Takayuki Ichikawa

List of Publications by Year
in descending order

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256	7,813	53794 45	69250 77
papers	citations	h-index	g-index

267	267	267	3902
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catalytic Effect of Nanoparticle 3d-Transition Metals on Hydrogen Storage Properties in Magnesium Hydride MgH2Prepared by Mechanical Milling. Journal of Physical Chemistry B, 2005, 109, 7188-7194.	2.6	518
2	New Metalâ^'Nâ^'H System Composed of Mg(NH2)2and LiH for Hydrogen Storage. Journal of Physical Chemistry B, 2004, 108, 8763-8765.	2.6	309
3	Lithium nitride for reversible hydrogen storage. Journal of Alloys and Compounds, 2004, 365, 271-276.	5.5	305
4	Mechanism of Novel Reaction from LiNH2and LiH to Li2NH and H2as a Promising Hydrogen Storage System. Journal of Physical Chemistry B, 2004, 108, 7887-7892.	2.6	296
5	A survey on content-based retrieval for multimedia databases. IEEE Transactions on Knowledge and Data Engineering, 1999, 11, 81-93.	5.7	244
6	Remarkable improvement of hydrogen sorption kinetics in magnesium catalyzed with Nb2O5. Journal of Alloys and Compounds, 2006, 420, 46-49.	5.5	231
7	Egocentric Object Manipulation in Virtual Environments: Empirical Evaluation of Interaction Techniques. Computer Graphics Forum, 1998, 17, 41-52.	3.0	222
8	Development of vanadium based hydrogen storage material: A review. Renewable and Sustainable Energy Reviews, 2017, 72, 791-800.	16.4	156
9	Catalytic effect of Ni nano-particle and Nb oxide on H-desorption properties in MgH2 prepared by ball milling. Journal of Alloys and Compounds, 2005, 404-406, 716-719.	5.5	123
10	Correlation between hydrogen storage properties and structural characteristics in mechanically milled magnesium hydride MgH2. Journal of Alloys and Compounds, 2004, 366, 269-273.	5.5	112
11	Hydrogen absorption of catalyzed magnesium below room temperature. International Journal of Hydrogen Energy, 2013, 38, 13728-13733.	7.1	112
12	Hydrogen storage properties in Ti catalyzed Liâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 404-406, 435-438.	5.5	100
13	Effect of Ti catalyst with different chemical form on Liâ€“Nâ€“H hydrogen storage properties. Journal of Alloys and Compounds, 2005, 404-406, 439-442.	5.5	96
14	Ammonia, a Switch for Controlling High Ionic Conductivity in Lithium Borohydride Ammoniates. Joule, 2018, 2, 1522-1533.	24.0	87
15	Synthesis and decomposition reactions of metal amides in metalâ€“Nâ€“H hydrogen storage system. Journal of Power Sources, 2006, 156, 166-170.	7.8	83
16	Hydrogen Storage Properties of Liâ^'Mgâ^'Nâ^'H Systems with Different Ratios of LiH/Mg(NH2)2. Journal of Physical Chemistry B, 2006, 110, 12964-12968.	2.6	82
17	Review on Ammonia Absorption Materials: Metal Hydrides, Halides, and Borohydrides. ACS Applied Energy Materials, 2018, 1, 232-242.	5.1	80
18	Composite Materials based on Light Elements for Hydrogen Storage. Materials Transactions, 2005, 46, 1-14.	1.2	79

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19	Highly purified hydrogen production from ammonia for PEM fuel cell. International Journal of Hydrogen Energy, 2018, 43, 14486-14492.	7.1	76
20	Mechanism of Hydrogenation Reaction in the Liâˆ’Mgâˆ’Nâˆ’H System. Journal of Physical Chemistry B, 2005, 109, 10744-10748.	2.6	75
21	Thermal analysis on the Liâ€“Mgâ€“Bâ€“H systems. Journal of Alloys and Compounds, 2007, 446-447, 306-309.	5.5	74
22	SEM and TEM characterization of magnesium hydride catalyzed with Ni nano-particle or Nb2O5. Journal of Alloys and Compounds, 2008, 450, 395-399.	5.5	73
23	Catalytic effect of TiF4 in improving hydrogen storage properties of MgH2. International Journal of Hydrogen Energy, 2016, 41, 14178-14183.	7.1	71
24	Hydrogen Desorption Mechanism in a Liâˆ’Nâˆ’H System by Means of the Isotopic Exchange Technique. Journal of Physical Chemistry B, 2005, 109, 14855-14858.	2.6	70
25	The crystal structure of LiND2 and Mg(ND2)2. Journal of Alloys and Compounds, 2007, 428, 297-301.	5.5	70
26	Desorption behaviours from metalâ€“Nâ€“H systems synthesized by ball milling. Journal of Alloys and Compounds, 2005, 404-406, 443-447.	5.5	68
27	How does TiF₄ affect the decomposition of MgH₂ and its complex variants? â€“ An XPS investigation. Journal of Materials Chemistry A, 2017, 5, 15543-15551.	10.3	65
28	X-ray Absorption Spectroscopic Study on Valence State and Local Atomic Structure of Transition Metal Oxides Doped in MgH₂. Journal of Physical Chemistry C, 2009, 113, 13450-13455.	3.1	64
29	Metal hydride-based materials towards high performance negative electrodes for all-solid-state lithium-ion batteries. Chemical Communications, 2015, 51, 9773-9776.	4.1	64
30	Surface modification of MgH2 by ZrCl4 to tailor the reversible hydrogen storage performance. International Journal of Hydrogen Energy, 2017, 42, 6152-6159.	7.1	61
31	Recyclable hydrogen storage system composed of ammonia and alkali metal hydride. International Journal of Hydrogen Energy, 2009, 34, 9760-9764.	7.1	59
32	Hydrogen absorption kinetics of the catalyzed MgH2 by niobium oxide. Journal of Alloys and Compounds, 2007, 446-447, 67-71.	5.5	58
33	Hydrogen absorption properties of Liâ€“Mgâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 400, 245-248.	5.5	57
34	Comparative Study of Structural Changes in NH₃BH₃, LiNH₂BH₃, and KNH₂BH₃ During Dehydrogenation Process. Journal of Physical Chemistry C, 2012, 116, 5957-5964.	3.1	57
35	Enhancement of hydrogen desorption kinetics in magnesium hydride by doping with lithium metatitanate. Journal of Alloys and Compounds, 2017, 711, 400-405.	5.5	57
36	Hydrogen desorption properties of the Caâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 398, 62-66.	5.5	55

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37	Hydrogen generation by electrolysis of liquid ammonia. Chemical Communications, 2010, 46, 7775.	4.1	55
38	Rechargeable hydrogen storage in nanostructured mixtures of hydrogenated carbon and lithium hydride. Applied Physics Letters, 2005, 86, 241914.	3.3	52
39	Metal Hydrides and Related Materials. Energy Carriers for Novel Hydrogen and Electrochemical Storage. Journal of Physical Chemistry C, 2020, 124, 7599-7607.	3.1	52
40	Electrode properties of a double layer capacitor of nano-structured graphite produced by ball milling under a hydrogen atmosphere. Carbon, 2006, 44, 983-988.	10.3	51
41	The enhanced de/re-hydrogenation performance of MgH₂ with TiH₂ additive. International Journal of Energy Research, 2018, 42, 1139-1147.	4.5	50
42	Battery-assisted low-cost hydrogen production from solar energy: Rational target setting for future technology systems. International Journal of Hydrogen Energy, 2019, 44, 1451-1465.	7.1	50
43	Catalytic effect of 3d transition metals on hydrogen storage properties in mechanically milled graphite. Journal of Physics and Chemistry of Solids, 2004, 65, 535-539.	4.0	48
44	Superior Hydrogen Exchange Effect in the MgH₂â"LiBH₄ System. Journal of Physical Chemistry C, 2010, 114, 13132-13135.	3.1	48
45	Solid state NMR study on the thermal decomposition pathway of sodium amidoborane NaNH2BH3. Journal of Materials Chemistry, 2011, 21, 2609.	6.7	48
46	Catalysis of nickel nanoparticles with high thermal stability for ammonia decomposition. Applied Catalysis A: General, 2015, 491, 184-188.	4.3	48
47	Anode properties of magnesium hydride catalyzed with niobium oxide for an all solid-state lithium-ion battery. Chemical Communications, 2013, 49, 7174.	4.1	47
48	High compressed hydrogen production via direct electrolysis of liquid ammonia. International Journal of Hydrogen Energy, 2016, 41, 14529-14534.	7.1	46
49	Hydrogen storage properties on mechanically milled graphite. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 138-142.	3.5	45
50	Quantitative estimation of NH3 partial pressure in H2 desorbed from the Liâ€"Nâ€"H system by Raman spectroscopy. Chemical Communications, 2005, , 3038.	4.1	45
51	Thermal decomposition of alkaline-earth metal hydride and ammonia borane composites. International Journal of Hydrogen Energy, 2010, 35, 12405-12409.	7.1	45
52	Bulk-Type All-Solid-State Lithium-Ion Batteries: Remarkable Performances of a Carbon Nanofiber-Supported MgH₂ Composite Electrode. ACS Applied Materials & Interfaces, 2017, 9, 2261-2266.	8.0	45
53	Unusual hydrogen absorption properties in graphite mechanically milled under various hydrogen pressures up to 6 MPa. Journal of Alloys and Compounds, 2003, 354, L5-L9.	5.5	43
54	Hydrogen desorption/absorption properties of Liâ€"Caâ€"Nâ€"H system. Journal of Alloys and Compounds, 2007, 439, 337-341.	5.5	43

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55	Electron Spin Resonance Investigation of Hydrogen Absorption in Ball-Milled Graphite. Journal of Physical Chemistry C, 2009, 113, 5409-5416.	3.1	41
56	Molecular hydrogen carrier with activated nanohydride and ammonia. Journal of Materials Research, 2009, 24, 2185-2190.	2.6	41
57	Study of cyclic performance of V-Ti-Cr alloys employed for hydrogen compressor. International Journal of Hydrogen Energy, 2018, 43, 2881-2889.	7.1	40
58	Recent development on hydrogen storage properties in metalâ€“Nâ€“H systems. Journal of Power Sources, 2006, 159, 126-131.	7.8	39
59	Phase and morphology evolution study of ball milled Mgâ€“Co hydrogen storage alloys. International Journal of Hydrogen Energy, 2013, 38, 7070-7076.	7.1	39
60	Dehydrogenation reaction of Liâ€“Mgâ€“Nâ€“H systems studied by in situ synchrotron powder X-ray diffraction and powder neutron diffraction. Journal of Alloys and Compounds, 2008, 457, 362-367.	5.5	38
61	Sodium Hydrazinidoborane: A Chemical Hydrogenâ€Storage Material. ChemSusChem, 2013, 6, 667-673.	6.8	37
62	Study on the thermal decomposition of NaBH 4 catalyzed by ZrCl 4. International Journal of Hydrogen Energy, 2017, 42, 22432-22437.	7.1	37
63	Hybrid nickel-metal hydride/hydrogen battery. International Journal of Hydrogen Energy, 2019, 44, 4263-4270.	7.1	36
64	Correlation between kinetics and chemical bonding state of catalyst surface in catalyzed magnesium hydride. International Journal of Hydrogen Energy, 2011, 36, 12319-12323.	7.1	34
65	Destabilization of lithium hydride by the substitution of group 14 elements: A review. International Journal of Hydrogen Energy, 2016, 41, 5969-5978.	7.1	34
66	Catalytic Tuning of Sorption Kinetics of Lightweight Hydrides: A Review of the Materials and Mechanism. Catalysts, 2018, 8, 651.	3.5	34
67	Activation of Ammonia Borane Hybridized with Alkalineâ€'Metal Hydrides: A Low-Temperature and High-Purity Hydrogen Generation Material. Journal of Physical Chemistry C, 2010, 114, 14662-14664.	3.1	33
68	Flower-like Bi₂S₃ nanostructures as highly efficient anodes for all-solid-state lithium-ion batteries. RSC Advances, 2019, 9, 29549-29555.	3.6	33
69	Thermodynamics on Ammonia Absorption of Metal Halides and Borohydrides. Journal of Physical Chemistry C, 2014, 118, 18412-18416.	3.1	32
70	Activation on Ammonia Absorbing Reaction for Magnesium Chloride. Journal of Physical Chemistry C, 2015, 119, 26296-26302.	3.1	32
71	Electrochemical Performance of Titanium Hydride for Bulk-Type All-Solid-State Lithium-Ion Batteries. Materials Transactions, 2016, 57, 755-757.	1.2	31
72	Improvement of hydrogen desorption kinetics in the LiHâ€“NH3 system by addition of KH. Chemical Communications, 2011, 47, 12227.	4.1	30

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73	A new synthesis route of ammonia production through hydrolysis of metal â€“ Nitrides. International Journal of Hydrogen Energy, 2017, 42, 24897-24903.	7.1	30
74	Hydrogen storage properties of lithium silicon alloy synthesized by mechanical alloying. Journal of Power Sources, 2011, 196, 504-507.	7.8	29
75	Raman Scattering and Infrared Absorption Investigation of Hydrogen Configuration State in Mechanically Milled Graphite under H2Gas Atmosphere. Journal of the Physical Society of Japan, 2004, 73, 553-555.	1.6	28
76	Dehydrogenation process of AlH3 observed by TEM. Journal of Alloys and Compounds, 2013, 580, S163-S166.	5.5	28
77	Destabilization of LiH by Li Insertion into Ge. Journal of Physical Chemistry C, 2013, 117, 5650-5657.	3.1	28
78	Lithium Hydrazinidoborane: A Polymorphic Material with Potential for Chemical Hydrogen Storage. Chemistry of Materials, 2014, 26, 3249-3255.	6.7	28
79	Highly stable nanostructured Bi2Se3 anode material for all solid-state lithium-ion batteries. Journal of Alloys and Compounds, 2020, 838, 155403.	5.5	28
80	Catalytic effect of niobium oxide on hydrogen storage properties of mechanically ball milled MgH2. Physica B: Condensed Matter, 2006, 383, 49-50.	2.7	27
81	Low-temperature water-splitting by sodium redox reaction. International Journal of Hydrogen Energy, 2012, 37, 17709-17714.	7.1	27
82	Synthesis and characterization of lithiumâ€“carbon compounds for hydrogen storage. Journal of Alloys and Compounds, 2011, 509, 719-723.	5.5	26
83	Effects of hydrogen and carbon dioxide on the laminar burning velocities of methaneâ€“air mixtures. Journal of the Energy Institute, 2021, 99, 178-185.	5.3	26
84	An Image Processing Language with Icon-Assisted Navigation. IEEE Transactions on Software Engineering, 1985, SE-11, 811-819.	5.6	25
85	Thermodynamic properties of metal amides determined by ammonia pressure-composition isotherms. Journal of Chemical Thermodynamics, 2010, 42, 140-143.	2.0	25
86	Evaluation of enthalpy change due to hydrogen desorption for lithium amide/imide system by differential scanning calorimetry. Thermochimica Acta, 2008, 468, 35-38.	2.7	24
87	The reaction process of hydrogen absorption and desorption on the nanocomposite of hydrogenated graphite and lithium hydride. Nanotechnology, 2009, 20, 204021.	2.6	24
88	Formation of NaCl-Type Monodeuteride LaD by the Disproportionation Reaction of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaD</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 108, 205501.	7.8	24
89	Improved hydrogen release from magnesium borohydride by ZrCl4 additive. International Journal of Hydrogen Energy, 2017, 42, 22342-22347.	7.1	24
90	MgH₂â€“CoO: a conversion-type composite electrode for LiBH₄-based all-solid-state lithium ion batteries. RSC Advances, 2018, 8, 23468-23474.	3.6	24

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91	Interactive visualization of spatiotemporal patterns using spirals on a geographical map. , 1999, , .		23
92	Micro-alloyed Mg2Ni for better performance as negative electrode of Ni-MH battery and hydrogen storage. International Journal of Hydrogen Energy, 2017, 42, 5220-5226.	7.1	23
93	Doping effect of Nb species on hydrogen desorption properties of AlH3. Journal of Alloys and Compounds, 2018, 734, 55-59.	5.5	23
94	Hydrogen Desorption Properties of Lithium–Carbon–Hydrogen System. Materials Transactions, 2005, 46, 1757-1759.	1.2	22
95	Characterization of titanium based catalysts in the Li-N-H hydrogen storage system by X-ray absorption spectroscopy. Journal of Alloys and Compounds, 2007, 446-447, 360-362.	5.5	22
96	Investigation of reaction between LiNH2 and H2. Journal of Alloys and Compounds, 2008, 463, 462-465.	5.5	22
97	Thermodynamic properties of lithium amide under hydrogen pressure determined by Raman spectroscopy. Journal of Applied Physics, 2009, 105, .	2.5	22
98	Implementation of Bismuth Chalcogenides as an Efficient Anode: A Journey from Conventional Liquid Electrolyte to an All-Solid-State Li-Ion Battery. Molecules, 2020, 25, 3733.	3.8	22
99	Electrochemical charge and discharge properties for the formation of magnesium and aluminum hydrides. Journal of Alloys and Compounds, 2011, 509, S584-S587.	5.5	21
100	Content-based retrieval of video data by the grammar of film. , 0, , .		20
101	Hydrogen desorption processes in Liâ€“Mgâ€“Nâ€“H systems. Journal of Physics and Chemistry of Solids, 2008, 69, 2234-2236.	4.0	20
102	Synthesis and characterization of magnesiumâ€“carbon compounds for hydrogen storage. Carbon, 2013, 56, 50-55.	10.3	20
103	Development of Mg Li B based advanced material for onboard hydrogen storage solution. International Journal of Hydrogen Energy, 2017, 42, 3963-3970.	7.1	20
104	LiBH4 as solid electrolyte for Li-ion batteries with Bi2Te3 nanostructured anode. International Journal of Hydrogen Energy, 2018, 43, 21709-21714.	7.1	20
105	Highly efficient & stable Bi & Sb anodes using lithium borohydride as solid electrolyte in Li-ion batteries. RSC Advances, 2019, 9, 13077-13081.	3.6	20
106	Recent development on hydrogen storage materials composed of light elements. Physica B: Condensed Matter, 2006, 383, 45-48.	2.7	19
107	Thermodynamic and structural properties of ball-milled mixtures composed of nano-structural graphite and alkali(-earth) metal hydride. Journal of Alloys and Compounds, 2007, 432, 303-307.	5.5	19
108	Catalytic effect of ATiO3 (A = Sr, Ba) on ammonia decomposition during mechanical milling. Chemical Communications, 2010, 46, 3982.	4.1	19

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109	Liquid ammonia electrolysis by platinum electrodes. Journal of Alloys and Compounds, 2011, 509, S891-S894.	5.5	19
110	Anode properties of Al2O3-added MgH2 for all-solid-state lithium-ion batteries. Journal of Solid State Electrochemistry, 2015, 19, 3639-3644.	2.5	19
111	Catalytic hydrolysis of sodium borohydride on Co catalysts. International Journal of Energy Research, 2016, 40, 2078-2090.	4.5	19
112	Characterization of hydrogen absorption/desorption states on lithium-carbon-hydrogen system by neutron diffraction. Journal of Applied Physics, 2008, 104, 053511.	2.5	18
113	X-Ray crystal structure of [HSm{VIVO(TPPS)}]n and encapsulation of nitrogen molecules in 1-D channels. Dalton Transactions, 2011, 40, 12826.	3.3	18
114	Thermal decomposition studies of [Ni(NH3)6]X2 (X = Cl, Br) in the solid state using TG-MS and TR-XRD. Journal of Thermal Analysis and Calorimetry, 2011, 103, 515-523.	3.6	18
115	Nitrogen Dissociation via Reaction with Lithium Alloys. ACS Omega, 2017, 2, 1081-1088.	3.5	18
116	Hydrogen desorption properties of Liâ€“BNâ€“H system synthesized by mechanical milling. International Journal of Hydrogen Energy, 2008, 33, 3128-3131.	7.1	17
117	Improvement of reaction kinetics by metal chloride on ammonia and lithium hydride system. International Journal of Hydrogen Energy, 2012, 37, 16025-16030.	7.1	17
118	Collision Drag Effect on Propagation of Sound in Liquid3He in Aerogel. Journal of the Physical Society of Japan, 2001, 70, 3483-3486.	1.6	17
119	Observation of hydrogen absorption/desorption reaction processes in Liâ€“Mgâ€“Nâ€“H system by in-situ X-ray diffractmetry. Journal of Alloys and Compounds, 2007, 430, 217-221.	5.5	16
120	Anomalous hydrogen absorption on non-stoichiometric iron-carbon compound. Journal of Alloys and Compounds, 2010, 507, 547-550.	5.5	16
121	Ammonia Synthesis via Non-Equilibrium Reaction of Lithium Nitride in Hydrogen Flow Condition. Materials Transactions, 2015, 56, 410-414.	1.2	16
122	Catalytic effect of bis (cyclopentadienyl) nickel II on the improvement of the hydrogenation-dehydrogenation of Mg-MgH2 system. International Journal of Hydrogen Energy, 2017, 42, 17178-17183.	7.1	16
123	Nanostructured Bi2Te3 as anode material as well as a destabilizing agent for LiBH4. International Journal of Hydrogen Energy, 2020, 45, 16992-16999.	7.1	16
124	V-QBE: video database retrieval by means of example motion of objects. , 0, , .		15
125	The structural properties of amides and imides as hydrogen storage materials. Zeitschrift FÃ¼r Kristallographie, 2008, 223, 660-665.	1.1	15
126	Catalytic Effect of Tiâˆ’Liâˆ’N Compounds in the Liâˆ’Nâˆ’H System on Hydrogen Desorption Properties. Journal of Physical Chemistry C, 2011, 115, 589-593.	3.1	15

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127	Synthesis of nickel nanoparticles with excellent thermal stability in micropores of zeolite. International Journal of Hydrogen Energy, 2013, 38, 13579-13586.	7.1	15
128	Correlation between electrochemical behavior and hydrogen storage properties of Liâ€“Sn system. Journal of Alloys and Compounds, 2013, 580, S211-S215.	5.5	15
129	Catalytic modification in dehydrogenation properties of KSiH₃. Physical Chemistry Chemical Physics, 2014, 16, 26163-26167.	2.8	15
130	Two-Peak Mystery of LiNH2â€“NaH Dehydrogenation Is Solved? A Study of the Analogous Sodium Amide/Lithium Hydride System. Journal of Physical Chemistry C, 2016, 120, 27903-27909.	3.1	15
131	Quantity of NH3 desorption from the Liâ€“Nâ€“H hydrogen storage system examined by Fourier transform infrared spectroscopy. Journal of Alloys and Compounds, 2007, 446-447, 342-344.	5.5	14
132	Reaction between magnesium ammine complex compound and lithium hydride. International Journal of Hydrogen Energy, 2010, 35, 2058-2062.	7.1	13
133	Structural and thermal gas desorption properties of metal aluminum amides. Journal of Alloys and Compounds, 2010, 506, 297-301.	5.5	13
134	Ammonia Desorption Property and Structural Changes of LiAl(NH₂)₄ on Thermal Decomposition. Journal of Physical Chemistry C, 2011, 115, 10284-10291.	3.1	13
135	Pseudo catalytic ammonia synthesis by lithiumâ€“tin alloy. International Journal of Hydrogen Energy, 2020, 45, 6806-6812.	7.1	13
136	Experimental investigation on performance of hydrogen additions in natural gas combustion combined with CO2. International Journal of Hydrogen Energy, 2021, 46, 34958-34969.	7.1	13
137	A Pyramidal Representation of Images and Its Feature Extraction Facility. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1981, PAMI-3, 257-264.	13.9	12
138	Nuclear-magnetic-resonance measurements of the hydrogen dynamics in nanocrystalline graphite. Journal of Applied Physics, 2005, 98, 044302.	2.5	12
139	Hydrogen storage properties of nano-structural carbon and metal hydrides composites. Physica B: Condensed Matter, 2006, 383, 51-52.	2.7	12
140	A process for synthesizing the Liâ€“Mgâ€“Nâ€“H hydrogen storage system from Mg and LiNH2. Journal of Alloys and Compounds, 2007, 432, 289-292.	5.5	12
141	Compressed hydrogen production via reaction between liquid ammonia and alkali metal hydride. International Journal of Hydrogen Energy, 2011, 36, 8217-8220.	7.1	12
142	Identifying catalyst in Li-N-H system by x-ray absorption spectroscopy. Applied Physics Letters, 2011, 99, .	3.3	12
143	Investigations on the thermal behaviour of [Ni(NH3)6](NO3)2 and [Ni(en)3](NO3)2 using TGâ€“MS and TR-XRD under inert condition. Journal of Thermal Analysis and Calorimetry, 2012, 107, 887-892.	3.6	12
144	Metal hydrideâ€“hydrazine borane: Towards hydrazinidoboranes or composites as hydrogen carriers. International Journal of Hydrogen Energy, 2015, 40, 14875-14884.	7.1	12

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145	Thermal decomposition of sodium amide. International Journal of Hydrogen Energy, 2017, 42, 5213-5219.	7.1	12
146	Transverse Sound in Liquid-H3eâ€“Aerogel System. Physical Review Letters, 2002, 89, 215301.	7.8	11
147	Multiple-Gap Features from Break-Junction Tunneling in the Superconducting MgB2. Journal of the Physical Society of Japan, 2004, 73, 1902-1913.	1.6	11
148	Local Structural Analysis on Decomposition Process of LiAl(ND₂)₄. Materials Transactions, 2014, 55, 1129-1133.	1.2	11
149	Pure hydrogen-generating â€œdopedâ€•sodium hydrazinidoborane. International Journal of Hydrogen Energy, 2015, 40, 7475-7482.	7.1	11
150	The destabilization of LiBH4 through the addition of Bi2Se3 nanosheets. International Journal of Hydrogen Energy, 2020, 45, 23947-23953.	7.1	11
151	Enhanced performance of MgH2 composite electrode using glass-ceramic electrolytes for all-solid-state Li-ion batteries. Journal of Alloys and Compounds, 2021, 863, 158729.	5.5	11
152	Catalysis of Lithium Chloride and Alkali Metal Borohydrides on Hydrogen Generation of Ammonia and Lithium Hydride System. Journal of Physical Chemistry C, 2015, 119, 19922-19927.	3.1	10
153	Evaluation of the enthalpy change due to hydrogen desorption for Mâ€“Nâ€“H (MÂ=ÂLi, Mg, Ca) systems by differential scanning calorimetry. International Journal of Hydrogen Energy, 2015, 40, 1516-1522.	7.1	10
154	Effective Factor on Catalysis of Niobium Oxide for Magnesium. ACS Omega, 2020, 5, 21906-21912.	3.5	10
155	High capacity MgH2 composite electrodes for all-solid-state Li-ion battery operating at ambient temperature. International Journal of Hydrogen Energy, 2021, 46, 1030-1037.	7.1	10
156	Viscoelastic theory of liquid in aerogel. Physica B: Condensed Matter, 2003, 329-333, 299-300.	2.7	9
157	Crystal structure and dynamics of Mg(ND3)6Cl2. Physical Chemistry Chemical Physics, 2011, 13, 7644.	2.8	9
158	First-Principles Calculations of Potassium Amidoborane KNH₂BH₃: Structure and ³⁹K NMR Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 20666-20672.	3.1	9
159	Metal aluminum amides for hydrogen storage â€“ Crystal structure studies. International Journal of Hydrogen Energy, 2015, 40, 16938-16947.	7.1	9
160	Tailoring the absorptionâ€“desorption properties of KSiH3 compound using nano-metals (Ni, Co, Nb) as catalyst. Journal of Alloys and Compounds, 2015, 645, S144-S147.	5.5	9
161	Electrochemical reaction mechanism for Bi2Te3-based anode material in highly durable all solid-state lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2020, 31, 16429-16436.	2.2	9
162	Lithiation mechanism of antimony chalcogenides (<scp> Sb ₂ X ₃ </scp> ; X = S,) Tj ETQq0 0 0 rgBT /Overloc Research, 2021, 45, 11135-11145.	4.5	9

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163	The Catalytic Role of D-block Elements and Their Compounds for Improving Sorption Kinetics of Hydride Materials: A Review. Reactions, 2021, 2, 333-364.	2.1	9
164	Improvement of Kinetics of Ammonia Synthesis at Ambient Pressure by the Chemical Looping Process of Lithium Hydride. Journal of Physical Chemistry C, 2022, 126, 2403-2409.	3.1	9
165	Gas Emission Properties of the MgH<I>_x</I>-Zn(BH₄)₂ Systems. Materials Transactions, 2007, 48, 556-559.	1.2	8
166	H2 desorption from LiH cluster and NH3 molecule studied by ab initio molecular dynamics simulation. Computational and Theoretical Chemistry, 2010, 944, 137-145.	1.5	8
167	Raman Scattering Study of Hydrogen Storage Material LiNH₂. Journal of the Physical Society of Japan, 2012, 81, 094603.	1.6	8
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