstructures of sodium aluminum hydride. <i>Transactions of Nonferrous Metals Society of China</i> , 2011 , 21, 1297-1302	3.3	6
29	Soft chemical synthesis and characterization of lithium nickel oxide electrode materials. <i>Journal of Materials Science</i> , 1996 , 31, 6449-6454	4.3	6
28	Superior catalysis of NbN nanoparticles with intrinsic multiple valence on reversible hydrogen storage properties of magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 814-822	6.7	6
27	An impact of hydrogenation phase transformation mechanism on the cyclic stabilizing behavior of Zr _{0.8} Ti _{0.2} Co alloy for hydrogen isotope handling. <i>Materials Today Energy</i> , 2020 , 18, 100554	7	5
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19	Ultra-fast dehydrogenation behavior at low temperature of LiAlH ₄ modified by fluorographite. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 28123-28133	6.7	3
18	Effects of surface modification on the electrode behavior of ball-milled La ₂ Mg ₁₇ +200wt% Ni composite in alkaline solution. <i>Journal of Alloys and Compounds</i> , 2006 , 420, 306-311	5.7	3
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14	Low-cost batteries based on industrial waste Al-Si microparticles and LiFePO for stationary energy storage. <i>Dalton Transactions</i> , 2021 , 50, 8322-8329	4.3	3
13	Studies on Ti-Zr-Cr-Mn-Fe-V based alloys for hydrogen compression under mild thermal conditions of water bath. <i>Journal of Alloys and Compounds</i> , 2021 , 892, 162145	5.7	3
12	Dehydriding properties of Ti or/and Zr-doped sodium aluminum hydride prepared by ball-milling. <i>Physica Scripta</i> , 2007 , T129, 95-98	2.6	2
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