

# Torben Rene Jensen

## List of Publications by Year in descending order

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295  
papers

15,852  
citations

17440

63  
h-index

23533

111  
g-index

320  
all docs

320  
docs citations

320  
times ranked

7770  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen - A sustainable energy carrier. Progress in Natural Science: Materials International, 2017, 27, 34-40.	4.4	541
2	Materials for hydrogen-based energy storage – past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	5.5	518
3	Magnesium based materials for hydrogen based energy storage: Past, present and future. International Journal of Hydrogen Energy, 2019, 44, 7809-7859.	7.1	460
4	Complex hydrides for hydrogen storage – new perspectives. Materials Today, 2014, 17, 122-128.	14.2	408
5	Hydrogen sorption properties of MgH <sub>2</sub> –LiBH <sub>4</sub> composites. Acta Materialia, 2007, 55, 3951-3958.	7.9	350
6	Mechanochemical synthesis of hydrogen storage materials. Progress in Materials Science, 2013, 58, 30-75.	32.8	345
7	Metal borohydrides and derivatives – synthesis, structure and properties. Chemical Society Reviews, 2017, 46, 1565-1634.	38.1	320
8	Review of magnesium hydride-based materials: development and optimisation. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	274
9	Nanoconfined hydrides for energy storage. Nanoscale, 2011, 3, 2086.	5.6	262
10	Tailoring properties of borohydrides for hydrogen storage: A review. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1754-1773.	1.8	236
11	A Series of Mixed–Metal Borohydrides. Angewandte Chemie - International Edition, 2009, 48, 6659-6663.	13.8	228
12	Water in Contact with Extended Hydrophobic Surfaces: Direct Evidence of Weak Dewetting. Physical Review Letters, 2003, 90, 086101.	7.8	224
13	Confinement of MgH <sub>2</sub> Nanoclusters within Nanoporous Aerogel Scaffold Materials. ACS Nano, 2009, 3, 3521-3528.	14.6	223
14	Role of additives in LiBH <sub>4</sub> –MgH <sub>2</sub> reactive hydride composites for sorption kinetics. Acta Materialia, 2010, 58, 3381-3389.	7.9	193
15	A Reversible Nanoconfined Chemical Reaction. ACS Nano, 2010, 4, 3903-3908.	14.6	185
16	Chiral Amplification of Oligopeptides in Two-Dimensional Crystalline Self-Assemblies on Water. Science, 2002, 295, 1266-1269.	12.6	184
17	Porous and Dense Magnesium Borohydride Frameworks: Synthesis, Stability, and Reversible Absorption of Guest Species. Angewandte Chemie - International Edition, 2011, 50, 11162-11166.	13.8	175
18	Structure and properties of complex hydride perovskite materials. Nature Communications, 2014, 5, 5706.	12.8	168

#	ARTICLE	IF	CITATIONS
19	Reversible ammonia-based and liquid organic hydrogen carriers for high-density hydrogen storage: Recent progress. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7746-7767.	7.1	166
20	Boron-nitrogen based hydrides and reactive composites for hydrogen storage. <i>Materials Today</i> , 2014, 17, 129-135.	14.2	165
21	Complex Metal Hydrides for Hydrogen, Thermal and Electrochemical Energy Storage. <i>Energies</i> , 2017, 10, 1645.	3.1	152
22	Formation of $\text{Fe}_2\text{O}_3$ nanoparticles and vacancy ordering: An in situ X-ray powder diffraction study. <i>Journal of Solid State Chemistry</i> , 2007, 180, 180-185.	2.9	151
23	Versatile in situ powder X-ray diffraction cells for solid-gas investigations. <i>Journal of Applied Crystallography</i> , 2010, 43, 1456-1463.	4.5	150
24	Two-Dimensional Order in $\beta$ -Sheet Peptide Monolayers. <i>Journal of the American Chemical Society</i> , 2000, 122, 12523-12529.	13.7	148
25	Mg-based compounds for hydrogen and energy storage. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	146
26	Hydrogen sorption in TiZrNbHfTa high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2019, 775, 667-674.	5.5	145
27	Dehydrogenation kinetics of pure and nickel-doped magnesium hydride investigated by in situ time-resolved powder X-ray diffraction. <i>International Journal of Hydrogen Energy</i> , 2006, 31, 2052-2062.	7.1	138
28	$\text{NaSc}(\text{BH}_4)_4$ : A Novel Scandium-Based Borohydride. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1357-1364.	3.1	137
29	Structure and Dynamics for $\text{LiBH}_4$ -LiCl Solid Solutions. <i>Chemistry of Materials</i> , 2009, 21, 5772-5782.	6.7	135
30	$\text{LiCe}(\text{BH}_4)_3\text{Cl}$ , a New Lithium-Ion Conductor and Hydrogen Storage Material with Isolated Tetranuclear Anionic Clusters. <i>Chemistry of Materials</i> , 2012, 24, 1654-1663.	6.7	128
31	Reactivity of $\text{LiBH}_4$ : In Situ Synchrotron Radiation Powder X-ray Diffraction Study. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1299-1303.	3.1	127
32	Pressure and Temperature Influence on the Desorption Pathway of the $\text{LiBH}_4$ -MgH <sub>2</sub> Composite System. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15212-15217.	3.1	127
33	Complex hydrides for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7860-7874.	7.1	123
34	Structure and Hydrogenation Properties of a HfNbTiVZr High-Entropy Alloy. <i>Inorganic Chemistry</i> , 2018, 57, 2103-2110.	4.0	121
35	Metal boranes: Progress and applications. <i>Coordination Chemistry Reviews</i> , 2016, 323, 60-70.	18.8	120
36	Eutectic melting in metal borohydrides. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19774.	2.8	113

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37	Future perspectives of thermal energy storage with metal hydrides. International Journal of Hydrogen Energy, 2019, 44, 7738-7745.	7.1	112
38	Improved Hydrogen Storage Kinetics of Nanoconfined NaAlH <sub>4</sub> Catalyzed with TiCl <sub>3</sub> Nanoparticles. ACS Nano, 2011, 5, 4056-4064.	14.6	110
39	Formation of Ca(BH <sub>4</sub> ) <sub>2</sub> from Hydrogenation of CaH <sub>2</sub> +MgB <sub>2</sub> Composite. Journal of Physical Chemistry C, 2008, 112, 2743-2749.	3.1	106
40	Formation of ettringite, Ca <sub>6</sub> Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (OH) <sub>12</sub> ·26H <sub>2</sub> O, AFt, and monosulfate, Ca <sub>4</sub> Al <sub>2</sub> O <sub>6</sub> (SO <sub>4</sub> )·14H <sub>2</sub> O, AFm-14, in hydrothermal hydration of Portland cement and of calcium aluminum oxide-calcium sulfate dihydrate mixtures studied by in situ synchrotron X-ray powder diffraction. Journal of Solid State Chemistry, 2004, 177, 1944-1951.	2.9	105
41	Decomposition Reactions and Reversibility of the LiBH <sub>4</sub> -Ca(BH <sub>4</sub> ) <sub>2</sub> Composite. Journal of Physical Chemistry C, 2009, 113, 15080-15086.	3.1	105
42	New Li Ion Conductors and Solid State Hydrogen Storage Materials: LiM(BH <sub>4</sub> ) <sub>3</sub> Cl, M = La, Gd. Journal of Physical Chemistry C, 2012, 116, 21267-21276.	3.1	102
43	Formation and Transformation of Five Different Phases in the CaSO <sub>4</sub> -H <sub>2</sub> O System: Crystal Structure of the Subhydrate ½-CaSO <sub>4</sub> ·0.5H <sub>2</sub> O and Soluble Anhydrite CaSO <sub>4</sub> . Chemistry of Materials, 2008, 20, 2124-2132.	6.7	98
44	Thermal Polymorphism and Decomposition of Y(BH <sub>4</sub> ) <sub>3</sub> . Inorganic Chemistry, 2010, 49, 3801-3809.	4.0	96
45	Structure and Characterization of KSc(BH <sub>4</sub> ) <sub>4</sub> . Journal of Physical Chemistry C, 2010, 114, 19540-19549.	3.1	95
46	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. International Journal of Hydrogen Energy, 2016, 41, 14404-14428.	7.1	94
47	Screening of Metal Borohydrides by Mechanochemistry and Diffraction. Angewandte Chemie - International Edition, 2012, 51, 3582-3586.	13.8	83
48	Synthesis and decomposition mechanisms of Mg <sub>2</sub> FeH <sub>6</sub> studied by in-situ synchrotron X-ray diffraction and high-pressure DSC. International Journal of Hydrogen Energy, 2010, 35, 3578-3582.	7.1	81
49	Complex and liquid hydrides for energy storage. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	81
50	Iodide substitution in lithium borohydride, LiBH <sub>4</sub> -LiI. Journal of Alloys and Compounds, 2011, 509, 8299-8305.	5.5	80
51	Nuclear Magnetic Resonance Studies of BH <sub>4</sub> Reorientations and Li Diffusion in LiLa(BH <sub>4</sub> ) <sub>3</sub> Cl. Journal of Physical Chemistry C, 2013, 117, 14965-14972.	3.1	79
52	Anisotropic Crystal Growth Kinetics of Anatase TiO <sub>2</sub> Nanoparticles Synthesized in a Nonaqueous Medium. Chemistry of Materials, 2010, 22, 6044-6055.	6.7	77
53	Nanoconfined 2LiBH <sub>4</sub> -MgH <sub>2</sub> Prepared by Direct Melt Infiltration into Nanoporous Materials. Journal of Physical Chemistry C, 2011, 115, 10903-10910.	3.1	75
54	Hydrogen storage systems from waste Mg alloys. Journal of Power Sources, 2014, 270, 554-563.	7.8	75

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55	Halogenated Sodium-closo-Dodecaboranes as Solid-State Ion Conductors. Chemistry of Materials, 2017, 29, 3423-3430.	6.7	73
56	Langmuir and Langmuir-Blodgett Films of Amphiphilic Hexa-peri-hexabenzocoronene: New Phase Transitions and Electronic Properties Controlled by Pressure. Chemistry - A European Journal, 2001, 7, 4894-4901.	3.3	72
57	Intermediate phases observed during decomposition of LiBH <sub>4</sub> . Journal of Alloys and Compounds, 2007, 446-447, 301-305.	5.5	72
58	Mechanochemistry of Metal Hydrides: Recent Advances. Materials, 2019, 12, 2778.	2.9	71
59	The mechanism of Mg <sup>2+</sup> conduction in ammine magnesium borohydride promoted by a neutral molecule. Physical Chemistry Chemical Physics, 2020, 22, 9204-9209.	2.8	70
60	Bimetallic Borohydrides in the System M(BH <sub>4</sub> ) <sub>2</sub> •KBH <sub>4</sub> (M = Mg, Mn): On the Structural Diversity. Journal of Physical Chemistry C, 2012, 116, 10829-10840.	3.1	69
61	Powder diffraction methods for studies of borohydride-based energy storage materials. Zeitschrift für Kristallographie, 2010, 225, 557-569.	1.1	68
62	In situ X-ray diffraction environments for high-pressure reactions. Journal of Applied Crystallography, 2015, 48, 1234-1241.	4.5	67
63	Synthesis of amorphous Mg(BH <sub>4</sub> ) <sub>2</sub> from MgB <sub>2</sub> and H <sub>2</sub> at room temperature. Journal of Alloys and Compounds, 2010, 508, 212-215.	5.5	66
64	Multifunctionality of silver closo-boranes. Nature Communications, 2017, 8, 15136.	12.8	66
65	Structure and thermal properties of composites with RE-borohydrides (RE = La, Ce, Pr, Nd, Sm, Eu, Gd). Journal of Applied Crystallography, 2015, 48, 1234-1241.	3.6	64
66	Interaction of hydrogen with an Mg-Al alloy. Journal of Alloys and Compounds, 2005, 404-406, 323-326.	5.5	63
67	Ammonia-assisted fast Li-ion conductivity in a new hemiammine lithium borohydride, LiBH <sub>4</sub> •1/2NH <sub>3</sub> . Chemical Communications, 2020, 56, 3971-3974.	4.1	60
68	In Situ Synchrotron X-ray Powder Diffraction Studies of Crystallization of Microporous Aluminophosphates and Me <sup>2+</sup> -Substituted Aluminophosphates. Chemistry of Materials, 1998, 10, 1688-1693.	6.7	58
69	Effect of Transition Metal Fluorides on the Sorption Properties and Reversible Formation of Ca(BH <sub>4</sub> ) <sub>2</sub> . Journal of Physical Chemistry C, 2011, 115, 2497-2504.	3.1	58
70	Tailoring the Properties of Ammine Metal Borohydrides for Solid-State Hydrogen Storage. ChemSusChem, 2015, 8, 1452-1463.	6.8	58
71	Hydrogen storage properties of nanoconfined LiBH <sub>4</sub> •Ca(BH <sub>4</sub> ) <sub>2</sub> . Nano Energy, 2015, 11, 96-103.	16.0	58
72	Novel methods for studying lipids and lipases and their mutual interaction at interfaces. Part I. Atomic force microscopy. Biochimie, 2001, 83, 387-397.	2.6	57

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73	Mg-Ti nanoparticles with superior kinetics for hydrogen storage. International Journal of Hydrogen Energy, 2016, 41, 14447-14454.	7.1	57
74	Kinetics and thermodynamics of hydrogenation-dehydrogenation for Mg-25%TM (TM=Ti, Nb or V) composites synthesized by reactive ball milling in hydrogen. International Journal of Hydrogen Energy, 2018, 43, 16804-16814.	7.1	57
75	Li-MgB <sub>2</sub> System for Reversible Hydrogen Storage. Journal of Physical Chemistry C, 2010, 114, 10291-10296.	3.1	56
76	Assembly of Triple-Stranded $\beta$ -Sheet Peptides at Interfaces. Journal of the American Chemical Society, 2002, 124, 9342-9343.	13.7	55
77	Bed geometries, fueling strategies and optimization of heat exchanger designs in metal hydride storage systems for automotive applications: A review. International Journal of Hydrogen Energy, 2014, 39, 17054-17074.	7.1	55
78	Bromide substitution in lithium borohydride, LiBH <sub>4</sub> -LiBr. International Journal of Hydrogen Energy, 2011, 36, 15664-15672.	7.1	54
79	Pressure Effect on the 2NaH + MgB <sub>2</sub> Hydrogen Absorption Reaction. Journal of Physical Chemistry C, 2010, 114, 21816-21823.	3.1	53
80	Ammine Magnesium Borohydride Nanocomposites for All-Solid-State Magnesium Batteries. ACS Applied Energy Materials, 2020, 3, 9264-9270.	5.1	53
81	Dehydrogenation kinetics of air-exposed MgH <sub>2</sub> /Mg <sub>2</sub> Cu and MgH <sub>2</sub> /MgCu <sub>2</sub> studied with in situ X-ray powder diffraction. Applied Physics A: Materials Science and Processing, 2006, 82, 515-521.	2.3	52
82	Nanoconfined NaAlH <sub>4</sub> : Determination of Distinct Proliferative Effects from Pore Size, Crystallite Size, and Surface Interactions. Journal of Physical Chemistry C, 2012, 116, 21046-21051.	3.1	52
83	MgH <sub>2</sub> -Nb <sub>2</sub> O <sub>5</sub> investigated by in situ synchrotron X-ray diffraction. International Journal of Hydrogen Energy, 2012, 37, 13409-13416.	7.1	52
84	Hydrogen-fluorine exchange in NaBH <sub>4</sub> -NaBF <sub>4</sub> . Physical Chemistry Chemical Physics, 2013, 15, 18185.	2.8	52
85	Novel solvates M(BH <sub>4</sub> ) <sub>3</sub> S(CH <sub>3</sub> ) <sub>2</sub> and properties of halide-free M(BH <sub>4</sub> ) <sub>3</sub> (M = Y or Gd). Dalton Transactions, 2014, 43, 13333-13342.	3.3	52
86	Trimetallic Borohydride Li <sub>3</sub> MZn <sub>5</sub> (BH <sub>4</sub> ) <sub>15</sub> (M = Mg.) Tj ETQq0 0 0 rgBT /Overlock 10	4.0	51
87	Structural Properties and Interactions of Thin Films at the Air-Liquid Interface Explored by Synchrotron X-Ray Scattering. Studies in Interface Science, 2001, , 205-254.	0.0	50
88	Nanoconfined 2LiBH <sub>4</sub> -MgH <sub>2</sub> -TiCl <sub>3</sub> in carbon aerogel scaffold for reversible hydrogen storage. International Journal of Hydrogen Energy, 2013, 38, 3275-3282.	7.1	49
89	Novel methods for studying lipids and lipases and their mutual interaction at interfaces. Part II. Surface sensitive synchrotron X-ray scattering. Biochimie, 2001, 83, 399-408.	2.6	48
90	Mixed-Anion and Mixed-Cation Borohydride KZn(BH <sub>4</sub> ) <sub>2</sub> Cl <sub>2</sub> : Synthesis, Structure and Thermal Decomposition. European Journal of Inorganic Chemistry, 2010, 2010, 1608-1612.	2.0	48

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91	Eutectic melting of $\text{LiBH}_4$ – $\text{KBH}_4$ . <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 24194-24199.	2.8	48
92	Hydrothermal transformation of the calcium aluminum oxide hydrates $\text{CaAl}_2\text{O}_4 \cdot 10\text{H}_2\text{O}$ and $\text{Ca}_2\text{Al}_2\text{O}_5 \cdot 8\text{H}_2\text{O}$ to $\text{Ca}_3\text{Al}_2(\text{OH})_{12}$ investigated by in situ synchrotron X-ray powder diffraction. <i>Cement and Concrete Research</i> , 2005, 35, 2300-2309.	11.0	47
93	Nanoconfined $\text{NaAlH}_4$ : prolific effects from increased surface area and pore volume. <i>Nanoscale</i> , 2014, 6, 599-607.	5.6	47
94	Nanoconfined $2\text{LiBH}_4$ – $\text{MgH}_2$ for reversible hydrogen storages: Reaction mechanisms, kinetics and thermodynamics. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 1932-1942.	7.1	46
95	Manganese borohydride; synthesis and characterization. <i>Dalton Transactions</i> , 2015, 44, 3988-3996.	3.3	46
96	Full-cell hydride-based solid-state Li batteries for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7875-7887.	7.1	46
97	Hydrogen Storage Capacity Loss in a $\text{LiBH}_4$ – $\text{Al}$ Composite. <i>Journal of Physical Chemistry C</i> , 2013, 117, 7423-7432.	3.1	45
98	From Metal Hydrides to Metal Borohydrides. <i>Inorganic Chemistry</i> , 2018, 57, 10768-10780.	4.0	45
99	Reversible hydrogen storage in $\text{NaF}$ – $\text{Al}$ composites. <i>Journal of Alloys and Compounds</i> , 2009, 477, 76-80.	5.5	44
100	Chloride substitution in sodium borohydride. <i>Journal of Solid State Chemistry</i> , 2011, 184, 1858-1866.	2.9	44
101	$2\text{LiBH}_4$ – $\text{MgH}_2$ in a Resorcinol–Furfural Carbon Aerogel Scaffold for Reversible Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1526-1534.	3.1	44
102	$\text{Mg}_2\text{NiH}_4$ synthesis and decomposition reactions. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 4003-4010.	7.1	44
103	Hydrogen storage and phase transformations in $\text{Mg}$ – $\text{Pd}$ nanoparticles. <i>Journal of Applied Physics</i> , 2010, 108, 073513.	2.5	43
104	Synthesis and Structural Investigation of $\text{Zr}(\text{BH}_4)_4$ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 20239-20245.	3.1	43
105	Tuning hydrogen storage properties and reactivity: Investigation of the $\text{LiBH}_4$ – $\text{NaAlH}_4$ system. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 1144-1149.	4.0	42
106	Novel Alkali Earth Borohydride $\text{Sr}(\text{BH}_4)_2$ and Borohydride-Chloride $\text{Sr}(\text{BH}_4)_2\text{Cl}$ . <i>Inorganic Chemistry</i> , 2013, 52, 10877-10885.	4.0	42
107	Crystal structure and in situ decomposition of $\text{Eu}(\text{BH}_4)_2$ and $\text{Sm}(\text{BH}_4)_2$ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 691-698.	10.3	42
108	Hydrogen Storage Properties of Nanoconfined $\text{LiBH}_4$ – $\text{Mg}_2\text{NiH}_4$ Reactive Hydride Composites. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5819-5826.	3.1	42

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109	Orientation and Conformation of a Lipase at an Interface Studied by Molecular Dynamics Simulations. <i>Biophysical Journal</i> , 2002, 83, 98-111.	0.5	41
110	Synthesis, Crystal Structure, Thermal Decomposition, and $^{11}\text{B}$ MAS NMR Characterization of $\text{Mg}(\text{BH}_4)_2 \cdot 2(\text{NH}_3 \cdot \text{BH}_3)_2$ . <i>Journal of Physical Chemistry C</i> , 2014, 118, 12141-12153.	3.1	41
111	Trends in Syntheses, Structures, and Properties for Three Series of Ammine Rare-Earth Metal Borohydrides, $\text{M}(\text{BH}_4)_3 \cdot n\text{NH}_3$ (M = Y, Gd, and Dy). <i>Inorganic Chemistry</i> , 2015, 54, 7402-7414.	4.0	41
112	Anion Substitution in $\text{Ca}(\text{BH}_4)_2 \cdot \text{CaCl}_2$ : Synthesis, Structure and Stability of Three New Compounds. <i>Journal of Physical Chemistry C</i> , 2011, 115, 7768-7777.	3.1	40
113	Structural studies of lithium zinc borohydride by neutron powder diffraction, Raman and NMR spectroscopy. <i>Journal of Alloys and Compounds</i> , 2011, 509, S698-S704.	5.5	40
114	Nuclear Magnetic Resonance Studies of Reorientational Motion and Li Diffusion in $\text{LiBH}_4$ Solid Solutions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 26177-26184.	3.1	40
115	Nanoconfinement of Molecular Magnesium Borohydride Captured in a Bipyridine-Functionalized Metal-Organic Framework. <i>ACS Nano</i> , 2020, 14, 10294-10304.	14.6	40
116	Enhanced hydrogen reversibility of nanoconfined $\text{LiBH}_4$ in $\text{Mg}(\text{BH}_4)_2$ . <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9871-9876.	7.1	39
117	Effective nanoconfinement of $2\text{LiBH}_4$ in $\text{MgH}_2$ via simply $\text{MgH}_2$ premilling for reversible hydrogen storages. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 15614-15626.	7.1	39
118	Sorption behavior of the $\text{MgH}_2$ in $\text{Mg}_2\text{FeH}_6$ hydride storage system synthesized by mechanical milling followed by sintering. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 14618-14630.	7.1	37
119	Solid state synthesis, structural characterization and ionic conductivity of bimetallic alkali-metal yttrium borohydrides $\text{MY}(\text{BH}_4)_4$ (M = Li and Na). <i>Journal of Materials Chemistry A</i> , 2016, 4, 8793-8802.	10.3	37
120	$2\text{LiBH}_4$ in $\text{MgH}_2 \cdot 0.13\text{TiCl}_4$ confined in nanoporous structure of carbon aerogel scaffold for reversible hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2014, 599, 78-86.	5.5	36
121	Hydrogen storage in $\text{Mg}$ in $\text{LiBH}_4$ composites catalyzed by $\text{FeF}_3$ . <i>Journal of Power Sources</i> , 2014, 267, 799-811.	7.8	36
122	Halide Substitution in Magnesium Borohydride. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12482-12488.	3.1	35
123	Understanding Superionic Conductivity in Lithium and Sodium Salts of Weakly Coordinating Closo-Hexahalocarbaborate Anions. <i>Chemistry of Materials</i> , 2020, 32, 1475-1487.	6.7	35
124	Oligopeptides with Homochiral Sequences Generated from Racemic Precursors that Spontaneously Separate into Enantiomorphous Two-Dimensional Crystalline Domains on Water Surface. <i>Journal of the American Chemical Society</i> , 2002, 124, 9093-9104.	18.7	34
125	Formation and Structure of Conjugated Salen-Cross-Linked Polymers and Their Application in Asymmetric Heterogeneous Catalysis. <i>European Journal of Organic Chemistry</i> , 2005, 2005, 342-347.	2.4	34
126	Nano size crystals of goethite, $\text{FeOOH}$ : Synthesis and thermal transformation. <i>Journal of Solid State Chemistry</i> , 2007, 180, 1431-1435.	2.9	34



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127	Synthesis and decomposition mechanisms of ternary Mg <sub>2</sub> CoH <sub>5</sub> studied using in situ synchrotron X-ray diffraction. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 10760-10770.	7.1	34
128	Potassium Zinc Borohydrides Containing Triangular [Zn(BH <sub>4</sub> ) <sub>3</sub> ] <sup>+</sup> and Tetrahedral [Zn(BH <sub>4</sub> ) <sub>4</sub> ] <sup>-</sup> Anions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1563-1571.	3.1	34
129	Hydrogen storage properties of nanoconfined LiBH <sub>4</sub> •NaBH <sub>4</sub> . <i>International Journal of Hydrogen Energy</i> , 2015, 40, 14916-14924.	7.1	34
130	Potassium octahydridotriborate: diverse polymorphism in a potential hydrogen storage material and potassium ion conductor. <i>Dalton Transactions</i> , 2019, 48, 8872-8881.	3.3	34
131	Reorientational Motion in Alkali-Metal Borohydrides: NMR Data for RbBH <sub>4</sub> and CsBH <sub>4</sub> and Systematics of the Activation Energy Variations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10305-10309.	3.1	33
132	NMR Study of Reorientational Motion in Alkaline-Earth Borohydrides: <sup>1</sup> H <sup>2</sup> and <sup>1</sup> H <sup>3</sup> Phases of Mg(BH <sub>4</sub> ) <sub>2</sub> and <sup>1</sup> H <sup>±</sup> and <sup>1</sup> H <sup>2</sup> Phases of Ca(BH <sub>4</sub> ) <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2012, 116, 4913-4920.	3.1	33
133	A mixed-cation mixed-anion borohydride NaY(BH <sub>4</sub> ) <sub>2</sub> Cl <sub>2</sub> . <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8428-8438.	7.1	33
134	Characterization of Gas-Solid Reactions using In Situ Powder X-ray Diffraction. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014, 640, 3029-3043.	1.2	33
135	Nanoconfinement degradation in NaAlH <sub>4</sub> /CMK-1. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 11103-11109.	7.1	33
136	Ammine-Stabilized Transition-Metal Borohydrides of Iron, Cobalt, and Chromium: Synthesis and Characterization. <i>Inorganic Chemistry</i> , 2015, 54, 10477-10482.	4.0	32
137	From M(BH <sub>4</sub> ) <sub>3</sub> (M = La, Ce) Borohydride Frameworks to Controllable Synthesis of Porous Hydrides and Ion Conductors. <i>Inorganic Chemistry</i> , 2016, 55, 9748-9756.	4.0	32
138	Synthesis, Structure, and Li-Ion Conductivity of LiLa(BH <sub>4</sub> ) <sub>3</sub> X, X = Cl, Br, I. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19010-19021.	3.1	32
139	A Composite of Complex and Chemical Hydrides Yields the First Al-Based Amidoborane with Improved Hydrogen Storage Properties. <i>Chemistry - A European Journal</i> , 2015, 21, 14562-14570.	3.3	31
140	Effect of Eutectic Melting, Reactive Hydride Composites, and Nanoconfinement on Decomposition and Reversibility of LiBH <sub>4</sub> •KBH <sub>4</sub> . <i>Journal of Physical Chemistry C</i> , 2015, 119, 25818-25825.	3.1	31
141	Trends in Synthesis, Crystal Structure, and Thermal and Magnetic Properties of Rare-Earth Metal Borohydrides. <i>Inorganic Chemistry</i> , 2019, 58, 5503-5517.	4.0	31
142	Theoretical and Experimental Study of LiBH <sub>4</sub> -LiCl Solid Solution. <i>Crystals</i> , 2012, 2, 144-158.	2.2	30
143	2LiBH <sub>4</sub> •MgH <sub>2</sub> nanoconfined into carbon aerogel scaffold impregnated with ZrCl <sub>4</sub> for reversible hydrogen storage. <i>Materials Chemistry and Physics</i> , 2016, 169, 136-141.	4.0	30
144	Fluoride substitution in LiBH <sub>4</sub> ; destabilization and decomposition. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 30157-30165.	2.8	30

#	ARTICLE	IF	CITATIONS
145	Hydrogen storage properties of Mg-Ni nanoparticles. International Journal of Hydrogen Energy, 2013, 38, 12207-12212.	7.1	29
146	Design of a Nanometric AlTi Additive for Mg <sub>2</sub> -Based Reactive Hydride Composites with Superior Kinetic Properties. Journal of Physical Chemistry C, 2018, 122, 7642-7655.	3.1	29
147	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. Progress in Energy, 2022, 4, 032007.	10.9	29
148	A new polymorph of LiZnPO <sub>4</sub> ·H <sub>2</sub> O; synthesis, crystal structure and thermal transformation. Journal of the Chemical Society Dalton Transactions, 1998, , 2261-2266.	1.1	28
149	Self-Assembly of Crystalline Films of Interdigitated Long-Chain Cholesteryl Esters at the Air-Water Interface. Journal of Physical Chemistry B, 2001, 105, 8563-8568.	2.6	28
150	Mechanism for reversible hydrogen storage in LiBH <sub>4</sub> -Al. Journal of Applied Physics, 2012, 111, 112621.	2.5	27
151	Phase Diagram for the NaBH <sub>4</sub> -KBH <sub>4</sub> System and the Stability of a Na <sub>1-x</sub> K <sub>x</sub> BH <sub>4</sub> Solid Solution. Journal of Physical Chemistry C, 2015, 119, 27919-27929.	3.1	27
152	Alkali metal yttrium borohydrides: The link between coordination of small and large rare-earth. Journal of Solid State Chemistry, 2015, 225, 231-239.	2.9	27
153	Homochiral Oligopeptides by Chiral Amplification within Two-Dimensional Crystalline Self-Assemblies at the Air-Water Interface; Relevance to Biomolecular Handedness. Chemistry - A European Journal, 2003, 9, 1782-1794.	3.3	26
154	Magnesium nanoparticles with transition metal decoration for hydrogen storage. Journal of Nanoparticle Research, 2011, 13, 5727-5737.	1.9	26
155	The influence of LiH on the rehydrogenation behavior of halide free rare earth (RE) borohydrides (RE) Tj ETQq1 1 0.784314 rgBT / Overbo	2.8	26
156	Iodine-Substituted Lithium/Sodium <i>clo</i> -Decaborates: Syntheses, Characterization, and Solid-State Ionic Conductivity. ACS Applied Materials & Interfaces, 2021, 13, 17554-17564.	8.0	26
157	Metallic and complex hydride-based electrochemical storage of energy. Progress in Energy, 2022, 4, 032001.	10.9	26
158	Preparation, Structure Determination and Thermal Transformation of a New Lithium Zinc Phosphate, <sup>1</sup> LiZnPO <sub>4</sub> . Journal of Solid State Chemistry, 1995, 117, 39-47.	2.9	25
159	Characterization of Hydrogen Storage Materials and Systems with Photons and Neutrons. Advanced Engineering Materials, 2011, 13, 730-736.	3.5	25
160	New perspectives of functional metal borohydrides. Journal of Alloys and Compounds, 2022, 896, 163014.	5.5	25
161	Real time study of cement and clinker phases hydration. Dalton Transactions, 2003, , 1529-1536.	3.3	24
162	Ca(BH <sub>4</sub> ) <sub>2</sub> ·MgF <sub>2</sub> Reversible Hydrogen Storage: Reaction Mechanisms and Kinetic Properties. Journal of Physical Chemistry C, 2011, 115, 3762-3768.	3.1	24

#	ARTICLE	IF	CITATIONS
163	Supercritical N <sub>2</sub> Processing as a Route to the Clean Dehydrogenation of Porous Mg(BH <sub>4</sub> ) <sub>2</sub> . Journal of the American Chemical Society, 2014, 136, 8181-8184.	13.7	24
164	Ammine Calcium and Strontium Borohydrides: Syntheses, Structures, and Properties. ChemSusChem, 2015, 8, 3472-3482.	6.8	24
165	In-situ X-ray powder diffraction studies of hydrothermal and thermal decomposition reactions of basic bismuth(III) nitrates in the temperature range 20–650 °C. Dalton Transactions, 2003, , 3278-3282.	3.3	23
166	The Effect of H <sub>2</sub> Partial Pressure on the Reaction Progression and Reversibility of Lithium-Containing Multicomponent Destabilized Hydrogen Storage Systems. Journal of the American Chemical Society, 2011, 133, 13534-13538.	13.7	23
167	Hydrogen reversibility of LiBH <sub>4</sub> –MgH <sub>2</sub> –Al composites. Physical Chemistry Chemical Physics, 2014, 16, 8970-8980.	2.8	23
168	Melting Behavior and Thermolysis of NaBH <sub>4</sub> –Mg(BH <sub>4</sub> ) <sub>2</sub> and NaBH <sub>4</sub> –Ca(BH <sub>4</sub> ) <sub>2</sub> Composites. Energies, 2015, 8, 2701-2713.	3.1	23
169	Hydrogen sorption and reaction mechanisms of nanoconfined 2LiBH <sub>4</sub> –NaAlH <sub>4</sub> . Journal of Alloys and Compounds, 2015, 633, 484-493.	5.5	23
170	A thermodynamic investigation of the LiBH <sub>4</sub> –NaBH <sub>4</sub> system. RSC Advances, 2016, 6, 60101-60108.	3.6	23
171	Hydrogen Sorption in Erbium Borohydride Composite Mixtures with LiBH <sub>4</sub> and/or LiH. Inorganics, 2017, 5, 31.	2.7	23
172	Hydrogen storage in complex hydrides: past activities and new trends. Progress in Energy, 2022, 4, 032009.	10.9	23
173	Methods to stabilize and destabilize ammonium borohydride. Dalton Transactions, 2013, 42, 680-687.	3.3	22
174	Halide substitution in Ca(BH <sub>4</sub> ) <sub>2</sub> . RSC Advances, 2014, 4, 4736-4742.	3.6	22
175	Mechanism and kinetics of early transition metal hydrides, oxides, and chlorides to enhance hydrogen release and uptake properties of MgH <sub>2</sub> . Powder Diffraction, 2015, 30, S9-S15.	0.2	22
176	Synthesis, structure and properties of new bimetallic sodium and potassium lanthanum borohydrides. Dalton Transactions, 2016, 45, 19002-19011.	3.3	22
177	Analysis of Dihydrogen Bonding in Ammonium Borohydride. Journal of Physical Chemistry C, 2019, 123, 28631-28639.	3.1	22
178	A new calcium sulfate hemi-hydrate. Dalton Transactions, 2010, 39, 2044.	3.3	21
179	New compounds in the potassium-aluminium-hydrogen system observed during release and uptake of hydrogen. International Journal of Hydrogen Energy, 2012, 37, 345-356.	7.1	21
180	Hydrogen Storage Stability of Nanoconfined MgH <sub>2</sub> upon Cycling. Inorganics, 2017, 5, 57.	2.7	21

#	ARTICLE	IF	CITATIONS
181	New Amine-Templated Zinc Phosphates with a Temperature-Induced Increase of Structural Dimensionality. <i>Inorganic Chemistry</i> , 2005, 44, 658-665.	4.0	20
182	NMR Investigation of Nanoporous $\text{Mg}(\text{BH}_4)_2$ and Its Thermally Induced Phase Changes. <i>Journal of Physical Chemistry C</i> , 2012, 116, 13033-13037.	3.1	20
183	Borohydrides: from sheet to framework topologies. <i>Dalton Transactions</i> , 2014, 43, 7726.	3.3	20
184	Destabilization of lithium hydride and the thermodynamic assessment of the Li-Al-H system for solar thermal energy storage. <i>RSC Advances</i> , 2016, 6, 94927-94933.	3.6	20
185	Lithium Ion Disorder and Conduction Mechanism in $\text{LiCe}(\text{BH}_4)_3\text{Cl}$ . <i>Journal of Physical Chemistry C</i> , 2016, 120, 19035-19042.	3.1	20
186	Phase diagrams of the $\text{LiBH}_4$ - $\text{NaBH}_4$ - $\text{KBH}_4$ system. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 25071-25079.	2.8	20
187	Methylamine Lithium Borohydride as Electrolyte for All-Solid-State Batteries. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	20
188	Self-Assembly of Bolaamphiphiles Forming Alternating Layer Arrangements with Lead and Copper Divalent Ions. <i>Journal of Physical Chemistry B</i> , 2001, 105, 11447-11455.	2.6	19
189	A new material for hydrogen storage; $\text{ScAl}_0.8\text{Mg}_0.2$ . <i>Journal of Solid State Chemistry</i> , 2009, 182, 3113-3117.	2.9	19
190	Nanoscopic $\text{Al}_x\text{Ce}_x$ phases in the $\text{NaH}+\text{Al}+\text{CeCl}_3$ system. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8403-8411.	7.1	19
191	Challenges in the synthetic routes to $\text{Mn}(\text{BH}_4)_2$ : insight into intermediate compounds. <i>Dalton Transactions</i> , 2015, 44, 6571-6580.	3.3	19
192	Synthesis and thermal stability of perovskite alkali metal strontium borohydrides. <i>Dalton Transactions</i> , 2016, 45, 831-840.	3.3	19
193	Synthesis, structure, and polymorphic transitions of praseodymium( $\text{Pr}(\text{BH}_4)_3$ ) and neodymium( $\text{Nd}(\text{BH}_4)_3$ ) borohydride, $\text{Pr}(\text{BH}_4)_3$ and $\text{Nd}(\text{BH}_4)_3$ . <i>Dalton Transactions</i> , 2018, 47, 8307-8319.	3.3	19
194	Amine Lanthanum and Cerium Borohydrides, $\text{M}(\text{BH}_4)_3 \cdot n\text{NH}_3$ ; Trends in Synthesis, Structures, and Thermal Properties. <i>Inorganic Chemistry</i> , 2020, 59, 7768-7778.	4.0	19
195	Guest Intercalation at Corrugated Surface of Host Monolayer Crystal on Water: $\text{Cholesteryl-l-Glutamate}$ and Water-Soluble Amino Acids. <i>Journal of the American Chemical Society</i> , 2001, 123, 10105-10106.	13.7	18
196	Hydrolysis of Pure and Sodium Substituted Calcium Aluminates and Cement Clinker Components Investigated by <i>in Situ</i> Synchrotron X-ray Powder Diffraction. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1488-1493.	3.8	18
197	New directions for hydrogen storage: sulphur destabilised sodium aluminium hydride. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12775.	10.3	18
198	Investigations of the thermal decomposition of $\text{MBH}_4 \cdot 2\text{NH}_3\text{BH}_3$ , $\text{M}=\text{Na}, \text{K}$ . <i>Journal of Alloys and Compounds</i> , 2013, 580, S287-S291.	5.5	18

#	ARTICLE	IF	CITATIONS
199	Hydrogen Desorption Properties of Bulk and Nanoconfined LiBH <sub>4</sub> -NaAlH <sub>4</sub> . Crystals, 2016, 6, 70.	2.2	18
200	Reaction Pathways in Ca(BH <sub>4</sub> ) <sub>2</sub> •NaNH <sub>2</sub> and Mg(BH <sub>4</sub> ) <sub>2</sub> •NaNH <sub>2</sub> Hydrogen-Rich Systems. Journal of Physical Chemistry C, 2016, 120, 8428-8435.	3.1	18
201	Nanoconfined NaAlH <sub>4</sub> Conversion Electrodes for Li Batteries. ACS Omega, 2017, 2, 1956-1967.	3.5	18
202	Hydrogenation properties of lithium and sodium hydride <i>closo</i> -borate, [B <sub>10</sub> H <sub>10</sub> ] <sup>2+</sup> and [B <sub>12</sub> H <sub>12</sub> ] <sup>2+</sup> , composites. Physical Chemistry Chemical Physics, 2018, 20, 16266-16275.	2.8	18
203	Fast Room-Temperature Mg <sup>2+</sup> Conductivity in Mg(BH <sub>4</sub> ) <sub>2</sub> •1.6NH <sub>3</sub> •Al <sub>2</sub> O <sub>3</sub> Nanocomposites. Journal of Physical Chemistry Letters, 2022, 13, 2211-2216.	4.6	18
204	Effect of the Partial Replacement of CaH <sub>2</sub> with CaF <sub>2</sub> in the Mixed System CaH <sub>2</sub> + MgB <sub>2</sub> . Journal of Physical Chemistry C, 2014, 118, 28409-28417.	3.1	17
205	B1•Mobilstor: Materials for Sustainable Energy Storage Techniques • Lithium Containing Compounds for Hydrogen and Electrochemical Energy Storage. Advanced Engineering Materials, 2014, 16, 1189-1195.	3.5	17
206	Thermal decomposition of sodium amide, NaNH <sub>2</sub> , and sodium amide hydroxide composites, NaNH <sub>2</sub> •NaOH. Physical Chemistry Chemical Physics, 2016, 18, 25257-25264.	2.8	17
207	High-Pressure Study of Mn(BH <sub>4</sub> ) <sub>2</sub> Reveals a Stable Polymorph with High Hydrogen Density. Chemistry of Materials, 2016, 28, 274-283.	6.7	17
208	Compaction of LiBH <sub>4</sub> -LiAlH <sub>4</sub> nanoconfined in activated carbon nanofibers: Dehydrogenation kinetics, reversibility, and mechanical stability during cycling. International Journal of Hydrogen Energy, 2017, 42, 1036-1047.	7.1	17
209	Synthesis, structure and properties of bimetallic sodium rare-earth (RE) borohydrides, NaRE(BH <sub>4</sub> ) <sub>4</sub> , RE = Ce, Pr, Er or Gd. Dalton Transactions, 2017, 46, 13421-13431.	3.3	17
210	Nanoscale Mg•B <i>via</i> Surfactant Ball Milling of MgB <sub>2</sub> : Morphology, Composition, and Improved Hydrogen Storage Properties. Journal of Physical Chemistry C, 2020, 124, 21761-21771.	3.1	17
211	Hydroxylated <i>closo</i> -Dodecaborates M <sub>2</sub> B <sub>12</sub> (OH) <sub>12</sub> (M = Li,) Tj ETQq1 1 0.784314 rgBT Physical Chemistry C, 2020, 124, 11340-11349.	3.1	17
212	Hydrothermal Synthesis of Lithium Zinc Phosphates: Structural Investigation of Twinned $\hat{1}$ -Li <sub>4</sub> Zn(PO <sub>4</sub> ) <sub>2</sub> and a High Temperature Polymorph $\hat{2}$ -Li <sub>4</sub> Zn(PO <sub>4</sub> ) <sub>2</sub> . Journal of Solid State Chemistry, 2002, 166, 341-351.	2.9	16
213	Hydrothermal synthesis of nanocrystalline ZnSe: An in situ synchrotron radiation X-ray powder diffraction study. Journal of Solid State Chemistry, 2008, 181, 1925-1929.	2.9	16
214	Cyclic stability and structure of nanoconfined Ti-doped NaAlH <sub>4</sub> . International Journal of Hydrogen Energy, 2016, 41, 4159-4167.	7.1	16
215	Li <sub>5</sub> (BH <sub>4</sub> ) <sub>3</sub> NH: Lithium-Rich Mixed Anion Complex Hydride. Journal of Physical Chemistry C, 2017, 121, 11069-11075.	3.1	16
216	Reversibility of LiBH <sub>4</sub> Facilitated by the LiBH <sub>4</sub> •Ca(BH <sub>4</sub> ) <sub>2</sub> Eutectic. Journal of Physical Chemistry C, 2017, 121, 18439-18449.	3.1	16

#	ARTICLE	IF	CITATIONS
217	Structural Diversity and Trends in Properties of an Array of Hydrogen-Rich Ammonium Metal Borohydrides. <i>Inorganic Chemistry</i> , 2020, 59, 12733-12747.	4.0	16
218	Metal borohydride formation from aluminium boride and metal hydrides. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27545-27553.	2.8	15
219	Functional Materials Based on Metal Hydrides. <i>Inorganics</i> , 2018, 6, 91.	2.7	15
220	Reactivity of magnesium borohydride $\hat{=}$ Metal hydride composites, $\hat{^3}$ -Mg(BH <sub>4</sub> ) <sub>2</sub> -MH <sub>x</sub> , M $\hat{=}$ Li, Na, Mg, Ca. <i>Journal of Alloys and Compounds</i> , 2019, 770, 1155-1163.	5.5	15
221	The interconversion between THF $\hat{\cdot}$ B <sub>3</sub> H <sub>7</sub> and B <sub>3</sub> H <sub>8</sub> <sup>+</sup> : an efficient synthetic method for MB <sub>3</sub> H <sub>8</sub> (M = Li and Na). <i>Dalton Transactions</i> , 2019, 48, 5140-5143.	3.3	15
222	NMR Study of Molecular Dynamics in Complex Metal Borohydride LiZn <sub>2</sub> (BH <sub>4</sub> ) <sub>5</sub> . <i>Journal of Physical Chemistry C</i> , 2013, 117, 21139-21147.	3.1	14
223	A novel intermediate in the LiAlH <sub>4</sub> $\hat{=}$ LiNH <sub>2</sub> hydrogen storage system. <i>Dalton Transactions</i> , 2014, 43, 3095-3103.	3.3	14
224	Thermal Decomposition of Mn(BH <sub>4</sub> ) <sub>2</sub> $\hat{=}$ M(BH <sub>4</sub> ) <sub>x</sub> and Mn(BH <sub>4</sub> ) <sub>2</sub> $\hat{=}$ MH <sub>x</sub> Composites with M = Li, Na, Mg, and Ca. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23567-23574.	3.1	14
225	Hydrogen desorption and cycling properties of composites based on mesoporous carbons and a LiBH <sub>4</sub> $\hat{=}$ Ca(BH <sub>4</sub> ) <sub>2</sub> eutectic mixture. <i>Journal of Alloys and Compounds</i> , 2015, 645, S480-S484.	5.5	14
226	Nuclear Magnetic Resonance Study of Molecular Dynamics in Ammine Metal Borohydride Sr(BH <sub>4</sub> ) <sub>2</sub> (NH <sub>3</sub> ) <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2016, 120, 24646-24654.	3.1	14
227	In situ investigations of bimetallic potassium erbium borohydride. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22468-22474.	7.1	14
228	Perovskite alkali metal samarium borohydrides: crystal structures and thermal decomposition. <i>Dalton Transactions</i> , 2017, 46, 11905-11912.	3.3	14
229	New Rubidium Zinc Hydrogen Phosphate, Rb <sub>2</sub> Zn <sub>2</sub> (HPO <sub>4</sub> ) <sub>3</sub> : $\hat{A}$ Synthesis, Crystal Structure, and 31P Single-Crystal NMR. <i>Inorganic Chemistry</i> , 2000, 39, 2026-2032.	4.0	13
230	Stepwise Collapse of Cyclolinear Polysiloxane Langmuir Monolayers Studied by Brewster Angle Microscopy and Grazing Incidence X-ray Diffraction. <i>Macromolecules</i> , 2004, 37, 4872-4881.	4.8	13
231	Piperazinium dihydrogen phosphate, C <sub>4</sub> H <sub>12</sub> N <sub>2</sub> (H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> : Synthesis, 31P CP/MAS NMR, structural and thermal investigations. <i>Solid State Sciences</i> , 2007, 9, 72-81.	3.2	13
232	Ternary compounds in the magnesium $\hat{=}$ titanium hydrogen storage system. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9700-9708.	7.1	13
233	A NaAlH <sub>4</sub> -Ca(BH <sub>4</sub> ) <sub>2</sub> composite system for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2017, 720, 497-501.	5.5	13
234	Synthesis and thermal decomposition of potassium tetraamidoboranealuminate, K[Al(NH <sub>2</sub> BH <sub>3</sub> ) <sub>4</sub> ]. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 311-321.	7.1	13

#	ARTICLE	IF	CITATIONS
235	Hydrothermal synthesis, crystal structure refinement and thermal transformation of $\text{LiZnAsO}_4 \cdot \text{H}_2\text{O}$ . <i>Microporous and Mesoporous Materials</i> , 1998, 26, 77-87.	4.4	12
236	Activation effects during hydrogen release and uptake of $\text{MgH}_2$ . <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9888-9892.	7.1	12
237	Molten metal <i>closo</i> -borate solvates. <i>Chemical Communications</i> , 2019, 55, 3410-3413.	4.1	12
238	Successive Multilayer Formation of Cycloliner Polyorganosiloxanes Floating at the Air/Water Interface. A Synchrotron X-ray Reflectivity Investigation. <i>Macromolecules</i> , 2003, 36, 7236-7243.	4.8	11
239	Cobalt substitution in a nano-porous zinc phosphate: Hydrothermal synthesis and crystal structure. <i>Microporous and Mesoporous Materials</i> , 2005, 84, 144-152.	4.4	11
240	Synthesis, structures and thermal decomposition of ammine $\text{MxB}_{12}\text{H}_{12}$ complexes (M = Li, Na, Ca). <i>Dalton Transactions</i> , 2017, 46, 7770-7781.	3.3	11
241	Hydrothermal synthesis and crystal structure of $\text{LiZnAsO}_4$ . <i>Journal of Materials Chemistry</i> , 1998, 8, 969-975.	6.7	10
242	Integration of phase change materials in compressed hydrogen gas systems: Modelling and parametric analysis. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 1060-1073.	7.1	10
243	Sulfurized metal borohydrides. <i>Dalton Transactions</i> , 2016, 45, 639-645.	3.3	10
244	Synthesis and decomposition of $\text{Li}_3\text{Na}(\text{NH}_2)_4$ and investigations of $\text{LiNaH}$ based systems for hydrogen storage. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1735-1742.	2.8	10
245	Reorientational Motions and Ionic Conductivity in $(\text{NH}_4)_2\text{B}_{10}\text{H}_{10}$ and $(\text{NH}_4)_2\text{B}_{12}\text{H}_{12}$ . <i>Journal of Physical Chemistry C</i> , 2018, 122, 17073-17079.	3.1	10
246	Crystal Structures and Energy Storage Properties of Ammine Sodium Decahydro-closo-decaboranes ( $\text{Na}_2\text{B}_{10}\text{H}_{10} \cdot n\text{NH}_3$ , $n = 1, 2$ ). <i>Journal of Physical Chemistry C</i> , 2019, 123, 20160-20166.	3.1	10
247	Interplay between the Reorientational Dynamics of the $\text{B}_3\text{H}_8^+$ Anion and the Structure in $\text{KB}_3\text{H}_8$ . <i>Journal of Physical Chemistry C</i> , 2021, 125, 3716-3724.	3.1	10
248	Trends in the Series of Ammine Rare-Earth-Metal Borohydrides: Relating Structural and Thermal Properties. <i>Inorganic Chemistry</i> , 2021, 60, 2573-2589.	4.0	10
249	Reorientational dynamics in $\text{LiNaH}$ and $\text{LiMgB}_2$ systems. <i>Journal of Physical Chemistry C</i> , 2013, 117, 17360-17366.	2.4	10
250	Influence of Stoichiometry on the Hydrogen Sorption Behavior in the $\text{LiF}_2\text{MgB}_2$ System. <i>Journal of Physical Chemistry C</i> , 2012, 116, 7010-7015.	3.1	9
251	Hydrogen Sorption in the $\text{LiF}_2\text{MgB}_2$ System. <i>Journal of Physical Chemistry C</i> , 2013, 117, 17360-17366.	3.1	9
252	Scandium functionalized carbon aerogel: Synthesis of nanoparticles and structure of a new $\text{ScOCl}$ and properties of $\text{NaAlH}_4$ as a function of pore size. <i>Journal of Solid State Chemistry</i> , 2015, 231, 190-197.	2.9	9

#	ARTICLE	IF	CITATIONS
253	Heat capacity and thermodynamic properties of alkali and alkali-earth borohydrides. Journal of Chemical Thermodynamics, 2020, 143, 106055.	2.0	9
254	Probing the local symmetry of Tb <sup>3+</sup> in borohydrides using luminescence spectroscopy. Journal of Luminescence, 2020, 221, 117065.	3.1	9
255	Molecular Dynamics in Ag <sub>2</sub> B <sub>12</sub> H <sub>12</sub> Studied by Nuclear Magnetic Resonance. Journal of Physical Chemistry C, 2021, 125, 5534-5541.	3.1	9
256	A new polymorph in the zinc phosphate Zn <sub>2</sub> (HPO <sub>4</sub> ) <sub>3</sub> family prepared with DABCO as structure-directing agent. Microporous and Mesoporous Materials, 2008, 109, 383-391.	4.4	8
257	Thermal decomposition of monocalcium aluminate decahydrate (CaAl <sub>2</sub> O <sub>4</sub> ·10H <sub>2</sub> O) investigated by in-situ synchrotron X-ray powder diffraction, thermal analysis and <sup>27</sup> Al, <sup>2</sup> H MAS NMR spectroscopy. Dalton Transactions, 2008, , 455-462.	3.3	8
258	Barium borohydride chlorides: synthesis, crystal structures and thermal properties. Dalton Transactions, 2016, 45, 8291-8299.	3.3	8
259	Complexation of Ammonia Boranes with Al <sup>3+</sup> . Inorganic Chemistry, 2019, 58, 4753-4760.	4.0	8
260	NMR Study of the Dynamical Properties of LiLa(BH <sub>4</sub> ) <sub>3</sub> Br and LiLa(BH <sub>4</sub> ) <sub>3</sub> I. Applied Magnetic Resonance, 2021, 52, 595-606.	1.2	8
261	Interface controlled solid-state lithium storage performance in free-standing bismuth nanosheets. Dalton Transactions, 2021, 50, 252-261.	3.3	8
262	A novel layered templated lithium zinc phosphate prepared by an unusual solution mediated technique. Chemical Communications, 1999, , 371-372.	4.1	7
263	Two new cobalt-zinc orthophosphate monohydrates: hydrothermal synthesis, crystal structures and thermal investigation. Dalton Transactions, 2005, , 598-606.	3.3	7
264	Thermally induced phase transitions of barium oxalates. Solid State Sciences, 2011, 13, 1407-1413.	3.2	7
265	Investigation of MBH <sub>4</sub> ·VCl <sub>2</sub> , M = Li, Na or K. International Journal of Hydrogen Energy, 2013, 38, 8376-8383.	7.1	7
266	NaAlH <sub>4</sub> production from waste aluminum by reactive ball milling. International Journal of Hydrogen Energy, 2014, 39, 9877-9882.	7.1	7
267	Mapping the complete bonding network in KBH <sub>4</sub> using the combined power of powder diffraction and maximum entropy method. Computational and Theoretical Chemistry, 2015, 1053, 245-253.	2.5	7
268	Comment on $\alpha$ -Bi-functional Li <sub>2</sub> B <sub>12</sub> H <sub>12</sub> for energy storage and conversion applications: solid-state electrolyte and luminescent down-conversion dye by J. A. Teprovich Jr, H. Col <sup>3</sup> n-Mercado, A. L. Washington II, P. A. Ward, S. Greenway, D. M. Missimer, H. Hartman, J. Velten, J. H. Christian and R. Zidan, <i>J. Mater. Chem. A</i>, 2015, <b>3</b>, 22853. Journal of Materials Chemistry A, 2019, 7, 4185-4187.	10.3	7
269	Hydrogen Sorption and Reversibility of the LiBH <sub>4</sub> -KBH <sub>4</sub> Eutectic System Confined in a CMK-3 Type Carbon via Melt Infiltration. Journal of Carbon Research, 2020, 6, 19.	2.7	7
270	Lithium-ion diffusivity in complex hydrides: Pulsed-field-gradient NMR studies of LiLa(BH <sub>4</sub> ) <sub>3</sub> Cl, Li <sub>3</sub> (NH <sub>2</sub> ) <sub>2</sub> I and Li-1-CB9H <sub>10</sub> . Solid State Ionics, 2021, 362, 115585.	2.7	7



#	ARTICLE	IF	CITATIONS
271	Hydrogen absorption and desorption properties of a novel ScNiAl alloy. Applied Physics A: Materials Science and Processing, 2011, 104, 235-238.	2.3	6
272	Thermodynamic Tuning of Calcium Hydride by Fluorine Substitution. Materials Research Society Symposia Proceedings, 2012, 1441, 17.	0.1	6
273	Ammonium-Ammonia Complexes, $\text{NH}_4^+$ , in Ammonium closo-Borate Amines: Synthesis, Structure, and Properties. Inorganic Chemistry, 2020, 59, 11449-11458.	4.0	6
274	Polymorphism of Calcium Decahydrido-closo-decaborate and Characterization of Its Hydrates. Inorganic Chemistry, 2021, 60, 10943-10957.	4.0	6
275	Neutron Scattering Investigations of the Global and Local Structures of Ammine Yttrium Borohydrides. Journal of Physical Chemistry C, 2021, 125, 15415-15423.	3.1	6
276	Improved hydrogen storage kinetics of nanoconfined $\text{LiBH}_4$ - $\text{MgH}_2$ reactive hydride composites catalyzed with nickel Nanoparticles. Materials Research Society Symposia Proceedings, 2012, 1441, 1.	0.1	5
277	Hydrogen storage properties of the pseudo binarylaves phase $(\text{Sc}_{1-x}\text{Zr}_x)(\text{Co}_{1-y}\text{Ni}_y)_2$ system. International Journal of Hydrogen Energy, 2013, 38, 9772-9778.	7.1	5
278	Synthesis, Structures and Dehydrogenation Properties of Zinc Borohydride Ethylenediamine Complexes. ChemistrySelect, 2016, 1, 752-755.	1.5	5
279	Disorder induced polymorphic transitions in the high hydrogen density compound $\text{Sr}(\text{BH}_4)_2(\text{NH}_3)_2(\text{BH}_3)_2$ . Dalton Transactions, 2018, 47, 16737-16746.	3.3	5
280	Synthesis and crystal structures of decahydro-closo-decaborates of the divalent cations of strontium and manganese. Journal of Solid State Chemistry, 2021, 298, 122133.	2.9	5
281	New layered caesium zinc hydrogen phosphate, $\text{CsZn}_{2.5}(\text{HPO}_4)_3 \cdot 2\text{H}_2\text{O}$ ; synthesis, crystal structure and thermal transformation. Dalton Transactions RSC, 2000, , 2831-2835.	2.3	4
282	A Crystalline Langmuir Monolayer Designed as a Template for Selective Intercalation of Water Soluble $\alpha$ -Amino Acids. Crystal Growth and Design, 2003, 3, 683-690.	3.0	4
283	Synthesis, Crystal Structures and Thermal Properties of Ammine Barium Borohydrides. Inorganics, 2020, 8, 57.	2.7	4
284	$^{11}\text{B}$ Nuclear Spin- $^1\text{H}$ Electron Spin Interactions in $^{11}\text{B}$ MAS NMR Spectra of Paramagnetic Metal Borohydrides. Journal of Physical Chemistry C, 2021, 125, 1113-1124.	3.1	3
285	Dynamical properties of lithium borohydride-ammine composite $\text{LiBH}_4 \cdot \text{NH}_3$ : A nuclear magnetic resonance study. Journal of Alloys and Compounds, 2022, 894, 162446.	5.5	3
286	Structural and dynamic studies of $\text{Pr}(\text{11BH}_4)_3$ . International Journal of Hydrogen Energy, 2021, 46, 32126-32134.	7.1	2
287	Methylamine Lithium Borohydride as Electrolyte for All-Solid-State Batteries. Angewandte Chemie, 2022, 134, .	2.0	2
288	Disorder, dynamic and entropy effects in the solid state. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
289	Decomposition pathway of $KAlH_4$ altered by the addition of $Al_2S_3$ . Dalton Transactions, 2019, 48, 5048-5057.	3.3	1
290	New Amine-Templated Zinc Phosphates with a Temperature-Induced Increase of Structural Dimensionality.. ChemInform, 2005, 36, no.	0.0	0
291	Direct imaging by atomic force microscopy of surface-localized self-assembled monolayers on a cuprate superconductor and surface X-ray scattering analysis of analogous monolayers on the surface of water. Thin Solid Films, 2007, 515, 8424-8429.	1.8	0
292	Hydrogen Sorption in Magnesium Nanoparticles: Size- and Surface-related Phenomena. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
293	Inside Cover: Porous and Dense Magnesium Borohydride Frameworks: Synthesis, Stability, and Reversible Absorption of Guest Species (Angew. Chem. Int. Ed. 47/2011). Angewandte Chemie - International Edition, 2011, 50, 11014-11014.	13.8	0
294	Anelastic spectroscopy investigation of nano-confined alanates. Journal of Alloys and Compounds, 2013, 580, S70-S72.	5.5	0
295	Nuclear magnetic resonance study of hydrogen dynamics in the complex hydride $LiBH_4 \cdot NH_3$ . AIP Conference Proceedings, 2022, , .	0.4	0