

# Volodymyr Yartys

## 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.

212  
papers

6,032  
citations

42  
h-index

69  
g-index

239  
ext. papers

7,125  
ext. citations

5.2  
avg, IF

5.85  
L-index

#	Paper	IF	Citations
212	Lattice dynamics of high-pressure hydrides studied by inelastic neutron scattering. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 164208	5.7	0
211	Neutron vibrational spectroscopic evidence for short H <sub>B</sub> contacts in the RNiInH <sub>1.4</sub> ; 1.6 (R = Ce, La) metal hydride. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 894, 162381	5.7	3
210	Effects of Ti substitution for Zr on the electrochemical characteristics and structure of AB <sub>2</sub> -type Laves-phase alloys as metal hydride anodes. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 889, 161655	5.7	5
209	Recent progress on hydrogen generation from the hydrolysis of light metals and hydrides. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 164831	5.7	5
208	Laves Type Intermetallic Compounds As Hydrogen Storage Materials: A Review. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 165219	5.7	1
207	Metal Hydride // Graphene Composites for Hydrogen Based Energy Storage. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 162881	5.7	1
206	Kinetics and mechanism of MgH <sub>2</sub> hydrolysis in MgCl <sub>2</sub> solutions. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 40278-40278	6.7	1
205	Studies of the effect of melt spinning on the electrochemical properties of the AB <sub>2</sub> Laves phase alloys <b>2021</b> , 5, 24		2
204	200 NL H <sub>2</sub> hydrogen storage tank using MgH <sub>2</sub> //H <sub>2</sub> nanocomposite as H storage material. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 19046-19059	6.7	5
203	Study of hydrogen storage properties of oxygen modified Ti-based AB <sub>2</sub> type metal hydride alloy. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 13658-13663	6.7	6
202	Modelling of metal hydride hydrogen compressors from thermodynamics of hydrogen //Metal interactions viewpoint: Part II. Assessment of the performance of metal hydride compressors. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 2339-2350	6.7	5
201	Modelling of metal hydride hydrogen compressors from thermodynamics of hydrogen //Metal interactions viewpoint: Part I. Assessment of the performance of metal hydride materials. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 2330-2338	6.7	9
200	Metal hydride hydrogen storage and compression systems for energy storage technologies. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 13647-13657	6.7	66
199	Effect of Mg content in the La <sub>3</sub> -xMg <sub>x</sub> Ni <sub>9</sub> battery anode alloys on the structural, hydrogen storage and electrochemical properties. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 856, 157443	5.7	6
198	Effect of Various Additives on the Hydrolysis Performance of Nanostructured MgH <sub>2</sub> Synthesized by High-Energy Ball Milling in Hydrogen. <i>Powder Metallurgy and Metal Ceramics</i> , <b>2021</b> , 59, 483-490	0.8	2
197	HYDRIDE4MOBILITY: An EU HORIZON 2020 project on hydrogen powered fuel cell utility vehicles using metal hydrides in hydrogen storage and refuelling systems. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> ,	6.7	8
196	Control strategy of a fuel-cell power module for electric forklift. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 35938-35938	6.7	2

195	Towards understanding the influence of Mg content on phase transformations in the La <sub>3</sub> -xMgxNi <sub>9</sub> alloys by in-situ neutron powder diffraction study. <i>Progress in Natural Science: Materials International</i> , <b>2021</b> ,	3.6	2
194	Modeling of the hydrogen sorption kinetics in an AB <sub>2</sub> laves type metal hydride alloy. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 893, 162135	5.7	1
193	A multi-function desalination system based on hydrolysis reaction of hydride and fuel cell water recovery. <i>Energy Conversion and Management</i> , <b>2021</b> , 247, 114728	10.6	2
192	Studies of the Hydrolysis of Aluminum Activated by Additions of GaInSn Eutectic Alloy, Bismuth, or Antimony. <i>Materials Science</i> , <b>2020</b> , 55, 536-547	0.7	6
191	Features of the Hydrogenation of Magnesium with a Ni-Graphene Coating. <i>Russian Journal of Physical Chemistry A</i> , <b>2020</b> , 94, 996-1001	0.7	3
190	Metal-hydride hydrogen compressors for laboratory use. <i>JPhys Energy</i> , <b>2020</b> , 2, 034004	4.9	3
189	Hydrides of Laves type TiZr alloys with enhanced H storage capacity as advanced metal hydride battery anodes. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 828, 154354	5.7	18
188	Thermal desorption spectroscopy studies of hydrogen desorption from rare earth metal trihydrides REH <sub>3</sub> (RE=Dy, Ho, Er). <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 842, 155530	5.7	4
187	Materials for hydrogen-based energy storage [past, recent progress and future outlook. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 827, 153548	5.7	264
186	Exploits, advances and challenges benefiting beyond Li-ion battery technologies. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 817, 153261	5.7	79
185	Hydrogen Generation by the Hydrolysis of MgH <sub>2</sub> . <i>Materials Science</i> , <b>2020</b> , 56, 1-14	0.7	9
184	The electrochemical performance of melt-spun C14-Laves type Ti Zr-based alloy. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 1297-1303	6.7	6
183	Effect of oxygen on the mechanism of phase-structural transformations in O-Containing titanium hydride. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 24821-24828	6.7	5
182	Magnesium based materials for hydrogen based energy storage: Past, present and future. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 7809-7859	6.7	264
181	Postsynthetic Modification of a Network Polymer of Intrinsic Microporosity and Its Hydrogen Adsorption Properties. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 6998-7009	3.8	4
180	Study of hydrogen storage and electrochemical properties of AB <sub>2</sub> -type Ti <sub>0.15</sub> Zr <sub>0.85</sub> La <sub>0.03</sub> Ni <sub>1.2</sub> Mn <sub>0.7</sub> V <sub>0.12</sub> Fe <sub>0.12</sub> alloy. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 793, 564-575	5.7	30
179	Hydrogen storage behavior of magnesium catalyzed by nickel-graphene nanocomposites. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 29212-29223	6.7	47
178	Full-cell hydride-based solid-state Li batteries for energy storage. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 7875-7887	6.7	37

177	Nanostructured hydrogen storage materials prepared by high-energy reactive ball milling of magnesium and ferrovandium. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 6687-6701	6.7	26
176	Studies of Zr-based C15 type metal hydride battery anode alloys prepared by rapid solidification. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 804, 527-537	5.7	8
175	The Effect of Thermal Treatment on the Hydrogen-Storage Properties of PIM-1. <i>ChemPhysChem</i> , <b>2019</b> , 20, 1613-1623	3.2	4
174	Electrochemical studies and phase-structural characterization of a high-capacity La-doped AB2 Laves type alloy and its hydride. <i>Journal of Power Sources</i> , <b>2019</b> , 418, 193-201	8.9	23
173	Application of hydrides in hydrogen storage and compression: Achievements, outlook and perspectives. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 7780-7808	6.7	273
172	An outstanding effect of graphite in nano-MgH <sub>2</sub> /TiH <sub>2</sub> on hydrogen storage performance. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 10740-10754	13	58
171	A concept of combined cooling, heating and power system utilising solar power and based on reversible solid oxide fuel cell and metal hydrides. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 18650-18663	6.7	37
170	Synthesis of Mg <sub>2</sub> FeH <sub>6</sub> assisted by heat treatment of starting materials. <i>Materials Today: Proceedings</i> , <b>2018</b> , 5, 10533-10541	1.4	4
169	Modelling of hydrogen thermal desorption spectra. <i>Materials Today: Proceedings</i> , <b>2018</b> , 5, 10440-10449	1.4	6
168	In operando neutron diffraction study of LaNdMgNi <sub>9</sub> H <sub>13</sub> as a metal hydride battery anode. <i>Journal of Power Sources</i> , <b>2017</b> , 343, 502-512	8.9	17
167	MgCo <sub>2</sub> -D <sub>2</sub> and MgCoNi-D <sub>2</sub> systems synthesized at high pressures and interaction mechanism during the HDDR processing. <i>Progress in Natural Science: Materials International</i> , <b>2017</b> , 27, 74-80	3.6	5
166	The use of metal hydrides in fuel cell applications. <i>Progress in Natural Science: Materials International</i> , <b>2017</b> , 27, 3-20	3.6	151
165	Nd <sub>2</sub> Ni <sub>2</sub> MgH <sub>8</sub> hydride: Synthesis, structure and magnetic properties. <i>Intermetallics</i> , <b>2017</b> , 87, 13-20	3.5	4
164	Nanostructured magnesium silicide Mg <sub>2</sub> Si and its electrochemical performance as an anode of a lithium ion battery. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 718, 478-491	5.7	17
163	Effect of nanoparticle (Pd, Pd/Pt, Ni) deposition on high temperature hydrogenation of Ti-V alloys in gaseous flow containing CO. <i>Progress in Natural Science: Materials International</i> , <b>2017</b> , 27, 93-98	3.6	4
162	Comparison of C14- and C15-Predomiated AB <sub>2</sub> Metal Hydride Alloys for Electrochemical Applications. <i>Batteries</i> , <b>2017</b> , 3, 22	5.7	16
161	Cell Performance Comparison between C14- and C15-Predomiated AB <sub>2</sub> Metal Hydride Alloys. <i>Batteries</i> , <b>2017</b> , 3, 29	5.7	9
160	Kinetics of Hydrogen Absorption and Desorption in Titanium. <i>Bulletin of Chemical Reaction Engineering and Catalysis</i> , <b>2017</b> , 12, 312	1.7	4

159	In operando neutron diffraction study of a commercial graphite/(Ni, Mn, Co) oxide-based multi-component lithium ion battery. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 93-103	8.9	18
158	Phase-structural transformations in a metal hydride battery anode La <sub>1.5</sub> Nd <sub>0.5</sub> MgNi <sub>9</sub> alloy and its electrochemical performance. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 9954-9967	6.7	28
157	High temperature hydrogenation of TiV alloys: The effect of cycling and carbon monoxide on the bulk and surface properties. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 1699-1710	6.7	11
156	Review of magnesium hydride-based materials: development and optimisation. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	212
155	Mg-based compounds for hydrogen and energy storage. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	121
154	In situ neutron powder diffraction study of phase-structural transformations in the LaMgNi battery anode alloy. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 670, 210-216	5.7	24
153	Metal hydrides as negative electrode materials for NiMH batteries. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	37
152	Hydrogen sorption and electrochemical properties of intermetallic compounds La <sub>2</sub> MgNi <sub>9</sub> and La <sub>1.9</sub> Mg <sub>1.1</sub> Ni <sub>9</sub> . <i>Russian Chemical Bulletin</i> , <b>2016</b> , 65, 1971-1976	1.7	8
151	Metal hydride hydrogen compression: recent advances and future prospects. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	42
150	New FCC Mg <sub>2</sub> r and Mg <sub>2</sub> r <sub>2</sub> deuterides obtained by reactive milling. <i>Journal of Solid State Chemistry</i> , <b>2015</b> , 226, 237-242	3.3	5
149	Synthesis of hydrides by interaction of intermetallic compounds with ammonia. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S261-S266	5.7	3
148	Structure and chemical bonding in MgNi <sub>2</sub> H <sub>3</sub> from combined high resolution synchrotron and neutron diffraction studies and ab initio electronic structure calculations. <i>Acta Materialia</i> , <b>2015</b> , 98, 416-422	8.4	9
147	Hydrogen-assisted phase transition in a trihydride MgNi <sub>2</sub> H <sub>3</sub> synthesized at high H <sub>2</sub> pressures: Thermodynamics, crystallographic and electronic structures. <i>Acta Materialia</i> , <b>2015</b> , 82, 316-327	8.4	19
146	LaNi <sub>5</sub> -Assisted Hydrogenation of MgNi <sub>2</sub> in the Hybrid Structures of La <sub>1.09</sub> Mg <sub>1.91</sub> Ni <sub>9</sub> D <sub>9.5</sub> and La <sub>0.91</sub> Mg <sub>2.09</sub> Ni <sub>9</sub> D <sub>9.4</sub> . <i>Energies</i> , <b>2015</b> , 8, 3198-3211	3.1	10
145	Structure-properties relationship in RE <sub>3</sub> Mg <sub>x</sub> Ni <sub>9</sub> H <sub>10</sub> (RE = La, Pr, Nd) hydrides for energy storage. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S412-S418	5.7	44
144	Hydrogen diffusion in La <sub>1.5</sub> Nd <sub>0.5</sub> MgNi <sub>9</sub> alloy electrodes of the Ni/MH battery. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S288-S291	5.7	25
143	Comparative analysis of the efficiencies of hydrogen storage systems utilising solid state H storage materials. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S365-S373	5.7	48
142	Metal hydride hydrogen compressors: A review. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 5818-5851	5.5	269

141	The effects of rapid solidification on microstructure and hydrogen sorption properties of binary BCC TiV alloys. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 582, 540-546	5.7	18
140	Mechanistic and Kinetic Study of the Electrochemical Charge and Discharge of La <sub>2</sub> MgNi <sub>9</sub> by in Situ Powder Neutron Diffraction. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 12162-12169	3.8	27
139	Modeling of metal hydride battery anodes at high discharge current densities and constant discharge currents. <i>Electrochimica Acta</i> , <b>2014</b> , 147, 73-81	6.7	11
138	Thermodynamics and crystal chemistry of the RE <sub>2</sub> MgNi <sub>9</sub> H <sub>12-13</sub> (RE = La and Nd) hydrides. <i>Chemistry of Metals and Alloys</i> , <b>2014</b> , 7, 1-8	1	8
137	Non-isothermal kinetics and in situ SR XRD studies of hydrogen desorption from dihydrides of binary TiV alloys. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 14704-14714	6.7	14
136	Effect of magnesium content and quenching rate on the phase structure and composition of rapidly solidified La <sub>2</sub> MgNi <sub>9</sub> metal hydride battery electrode alloy. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 555, 201-208	5.7	46
135	Annealing effect on phase composition and electrochemical properties of the Co-free La <sub>2</sub> MgNi <sub>9</sub> anode for Ni-metal hydride batteries. <i>Electrochimica Acta</i> , <b>2013</b> , 96, 27-33	6.7	82
134	Magnesium-carbon hydrogen storage hybrid materials produced by reactive ball milling in hydrogen. <i>Carbon</i> , <b>2013</b> , 57, 146-160	10.4	94
133	Influence of Cr on the hydrogen storage properties of Ti-rich TiVCr alloys. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 7624-7628	6.7	24
132	Hydrogen in La <sub>2</sub> MgNi <sub>9</sub> D <sub>13</sub> : the role of magnesium. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 4231-8	5.1	50
131	Microstructure and hydrogen storage properties of as-cast and rapidly solidified Ti-rich TiV alloys. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2012</b> , 22, 1831-1838	3.3	8
130	Effect of microstructure on the phase composition and hydrogen absorption-desorption behaviour of melt-spun Mg-20Ni-8Mm alloys. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 1495-1508	6.7	28
129	Nanostructured rapidly solidified LaMg <sub>11</sub> Ni alloy: Microstructure, crystal structure and hydrogenation properties. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3548-3557	6.7	54
128	Selective hydrogen absorption from gaseous mixtures by BCC Ti-V alloys. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 4127-4138	6.7	18
127	Nanostructured rapidly solidified LaMg <sub>11</sub> Ni alloy. II. In situ synchrotron X-ray diffraction studies of hydrogen absorption-desorption behaviours. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 5710-5722	6.7	48
126	Microstructural optimization of LaMg <sub>12</sub> alloy for hydrogen storage. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S633-S639	5.7	45
125	Surface-modified advanced hydrogen storage alloys for hydrogen separation and purification. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S555-S561	5.7	42
124	Hydrogenation and microstructural study of melt-spun Ti <sub>0.8</sub> V <sub>0.2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S775-S778	5.7	14

123	Chemical surface modification for the improvement of the hydrogenation kinetics and poisoning resistance of TiFe. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S770-S774	5-7	46
122	Aluminum hydride as a hydrogen and energy storage material: Past, present and future. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S517-S528	5-7	155
121	Synchrotron diffraction studies and thermodynamics of hydrogen absorption-desorption processes in La <sub>0.5</sub> Ce <sub>0.5</sub> Ni <sub>4</sub> Co. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S844-S848	5-7	9
120	Microstructural evolution and improved hydrogenation-dehydrogenation kinetics of nanostructured melt-spun Mg <sub>90</sub> Ni <sub>10</sub> M alloys. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S640-S645	5-7	29
119	Effect of magnesium on the crystal structure and thermodynamics of the La <sub>3</sub> Mg <sub>x</sub> Ni <sub>9</sub> hydrides. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S540-S548	5-7	88
118	High pressure in situ diffraction studies of metal-hydrogen systems. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S817-S822	5-7	11
117	Microstructural evolution of melt-spun Mg-10Ni-2Mm hydrogen storage alloy. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2011</b> , 21, 121-126	3-3	9
116	Palladium mixed-metal surface-modified AB <sub>5</sub> -type intermetallides enhance hydrogen sorption kinetics. <i>South African Journal of Science</i> , <b>2010</b> , 106,	1-3	4
115	Nanostructured Metal Hydrides for Hydrogen Storage Studied by In Situ Synchrotron and Neutron Diffraction. <i>Materials Research Society Symposia Proceedings</i> , <b>2010</b> , 1262, 1		7
114	Kinetics of hydrogen evolution from MgH <sub>2</sub> : Experimental studies, mechanism and modelling. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 9060-9069	6-7	78
113	LaMg <sub>11</sub> with a giant unit cell synthesized by hydrogen metallurgy: Crystal structure and hydrogenation behavior. <i>Acta Materialia</i> , <b>2010</b> , 58, 2510-2519	8-4	94
112	H <sub>2</sub> reactivity on the surfaces of In and Sn at 298 K. <i>Applied Surface Science</i> , <b>2010</b> , 256, 3321-3324	6-7	
111	Influence of aminosilane surface functionalization of rare earth hydride-forming alloys on palladium treatment by electroless deposition and hydrogen sorption kinetics of composite materials. <i>Materials Chemistry and Physics</i> , <b>2009</b> , 115, 136-141	4-4	26
110	Combustion-type hydrogenation of nanostructured Mg-based composites for hydrogen storage. <i>International Journal of Energy Research</i> , <b>2009</b> , 33, 1114-1125	4-5	20
109	Nanostructured surface coatings for the improvement of AB <sub>5</sub> -type hydrogen storage intermetallics. <i>International Journal of Energy Research</i> , <b>2009</b> , 33, 1171-1179	4-5	29
108	In situ synchrotron X-ray diffraction studies of hydrogen desorption and absorption properties of Mg and Mg <sub>90</sub> Ni <sub>10</sub> after reactive ball milling in hydrogen. <i>Acta Materialia</i> , <b>2009</b> , 57, 3989-4000	8-4	86
107	Modelling and experimental results of heat transfer in a metal hydride store during hydrogen charge and discharge. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 5121-5130	6-7	34
106	Microstructure and novel hydrogen storage properties of melt-spun Mg <sub>90</sub> Ni <sub>10</sub> M alloys. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 477, 262-266	5-7	39

105	Crystal chemistry and metal-hydrogen bonding in anisotropic and interstitial hydrides of intermetallics of rare earth (R) and transition metals (T), RT <sub>3</sub> and R <sub>2</sub> T <sub>7</sub> . <i>Zeitschrift für Kristallographie</i> , <b>2008</b> , 223,		19
104	Microstructure and hydrogenation behavior of ball-milled and melt-spun Mg <sub>70</sub> Ni <sub>20</sub> Mm alloys. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 466, 176-181	5.7	145
103	Mg substitution effect on the hydrogenation behaviour, thermodynamic and structural properties of the La <sub>2</sub> Ni <sub>7</sub> (D) <sub>2</sub> system. <i>Journal of Solid State Chemistry</i> , <b>2008</b> , 181, 812-821	3.3	107
102	SURFACE-MODIFIED AB <sub>5</sub> ALLOYS WITH ENHANCED HYDROGEN ABSORPTION KINETICS. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , <b>2008</b> , 625-636	0.3	
101	Metallographic Investigations And Hydrogenation Peculiarities Of The Alloy Mg-La-Ni. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , <b>2008</b> , 457-460	0.3	
100	Influence of intrinsic hydrogenation/dehydrogenation kinetics on the dynamic behaviour of metal hydrides: A semi-empirical model and its verification. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 1041-1049	6.7	47
99	Crystal chemistry and thermodynamic properties of anisotropic Ce <sub>2</sub> Ni <sub>7</sub> H <sub>4.7</sub> hydride. <i>Journal of Solid State Chemistry</i> , <b>2007</b> , 180, 2566-2576	3.3	32
98	Crystal and magnetic structure of TbNiSnD studied by neutron powder diffraction. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 311, 639-643	2.8	3
97	Problem of hydrogen storage and prospective uses of hydrides for hydrogen accumulation. <i>Russian Journal of General Chemistry</i> , <b>2007</b> , 77, 694-711	0.7	39
96	Synchrotron X-ray diffraction study of ErMn <sub>2</sub> D <sub>2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 437, 140-145	5.7	5
95	Thermal decomposition of AlH <sub>3</sub> studied by in situ synchrotron X-ray diffraction and thermal desorption spectroscopy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 446-447, 280-289	5.7	56
94	Nanostructured Mg <sub>70</sub> Mn <sub>20</sub> Ni hydrogen storage alloy: Structure-properties relationship. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 446-447, 114-120	5.7	73
93	The effect of solidification rate on microstructural evolution of a melt-spun Mg <sub>70</sub> Ni <sub>20</sub> Mm hydrogen storage alloy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 446-447, 178-182	5.7	28
92	Metallography and hydrogenation behaviour of the alloy Mg-72mass%Ni-20mass%La-8mass%. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 446-447, 183-187	5.7	11
91	Hydrogen storage properties and structure of La <sub>1-x</sub> Mg <sub>x</sub> (Ni <sub>1-y</sub> Mn <sub>y</sub> ) <sub>3</sub> intermetallics and their hydrides. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 446-447, 166-172	5.7	74
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