

# Andreas ZÃ¼ttel

## List of Publications by Year in descending order

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157  
papers

19,931  
citations

41344

49  
h-index

10158

140  
g-index

171  
all docs

171  
docs citations

171  
times ranked

14328  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced Electrocatalytic CO <sub>2</sub> Reduction to C <sub>2+</sub> Products by Adjusting the Local Reaction Environment with Polymer Binders. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	71
2	Support-Dependent Cu <sup>II</sup> /In Bimetallic Catalysts for Tailoring the Activity of Reverse Water Gas Shift Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1524-1535.	6.7	26
3	Selective Borohydride Oxidation Reaction on Nickel Catalyst with Anion and Cation Exchange Ionomer for High-Performance Direct Borohydride Fuel Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	8
4	Halide exchange in the passivation of perovskite solar cells with functionalized ionic liquids. <i>Cell Reports Physical Science</i> , 2022, 3, 100848.	5.6	9
5	Complex hydrides for CO <sub>2</sub> reduction. <i>MRS Bulletin</i> , 2022, 47, 424-431.	3.5	6
6	Tandem effect of Ag@C@Cu catalysts enhances ethanol selectivity for electrochemical CO <sub>2</sub> reduction in flow reactors. <i>Cell Reports Physical Science</i> , 2022, 3, 100949.	5.6	31
7	Unraveling and optimizing the metal-metal oxide synergistic effect in a highly active Co (CoO) <sub>1-x</sub> catalyst for CO <sub>2</sub> hydrogenation. <i>Journal of Energy Chemistry</i> , 2021, 53, 241-250.	12.9	32
8	Hydrogen Storage by Reduction of CO <sub>2</sub> to Synthetic Hydrocarbons. <i>Chimia</i> , 2021, 75, 156.	0.6	1
9	Direct CO <sub>2</sub> Capture and Reduction to High-End Chemicals with Tetraalkylammonium Borohydrides. <i>Angewandte Chemie</i> , 2021, 133, 9666-9675.	2.0	2
10	Electrospun nanofibers for electrochemical reduction of CO <sub>2</sub> : A mini review. <i>Electrochemistry Communications</i> , 2021, 124, 106968.	4.7	13
11	Direct CO <sub>2</sub> Capture and Reduction to High-End Chemicals with Tetraalkylammonium Borohydrides. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9580-9589.	13.8	28
12	Near ambient-pressure X-ray photoelectron spectroscopy study of CO <sub>2</sub> activation and hydrogenation on indium/copper surface. <i>Journal of Catalysis</i> , 2021, 395, 315-324.	6.2	15
13	Monocarborane cluster as a stable fluorine-free calcium battery electrolyte. <i>Scientific Reports</i> , 2021, 11, 7563.	3.3	38
14	Surface Oxygenate Species on TiC Reinforce Cobalt-Catalyzed Fischer-Tropsch Synthesis. <i>ACS Catalysis</i> , 2021, 11, 8087-8096.	11.2	15
15	Engineering long-term stability into perovskite solar cells via application of a multi-functional TFSI-based ionic liquid. <i>Cell Reports Physical Science</i> , 2021, 2, 100475.	5.6	25
16	Revealing the Surface Chemistry for CO <sub>2</sub> Hydrogenation on Cu/CeO <sub>2-x</sub> Using Near-Ambient-Pressure X-ray Photoelectron Spectroscopy. <i>ACS Applied Energy Materials</i> , 2021, 4, 12326-12335.	5.1	9
17	Methanol production from CO <sub>2</sub> via an integrated, formamide-assisted approach. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1773-1779.	4.9	11
18	A model-based comparison of Ru and Ni catalysts for the Sabatier reaction. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1396-1408.	4.9	26

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19	Imaging Catalysis: Operando Investigation of the CO <sub>2</sub> Hydrogenation Reaction Dynamics by Means of Infrared Thermography. <i>ACS Catalysis</i> , 2020, 10, 1721-1730.	11.2	14
20	Effects of Ball Milling and TiF <sub>3</sub> Addition on the Dehydrogenation Temperature of Ca(BH <sub>4</sub> ) <sub>2</sub> Polymorphs. <i>Energies</i> , 2020, 13, 4828.	3.1	3
21	Influence of Composition on Performance in Metallic Iron–Nickel–Cobalt Ternary Anodes for Alkaline Water Electrolysis. <i>ACS Catalysis</i> , 2020, 10, 12139-12147.	11.2	20
22	CO <sub>2</sub> Hydrogenation over Unsupported Fe-Co Nanoalloy Catalysts. <i>Nanomaterials</i> , 2020, 10, 1360.	4.1	17
23	Universal approach toward high-efficiency two-dimensional perovskite solar cells <i>via</i> a vertical-rotation process. <i>Energy and Environmental Science</i> , 2020, 13, 3093-3101.	30.8	82
24	A combined diffuse reflectance infrared Fourier transform spectroscopy–mass spectroscopy–gas chromatography for the <i>operando</i> study of the heterogeneously catalyzed CO <sub>2</sub> hydrogenation over transition metal-based catalysts. <i>Review of Scientific Instruments</i> , 2020, 91, 074102.	1.3	0
25	Crystal Structural Investigations for Understanding the Hydrogen Storage Properties of YMgNi <sub>4</sub> -Based Alloys. <i>ACS Omega</i> , 2020, 5, 31192-31198.	3.5	22
26	Synthesis of grid compliant substitute natural gas from a representative biogas mixture in a hybrid Ni/Ru catalysed reactor. <i>Chemical Engineering Science: X</i> , 2020, 8, 100078.	1.5	4
27	Synergistic Cu/CeO <sub>2</sub> carbon nanofiber catalysts for efficient CO <sub>2</sub> electroreduction. <i>Electrochemistry Communications</i> , 2020, 114, 106716.	4.7	34
28	Thermal stability of size-selected copper nanoparticles: Effect of size, support and CO <sub>2</sub> hydrogenation atmosphere. <i>Applied Surface Science</i> , 2020, 510, 145439.	6.1	13
29	Electrochemical reconstruction of ZnO for selective reduction of CO <sub>2</sub> to CO. <i>Applied Catalysis B: Environmental</i> , 2020, 273, 119060.	20.2	115
30	Crossover of liquid products from electrochemical CO <sub>2</sub> reduction through gas diffusion electrode and anion exchange membrane. <i>Journal of Catalysis</i> , 2020, 385, 140-145.	6.2	94
31	Solvent- and Catalyst-Free Carbon Dioxide Capture and Reduction to Formate with Borohydride Ionic Liquid. <i>ChemSusChem</i> , 2020, 13, 2025-2031.	6.8	31
32	Incarceration of Iodine in a Pyrene-Based Metal–Organic Framework. <i>Chemistry - A European Journal</i> , 2019, 25, 501-506.	3.3	38
33	Nitrogen-doped carbon black supported Pt–M (M = Pd, Fe, Ni) alloy catalysts for oxygen reduction reaction in proton exchange membrane fuel cell. <i>Materials Today Energy</i> , 2019, 13, 374-381.	4.7	37
34	Efficient Base-Metal NiMn/TiO <sub>2</sub> Catalyst for CO <sub>2</sub> Methanation. <i>ACS Catalysis</i> , 2019, 9, 7823-7839.	11.2	124
35	New Ni <sub>0.5</sub> Ti <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> @C NASICON-type Electrode Material with High Rate Capability Performance for Lithium-ion Batteries: Synthesis and Electrochemical Properties. <i>ChemSusChem</i> , 2019, 12, 4846-4853.	6.8	5
36	Self-supported copper-based gas diffusion electrodes for CO <sub>2</sub> electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26285-26292.	10.3	55

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37	Parametric sensitivity in the Sabatier reaction over Ru/Al <sub>2</sub> O <sub>3</sub> – theoretical determination of the minimal requirements for reactor activation. Reaction Chemistry and Engineering, 2019, 4, 100-111.	3.7	25
38	3D hierarchical porous indium catalyst for highly efficient electroreduction of CO <sub>2</sub> . Journal of Materials Chemistry A, 2019, 7, 4505-4515.	10.3	134
39	Model based determination of the optimal reactor concept for Sabatier reaction in small-scale applications over Ru/Al <sub>2</sub> O <sub>3</sub> . Chemical Engineering Journal, 2019, 375, 121954.	12.7	31
40	Modelling the CO <sub>2</sub> hydrogenation reaction over Co, Ni and Ru/Al <sub>2</sub> O <sub>3</sub> . Journal of Catalysis, 2019, 375, 193-201.	6.2	15
41	Accurate measurement of pressure-composition isotherms and determination of thermodynamic and kinetic parameters of metal hydrides. International Journal of Hydrogen Energy, 2019, 44, 13583-13591.	7.1	8
42	Identifying Reaction Species by Evolutionary Fitting and Kinetic Analysis: An Example of CO <sub>2</sub> Hydrogenation in DRIFTS. Journal of Physical Chemistry C, 2019, 123, 8785-8792.	3.1	23
43	Boosting CO Production in Electrocatalytic CO <sub>2</sub> Reduction on Highly Porous Zn Catalysts. ACS Catalysis, 2019, 9, 3783-3791.	11.2	247
44	Renewable energy storage via CO <sub>2</sub> and H <sub>2</sub> conversion to methane and methanol: Assessment for small scale applications. Renewable and Sustainable Energy Reviews, 2019, 107, 497-506.	16.4	56
45	Application of hydrides in hydrogen storage and compression: Achievements, outlook and perspectives. International Journal of Hydrogen Energy, 2019, 44, 7780-7808.	7.1	486
46	Study of borohydride ionic liquids as hydrogen storage materials. Journal of Energy Chemistry, 2019, 33, 17-21.	12.9	36
47	The role of malachite nanorods for the electrochemical reduction of CO <sub>2</sub> to C <sub>2</sub> hydrocarbons. Electrochimica Acta, 2019, 297, 55-60.	5.2	16
48	Hydrogen storage and electrochemical properties of LaNi <sub>5-x</sub> Cu <sub>x</sub> hydride-forming alloys. Journal of Alloys and Compounds, 2019, 775, 175-180.	5.5	29
49	Experimental performance investigation of a 2 kW methanation reactor. Sustainable Energy and Fuels, 2018, 2, 1101-1110.	4.9	14
50	Hydrogen storage properties of various carbon supported NaBH <sub>4</sub> prepared via metathesis. International Journal of Hydrogen Energy, 2018, 43, 7108-7116.	7.1	37
51	Dual-Functional Photocatalysis: Concurrent Photocatalytic Hydrogen Generation and Dye Degradation Using MIL-125(NH <sub>2</sub> ) under Visible Light Irradiation (Adv. Funct. Mater. 52/2018). Advanced Functional Materials, 2018, 28, 1870373.	14.9	6
52	Fast real time and quantitative gas analysis method for the investigation of the CO <sub>2</sub> reduction reaction mechanism. Review of Scientific Instruments, 2018, 89, 114102.	1.3	8
53	Concurrent Photocatalytic Hydrogen Generation and Dye Degradation Using MIL-125(NH <sub>2</sub> ) under Visible Light Irradiation. Advanced Functional Materials, 2018, 28, 1806368.	14.9	110
54	Single-layer graphene membranes by crack-free transfer for gas mixture separation. Nature Communications, 2018, 9, 2632.	12.8	160

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55	Destabilizing sodium borohydride with an ionic liquid. <i>Materials Today Energy</i> , 2018, 9, 391-396.	4.7	10
56	Selective and Stable Electroreduction of CO <sub>2</sub> to CO at the Copper/Indium Interface. <i>ACS Catalysis</i> , 2018, 8, 6571-6581.	11.2	175
57	CO <sub>2</sub> hydrogenation reaction over pristine Fe, Co, Ni, Cu and Al <sub>2</sub> O <sub>3</sub> supported Ru: Comparison and determination of the activation energies. <i>Journal of Catalysis</i> , 2018, 366, 139-149.	6.2	80
58	In Situ Control of the Adsorption Species in CO <sub>2</sub> Hydrogenation: Determination of Intermediates and Byproducts. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20888-20893.	3.1	55
59	Photocatalytic Hydrogen Generation from a Visible-Light-Responsive Metal-Organic Framework System: Stability versus Activity of Molybdenum Sulfide Cocatalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 30035-30039.	8.0	71
60	Post-Synthesis Amine Borane Functionalization of a Metal-Organic Framework and Its Unusual Chemical Hydrogen Release Phenomenon. <i>Chemistry - A European Journal</i> , 2017, 23, 8823-8828.	3.3	6
61	Membrane electrode assembly fabricated with the combination of Pt/C and hollow shell structured-Pt-SiO <sub>2</sub> @ZrO <sub>2</sub> sphere for self-humidifying proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , 2017, 367, 8-16.	7.8	12
62	Effect of Boron Doping On Graphene Oxide for Ammonia Adsorption. <i>ChemNanoMat</i> , 2017, 3, 794-797.	2.8	16
63	Small-scale demonstration of the conversion of renewable energy to synthetic hydrocarbons. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1748-1758.	4.9	16
64	Characteristics and properties of nano-LiCoO <sub>2</sub> synthesized by pre-organized single source precursors: Li-ion diffusivity, electrochemistry and biological assessment. <i>Journal of Nanobiotechnology</i> , 2017, 15, 58.	9.1	11
65	The Origin of the Catalytic Activity of a Metal Hydride in CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , 2016, 128, 6132-6136.	2.0	15
66	The Origin of the Catalytic Activity of a Metal Hydride in CO <sub>2</sub> Reduction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6028-6032.	13.8	50
67	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 14404-14428.	7.1	94
68	High Influence of Potassium Bromide on Thermal Decomposition of Ammonia Borane <sup>+</sup> . <i>Journal of Physical Chemistry C</i> , 2016, 120, 25276-25288.	3.1	13
69	A novel method for the synthesis of solvent-free Mg(B <sub>3</sub> H <sub>8</sub> ) <sub>2</sub> . <i>Dalton Transactions</i> , 2016, 45, 3687-3690.	3.3	35
70	Complex and liquid hydrides for energy storage. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	81
71	Storing Renewable Energy in the Hydrogen Cycle. <i>Chimia</i> , 2015, 69, 741-745.	0.6	8
72	Supercritical Nitrogen Processing for the Purification of Reactive Porous Materials. <i>Journal of Visualized Experiments</i> , 2015, , e52817.	0.3	3

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73	Composite membranes for alkaline electrolysis based on polysulfone and mineral fillers. Journal of Power Sources, 2015, 291, 163-172.	7.8	50
74	Hydrogen Desorption Kinetics in Metal Intercalated Fullerides. Journal of Physical Chemistry C, 2015, 119, 1714-1719.	3.1	18
75	The catalyzed hydrogen sorption mechanism in alkali alanates. Physical Chemistry Chemical Physics, 2015, 17, 20932-20940.	2.8	13
76	Storage of Renewable Energy by Reduction of CO <sub>2</sub> with Hydrogen. Chimia, 2015, 69, 264.	0.6	29
77	Surface Reactions are Crucial for Energy Storage. Chimia, 2015, 69, 269.	0.6	3
78	Description of the capacity degradation mechanism in LaNi <sub>5</sub> -based alloy electrodes. Journal of Alloys and Compounds, 2015, 621, 225-231.	5.5	23
79	Reactivity enhancement of oxide skins in reversible Ti-doped NaAlH <sub>4</sub> . AIP Advances, 2014, 4, 127130.	1.3	8
80	Effect of composition and particle morphology on the electrochemical properties of LaNi <sub>5</sub> -based alloy electrodes. Journal of Alloys and Compounds, 2014, 607, 32-38.	5.5	10
81	Solvent-free synthesis and stability of MgB <sub>12</sub> H <sub>12</sub> . Journal of Materials Chemistry A, 2014, 2, 7244-7249.	10.3	41
82	The Role of Ti in Alanates and Borohydrides: Catalysis and Metathesis. Journal of Physical Chemistry C, 2014, 118, 77-84.	3.1	19
83	Avoiding chromium transport from stainless steel interconnects into contact layers and oxygen electrodes in intermediate temperature solid oxide electrolysis stacks. Journal of Power Sources, 2014, 270, 587-593.	7.8	19
84	Decoration of graphene with nickel nanoparticles: study of the interaction with hydrogen. Journal of Materials Chemistry A, 2014, 2, 1039-1046.	10.3	67
85	Reversible hydrogen storage in Mg(BH <sub>4</sub> ) <sub>2</sub> /carbon nanocomposites. Journal of Materials Chemistry A, 2013, 1, 11177.	10.3	57
86	Sorption enhanced CO <sub>2</sub> methanation. Physical Chemistry Chemical Physics, 2013, 15, 9620.	2.8	130
87	Hydrogen dynamics in the low temperature phase of LiBH <sub>4</sub> probed by quasielastic neutron scattering. Chemical Physics, 2013, 427, 18-21.	1.9	10
88	Surface properties of V <sub>40</sub> (TiCr) <sub>51</sub> Fe <sub>8</sub> Mn alloy during hydrogenation/dehydrogenation cycles. Journal of Alloys and Compounds, 2013, 580, S156-S158.	5.5	7
89	Thermal properties of Y(BH <sub>4</sub> ) <sub>3</sub> synthesized via two different methods. International Journal of Hydrogen Energy, 2013, 38, 9263-9270.	7.1	17
90	Insight into the decomposition pathway of the complex hydride Al <sub>3</sub> Li <sub>4</sub> (BH <sub>4</sub> ) <sub>13</sub> . International Journal of Hydrogen Energy, 2013, 38, 2790-2795.	7.1	15

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91	Three-dimensional pore structure and ion conductivity of porous ceramic diaphragms. AICHE Journal, 2013, 59, 1446-1457.	3.6	52
92	Hydrogen Dynamics in Nanoconfined Lithiumborohydride. Journal of Physical Chemistry C, 2013, 117, 3789-3798.	3.1	51
93	Surface and bulk reactions in borohydrides and amides. Energy and Environmental Science, 2012, 5, 6823.	30.8	30
94	Reversible hydrogen absorption in sodium intercalated fullerenes. International Journal of Hydrogen Energy, 2012, 37, 14307-14314.	7.1	47
95	Pressure and temperature dependence of the decomposition pathway of LiBH <sub>4</sub> . Physical Chemistry Chemical Physics, 2012, 14, 6514.	2.8	77
96	CO <sub>2</sub> hydrogenation on a metal hydride surface. Physical Chemistry Chemical Physics, 2012, 14, 5518.	2.8	37
97	Interface reactions and stability of a hydride composite (NaBH <sub>4</sub> + MgH <sub>2</sub> ). Physical Chemistry Chemical Physics, 2012, 14, 8360.	2.8	23
98	Recent Progress in Metal Borohydrides for Hydrogen Storage. Energies, 2011, 4, 185-214.	3.1	412
99	A multifaceted approach to hydrogen storage. Physical Chemistry Chemical Physics, 2011, 13, 16955.	2.8	64
100	Stability and Decomposition of NaBH <sub>4</sub> . Journal of Physical Chemistry C, 2010, 114, 7173-7177.	3.1	174
101	Evidence for Hydrogen Transport in Deuterated LiBH <sub>4</sub> from Raman-Scattering Measurements and First-Principles Calculations. Advances in Science and Technology, 2010, 72, 150-157.	0.2	0
102	First-Principles Determination of the Ground-State Structure of $\text{LiBH}_4$ . Physical Review Letters, 2010, 104, 215501. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a>	7.8	45
103	First-principles study of the paths of the decomposition reaction of $\text{LiBH}_4$ . Physical Review B, 2010, 81, . <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a>	3.2	77
104	First-principles study of the paths of the decomposition reaction of LiBH <sub>4</sub> . Molecular Physics, 2010, 108, 1263-1276.	1.7	17
105	Stability of the LiBH <sub>4</sub> /CeH <sub>2</sub> Composite System Determined by Dynamic pCT Measurements. Journal of Physical Chemistry C, 2010, 114, 16801-16805.	3.1	44
106	Hydrogen Dynamics in Lightweight Tetrahydroborates. Zeitschrift Fur Physikalische Chemie, 2010, 224, 263-278.	2.8	15
107	Hydrogen: the future energy carrier. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3329-3342.	3.4	447
108	Surface changes on AlH <sub>3</sub> during the hydrogen desorption. Applied Physics Letters, 2010, 96, .	3.3	58

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109	Effect of the surface oxidation of LiBH <sub>4</sub> on the hydrogen desorption mechanism. Physical Chemistry Chemical Physics, 2010, 12, 10950.	2.8	36
110	Time and Frequency Resolved Hydrogen Dynamics in deuterated LiBH <sub>4</sub> . Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
111	Low-Temperature Synthesis of LiBH <sub>4</sub> by Gas-Solid Reaction. Chemistry - A European Journal, 2009, 15, 5531-5534.	3.3	76
112	Catalytic effect of titanium nitride nanopowder on hydrogen desorption properties of NaAlH <sub>4</sub> and its stability in NaAlH <sub>4</sub> . Journal of Power Sources, 2009, 192, 582-587.	7.8	49
113	First-principles determination of the ground-state structure of Mg(BH <sub>4</sub> ) <sub>2</sub> . Chemical Physics Letters, 2009, 480, 203-209.	2.6	38
114	Ti cations in sodium alanate. Journal of Alloys and Compounds, 2009, 471, L29-L31.	5.5	8
115	First principles study of $\pm$ -boron: can the B12 cage host hetero-atoms?. Molecular Physics, 2009, 107, 1831-1842.	1.7	16
116	EXPERIMENTAL TECHNIQUES TO MEASURE OF THE EQUILIBRIUM PLATEAU PRESSURES OF METAL HYDRIDES. , 2009, , .		0
117	Electrochemical characterisation of air electrodes based on La <sub>0.6</sub> Sr <sub>0.4</sub> CoO <sub>3</sub> and carbon nanotubes. Journal of Power Sources, 2008, 183, 590-594.	7.8	48
118	Titanium and native defects in LiBH <sub>4</sub> and NaAlH <sub>4</sub> . Journal of Physics Condensed Matter, 2008, 20, 465210.	1.8	25
119	Stability and Reversibility of LiBH <sub>4</sub> . Journal of Physical Chemistry B, 2008, 112, 906-910.	2.6	324
120	Complex Hydrides for Hydrogen Storage. Chemical Reviews, 2007, 107, 4111-4132.	47.7	1,963
121	Hydrogen storage and distribution systems. Mitigation and Adaptation Strategies for Global Change, 2007, 12, 343-365.	2.1	37
122	Thermodynamical stability of calcium borohydride Ca(BH <sub>4</sub> ) <sub>2</sub> . Physical Review B, 2006, 74, .	3.2	169
123	Correlation between thermodynamical stabilities of metal borohydrides and cation electronegativities: First-principles calculations and experiments. Physical Review B, 2006, 74, .	3.2	465
124	Experimental studies on intermediate compound of LiBH <sub>4</sub> . Applied Physics Letters, 2006, 89, 021920.	3.3	220
125	Theoretical calculation of the energy of formation of LiBH <sub>4</sub> . Chemical Physics Letters, 2005, 405, 73-78.	2.6	85
126	Composition of Hydrofullerene Mixtures Produced by C <sub>60</sub> Reaction with Hydrogen Gas Revealed by High-Resolution Mass Spectrometry. Journal of Physical Chemistry B, 2005, 109, 12742-12747.	2.6	37



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127	Synthesis of C <sub>59</sub> H <sub>x</sub> and C <sub>58</sub> H <sub>x</sub> Fullerenes Stabilized by Hydrogen. <i>Journal of Physical Chemistry B</i> , 2005, 109, 5403-5405.	2.6	32
128	Hydrogen storage methods. <i>Die Naturwissenschaften</i> , 2004, 91, 157-172.	1.6	803
129	Hydrogen density in nanostructured carbon, metals and complex materials. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 108, 9-18.	3.5	108
130	Materials for hydrogen storage. <i>Materials Today</i> , 2003, 6, 24-33.	14.2	1,530
131	Cobalt-free over-stoichiometric Laves phase alloys for Ni-MH batteries. <i>Journal of Alloys and Compounds</i> , 2003, 350, 319-323.	5.5	10
132	Hydrogen in Nanostructured, Carbon-Related, and Metallic Materials. <i>MRS Bulletin</i> , 2002, 27, 705-711.	3.5	58
133	Nanostructured graphite-hydrogen systems prepared by mechanical milling method. <i>Molecular Crystals and Liquid Crystals</i> , 2002, 386, 173-178.	0.9	5
134	Phase analysis and atom distribution in the Zr(V <sub>0.5</sub> Ni <sub>0.5</sub> ) <sub>3</sub> D <sub>x</sub> (x=0,4,6) alloy system with Laves-type AB <sub>2</sub> structure. <i>Journal of Alloys and Compounds</i> , 2002, 333, 99-102.	5.5	2
135	Hydrogen-storage materials for mobile applications. <i>Nature</i> , 2001, 414, 353-358.	27.8	7,383
136	Hydrogen Interaction with Carbon Nanostructures. <i>Journal of Metastable and Nanocrystalline Materials</i> , 2001, 11, 95-0.	0.1	8
137	Effects of Ti on the cycle life of amorphous MgNi-based alloy prepared by ball milling. <i>Journal of Alloys and Compounds</i> , 2000, 306, 219-226.	5.5	89
138	Electrochemical properties of Zr(V <sub>x</sub> Ni <sub>1-x</sub> ) <sub>3</sub> as electrode material in nickel-metal hydride batteries. <i>International Journal of Hydrogen Energy</i> , 1999, 24, 229-233.	7.1	6
139	Influence of the alloy morphology on the kinetics of AB <sub>5</sub> -type metal hydride electrodes. <i>Journal of Alloys and Compounds</i> , 1999, 285, 292-297.	5.5	15
140	Hydrogen absorption and hydride electrode behaviour of the Laves phase ZrV <sub>1.5</sub> Cr <sub>x</sub> Ni <sub>1.5</sub> . <i>Journal of Alloys and Compounds</i> , 1999, 291, 289-294.	5.5	11
141	Bulk and surface properties of crystalline and amorphous Zr <sub>36</sub> (V <sub>0.33</sub> Ni <sub>0.66</sub> ) <sub>64</sub> alloy as active electrode material. <i>Journal of Alloys and Compounds</i> , 1998, 266, 321-326.	5.5	10
142	Mechanically milled Mg composites for hydrogen storage: the relationship between morphology and kinetics. <i>Journal of Alloys and Compounds</i> , 1998, 269, 259-270.	5.5	95
143	On the possibility of metal hydride formation. <i>Journal of Alloys and Compounds</i> , 1998, 274, 234-238.	5.5	11
144	On the possibility of metal hydride formation. <i>Journal of Alloys and Compounds</i> , 1998, 274, 239-247.	5.5	23

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145	Hydriding properties of the $Zr(Cr_{0.5}Ni_{0.5})_{1\pm}$ ( $1.75\% \leq \pm \leq 3.5$ ) alloy system. Journal of Alloys and Compounds, 1998, 274, 294-298.	5.5	7
146	ZrV <sub>1.5</sub> Ni <sub>1.5</sub> as electrode material in nickel-metal hydride batteries An in situ scanning tunnelling microscopy investigation. Journal of Alloys and Compounds, 1997, 260, 265-270.	5.5	7
147	Mg composites for hydrogen storage The dependence of hydriding properties on composition. Journal of Alloys and Compounds, 1997, 261, 276-280.	5.5	45
148	In situ STM investigation of metal hydride electrodes in alkaline electrolyte during electrochemical cycles. Journal of Alloys and Compounds, 1997, 261, 273-275.	5.5	5
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