Takayuki Ichikawa

List of Publications by Year
in descending order

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256	7,813	53751 45	69214 77
papers	citations	h-index	g-index

267	267	267	3902
all docs	docs citations	times ranked	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 NH₃ absorption properties of the NaBH₄â€“LiBH₄ 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 ETQq0 0 0 rgBT /Overloc Research, 2021, 45, 11135-11145.	2.2	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 Sb₂S₃/Li₂S-P₂S₅/Acetylene Black as the Electrode Composite and LiBH₄ 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

#	Article	IF	Citations
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 methaneâ€“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 Sb₂Te₃ 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 LiBH₄ by the infusion of Bi₂X₃ (X = S, Se, Te): an in situ 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 lithiumâ€“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	0
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 V₄₀Ti_{21.5}Cr_{33.5}M₅ (M= Nb, Zr, Fe) Alloys. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2019, 98, 157-164.	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	Operando 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 & Sb anodes using lithium borohydride as solid electrolyte in Li-ion batteries. RSC Advances, 2019, 9, 13077-13081.	1.7	20
51	Flower-like Bi₂S₃ 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 MgH₂ with TiH₂ 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	MgH₂â€“CoO: a conversion-type composite electrode for LiBH₄-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 TiF₄ affect the decomposition of MgH₂ and its complex variants? â€“ 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 MgH₂ 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 â€“ 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 LiNH2â€“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, Li₂Al(ND₂)₄BH₄: 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 hydrideâ€“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 Mâ€“Nâ€“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 â€“ Crystal structure studies. International Journal of Hydrogen Energy, 2015, 40, 16938-16947.	3.8	9
100	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.	2.8	9
101	Pure hydrogen-generating â€œdopedâ€•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 KSiH₃. 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(ND₂)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 Mgâ€“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 ScH2â€“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 Liâ€“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 magnesiumâ€“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 (metalâ€‰=â€‰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	0
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 LiNH₂. 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 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.	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 KNH₂BH₃: Structure and ³⁹K NMR Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 20666-20672.	1.5	9
138	Comparative Study of Structural Changes in NH₃BH₃, LiNH₂BH₃, and KNH₂BH₃ 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 TGâ€“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(NH₂)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 lithiumâ€“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 LinHnâ€“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 LiHâ€“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	Ab initio study on the hydrogen desorption from $m {MHext{–}NH}_3$MHâ€“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 MgH₂-LiBH₄ System. Materials Science Forum, 2010, 654-656, 2855-2858.	0.3	1
164	Superior Hydrogen Exchange Effect in the MgH₂â^'LiBH₄ System. Journal of Physical Chemistry C, 2010, 114, 13132-13135.	1.5	48
165	Hydrogen Desorption Reaction between Hydrogen-Containing Functional Groups and Lithium Hydride. Journal of Physical Chemistry C, 2010, 114, 8668-8674.	1.5	7
166	Structural and thermal gas desorption properties of metal aluminum amides. Journal of Alloys and Compounds, 2010, 506, 297-301.	2.8	13
167	Anomalous hydrogen absorption on non-stoichiometric iron-carbon compound. Journal of Alloys and Compounds, 2010, 507, 547-550.	2.8	16
168	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.	1.5	33
169	Catalytic effect of ATiO3 (A = Sr, Ba) on ammonia decomposition during mechanical milling. Chemical Communications, 2010, 46, 3982.	2.2	19
170	Hydrogen generation by electrolysis of liquid ammonia. Chemical Communications, 2010, 46, 7775.	2.2	55
171	The reaction process of hydrogen absorption and desorption on the nanocomposite of hydrogenated graphite and lithium hydride. Nanotechnology, 2009, 20, 204021.	1.3	24
172	Recyclable hydrogen storage system composed of ammonia and alkali metal hydride. International Journal of Hydrogen Energy, 2009, 34, 9760-9764.	3.8	59
173	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.	1.5	64
174	Electron Spin Resonance Investigation of Hydrogen Absorption in Ball-Milled Graphite. Journal of Physical Chemistry C, 2009, 113, 5409-5416.	1.5	41
175	Thermodynamic properties of lithium amide under hydrogen pressure determined by Raman spectroscopy. Journal of Applied Physics, 2009, 105, .	1.1	22
176	FUELS â€“ HYDROGEN STORAGE | Complex Hydrides. , 2009, , 473-483.		2
177	Molecular hydrogen carrier with activated nanohydride and ammonia. Journal of Materials Research, 2009, 24, 2185-2190.	1.2	41
178	Effect of hydrogenation on the electronic state of metallic La hydrides probed by X-ray absorption spectroscopy at the LaL-edges. Journal of Physics: Conference Series, 2009, 190, 012070.	0.3	5
179	Hydrogen desorption properties of Liâ€“BNâ€“H system synthesized by mechanical milling. International Journal of Hydrogen Energy, 2008, 33, 3128-3131.	3.8	17
180	Hydrogen desorption processes in Liâ€“Mgâ€“Nâ€“H systems. Journal of Physics and Chemistry of Solids, 2008, 69, 2234-2236.	1.9	20

#	Article	IF	Citations
181	Evaluation of enthalpy change due to hydrogen desorption for lithium amide/imide system by differential scanning calorimetry. Thermochimica Acta, 2008, 468, 35-38.	1.2	24
182	SEM and TEM characterization of magnesium hydride catalyzed with Ni nano-particle or Nb2O5. Journal of Alloys and Compounds, 2008, 450, 395-399.	2.8	73
183	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.	2.8	38
184	Investigation of reaction between LiNH2 and H2. Journal of Alloys and Compounds, 2008, 463, 462-465.	2.8	22
185	The structural properties of amides and imides as hydrogen storage materials. Zeitschrift FÃ¼r Kristallographie, 2008, 223, 660-665.	1.1	15
186	Characterization of hydrogen absorption/desorption states on lithium-carbon-hydrogen system by neutron diffraction. Journal of Applied Physics, 2008, 104, 053511.	1.1	18
187	Hydrogenation properties of lithium intercalated graphite. Tanso, 2008, 2008, 136-139.	0.1	1
188	A New Concept of Hydrogen Storage Using Lithium Hydride and Ammonia. Materials Research Society Symposia Proceedings, 2007, 1042, 1.	0.1	3
189	Gas Emission Properties of the MgH<I>_x</I>-Zn(BH₄)₂ Systems. Materials Transactions, 2007, 48, 556-559.	0.4	8
190	The crystal structure of LiND2 and Mg(ND2)2. Journal of Alloys and Compounds, 2007, 428, 297-301.	2.8	70
191	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.	2.8	16
192	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.	2.8	12
193	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.	2.8	19
194	Hydrogen desorption/absorption properties of Liâ€“Caâ€“Nâ€“H system. Journal of Alloys and Compounds, 2007, 439, 337-341.	2.8	43
195	Hydrogen absorption kinetics of the catalyzed MgH2 by niobium oxide. Journal of Alloys and Compounds, 2007, 446-447, 67-71.	2.8	58
196	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.	2.8	22
197	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.	2.8	14
198	Thermal analysis on the Liâ€“Mgâ€“Bâ€“H systems. Journal of Alloys and Compounds, 2007, 446-447, 306-309.	2.8	74

#	Article	IF	Citations
199	Hydrogen storage properties in a composite of lithium hydride and boron nitride with hydrocarbon groups. Journal of Alloys and Compounds, 2007, 446-447, 39-43.	2.8	0
200	Hydrogen Storage Properties of Liâˆ'Mgâˆ'Nâˆ'H Systems with Different Ratios of LiH/Mg(NH2)2. Journal of Physical Chemistry B, 2006, 110, 12964-12968.	1.2	82
201	Remarkable improvement of hydrogen sorption kinetics in magnesium catalyzed with Nb2O5. Journal of Alloys and Compounds, 2006, 420, 46-49.	2.8	231
202	Light Metal Amide/Imide Systems for On-Board Hydrogen Storage Materials. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 865-869.	0.2	3
203	Electrode properties of a double layer capacitor of nano-structured graphite produced by ball milling under a hydrogen atmosphere. Carbon, 2006, 44, 983-988.	5.4	51
204	Hydrogen storage properties of nano-structural carbon and metal hydrides composites. Physica B: Condensed Matter, 2006, 383, 51-52.	1.3	12
205	Synthesis and decomposition reactions of metal amides in metalâ€"Nâ€"H hydrogen storage system. Journal of Power Sources, 2006, 156, 166-170.	4.0	83
206	Recent development on hydrogen storage materials composed of light elements. Physica B: Condensed Matter, 2006, 383, 45-48.	1.3	19
207	Catalytic effect of niobium oxide on hydrogen storage properties of mechanically ball milled MgH2. Physica B: Condensed Matter, 2006, 383, 49-50.	1.3	27
208	Recent development on hydrogen storage properties in metalâ€"Nâ€"H systems. Journal of Power Sources, 2006, 159, 126-131.	4.0	39
209	Microstructures of Graphite Mechanically Milled Under Hydrogen Gas or Argon Gas Atmosphere with Zirconia Balls or Chromium Steel Balls. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2005, 69, 113-120.	0.2	5
210	Composite Materials based on Light Elements for Hydrogen Storage. Materials Transactions, 2005, 46, 1-14.	0.4	79
211	Hydrogen Desorption Properties of Lithium–Carbon–Hydrogen System. Materials Transactions, 2005, 46, 1757-1759.	0.4	22
212	Hydrogen Desorption Mechanism in a Liâ€"Nâ€"H System by Means of the Isotopic Exchange Technique.. ChemInform, 2005, 36, no.	0.1	0
213	Nuclear-magnetic-resonance measurements of the hydrogen dynamics in nanocrystalline graphite. Journal of Applied Physics, 2005, 98, 044302.	1.1	12
214	Rechargeable hydrogen storage in nanostructured mixtures of hydrogenated carbon and lithium hydride. Applied Physics Letters, 2005, 86, 241914.	1.5	52
215	Quantitative estimation of NH3 partial pressure in H2 desorbed from the Liâ€"Nâ€"H system by Raman spectroscopy. Chemical Communications, 2005, , 3038.	2.2	45
216	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.	1.2	70

#	Article	IF	Citations
217	Mechanism of Hydrogenation Reaction in the Liâˆ’Mgâˆ’Nâˆ’H System. Journal of Physical Chemistry B, 2005, 109, 10744-10748.	1.2	75
218	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.	2.8	96
219	Desorption behaviours from metalâ€“Nâ€“H systems synthesized by ball milling. Journal of Alloys and Compounds, 2005, 404-406, 443-447.	2.8	68
220	Hydrogen storage properties in Ti catalyzed Liâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 404-406, 435-438.	2.8	100
221	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.	2.8	123
222	Hydrogen desorption properties of the Caâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 398, 62-66.	2.8	55
223	Hydrogen absorption properties of Liâ€“Mgâ€“Nâ€“H system. Journal of Alloys and Compounds, 2005, 400, 245-248.	2.8	57
224	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.	1.2	518
225	New Metalâˆ’Nâˆ’H System Composed of Mg(NH2)2and LiH for Hydrogen Storage. Journal of Physical Chemistry B, 2004, 108, 8763-8765.	1.2	309
226	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.	1.9	48
227	New Metalâ€”Nâ€”H System Composed of Mg(NH2)2 and LiH for Hydrogen Storage.. ChemInform, 2004, 35, no.	0.1	0
228	Mechanism of Novel Reaction from LiNH2 and LiH to Li2NH and H2 as a Promising Hydrogen Storage System.. ChemInform, 2004, 35, no.	0.1	1
229	Hydrogen storage properties on mechanically milled graphite. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 138-142.	1.7	45
230	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.	1.2	296
231	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.	0.7	28
232	Lithium nitride for reversible hydrogen storage. Journal of Alloys and Compounds, 2004, 365, 271-276.	2.8	305
233	Correlation between hydrogen storage properties and structural characteristics in mechanically milled magnesium hydride MgH2. Journal of Alloys and Compounds, 2004, 366, 269-273.	2.8	112
234	Multiple-Gap Features from Break-Junction Tunneling in the Superconducting MgB2. Journal of the Physical Society of Japan, 2004, 73, 1902-1913.	0.7	11

#	Article	IF	Citations
235	Viscoelastic theory of liquid in aerogel. Physica B: Condensed Matter, 2003, 329-333, 299-300.	1.3	9
236	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.	2.8	43
237	Transverse Sound in Liquid-H3eâ€“Aerogel System. Physical Review Letters, 2002, 89, 215301.	2.9	11
238	Collision Drag Effect on Propagation of Sound in Liquid3He in Aerogel. Journal of the Physical Society of Japan, 2001, 70, 3483-3486.	0.7	17
239	Interactive visualization of spatiotemporal patterns using spirals on a geographical map. , 1999, , .		23
240	A survey on content-based retrieval for multimedia databases. IEEE Transactions on Knowledge and Data Engineering, 1999, 11, 81-93.	4.0	244
241	Egocentric Object Manipulation in Virtual Environments: Empirical Evaluation of Interaction Techniques. Computer Graphics Forum, 1998, 17, 41-52.	1.8	222
242	An Image Processing Language with Icon-Assisted Navigation. IEEE Transactions on Software Engineering, 1985, SE-11, 811-819.	4.3	25
243	Architecture and algorithm for parallel execution of a join operation. , 1984, , .		1
244	A Pyramidal Representation of Images and Its Feature Extraction Facility. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1981, PAMI-3, 257-264.	9.7	12
245	HI-VISUAL as a user-customizable visual programming environment. , 0, , .		5
246	V-QBE: video database retrieval by means of example motion of objects. , 0, , .		15
247	Content-based retrieval of video data by the grammar of film. , 0, , .		20
248	A situation-sensitive interface for the management of personal documents. , 0, , .		1
249	Content-based retrieval of video data based on spatiotemporal correlation of objects. , 0, , .		5
250	SRAW: a speech rehabilitation assistance workbench-speech ability evaluation by audio-video input. , 0, , .		0
251	AR-browser: active reading for WWW contents. , 0, , .		0
252	Thermodynamic Characterization on Hydrogen Absorption and Desorption Reactions of Lithium â€“ Silicon Alloy. Materials Science Forum, 0, 654-656, 2815-2818.	0.3	7

#	Article	IF	Citations
253	Hydrogen Storage Properties of Hydrogenated Graphite and Lithium Hydride Nanocomposite. , 0, , .		0
254	Improvement of Hydrogenation and Dehydrogenation Kinetics on MgH₂ by the Catalytic Effect of ZrO₂. Applied Mechanics and Materials, 0, 117-119, 1195-1198.	0.2	2
255	Metal Hydride-Based Materials as Negative Electrode for All- Solid-State Lithium-Ion Batteries. , 0, , .		3
256	Application of Metal Hydrides for All-Solid-State Li-Ion Batteries. ACS Symposium Series, 0, , 87-112.	0.5	0