Shin-Ichi Orimo

List of Publications by Year in Descending Order

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

348 papers	17,087 citations	68 h-index	120 g-index
383 ext. papers	18,457 ext. citations	5.1 avg, IF	6.66 L-index

#	Paper	IF	Citations
348	In situ synchrotron radiation X-ray diffraction measurements of Fe–Mo alloy hydrides formed under high pressure and high temperature. *Journal of Alloys and Compounds*, **2022**, 893, 162300	5.7	2
347	Stabilization of Superionic-Conducting High-Temperature Phase of Li(CB9H10) via Solid Solution Formation with Li2(B12H12). *Crystals*, **2021**, 11, 330	2.3	5
346	Synthesis of Super-functional Materials Using High Densification Ability. *Materia Japan*, **2021**, 60, 152-155	0.1	
345	Monocarborane cluster as a stable fluorine-free calcium battery electrolyte. *Scientific Reports*, **2021**, 11, 7563	4.9	15
344	Lithium-ion diffusivity in complex hydrides: Pulsed-field-gradient NMR studies of LiLa(BH4)3Cl, Li3(NH2)2I and Li-1-CB9H10. *Solid State Ionics*, **2021**, 362, 115585	3.3	3
343	Colossal barocaloric effects in the complex hydride Li[Formula: see text]B[Formula: see text]H[Formula: see text]. *Scientific Reports*, **2021**, 11, 11915	4.9	5
342	Pressure–Temperature Phase Diagram of Ta-H System up to 9 GPa and 600 °C. *Applied Sciences (Switzerland)*, **2021**, 11, 6719	2.6	0
341	Hydrogen Vibration in Hydrogen Storage Materials Investigated by Inelastic Neutron Scattering. *Topics in Catalysis*, **2021**, 64, 614-621	2.3	2
340	Comparative Molecular Dynamics Study of the Roles of Anion–Cation and Cation–Cation Correlation in Cation Diffusion in Li2B12H12 and LiCB11H12. *Chemistry of Materials*, **2021**, 33, 2357-2369	9.6	8
339	Generating Mechanism of Catalytic Effect for Hydrogen Absorption/Desorption Reactions in NaAlH4–TiCl3. *Applied Sciences (Switzerland)*, **2021**, 11, 8349	2.6	1
338	Hydrogenation treatment under several gigapascals assists diffusionless transformation in a face-centered cubic steel. *Scientific Reports*, **2021**, 11, 19384	4.9	0
337	Hydrogen storage by earth-abundant metals, synthesis and characterization of Al3FeH3.9. *Materials and Design*, **2021**, 208, 109953	8.1	3
336	The Crystal Structures in Hydrogen Absorption Reactions of REMgNi4-Based Alloys (RE: Rare-Earth Metals). *Energies*, **2021**, 14, 8163	3.1	2
335	Pseudorotating hydride complexes with high hydrogen coordination: A class of rotatable polyanions in solid matter. *Applied Physics Letters*, **2020**, 116, 173901	3.4	11
334	Investigation of shielding material properties for effective space radiation protection. *Life Sciences in Space Research*, **2020**, 26, 69-76	2.4	19
333	Pseudo-ternary LiBH–LiCl–PS system as structurally disordered bulk electrolyte for all-solid-state lithium batteries. *Physical Chemistry Chemical Physics*, **2020**, 22, 13872-13879	3.6	12
332	Crystal and Magnetic Structures of Double Hexagonal Close-Packed Iron Deuteride. *Scientific Reports*, **2020**, 10, 9934	4.9	2

331	Magnesium Borohydride Ammonia Borane as a Magnesium Ionic Conductor. *ACS Applied Energy Materials*, **2020**, 3, 3174-3179	6.1	26
330	Nuclear magnetic resonance study of atomic motion in the mixed borohydride-amide Li2(BH4)(NH2). *Journal of Alloys and Compounds*, **2020**, 823, 153821	5.7	2
329	New Functionalities of Hydride Complexes with High Hydrogen Coordination. *Journal of the Physical Society of Japan*, **2020**, 89, 051010	1.5	1
328	Neutron diffraction study on the deuterium composition of nickel deuteride at high temperatures and high pressures. *Physica B: Condensed Matter*, **2020**, 587, 412153	2.8	2
327	Complex Hydride Solid Electrolytes of the Li(CB9H10)â□i(CB11H12) Quasi-Binary System: Relationship between the Solid Solution and Phase Transition, and the Electrochemical Properties. *ACS Applied Energy Materials*, **2020**, 3, 4831-4839	6.1	14
326	Polarity reversal of the charge carrier in tetragonal TiHx(x=1.6â□2.0) at low temperatures. *Physical Review Research*, **2020**, 2,	3.9	2
325	Superconductivity of lanthanum hydride synthesized using AlH3 as a hydrogen source. *Superconductor Science and Technology*, **2020**, 33, 114004	3.1	5
324	Materials for hydrogen-based energy storage â□past, recent progress and future outlook. *Journal of Alloys and Compounds*, **2020**, 827, 153548	5.7	264
323	Hydrogenation reaction of Co3Ti alloy under high pressure and high temperature. *International Journal of Hydrogen Energy*, **2020**, 45, 33675-33680	6.7	2
322	Photo-crosslinked Polymer Electrolytes Containing Solvate Ionic Liquids: An Approach to Achieve Both Good Mechanical and Electrochemical Performances for Rechargeable Lithium Ion Batteries. *Chemistry Letters*, **2020**, 49, 1465-1469	1.7	0
321	Crystal Structural Investigations for Understanding the Hydrogen Storage Properties of YMgNi-Based Alloys. *ACS Omega*, **2020**, 5, 31192-31198	3.9	8
320	Room temperature operation of all-solid-state battery using a closo-type complex hydride solid electrolyte and a LiCoO2 cathode by interfacial modification. *Journal of Energy Chemistry*, **2020**, 43, 47-51	12	21
319	Microstructural analyses of all-solid-state Liâ□ batteries using LiBH4-based solid electrolyte for prolonged cycle performance. *Journal of Energy Chemistry*, **2020**, 50, 424-429	12	15
318	Hexagonal Close-packed Iron Hydride behind the Conventional Phase Diagram. *Scientific Reports*, **2019**, 9, 12290	4.9	15
317	Superconductivity of the hydrogen-rich metal hydride Li5MoH11 under high pressure. *Physical Review B*, **2019**, 99,	3.3	22
316	A complex hydride lithium superionic conductor for high-energy-density all-solid-state lithium metal batteries. *Nature Communications*, **2019**, 10, 1081	17.4	174
315	A hysteresis loop in electrical resistance of NbHx observed above the □□transition temperature. *AIP Advances*, **2019**, 9, 015027	1.5	6
314	Full-cell hydride-based solid-state Li batteries for energy storage. *International Journal of Hydrogen Energy*, **2019**, 44, 7875-7887	6.7	37

313	Epitaxial Film Growth of LiBH4 via Molecular Unit Evaporation. *ACS Applied Electronic Materials*, **2019**, 1, 1792-1796	4	5
312	Ionic conduction in Li3Na(NH2)4: Study of the material design for the enhancement of ion conductivity in double-cation complex hydrides. *AIP Advances*, **2019**, 9, 055109	1.5	1
311	Interfacial stability between LiBH4-based complex hydride solid electrolytes and Li metal anode for all-solid-state Li batteries. *Journal of Power Sources*, **2019**, 436, 226821	8.9	25
310	Superconductivity in a new layered triangular-lattice system Li2IrSi2. *New Journal of Physics*, **2019**, 21, 093056	2.9	0
309	Reorientational motion and Li+-ion transport in Li2B12H12 system: Molecular dynamics study. *Physical Review Materials*, **2019**, 3,	3.2	12
308	Hydrogen-Release Reaction of a Complex Transition Metal Hydride with Covalently Bound Hydrogen and Hydride Ions. *ChemPhysChem*, **2019**, 20, 1392-1397	3.2	3
307	Lithium ion conductivity of complex hydrides incorporating multiple closo-type complex anions. *Journal of Energy Chemistry*, **2019**, 38, 84-87	12	11
306	Evidence of Intermediate Hydrogen States in the Formation of a Complex Hydride. *Inorganic Chemistry*, **2018**, 57, 867-872	5.1	6
305	Fast Lithium-Ion Conduction in Atom-Deficient closo-Type Complex Hydride Solid Electrolytes. *Chemistry of Materials*, **2018**, 30, 386-391	9.6	44
304	Complex hydrides as thermal energy storage materials: characterisation and thermal decomposition of Na2Mg2NiH6. *Journal of Materials Chemistry A*, **2018**, 6, 9099-9108	13	18
303	Crystal Structural Determination of SrAlD5 with Corner-Sharing AlD6 Octahedron Chains by X-ray and Neutron Diffraction. *Crystals*, **2018**, 8, 89	2.3	3
302	Lithium ionic conduction in composites of Li(BH4)0.75I0.25 and amorphous 0.75Li2S□0.25P2S5 for battery applications. *Electrochimica Acta*, **2018**, 278, 332-339	6.7	30
301	High-Pressure and High-Temperature Synthesis of Novel Hydrides Based on First-Principles Prediction. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2018**, 28, 291-298	0	
300	Fast sodium ionic conduction in Na2B10H10-Na2B12H12 pseudo-binary complex hydride and application to a bulk-type all-solid-state battery. *Applied Physics Letters*, **2017**, 110, 103901	3.4	47
299	NMR Studies of Lithium Diffusion in Li3(NH2)2I Over Wide Range of Li+ Jump Rates. *Zeitschrift Fur Physikalische Chemie*, **2017**, 231,	3.1	4
298	Imaging the hydrogenation of Mg thin films. *International Journal of Hydrogen Energy*, **2017**, 42, 22411-22416	3.7	12
297	Li5(BH4)3NH: Lithium-Rich Mixed Anion Complex Hydride. *Journal of Physical Chemistry C*, **2017**, 121, 11069-11075	3.8	13
296	Synthesis of novel hydride Li3AlFeH8 at high temperature and pressure. *International Journal of Hydrogen Energy*, **2017**, 42, 22489-22495	6.7	6

295	Development of complex hydride-based all-solid-state lithium ion battery applying low melting point electrolyte. *Journal of Power Sources*, **2017**, 359, 97-103	8.9	7
294	Formation of novel transition metal hydride complexes with ninefold hydrogen coordination. *Scientific Reports*, **2017**, 7, 44253	4.9	25
293	In-situ powder neutron diffraction study on the formation process of LaMg2NiH7. *International Journal of Hydrogen Energy*, **2017**, 42, 22449-22453	6.7	10
292	The renaissance of hydrides as energy materials. *Nature Reviews Materials*, **2017**, 2,	73.3	240
291	Comparison of Anion Reorientational Dynamics in MCB9H10 and M2B10H10 (M = Li, Na) via Nuclear Magnetic Resonance and Quasielastic Neutron Scattering Studies. *Journal of Physical Chemistry C*, **2017**, 121, 1000-1012	3.8	33
290	Development of 4V-Class Bulk-Type All-Solid-State Lithium Rechargeable Batteries by a Combined Use of Complex Hydride and Sulfide Electrolytes for Room Temperature Operation. *Materials Transactions*, **2017**, 58, 1063-1068	1.3	12
289	Infrared Spectroscopic and Computational Studies on Li4FeH6 with High Gravimetric Hydrogen Density. *Materials Transactions*, **2017**, 58, 157-159	1.3	2
288	Complex Hydride as a Novel Solid Electrolyte and Its Application to an All-solid-state Battery. *Materia Japan*, **2017**, 56, 448-452	0.1	
287	R&D on Hydrides as Energy Materials. *Materia Japan*, **2017**, 56, 130-134	0.1	
286	Fabrication of atomically abrupt interfaces of single-phase TiH2 and Al2O3. *APL Materials*, **2017**, 5, 086102	3.7	10
285	Thermodynamic Properties and Reversible Hydrogenation of LiBH4âMg2FeH6 Composite Materials. *Inorganics*, **2017**, 5, 81	2.9	1
284	Hydrogen release reactions of Al-based complex hydrides enhanced by vibrational dynamics and valences of metal cations. *Chemical Communications*, **2016**, 52, 11807-11810	5.8	8
283	Impact of severe plastic deformation on microstructure and hydrogen storage of titanium-iron-manganese intermetallics. *Scripta Materialia*, **2016**, 124, 108-111	5.6	29
282	Extending the applicability of the Goldschmidt tolerance factor to arbitrary ionic compounds. *Scientific Reports*, **2016**, 6, 23592	4.9	57
281	Syntheses of Novel Metal Hydrides under High Pressure and High Temperature. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **2016**, 63, 298-305	0.2	2
280	Bulk-Type All-Solid-State Lithium Batteries Using Complex Hydrides Containing Cluster-Anions. *Materials Transactions*, **2016**, 57, 1639-1644	1.3	30
279	Carbon-Rich Active Materials with Macrocyclic Nanochannels for High-Capacity Negative Electrodes in All-Solid-State Lithium Rechargeable Batteries. *Small*, **2016**, 12, 3381-7	11	26
278	Complex hydride for composite negative electrodeâpplicable to bulk-type all-solid-state Li-ion battery with wide temperature operation. *Solid State Ionics*, **2016**, 285, 96-100	3.3	16

277	Complex hydrides as room-temperature solid electrolytes for rechargeable batteries. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	41
276	Complex and liquid hydrides for energy storage. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	64
275	Fast lithium-ionic conduction in a new complex hydride-sulphide crystalline phase. *Chemical Communications*, **2016**, 52, 564-6	5.8	28
274	Hydrogen Storage by Reversible Metal Hydride Formation **2016**, 763-790		5
273	Development of 4 V-Class Bulk-Type All-Solid-State Lithium Rechargeable Batteries by a Combined Use of Complex Hydride and Sulfide Electrolytes for Room Temperature Operation. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2016**, 80, 720-725	0.4	
272	Effect of the structural evolution on the ionic conductivity of Li-N-H system during the dehydrogenation. *Applied Physics Letters*, **2016**, 108, 213903	3.4	9
271	Stabilizing lithium and sodium fast-ion conduction in solid polyhedral-borate salts at device-relevant temperatures. *Energy Storage Materials*, **2016**, 4, 79-83	19.4	70
270	Metallic Intermediate Hydride Phase of LaMg2Ni with Niâ€“H Covalent Bonding: Precursor State for Complex Hydride Formation. *Journal of Physical Chemistry C*, **2016**, 120, 5926-5931	3.8	7
269	Liquid-Like Ionic Conduction in Solid Lithium and Sodium Monocarba-closo-Decaborates Near or at Room Temperature. *Advanced Energy Materials*, **2016**, 6, 1502237	21.8	148
268	Stabilizing Superionic-Conducting Structures via Mixed-Anion Solid Solutions of Monocarba-closo-borate Salts. *ACS Energy Letters*, **2016**, 1, 659-664	20.1	113
267	Lithium Batteries: Carbon-Rich Active Materials with Macrocyclic Nanochannels for High-Capacity Negative Electrodes in All-Solid-State Lithium Rechargeable Batteries (Small 25/2016). *Small*, **2016**, 12, 3472-3472	11	
266	Complex transition metal hydrides incorporating ionic hydrogen: Synthesis and characterization of Na2Mg2FeH8 and Na2Mg2RuH8. *Journal of Alloys and Compounds*, **2015**, 645, S347-S352	5.7	16
265	Atomic Motion in the Complex Hydride Li3(NH2)2I: 7Li and 1H Nuclear Magnetic Resonance Studies. *Journal of Physical Chemistry C*, **2015**, 119, 13459-13464	3.8	7
264	The catalyzed hydrogen sorption mechanism in alkali alanates. *Physical Chemistry Chemical Physics*, **2015**, 17, 20932-40	3.6	11
263	Stable Interface Formation between TiS2 and LiBH4 in Bulk-Type All-Solid-State Lithium Batteries. *Chemistry of Materials*, **2015**, 27, 5407-5416	9.6	85
262	Selective reversible hydrogenation of Mg(B3H8)2/MgH2 to Mg(BH4)2: pathway to reversible borane-based hydrogen storage?. *Inorganic Chemistry*, **2015**, 54, 4120-5	5.1	44
261	Complex transition metal hydrides incorporating ionic hydrogen: thermal decomposition pathway of Na2Mg2FeH8 and Na2Mg2RuH8. *Physical Chemistry Chemical Physics*, **2015**, 17, 8276-82	3.6	12
260	Recent progress in hydrogen-rich materials from the perspective of bonding flexibility of hydrogen. *Scripta Materialia*, **2015**, 109, 1-5	5.6	45

259	Neutron holography and diffuse scattering of palladium hydride. *Physical Review B*, **2015**, 91,	3.3	7
258	Isotopic Exchange in Porous and Dense Magnesium Borohydride. *Angewandte Chemie - International Edition*, **2015**, 54, 10592-5	16.4	9
257	Multi-Phonon Excitations in Fe 2p RIXS on Mg2FeH6. *Journal of the Physical Society of Japan*, **2015**, 84, 043201	1.5	2
256	Unparalleled Lithium and Sodium Superionic Conduction in Solid Electrolytes with Large Monovalent Cage-like Anions. *Energy and Environmental Science*, **2015**, 8, 3637-3645	35.4	183
255	Estimation of bonding nature using diamagnetic susceptibility. *Chemical Communications*, **2015**, 51, 8691-8	5.8	4
254	High-Pressure Synthesis of Hydrogen Storage Materials **2015**, 1-8		1
253	Pulsed laser deposition of air-sensitive hydride epitaxial thin films: LiH. *APL Materials*, **2015**, 3, 096106	5.7	10
252	Simultaneous desorption behavior of M borohydrides and Mg2FeH6 reactive hydride composites (M = Mg, then Li, Na, K, Ca). *Applied Physics Letters*, **2015**, 107, 073905	3.4	13
251	True Boundary for the Formation of Homoleptic Transition-Metal Hydride Complexes. *Angewandte Chemie*, **2015**, 127, 5742-5745	3.6	1
250	Isotopic Exchange in Porous and Dense Magnesium Borohydride. *Angewandte Chemie*, **2015**, 127, 10738-10741	3.6	1
249	Dehydriding Process and Hydrogenâ€Deuterium Exchange of LiBH4â€Mg2FeD6 Composites. *Energies*, **2015**, 8, 5459-5466	3.1	4
248	Pseudo-binary electrolyte, LiBH4-LiCl, for bulk-type all-solid-state lithium-sulfur battery. *Nanotechnology*, **2015**, 26, 254001	3.4	51
247	True boundary for the formation of homoleptic transition-metal hydride complexes. *Angewandte Chemie - International Edition*, **2015**, 54, 5650-3	16.4	34
246	Effect of Lithium Ion Conduction on Hydrogen Desorption of LiNH2â€LiH Solid Composite. *ACS Catalysis*, **2015**, 5, 1552-1555	13.1	16
245	Complex Hydrides for Electrochemical Energy Storage. *Advanced Functional Materials*, **2014**, 24, 2267-2279	13.6	156
244	Exceptional superionic conductivity in disordered sodium decahydro-closo-decaborate. *Advanced Materials*, **2014**, 26, 7622-6	24	179
243	Li4FeH6: Iron-containing complex hydride with high gravimetric hydrogen density. *APL Materials*, **2014**, 2, 076103	5.7	25
242	Magnesium ion dynamics in Mg(BH4)2(1â€“x)X2x (X = Cl or AlH4) from first-principles molecular dynamics simulations. *RSC Advances*, **2014**, 4, 1366-1370	3.7	21

241	Sodium superionic conduction in Na2B12H12. *Chemical Communications*, **2014**, 50, 3750-2	5.8	191
240	Nuclear Magnetic Resonance Study of Atomic Motion in the Mixed Borohydrideâ Amide Na2(BH4)(NH2). *Journal of Physical Chemistry C*, **2014**, 118, 14805-14812	3.8	17
239	Local atomic structural investigations of precursory phenomenon of the hydrogen release from LiAlD4. *Journal of Alloys and Compounds*, **2014**, 586, 244-247	5.7	6
238	Raman and Infrared Spectroscopic Studies on Li4RuH6 Combined with First-Principles Calculations. *Materials Transactions*, **2014**, 55, 1117-1121	1.3	10
237	Dehydriding Property of NaBH4 Combined with Mg2FeH6. *Materials Transactions*, **2014**, 55, 1141-1143	1.3	9
236	Improved Dehydrogenation and Rehydrogenation Properties of LiBH4 by Nanosized Ni Addition. *Materials Transactions*, **2014**, 55, 1134-1137	1.3	16
235	Site occupancy of interstitial deuterium atoms in face-centred cubic iron. *Nature Communications*, **2014**, 5, 5063	17.4	47
234	Epitaxial thin film growth of LiH using a liquid-Li atomic template. *Applied Physics Letters*, **2014**, 105, 211601	3.4	8
233	Enhanced tunability of thermodynamic stability of complex hydrides by the incorporation of Hâ anions. *Applied Physics Letters*, **2014**, 104, 203901	3.4	19
232	Development of bulk-type all-solid-state lithium-sulfur battery using LiBH4 electrolyte. *Applied Physics Letters*, **2014**, 105, 083901	3.4	97
231	All-solid-state lithium battery with LiBH4 solid electrolyte. *Journal of Power Sources*, **2013**, 226, 61-64	8.9	109
230	Formation of an Feâ complex anion in YFe2: adjustment of imbalanced charge by using additional Li as an electron donor. *RSC Advances*, **2013**, 3, 1013-1016	3.7	20
229	Hexavalent hydrogen complex in hypothetical Y2CrH6. *Journal of Alloys and Compounds*, **2013**, 580, S274-S277	5.7	6
228	Dehydrogenation properties and crystal structure analysis of Mg(BH4)(NH2). *Journal of Alloys and Compounds*, **2013**, 580, S85-S89	5.7	10
227	Thermodynamical Stability of Complex Transition Metal Hydrides M2FeH6. *Journal of Physical Chemistry C*, **2013**, 117, 8014-8019	3.8	28
226	Sodium and magnesium ionic conduction in complex hydrides. *Journal of Alloys and Compounds*, **2013**, 580, S98-S101	5.7	38
225	Synthesis and crystal structure analysis of complex hydride Mg(BH4)(NH2). *International Journal of Hydrogen Energy*, **2013**, 38, 6730-6735	6.7	19
224	Comparative study on the reversibility of pure metal borohydrides. *Journal of Alloys and Compounds*, **2013**, 580, S292-S295	5.7	23

223	Formation process of perovskite-type hydride LiNiH3: In situ synchrotron radiation X-ray diffraction study. *Applied Physics Letters*, **2013**, 102, 091901	3.4	22
222	Density-functional study of perovskite-type hydride LiNiH3 and its synthesis: Mechanism for formation of metallic perovskite. *Physical Review B*, **2013**, 87,	3.3	10
221	Effect of Heat Treatment on the Lithium Ion Conduction of the LiBH4â□□Il Solid Solution. *Journal of Physical Chemistry C*, **2013**, 117, 3249-3257	3.8	53
220	Unusual sevenfold coordination of Ru in complex hydride Na3RuH7: Prospect for formation of [FeH7]3â□anion. *Applied Physics Letters*, **2013**, 103, 113903	3.4	9
219	Synthesis and formation process of Al2CuHx: A new class of interstitial aluminum-based alloy hydride. *APL Materials*, **2013**, 1, 032113	5.7	17
218	Biased interface between solid ion conductor LiBH4 and lithium metal: A first principles molecular dynamics study. *Applied Physics Letters*, **2013**, 103, 133903	3.4	13
217	First-Principles Prediction of Possible Synthesis of Li-Fe Based Complex Hydride Li4FeH6. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2013**, 77, 604-608	0.4	10
216	Improvement Effects of TiCl3 on Dehydrogenation of Magnesium Borohydride Mg(BH4)2. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2013**, 77, 627-630	0.4	4
215	Dehydriding Property of LiBH4 Combined with Mg2FeH6. *Materials Transactions*, **2013**, 54, 1532-1534	1.3	13
214	Surface and bulk reactions in borohydrides and amides. *Energy and Environmental Science*, **2012**, 5, 6823	35.4	30
213	Pressure and temperature dependence of the decomposition pathway of LiBH4. *Physical Chemistry Chemical Physics*, **2012**, 14, 6514-9	3.6	73
212	Hydrogen release from Li alanates originates in molecular lattice instability emerging at ~100 K. *Applied Physics Letters*, **2012**, 100, 193901	3.4	7
211	Synthesis and Specific Heat of CaPdH3-□with the Perovskite Structure. *Journal of the Physical Society of Japan*, **2012**, 81, 034704	1.5	6
210	Chemical Bonding of AlHâ□Hydride by Al-L Electron Energy-Loss Spectra and First-Principles Calculations. *Materials*, **2012**, 5, 566-574	3.5	5
209	Experimental studies of complex hydride YMn2H6 on formation kinetics and x-ray absorption fine structure analyses. *Applied Physics Letters*, **2012**, 100, 044101	3.4	4
208	Synthesis and Structural Investigation of Metal Hydride, Y(Mn1-xFex)2Hy (x â□0.3, 4.0 â□y â□4.5) and Complex Hydride, Y(Mn1-xFex)2H6. *Key Engineering Materials*, **2012**, 508, 310-314	0.4	
207	Theoretical investigation of Fe substitution for Mn in complex hydride YMn2H6. *Applied Physics Letters*, **2012**, 100, 021908	3.4	9
206	Sodium ionic conduction in complex hydrides with [BH4]â□and [NH2]â□anions. *Applied Physics Letters* , **2012**, 100, 203904	3.4	54

205	Recent Progress in Metal Borohydrides for Hydrogen Storage. *Energies*, **2011**, 4, 185-214	3.1	380
204	Fast-ionic conductivity of Li+ in LiBH4. *Physical Review B*, **2011**, 83,	3.3	65
203	Rotational motion in LiBH4/LiI solid solutions. *Journal of Physical Chemistry A*, **2011**, 115, 5329-34	2.8	59
202	Crystal structure change in the dehydrogenation process of the LiâMgâNâH system. *Journal of Alloys and Compounds*, **2011**, 509, 7553-7558	5.7	6
201	Enhanced Electrical Conductivities of Complex Hydrides Li2(BH4)(NH2) and Li4(BH4)(NH2)3 by Melting. *Materials Transactions*, **2011**, 52, 654-657	1.3	13
200	Aging of Copper-Titanium Dilute Alloys in Hydrogen Atmosphere: Influence of Prior-Deformation on Strength and Electrical Conductivity. *Materials Transactions*, **2011**, 52, 2137-2142	1.3	16
199	Formation Process of [B12H12]2− from [BH4]− during the Dehydrogenation Reaction of Mg(BH4)2. *Materials Transactions*, **2011**, 52, 1443-1446	1.3	28
198	Cyclic Hydrogenation and Dehydrogenation Property of LiNH2 Impregnated into Ni Foam. *Materials Transactions*, **2011**, 52, 623-626	1.3	6
197	Correlation between Structure of Titanium Additives and Dehydrogenation Reaction of Magnesium Borohydride Studied by Continuous Observation of X-Ray Absorption Spectroscopy. *Materials Transactions*, **2011**, 52, 635-640	1.3	11
196	Structural and Hydrogen Desorption Properties of Aluminum Hydride. *Materials Transactions*, **2011**, 52, 598-601	1.3	11
195	Order and disorder in lithium tetrahydroborate. *Journal of Materials Science*, **2011**, 46, 566-569	4.3	10
194	Lithium Fast-Ionic Conduction in Complex Hydrides: Review and Prospects. *Advanced Energy Materials*, **2011**, 1, 161-172	21.8	184
193	Reversible dehydrogenation of magnesium borohydride to magnesium triborane in the solid state under moderate conditions. *Chemical Communications*, **2011**, 47, 1330-2	5.8	136
192	Vibrational properties of CaAlH5 and □AlH3 with different AlH6 networks studied by inelastic neutron scattering. *Inorganic Chemistry*, **2011**, 50, 8007-11	5.1	7
191	Formation of Intermediate Compound Li2B12H12 during the Dehydrogenation Process of the LiBH4âMgH2 System. *Journal of Physical Chemistry C*, **2011**, 115, 19419-19423	3.8	55
190	Lithium ion conduction in lithium borohydrides under high pressure. *Solid State Ionics*, **2011**, 192, 118-121	3.3	14
189	Room temperature lithium fast-ion conduction and phase relationship of LiI stabilized LiBH4. *Solid State Ionics*, **2011**, 192, 143-147	3.3	47
188	First-principles studies of complex hydride YMn2H6 and its synthesis from metal hydride YMn2H4.5. *Applied Physics Letters*, **2011**, 98, 221908	3.4	19

187	Anharmonicity in LiBH4âIl induced by anion exchange and temperature. *Applied Physics Letters*, **2010**, 97, 031916	3.4	19
186	Synthesis and Lithium Fast-Ion Conductivity of a New Complex Hydride Li3(NH2)2I with Double-Layered Structure. *Chemistry of Materials*, **2010**, 22, 2702-2704	9.6	33
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