Takayuki Ichikawa

List of Publications by Year in descending order

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256 papers 7,813 citations

45 h-index 69108 77 g-index

267 all docs

267 docs citations

times ranked

267

3902 citing authors

#	Article	IF	CITATIONS
1	A reversible tuning of Fermi level in BiSbTe3 thin films through ion implantation. Materials Letters, 2022, 306, 130923.	1.3	3
2	Room-Temperature Hydrogen Absorption of Ti with Robust Surface Coated by Hexagonal Boron Nitride. ACS Applied Energy Materials, 2022, 5, 951-957.	2.5	1
3	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.	1.5	9
4	Systematic Study on Nitrogen Dissociation and Ammonia Synthesis by Lithium and Group 14 Element Alloys. ACS Applied Energy Materials, 2022, 5, 4765-4773.	2.5	8
5	Milling induced surface modification of V-based catalyst to improve sorption kinetics of KSiH3: An XPS investigation. International Journal of Hydrogen Energy, 2022, , .	3.8	1
6	Corrosion performance of carbide/nitride/oxide (C/N/O)-based reactor during thermochemical hydrogen production by Na redox reaction. Journal of Alloys and Compounds, 2022, , 165732.	2.8	0
7	Pseudo-Binary Phase Diagram of LiNH2-MH (M = Na, K) Eutectic Mixture. Molecules, 2022, 27, 4093.	1.7	3
8	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.	3.8	10
9	Synergetic NH ₃ absorption properties of the NaBH ₄ â€"LiBH ₄ mixed system. Chemical Communications, 2021, 57, 6003-6006.	2.2	1
10	Synthesis of Highly Activated Magnesium by Niobium and Tantalum Gel Oxide Catalyst. Materials Transactions, 2021, 62, 284-289.	0.4	2
11	Hydrogen storage behavior of TiFe alloy activated by different methods. Materials Letters: X, 2021, 9, 100061.	0.3	5
12	Lithiation mechanism of antimony chalcogenides (<scp> Sb ₂ X ₃ </scp> ; X = S,) Tj E ⁻ Research, 2021, 45, 11135-11145.	TQq0 0 0 r 2.2	rgBT /Overlocl 9
13	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.	2.8	11
14	Hydrogen Production via Thermochemical Water Splitting Process by Alkali Metal Redox Cycle. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2021, 100, 29-44.	0.2	0
15	Conversion reaction of TiFe hydride as anode material for all-solid-state Lithium-ion batteries. Materials Letters: X, 2021, 10, 100067.	0.3	0
16	All-Solid-State Li-Ion Batteries Using a Combination of Sb ₂ 55/Acetylene Black as the Electrode Composite and LiBH ₄ as the Electrolyte. ACS Applied Energy Materials, 2021, 4, 6269-6276.	2.5	5
17	Enhancement in hydrogenation dehydrogenation kinetics of KSiH3 by the addition of Ti-based catalysts. Materials Letters: X, 2021, 11, 100086.	0.3	1
18	Catalytic Activities of Various Niobium Oxides for Hydrogen Absorption/Desorption Reactions of Magnesium. ACS Omega, 2021, 6, 23564-23569.	1.6	7

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19	The Catalytic Role of D-block Elements and Their Compounds for Improving Sorption Kinetics of Hydride Materials: A Review. Reactions, 2021, 2, 333-364.	0.9	9
20	Reaction Rate of Hydrothermal Ammonia Production from Chicken Manure. ACS Omega, 2021, 6, 23442-23446.	1.6	8
21	Experimental investigation on performance of hydrogen additions in natural gas combustion combined with CO2. International Journal of Hydrogen Energy, 2021, 46, 34958-34969.	3.8	13
22	Effects of hydrogen and carbon dioxide on the laminar burning velocities of methane–air mixtures. Journal of the Energy Institute, 2021, 99, 178-185.	2.7	26
23	Analysis of sodium generation by sodium oxide decomposition on corrosion resistance materials: a new approach towards sodium redox water-splitting cycle. RSC Advances, 2021, 11, 21017-21022.	1.7	3
24	Structural and Morphological Modifications Induced by Fe Ion Implantation in Sb ₂ Te ₃ Thin Films. Macromolecular Symposia, 2021, 399, 2100079.	0.4	3
25	Electrochemical Performance of Graphene-Modulated Sulfur Composite Cathodes Using LiBH4 Electrolyte for All-Solid-State Li-S Battery. Energies, 2021, 14, 7362.	1.6	2
26	The destabilization of LiBH4 through the addition of Bi2Se3 nanosheets. International Journal of Hydrogen Energy, 2020, 45, 23947-23953.	3.8	11
27	Nanostructured Bi2Te3 as anode material as well as a destabilizing agent for LiBH4. International Journal of Hydrogen Energy, 2020, 45, 16992-16999.	3.8	16
28	Eutectic melting in x(2LiBH4-MgH2) hydrogen storage system by the addition of KH. International Journal of Hydrogen Energy, 2020, 45, 17000-17005.	3.8	5
29	Understanding the mechanism of photochromism in double-layer metal oxide using X-ray photoelectron spectroscopy. Chemical Physics Letters, 2020, 739, 136973.	1.2	1
30	Iron based catalyst for the improvement of the sorption properties of KSiH3. International Journal of Hydrogen Energy, 2020, 45, 33681-33686.	3.8	6
31	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.	1.1	9
32	Critical Temperature and Pressure Conditions of Degradation during Thermochemical Hydrogen Compression: A Case Study of V-Based Hydrogen Storage Alloy. Energies, 2020, 13, 2324.	1.6	7
33	Destabilization of LiBH ₄ by the infusion of Bi ₂ X ₃ (X = S, Se, Te): an <i>in situ</i> TEM investigation. Journal of Materials Chemistry A, 2020, 8, 25706-25715.	5.2	7
34	Effective Factor on Catalysis of Niobium Oxide for Magnesium. ACS Omega, 2020, 5, 21906-21912.	1.6	10
35	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.	1.7	22
36	Surface-Controlled Conversion of Ammonia Borane from Boron Nitride. Energies, 2020, 13, 5569.	1.6	3

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37	Surface modification effects of graphite for selective hydrogen absorption by titanium at room temperature. Chemical Communications, 2020, 56, 7237-7240.	2.2	3
38	Pseudo catalytic ammonia synthesis by lithium–tin alloy. International Journal of Hydrogen Energy, 2020, 45, 6806-6812.	3.8	13
39	Metal Hydrides and Related Materials. Energy Carriers for Novel Hydrogen and Electrochemical Storage. Journal of Physical Chemistry C, 2020, 124, 7599-7607.	1.5	52
40	Highly stable nanostructured Bi2Se3 anode material for all solid-state lithium-ion batteries. Journal of Alloys and Compounds, 2020, 838, 155403.	2.8	28
41	Hydrogen and Materials Characteristic in Solids â£. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 67-67.	0.2	O
42	Vanadium Hydride as Conversion Type Negative Electrode for All-Solid-State Lithium-Ion-Battery. Materials Transactions, 2019, 60, 2183-2187.	0.4	8
43	Room-Temperature Hydrogen Absorption of Titanium with Surface Modification by Organic Solvents. Journal of Physical Chemistry C, 2019, 123, 19269-19274.	1.5	7
44	Synthesis of sodium-magnesium amidoborane by sodium amide: An investigation of functional properties for hydrogen/ammonia storage. Journal of Alloys and Compounds, 2019, 801, 645-650.	2.8	6
45	Hydrogen Sorption and Cyclic Compressor Performance of V ₄₀ Ti _{21.5} Cr _{33.5} M _{5(M= Nb, Zr, Fe) Alloys. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2019, 98, 157-164.}	t;0 . 2	8
46	Hybrid nickel-metal hydride/hydrogen battery. International Journal of Hydrogen Energy, 2019, 44, 4263-4270.	3.8	36
47	Organogelators of 5,17-Difunctionalized Calix[4]arenes. Chemistry Letters, 2019, 48, 43-46.	0.7	2
48	<i>Operando</i> spectroscopic analyses for the ammonia absorption process of sodium borohydride. Chemical Communications, 2019, 55, 2150-2153.	2,2	4
49	Eutectic Phenomenon of LiNH2-KH Composite in MH-NH3 Hydrogen Storage System. Molecules, 2019, 24, 1348.	1.7	5
50	Highly efficient & Stable Bi & Stable Bi anodes using lithium borohydride as solid electrolyte in Li-ion batteries. RSC Advances, 2019, 9, 13077-13081.	1.7	20
51	Flower-like Bi ₂ S ₃ nanostructures as highly efficient anodes for all-solid-state lithium-ion batteries. RSC Advances, 2019, 9, 29549-29555.	1.7	33
52	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.	3.8	50
53	LiBH4 as solid electrolyte for Li-ion batteries with Bi2Te3 nanostructured anode. International Journal of Hydrogen Energy, 2018, 43, 21709-21714.	3.8	20
54	Review on Ammonia Absorption Materials: Metal Hydrides, Halides, and Borohydrides. ACS Applied Energy Materials, 2018, 1, 232-242.	2.5	80

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55	Study of cyclic performance of V-Ti-Cr alloys employed for hydrogen compressor. International Journal of Hydrogen Energy, 2018, 43, 2881-2889.	3.8	40
56	The enhanced de/re-hydrogenation performance of MgH ₂ with TiH ₂ additive. International Journal of Energy Research, 2018, 42, 1139-1147.	2.2	50
57	Doping effect of Nb species on hydrogen desorption properties of AlH3. Journal of Alloys and Compounds, 2018, 734, 55-59.	2.8	23
58	Catalytic Tuning of Sorption Kinetics of Lightweight Hydrides: A Review of the Materials and Mechanism. Catalysts, 2018, 8, 651.	1.6	34
59	Hydrogen Desorption Isobar Properties of Ti _{1.1} CrMn at High Temperatures and Pressures. Materials Transactions, 2018, 59, 855-857.	0.4	5
60	Highly purified hydrogen production from ammonia for PEM fuel cell. International Journal of Hydrogen Energy, 2018, 43, 14486-14492.	3.8	76
61	MgH ₂ –CoO: a conversion-type composite electrode for LiBH ₄ -based all-solid-state lithium ion batteries. RSC Advances, 2018, 8, 23468-23474.	1.7	24
62	Ammonia, a Switch for Controlling High Ionic Conductivity in Lithium Borohydride Ammoniates. Joule, 2018, 2, 1522-1533.	11.7	87
63	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.	3.8	23
64	Thermal decomposition of sodium amide. International Journal of Hydrogen Energy, 2017, 42, 5213-5219.	3.8	12
65	Improved hydrogen release from magnesium borohydride by ZrCl4 additive. International Journal of Hydrogen Energy, 2017, 42, 22342-22347.	3.8	24
66	Synthesis, structural characterization, and hydrogen desorption properties of Na[Al(NH 2 BH 3) 4]. International Journal of Hydrogen Energy, 2017, 42, 6173-6180.	3.8	8
67	Development of vanadium based hydrogen storage material: A review. Renewable and Sustainable Energy Reviews, 2017, 72, 791-800.	8.2	156
68	Surface modification of MgH2 by ZrCl4 to tailor the reversible hydrogen storage performance. International Journal of Hydrogen Energy, 2017, 42, 6152-6159.	3.8	61
69	Study on the thermal decomposition of NaBH 4 catalyzed by ZrCl 4. International Journal of Hydrogen Energy, 2017, 42, 22432-22437.	3.8	37
70	Nitrogen Dissociation via Reaction with Lithium Alloys. ACS Omega, 2017, 2, 1081-1088.	1.6	18
71	Enhancement of hydrogen desorption kinetics in magnesium hydride by doping with lithium metatitanate. Journal of Alloys and Compounds, 2017, 711, 400-405.	2.8	57
72	How does TiF ₄ affect the decomposition of MgH ₂ and its complex variants? – An XPS investigation. Journal of Materials Chemistry A, 2017, 5, 15543-15551.	5.2	65

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73	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.	3.8	16
74	Ammonia suppression during decomposition of sodium amide by the addition of metal hydride. International Journal of Hydrogen Energy, 2017, 42, 22388-22394.	3.8	7
75	Bulk-Type All-Solid-State Lithium-Ion Batteries: Remarkable Performances of a Carbon Nanofiber-Supported MgH ₂ Composite Electrode. ACS Applied Materials & Interfaces, 2017, 9, 2261-2266.	4.0	45
76	Development of Mg Li B based advanced material for onboard hydrogen storage solution. International Journal of Hydrogen Energy, 2017, 42, 3963-3970.	3.8	20
77	A new synthesis route of ammonia production through hydrolysis of metal – Nitrides. International Journal of Hydrogen Energy, 2017, 42, 24897-24903.	3.8	30
78	Development of Novel Anode Materials for Lithium-Ion Secondary Battery by Using Hydrides. Materia Japan, 2017, 56, 434-437.	0.1	0
79	Metal Amides: New Hydrogen Storage Systems. , 2016, , .		0
80	Hydrogen Ab/Desorption of LiH-KH Composite and Ammonia System. Materials Transactions, 2016, 57, 1215-1219.	0.4	3
81	Electrochemical Performance of Titanium Hydride for Bulk-Type All-Solid-State Lithium-Ion Batteries. Materials Transactions, 2016, 57, 755-757.	0.4	31
82	Two-Peak Mystery of LiNH2–NaH Dehydrogenation Is Solved? A Study of the Analogous Sodium Amide/Lithium Hydride System. Journal of Physical Chemistry C, 2016, 120, 27903-27909.	1.5	15
83	Destabilization of lithium hydride by the substitution of group 14 elements: A review. International Journal of Hydrogen Energy, 2016, 41, 5969-5978.	3.8	34
84	Catalytic effect of TiF4 in improving hydrogen storage properties of MgH2. International Journal of Hydrogen Energy, 2016, 41, 14178-14183.	3.8	71
85	High compressed hydrogen production via direct electrolysis of liquid ammonia. International Journal of Hydrogen Energy, 2016, 41, 14529-14534.	3.8	46
86	Catalytic hydrolysis of sodium borohydride on Co catalysts. International Journal of Energy Research, 2016, 40, 2078-2090.	2.2	19
87	A new complex alkali metal aluminium amide borohydride, Li ₂ Al(ND ₂) ₄ BH ₄ : synthesis, thermal analysis and crystal structure. RSC Advances, 2016, 6, 28761-28766.	1.7	4
88	Building a hydrogen infrastructure in Japan. , 2016, , 321-335.		3
89	<i>In-Situ</i> XAS for Niobium Oxide Catalyst on Hydrogen Absorption and Desorption of Magnesium. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 107-111.	0.2	3
90	"Hydrogen and Materials Characteristic in Solids II". Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 77-77.	0.2	0

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91	Ammonia Synthesis via Non-Equilibrium Reaction of Lithium Nitride in Hydrogen Flow Condition. Materials Transactions, 2015, 56, 410-414.	0.4	16
92	Activation on Ammonia Absorbing Reaction for Magnesium Chloride. Journal of Physical Chemistry C, 2015, 119, 26296-26302.	1.5	32
93	Kinetic Modification on Hydrogen Desorption of Lithium Hydride and Magnesium Amide System. Materials, 2015, 8, 3896-3909.	1.3	6
94	Anode properties of Al2O3-added MgH2 for all-solid-state lithium-ion batteries. Journal of Solid State Electrochemistry, 2015, 19, 3639-3644.	1.2	19
95	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.	1.5	10
96	Correlation between particle size and hydrogen generation properties on ammonia and lithium hydride system. International Journal of Hydrogen Energy, 2015, 40, 14911-14915.	3.8	2
97	Metal hydride–hydrazine borane: Towards hydrazinidoboranes or composites as hydrogen carriers. International Journal of Hydrogen Energy, 2015, 40, 14875-14884.	3.8	12
98	Evaluation of the enthalpy change due to hydrogen desorption for M–N–H (MÂ=ÂLi, Mg, Ca) systems by differential scanning calorimetry. International Journal of Hydrogen Energy, 2015, 40, 1516-1522.	3.8	10
99	Metal aluminum amides for hydrogen storage – Crystal structure studies. International Journal of Hydrogen Energy, 2015, 40, 16938-16947.	3.8	9
100	Tailoring the absorption–desorption properties of KSiH3 compound using nano-metals (Ni, Co, Nb) as catalyst. Journal of Alloys and Compounds, 2015, 645, S144-S147.	2.8	9
101	Pure hydrogen-generating "doped―sodium hydrazinidoborane. International Journal of Hydrogen Energy, 2015, 40, 7475-7482.	3.8	11
102	Metal hydride-based materials towards high performance negative electrodes for all-solid-state lithium-ion batteries. Chemical Communications, 2015, 51, 9773-9776.	2.2	64
103	Catalysis of nickel nanoparticles with high thermal stability for ammonia decomposition. Applied Catalysis A: General, 2015, 491, 184-188.	2.2	48
104	Catalytic modification in dehydrogenation properties of KSiH ₃ . Physical Chemistry Chemical Physics, 2014, 16, 26163-26167.	1.3	15
105	Lithium Hydrazinidoborane: A Polymorphic Material with Potential for Chemical Hydrogen Storage. Chemistry of Materials, 2014, 26, 3249-3255.	3.2	28
106	Thermodynamics on Ammonia Absorption of Metal Halides and Borohydrides. Journal of Physical Chemistry C, 2014, 118, 18412-18416.	1.5	32
107	Cation/anion dependence of metal ammine borohydrides/chlorides studied by ab initio calculations. Computational and Theoretical Chemistry, 2014, 1039, 71-74.	1.1	1
108	Thermochemical Energy Storage by Water-splitting Via Redox Reaction of Alkali Metals. Energy Procedia, 2014, 49, 927-934.	1.8	6

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109	Local Structural Analysis on Decomposition Process of LiAl(ND ₂) ₄ . Materials Transactions, 2014, 55, 1129-1133.	0.4	11
110	Effects of Metal Oxide Additives on Anode Properties of Magnesium Hydride for All-Solid-State Lithium Ion Batteries. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2014, 93, 926-930.	0.2	5
111	Hydrogen Storage Materials., 2013,, 99-136.		5
112	Improved hydrogen desorption from lithium hydrazide by alkali metal hydride. Journal of Alloys and Compounds, 2013, 580, S320-S323.	2.8	2
113	Anode properties of magnesium hydride catalyzed with niobium oxide for an all solid-state lithium-ion battery. Chemical Communications, 2013, 49, 7174.	2.2	47
114	Phase and morphology evolution study of ball milled Mg–Co hydrogen storage alloys. International Journal of Hydrogen Energy, 2013, 38, 7070-7076.	3.8	39
115	Dehydrogenation process of AlH3 observed by TEM. Journal of Alloys and Compounds, 2013, 580, S163-S166.	2.8	28
116	Hydrogen production via thermochemical water-splitting by lithium redox reaction. Journal of Alloys and Compounds, 2013, 580, S410-S413.	2.8	5
117	Microstructure and hydrogen desorption characteristics of hydrogenated ScH2–MBn (MÂ=ÂMg and Ca) systems synthesized by mechanical milling. International Journal of Hydrogen Energy, 2013, 38, 6744-6749.	3.8	0
118	Synthesis of nickel nanoparticles with excellent thermal stability in micropores of zeolite. International Journal of Hydrogen Energy, 2013, 38, 13579-13586.	3.8	15
119	Correlation between electrochemical behavior and hydrogen storage properties of Li–Sn system. Journal of Alloys and Compounds, 2013, 580, S211-S215.	2.8	15
120	Hydrogen absorption of catalyzed magnesium below room temperature. International Journal of Hydrogen Energy, 2013, 38, 13728-13733.	3.8	112
121	Synthesis and characterization of magnesium–carbon compounds for hydrogen storage. Carbon, 2013, 56, 50-55.	5.4	20
122	Sodium Hydrazinidoborane: A Chemical Hydrogenâ€Storage Material. ChemSusChem, 2013, 6, 667-673.	3.6	37
123	Destabilization of LiH by Li Insertion into Ge. Journal of Physical Chemistry C, 2013, 117, 5650-5657.	1.5	28
124	Microscopic characterization of metal-carbon-hydrogen composites (metal = Li, Mg). Journal of Applied Physics, 2013, 114, 093509.	1.1	3
125	^ ^ldquo;Hydrogen and Materials Characteristic in Solids^ ^rdquo;. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 551-551.	0.2	0
126	Catalytic Effect of Niobium Oxide on Hydrogen Absorption and Desorption Process for Magnesium. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 636-640.	0.2	1

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127	Chemical Hydrogen Storage of Carbon Material. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 552-558.	0.2	O
128	Synthesis of Calcium Borohydride by Milling Hydrogenation of Hydride and Boride. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 609-614.	0.2	1
129	Investigation of Reaction Mechanism in Li2NH Hydrogen Storage System by TEM. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 571-574.	0.2	0
130	Ammonia Synthesis via Non-Equilibrium Reaction of Lithium Nitride in Hydrogen Flow Condition. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 580-584.	0.2	0
131	Thermochemical Water-splitting Reaction by Alkali Metal-Cobalt Oxide. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2013, 92, 909-912.	0.2	1
132	Raman Scattering Study of Hydrogen Storage Material LiNH ₂ . Journal of the Physical Society of Japan, 2012, 81, 094603.	0.7	8
133	Formation of NaCl-Type Monodeuteride LaD by the Disproportionation Reaction of <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaD</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> . Physical Review Letters, 2012, 108, 205501.	2.9	24
134	The anharmonic vibration of Li in lithium amide. Applied Physics Letters, 2012, 100, 151911.	1.5	5
135	Improvement of reaction kinetics by metal chloride on ammonia and lithium hydride system. International Journal of Hydrogen Energy, 2012, 37, 16025-16030.	3.8	17
136	Low-temperature water-splitting by sodium redox reaction. International Journal of Hydrogen Energy, 2012, 37, 17709-17714.	3.8	27
137	First-Principles Calculations of Potassium Amidoborane KNH ₂ BH ₃ : Structure and ³⁹ K NMR Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 20666-20672.	1.5	9
138	Comparative Study of Structural Changes in NH ₃ BH ₃ , LiNH ₂ BH ₃ , and KNH ₂ BH ₃ During Dehydrogenation Process. Journal of Physical Chemistry C, 2012, 116, 5957-5964.	1.5	57
139	Lithium hydrazide as a potential compound for hydrogen storage. International Journal of Hydrogen Energy, 2012, 37, 5750-5753.	3.8	6
140	Investigations on the thermal behaviour of [Ni(NH3)6](NO3)2 and [Ni(en)3](NO3)2 using TG–MS and TR-XRD under inert condition. Journal of Thermal Analysis and Calorimetry, 2012, 107, 887-892.	2.0	12
141	Solid state NMR study on the thermal decomposition pathway of sodium amidoborane NaNH2BH3. Journal of Materials Chemistry, 2011, 21, 2609.	6.7	48
142	Ammonia Desorption Property and Structural Changes of LiAl(NH ₂) ₄ on Thermal Decomposition. Journal of Physical Chemistry C, 2011, 115, 10284-10291.	1.5	13
143	Catalytic Effect of Tiâ^'Liâ^'N Compounds in the Liâ^'Nâ^'H System on Hydrogen Desorption Properties. Journal of Physical Chemistry C, 2011, 115, 589-593.	1.5	15
144	Electronic structure of lithium amide. Physical Review B, 2011, 83, .	1.1	7

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145	Crystal structure and dynamics of Mg(ND3)6Cl2. Physical Chemistry Chemical Physics, 2011, 13, 7644.	1.3	9
146	Synthesis and characterization of lithium–carbon compounds for hydrogen storage. Journal of Alloys and Compounds, 2011, 509, 719-723.	2.8	26
147	Electrochemical charge and discharge properties for the formation of magnesium and aluminum hydrides. Journal of Alloys and Compounds, 2011, 509, S584-S587.	2.8	21
148	Liquid ammonia electrolysis by platinum electrodes. Journal of Alloys and Compounds, 2011, 509, S891-S894.	2.8	19
149	Cluster size effect on hydrogen desorption process from LinHn–NH3 hydrogen storage system. Journal of Alloys and Compounds, 2011, 509, S728-S731.	2.8	2
150	X-Ray crystal structure of [HSm{VIVO(TPPS)}]n and encapsulation of nitrogen molecules in 1-D channels. Dalton Transactions, 2011, 40, 12826.	1.6	18
151	Correlation between kinetics and chemical bonding state of catalyst surface in catalyzed magnesium hydride. International Journal of Hydrogen Energy, 2011, 36, 12319-12323.	3.8	34
152	Improvement of hydrogen desorption kinetics in the LiH–NH3 system by addition of KH. Chemical Communications, 2011, 47, 12227.	2.2	30
153	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.	2.0	18
154	Hydrogen storage properties of lithium silicon alloy synthesized by mechanical alloying. Journal of Power Sources, 2011, 196, 504-507.	4.0	29
155	Variable temperature neutron diffraction studies of single crystals of LiND2. International Journal of Hydrogen Energy, 2011, 36, 7909-7913.	3.8	1
156	Compressed hydrogen production via reaction between liquid ammonia and alkali metal hydride. International Journal of Hydrogen Energy, 2011, 36, 8217-8220.	3.8	12
157	Identifying catalyst in Li-N-H system by x-ray absorption spectroscopy. Applied Physics Letters, 2011, 99, .	1.5	12
158	<i>Ab initio</i> study on the hydrogen desorption from \$m {MHext{–}NH}_3\$MH–NH3 (M = Li, Na, K) hydrogen storage systems. Journal of Chemical Physics, 2011, 134, 124515.	1.2	2
159	Thermodynamic properties of metal amides determined by ammonia pressure-composition isotherms. Journal of Chemical Thermodynamics, 2010, 42, 140-143.	1.0	25
160	Reaction between magnesium ammine complex compound and lithium hydride. International Journal of Hydrogen Energy, 2010, 35, 2058-2062.	3.8	13
161	Thermal decomposition of alkaline-earth metal hydride and ammonia borane composites. International Journal of Hydrogen Energy, 2010, 35, 12405-12409.	3.8	45
162	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

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163	Hydrogen Exchange Effect in MgH ₂ -LiBH ₄ System. Materials Science Forum, 2010, 654-656, 2855-2858.	0.3	1
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