

# Michel J Latroche

## 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.

280  
papers

10,347  
citations

50  
h-index

90  
g-index

293  
ext. papers

11,498  
ext. citations

5.5  
avg, IF

6.07  
L-index

#	Paper	IF	Citations
280	Hydrides compounds for electrochemical applications. <i>Current Opinion in Electrochemistry</i> , <b>2022</b> , 32, 100921	5.7	1
279	Intermetallic alloys as hydrogen getters. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 905, 164173	5.7	1
278	Highlighting the stability control of superlattice structures by fine tuning of subunit volumes. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 907, 164448	5.7	0
277	3D Analysis of Helium-3 Nanobubbles in Palladium Aged under Tritium by Electron Tomography. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 25404-25409	3.8	0
276	LaNi <sub>5</sub> related AB <sub>5</sub> compounds: Structure, properties and applications. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 862, 158163	5.7	19
275	The Vision of France, Germany, and the European Union on Future Hydrogen Energy Research and Innovation. <i>Engineering</i> , <b>2021</b> , 7, 715-718	9.7	3
274	Hydrogen storage properties of Mn and Cu for Fe substitution in TiFe <sub>0.9</sub> intermetallic compound. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 851, 156075	5.7	11
273	Improvement of reversible H storage capacity by fine tuning of the composition in the pseudo-binary systems A <sub>2</sub> -La Ni <sub>7</sub> (A = Gd, Sm, Y, Mg). <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 852, 157008	5.7	6
272	Fundamental hydrogen storage properties of TiFe-alloy with partial substitution of Fe by Ti and Mn. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 874, 159925	5.7	9
271	Investigation by STEM-EELS of helium density in nanobubbles formed in aged palladium tritides. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 878, 160267	5.7	2
270	Investigation of the phase occurrence and H sorption properties in the Y <sub>33.33</sub> Ni <sub>66.67</sub> Al (0 ≤ x ≤ 3.33) system. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 888, 161375	5.7	0
269	Substitutional effects in TiFe for hydrogen storage: a comprehensive review. <i>Materials Advances</i> , <b>2021</b> , 2, 2524-2560	3.3	25
268	Pseudo-ternary LiBH <sub>4</sub> /LiClO <sub>4</sub> /PS system as structurally disordered bulk electrolyte for all-solid-state lithium batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 13872-13879	3.6	12
267	Thermodynamic and corrosion study of Sm <sub>1-x</sub> Mg <sub>x</sub> Ni <sub>y</sub> (y = 3.5 or 3.8) compounds forming reversible hydrides. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 11686-11694	6.7	6
266	Investigation of H Sorption and Corrosion Properties of Sm <sub>2</sub> Mn <sub>x</sub> Ni <sub>7-x</sub> (0 ≤ x ≤ 7) Energies, <b>2020</b> , 13, 3470	3.1	4
265	Role of silicon and carbon on the structural and electrochemical properties of Si-Ni <sub>3.4</sub> Sn <sub>4</sub> -Al-C anodes for Li-ion batteries. <i>Materials Today Communications</i> , <b>2020</b> , 23, 101160	2.5	2
264	Impact of Surface Chemistry of Silicon Nanoparticles on the Structural and Electrochemical Properties of Si/NiSn Composite Anode for Li-Ion Batteries. <i>Nanomaterials</i> , <b>2020</b> , 11,	5.4	1

263	Correlations between stacked structures and weak itinerant magnetic properties of La Y Ni compounds. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 415804	1.8	3
262	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
261	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
260	Metal (boro-) hydrides for high energy density storage and relevant emerging technologies. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 33687-33730	6.7	28
259	NiSn intermetallics as an efficient buffering matrix of Si anodes in Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 18132-18142	13	11
258	Solid-State Li-Ion Batteries Operating at Room Temperature Using New Borohydride Argyrodite Electrolytes. <i>Materials</i> , <b>2020</b> , 13,	3.5	8
257	Experimental and Theoretical Investigations on the Influence of A on the Hydrogen Sorption Properties of ANiy Compounds, A = {Y, Sm, Gd}. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 23334-23341	3.8	4
256	Hydrides of early transition metals as catalysts and grain growth inhibitors for enhanced reversible hydrogen storage in nanostructured magnesium. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 23064-23075 <sup>13</sup>	13	24
255	Mechanochemistry of Metal Hydrides: Recent Advances. <i>Materials</i> , <b>2019</b> , 12,	3.5	41
254	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
253	Improvement of the ionic conductivity on new substituted borohydride argyrodites. <i>Solid State Ionics</i> , <b>2019</b> , 339, 114987	3.3	10
252	An International Laboratory Comparison Study of Volumetric and Gravimetric Hydrogen Adsorption Measurements. <i>ChemPhysChem</i> , <b>2019</b> , 20, 1997-2009	3.2	17
251	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
250	Anisotropic Nanoporous Nickel Obtained through the Chemical Dealloying of Y2Ni7 for the Comprehension of Anode Surface Chemistry of Ni-MH Batteries. <i>ChemElectroChem</i> , <b>2019</b> , 6, 5022-5031	4.3	3
249	Electrochemical properties of MgH2 [TiH2 nanocomposite as active materials for all-solid-state lithium batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 397, 143-149	8.9	8
248	Relationship between H2 sorption, electrochemical cycling and aqueous corrosion properties in A5Ni19 hydride-forming alloys (A = Gd, Sm). <i>Journal of Power Sources</i> , <b>2018</b> , 397, 280-287	8.9	12
247	Crystal structures of the A5B19 phase intermetallic compounds <b>2018</b> , 160-165		
246	Thermodynamic properties of A5B19 compounds <b>2018</b> , 170-175		

245	Introduction to metal hydrides of A5B19 compounds <b>2018</b> , 159-159		
244	Thermodynamic properties of AB3 compounds <b>2018</b> , 151-157		
243	Crystal structures of the AB3 phase hydrides <b>2018</b> , 141-150		
242	Crystal structures of the AB3 intermetallic compounds <b>2018</b> , 135-140		
241	Crystal structures of the A5B19 phase hydrides <b>2018</b> , 166-169		
240	Electrocatalytic Reduction of Nitrate and Nitrite at CuRh Nanoparticles/C Composite Electrodes. <i>Electrocatalysis</i> , <b>2018</b> , 9, 343-351	2.7	8
239	Thin films as model system for understanding the electrochemical reaction mechanisms in conversion reaction of MgH <sub>2</sub> with lithium. <i>Journal of Power Sources</i> , <b>2018</b> , 402, 99-106	8.9	5
238	Milling effect on the microstructural and hydrogenation properties of TiFe <sub>0.9</sub> Mn <sub>0.1</sub> alloy. <i>Powder Technology</i> , <b>2018</b> , 339, 903-910	5.2	15
237	Optimization of TiH <sub>2</sub> content for fast and efficient hydrogen cycling of MgH <sub>2</sub> -TiH <sub>2</sub> nanocomposites. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 16774-16781	6.7	29
236	Influence of nanosizing on hydrogen electrosorption properties of rhodium based nanoparticles/carbon composites. <i>Electrochimica Acta</i> , <b>2017</b> , 228, 528-536	6.7	9
235	Study of the ternary system AlRE (RE = Er, La and Y) in liquid state. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22348-22352	6.7	
234	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
233	An all-solid-state metal hydride Sulfur lithium-ion battery. <i>Journal of Power Sources</i> , <b>2017</b> , 357, 56-60	8.9	38
232	Enhanced reversibility of the electrochemical Li conversion reaction with MgH <sub>2</sub> /TiH <sub>2</sub> nanocomposites. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22615-22621	6.7	16
231	Asymmetric Reaction Paths and Hydrogen Sorption Mechanism in Mechanochemically Synthesized Potassium Alanate (KAlH <sub>4</sub> ). <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 21299-21308	3.8	6
230	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
229	Electrochemical characterization of mechanically alloyed LaCaMgNi <sub>9</sub> compound. <i>Materials for Renewable and Sustainable Energy</i> , <b>2016</b> , 5, 1	4.7	6
228	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

227	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
226	Metal hydrides used as negative electrode materials for Li-ion batteries. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	40
225	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
224	One-pot synthesis of tailored PdCo nanoalloy particles confined in mesoporous carbon. <i>Microporous and Mesoporous Materials</i> , <b>2016</b> , 223, 79-88	5.3	14
223	Relationship between H <sub>2</sub> sorption properties and aqueous corrosion mechanisms in A <sub>2</sub> Ni <sub>7</sub> hydride forming alloys (A' = Y, Gd or Sm). <i>Journal of Power Sources</i> , <b>2016</b> , 326, 146-155	8.9	15
222	Mechanochemical synthesis in the Li-Mg-N-D system under deuterium gas: a neutron diffraction study. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 23944-53	3.6	3
221	Structural and hydrogen storage properties of LaCaMgNi <sub>9</sub> -type alloy obtained by mechanical alloying. <i>Materials for Renewable and Sustainable Energy</i> , <b>2015</b> , 4, 1	4.7	4
220	Ultrasmall MgH <sub>2</sub> Nanoparticles Embedded in an Ordered Microporous Carbon Exhibiting Rapid Hydrogen Sorption Kinetics. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 18091-18098	3.8	61
219	Optimization of the La substitution by Mg in the La <sub>2</sub> Ni <sub>7</sub> hydride-forming system for use as negative electrode in Ni-MH battery. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 17017-17020	6.7	15
218	First Evidence of Rh Nano-Hydride Formation at Low Pressure. <i>Nano Letters</i> , <b>2015</b> , 15, 4752-7	11.5	24
217	Hydrogen Storage in Pristine and d10-Block Metal-Anchored Activated Carbon Made from Local Wastes. <i>Energies</i> , <b>2015</b> , 8, 3578-3590	3.1	12
216	Structural and Hydrogen Storage Properties of Y <sub>2</sub> Ni <sub>7</sub> Deuterides Studied by Neutron Powder Diffraction. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 12218-12225	3.8	22
215	Hydrogen Storage Properties of Nanoconfined LiBH <sub>4</sub> /Mg <sub>2</sub> NiH <sub>4</sub> Reactive Hydride Composites. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 5819-5826	3.8	36
214	First principles calculations of (La,Mg) <sub>2</sub> Ni <sub>7</sub> hydrides. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S5-S8	5.7	13
213	Synthesis of destabilized nanostructured lithium hydride via hydrogenation of lithium electrochemically inserted into graphite. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 13936-13941	6.7	4
212	Mechanochemistry of lithium nitride under hydrogen gas. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 21927-34	3.6	12
211	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	8.1	9
210	Hydrogen sorption properties of Pd-Co nanoalloys embedded into mesoporous carbons. <i>Nanoscale</i> , <b>2015</b> , 7, 15469-76	7.7	17

209	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
208	Mechanochemistry and hydrogen storage properties of 2Li <sub>3</sub> N+Mg mixture. <i>Rare Metals</i> , <b>2015</b> , 1	5.5	3
207	Electrochemical Properties and Dissolution Mechanism of A <sub>2</sub> Ni <sub>7</sub> Hydrides (A=Y, Gd, LaSm). <i>ChemElectroChem</i> , <b>2015</b> , 2, 1321-1330	4.3	7
206	Hydrogen-sorption properties of Nb <sub>4</sub> M <sub>0.9</sub> Si <sub>1.1</sub> (M=Co,Ni) hydrides. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 2692-2697	6.7	1
205	Li-Driven Electrochemical Conversion Reaction of AlH <sub>3</sub> , LiAlH <sub>4</sub> , and NaAlH <sub>4</sub> . <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 4666-4674	3.8	40
204	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
203	Nanoalloying bulk-immiscible iridium and palladium inhibits hydride formation and promotes catalytic performances. <i>Nanoscale</i> , <b>2014</b> , 6, 9955-9	7.7	34
202	Nanoconfinement of Mg <sub>6</sub> Pd particles in porous carbon: size effects on structural and hydrogenation properties. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 18444-18453	13	11
201	Structure and Deuterium Desorption from Ca <sub>3</sub> Mg <sub>2</sub> Ni <sub>13</sub> Deuteride: A Neutron Diffraction Study. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 4626-4633	3.8	14
200	Phase Stabilities in the MgBi <sub>2</sub> System Tuned by Mechanochemistry. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 21889-21895	3.8	9
199	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
198	Bottom-up preparation of MgH <sub>2</sub> nanoparticles with enhanced cycle life stability during electrochemical conversion in Li-ion batteries. <i>Nanoscale</i> , <b>2014</b> , 6, 14459-66	7.7	62
197	Ti(Ni,Cu) pseudobinary compounds as efficient negative electrodes for NiMH batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 265, 182-191	8.9	18
196	Controlled synthesis of NiCo nanoalloys embedded in ordered porous carbon by a novel soft-template strategy. <i>Carbon</i> , <b>2014</b> , 67, 260-272	10.4	39
195	X-ray Absorption Spectroscopy and X-ray Diffraction Studies of the Thermal and Li-Driven Electrochemical Dehydrogenation of Nanocrystalline Complex Hydrides Mg <sub>2</sub> MH <sub>x</sub> (M = Co, Ni). <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 29554-29567	3.8	10
194	Investigation of the Phase Occurrence, H Sorption Properties, and Electrochemical Behavior in the Composition Ranges La <sub>0.75</sub> Co <sub>0.80</sub> Mg <sub>0.30</sub> Ni <sub>3.67</sub> . <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 27808-27814	3.8	7
193	Identification of a new pseudo-binary hydroxide during calendar corrosion of (La, Mg) <sub>2</sub> Ni <sub>7</sub> -type hydrogen storage alloys for Nickel Metal Hydride batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 266, 162-169	8.9	31
192	Supercritical fluid chemical deposition of Pd nanoparticles on magnesium-cadmium alloy for hydrogen storage. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 574, 6-12	5.7	11

191	Structural Properties and Reversible Deuterium Loading of MgD <sub>2</sub> /TiD <sub>2</sub> Nanocomposites. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 18851-18862	3.8	39
190	Reactivity of complex hydrides Mg <sub>2</sub> FeH <sub>6</sub> , Mg <sub>2</sub> CoH <sub>5</sub> and Mg <sub>2</sub> NiH <sub>4</sub> with lithium ion: Far from equilibrium electrochemically driven conversion reactions. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 4798-4808	6.7	52
189	Role of nanoconfinement on hydrogen sorption properties of metal nanoparticles hybrids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2013</b> , 439, 117-130	5.1	72
188	XAS investigations on nanocrystalline Mg <sub>2</sub> FeH <sub>6</sub> used as a negative electrode of Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4706	13	35
187	Identification of the atomic scale structure of the La <sub>0.65</sub> Nd <sub>0.15</sub> Mg <sub>0.20</sub> Ni <sub>3.5</sub> alloy synthesized by spark plasma sintering. <i>Intermetallics</i> , <b>2013</b> , 32, 103-108	3.5	19
186	Hydrogen storage in hybrid nanostructured carbon/palladium materials: Influence of particle size and surface chemistry. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 952-965	6.7	83
185	Synthesis and structural characterization of mechanically alloyed 'AB <sub>3</sub> -type' based material: LaZr <sub>2</sub> Mn <sub>4</sub> Ni <sub>5</sub> . <i>Intermetallics</i> , <b>2013</b> , 41, 76-81	3.5	12
184	Direct assessment from cyclic voltammetry of size effect on the hydrogen sorption properties of Pd nanoparticle/carbon hybrids. <i>Journal of Electroanalytical Chemistry</i> , <b>2013</b> , 706, 33-39	4.1	23
183	Tunable synthesis of (MgNi)-based hydrides nanoconfined in templated carbon studied by in situ synchrotron diffraction. <i>Nano Energy</i> , <b>2013</b> , 2, 12-20	17.1	57
182	Reactivity assessment of lithium with the different components of novel Si/Ni <sub>3.4</sub> Sn <sub>4</sub> /Al/C composite anode for Li-ion batteries. <i>Journal of Power Sources</i> , <b>2013</b> , 238, 210-217	8.9	7
181	Nanostructured Ni <sub>3.5</sub> Sn <sub>4</sub> intermetallic compound: An efficient buffering material for Si-containing composite anodes in lithium ion batteries. <i>Electrochimica Acta</i> , <b>2013</b> , 89, 365-371	6.7	16
180	A Round Robin Test exercise on hydrogen absorption/desorption properties of a magnesium hydride based material. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 6704-6717	6.7	38
179	Mechanochemical synthesis of hydrogen storage materials. <i>Progress in Materials Science</i> , <b>2013</b> , 58, 30-75	4.2	294
178	Photochemically-Driven Methods for the In Situ and Site-Specific Fabrication of Monolithic-Based Electrochromatographic Microsystems. <i>Key Engineering Materials</i> , <b>2013</b> , 543, 227-230	0.4	
177	Reactivity of TiH <sub>2</sub> hydride with lithium ion: Evidence for a new conversion mechanism. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 7831-7835	6.7	58
176	Structure and hydrogen storage properties of the hexagonal Laves phase Sc(Al <sub>1-x</sub> Ni <sub>x</sub> ) <sub>2</sub> . <i>Journal of Solid State Chemistry</i> , <b>2012</b> , 196, 132-137	3.3	5
175	Synthesis, structural and hydrogenation properties of Mg-rich MgH <sub>2</sub> -TiH <sub>2</sub> nanocomposites prepared by reactive ball milling under hydrogen gas. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 1200-11	3.6	105
174	Hydrogen sorption properties of Pd nanoparticles dispersed on graphitic carbon studied with a cavity microelectrode. <i>Electrochimica Acta</i> , <b>2012</b> , 83, 133-139	6.7	13

173	Activated carbons doped with Pd nanoparticles for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 5072-5080	6.7	62
172	Structural and chemical analyses of the new ternary La <sub>5</sub> MgNi <sub>24</sub> phase synthesized by Spark Plasma Sintering and used as negative electrode material for Ni-MH batteries. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 5225-5233	6.7	43
171	Effect of NH <sub>2</sub> and CF <sub>3</sub> functionalization on the hydrogen sorption properties of MOFs. <i>Dalton Transactions</i> , <b>2011</b> , 40, 4879-81	4.3	218
170	Highlighting of a Single Reaction Path during Reactive Ball Milling of Mg and TM by Quantitative H <sub>2</sub> Gas Sorption Analysis To Form Ternary Complex Hydrides (TM = Fe, Co, Ni). <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 4971-4979	3.8	71
169	Hydrogenation properties of FeTiV bcc alloys. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 372-379	5.7	26
168	Li <sub>3</sub> MxN (M = Co, Ni) synthesized by Spark Plasma Sintering for hydrogen storage. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S732-S735	5.7	4
167	Elaboration and characterization of unreported (Pr,Nd) <sub>5</sub> Ni <sub>19</sub> hydrides. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S823-S826	5.7	19
166	Hydrogen trapping properties of Zr-based intermetallic compounds in the presence of CO contaminant gas. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S801-S803	5.7	12
165	Influence of the C14 Ti <sub>35.4</sub> V <sub>32.3</sub> Fe <sub>32.3</sub> Laves phase on the hydrogenation properties of the body-centered cubic compound Ti <sub>24.5</sub> V <sub>59.3</sub> Fe <sub>16.2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 3013-3018	5.7	13
164	Influence of the addition of vanadium on the hydrogenation properties of the compounds TiFe <sub>0.9</sub> V <sub>x</sub> and TiFe <sub>0.8</sub> Mn <sub>0.1</sub> V <sub>x</sub> (x=0, 0.05 and 0.1). <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 5562-5566	5.7	36
163	Optimization of activated carbons for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 11746-11751	6.7	62
162	Nanostructured Si/SnNi/C composite as negative electrode for Li-ion batteries. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 4762-4768	8.9	43
161	Understanding the mechanism of hydrogen uptake at low pressure in carbon/palladium nanostructured composites. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 17765		46
160	Synthesis of small metallic Mg-based nanoparticles confined in porous carbon materials for hydrogen sorption. <i>Faraday Discussions</i> , <b>2011</b> , 151, 117-31; discussion 199-212	3.6	47
159	YMn <sub>2</sub> H <sub>x</sub> and RMn <sub>(2-y)</sub> Fe <sub>(y)</sub> H <sub>6</sub> (R = Y, Er) studied by Raman, infrared and inelastic neutron scattering spectroscopies. <i>Faraday Discussions</i> , <b>2011</b> , 151, 307-14; discussion 385-97	3.6	7
158	Elaboration and Characterization of New Pseudo-Binary Hydride-Forming Phases Pr <sub>1.5</sub> Mg <sub>0.5</sub> Ni <sub>7</sub> and Pr <sub>3.75</sub> Mg <sub>1.25</sub> Ni <sub>19</sub> : A Comparison to the Binary Pr <sub>2</sub> Ni <sub>7</sub> and Pr <sub>5</sub> Ni <sub>19</sub> Ones. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 19437-19444	3.8	24
157	Structural Stability of AB <sub>y</sub> Phases in the (La,Mg) <sub>5</sub> Ni System Obtained by Density Functional Theory Calculations. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 25470-25478	3.8	61
156	Activated carbons with appropriate micropore size distribution for hydrogen adsorption. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 5431-5434	6.7	51



155	Carboxymethylcellulose and carboxymethylcellulose-formate as binders in MgH <sub>2</sub> /carbon composites negative electrode for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 2854-2857	8.9	68
154	Fully reversible hydrogen absorption and desorption reactions with Sc(Al <sub>1-x</sub> Mg <sub>x</sub> ), x=0.0, 0.15, 0.20. <i>Journal of Solid State Chemistry</i> , <b>2011</b> , 184, 104-108	3.3	6
153	Hydrogenation, structure and magnetic properties of La(Fe <sub>0.91</sub> Si <sub>0.09</sub> ) <sub>13</sub> hydrides and deuterides. <i>Chinese Physics B</i> , <b>2011</b> , 20, 067502	1.2	8
152	Density functional study of Li <sub>4</sub> NH and Li <sub>1.5</sub> NH <sub>1.5</sub> as intermediary compounds during hydrogenation of Li <sub>3</sub> N. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	15
151	Nanostructures of Mg <sub>0.65</sub> Ti <sub>0.35</sub> D <sub>x</sub> studied with x-ray diffraction, neutron diffraction, and magic-angle-spinning H <sub>2</sub> NMR spectroscopy. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	26
150	Phase equilibria in the Fe <sup>III</sup> /IV system. <i>International Journal of Materials Research</i> , <b>2010</b> , 101, 1414-1423	0.5	7
149	Pd nanoparticles embedded into a metal-organic framework: synthesis, structural characteristics, and hydrogen sorption properties. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 2991-7	16.4	290
148	Size-dependent hydrogen sorption in ultrasmall Pd clusters embedded in a mesoporous carbon template. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 7720-9	16.4	83
147	Influence of [Mo <sub>6</sub> Br <sub>8</sub> F <sub>6</sub> ] <sub>2</sub> - cluster unit inclusion within the mesoporous solid MIL-101 on hydrogen storage performance. <i>Langmuir</i> , <b>2010</b> , 26, 11283-90	4	56
146	Hydrogen spillover measurements of unbridged and bridged metal-organic frameworks--revisited. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 10457-9	3.6	51
145	Experimental evidence of an upper limit for hydrogen storage at 77 K on activated carbons. <i>Carbon</i> , <b>2010</b> , 48, 1902-1911	10.4	68
144	In situ synthesis and hydrogen storage properties of PdNi alloy nanoparticles in an ordered mesoporous carbon template. <i>Microporous and Mesoporous Materials</i> , <b>2009</b> , 117, 511-514	5.3	38
143	Effects of Si addition on the microstructure and the hydrogen storage properties of Ti <sub>26.5</sub> V <sub>45</sub> Fe <sub>8.5</sub> Cr <sub>20</sub> Ce <sub>0.5</sub> BCC solid solution alloys. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 9385-9392	6.7	15
142	Nuclear magnetic resonance study of hydrogen mobility in LaY <sub>2</sub> Ni <sub>9</sub> H <sub>x</sub> and CeY <sub>2</sub> Ni <sub>9</sub> H <sub>x</sub> . <i>Journal of Solid State Chemistry</i> , <b>2009</b> , 182, 586-591	3.3	1
141	Crystal structure and hydrogenation properties of pseudo-binary Mg <sub>6</sub> Pd <sub>0.5</sub> Ni <sub>0.5</sub> complex metallic alloy. <i>Journal of Solid State Chemistry</i> , <b>2009</b> , 182, 2890-2896	3.3	14
140	Elaboration and characterization of magnesium-substituted La <sub>5</sub> Ni <sub>19</sub> hydride forming alloys as active materials for negative electrode in Ni-MH battery. <i>Electrochimica Acta</i> , <b>2009</b> , 54, 1710-1714	6.7	88
139	X-ray Diffraction and NMR Studies of Na <sub>3-x</sub> Li <sub>n</sub> AlH <sub>6</sub> (n = 0, 1, 2) Alanates Synthesized by High-Pressure Reactive Ball Milling. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 21242-21252	3.8	20
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136	Occurrence of Uncommon Infinite Chains Consisting of Edge-Sharing Octahedra in a Porous Metal Organic Framework-Type Aluminum Pyromellitate Al <sub>4</sub> (OH) <sub>8</sub> [C <sub>10</sub> O <sub>8</sub> H <sub>2</sub> ] (MIL-120): Synthesis, Structure, and Gas Sorption Properties. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 5783-5791	9.6	90
135	Structural and Magnetic Properties of Pd <sub>x</sub> Ni <sub>1-x</sub> (x = 0 and 0.54) Metallic Nanoparticles in an Ordered Mesoporous Carbon Template. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 16921-16926	3.8	6
134	The KagomTopology of the gallium and indium metal-organic framework types with a MIL-68 structure: synthesis, XRD, solid-state NMR characterizations, and hydrogen adsorption. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 11892-901	5.1	220
133	Hydriding and electrochemical properties of amorphous rich Mg <sub>x</sub> Ni <sub>100-x</sub> nanomaterial obtained by mechanical alloying starting from Mg <sub>2</sub> Ni and MgNi <sub>2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 460, 432-439	5.7	21
132	The use of aluminium and others p elements (gallium, indium) for the generation of MOF-type materials. <i>Studies in Surface Science and Catalysis</i> , <b>2008</b> , 447-450	1.8	3
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130	Thermodynamic Properties of Trialkali (Li, Na, K) Hexa-alanates: A Combined DFT and Experimental Study. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 18598-18607	3.8	15
129	In situ neutron diffraction study on Pd-doped Mg <sub>0.65</sub> Sc <sub>0.35</sub> electrode material. <i>Journal of Solid State Chemistry</i> , <b>2008</b> , 181, 1141-1148	3.3	15
128	Hydrogen storage properties of Pd nanoparticle/carbon template composites. <i>Carbon</i> , <b>2008</b> , 46, 206-214	10.4	116
127	Relevance of hydrogen storage properties of ANi <sub>3</sub> intermetallics (A = La, Ce, Y) to the ANi <sub>2</sub> subunits in their crystal structures. <i>Acta Materialia</i> , <b>2008</b> , 56, 5388-5394	8.4	33
126	Simulation and experimental validation of a hydrogen storage tank with metal hydrides. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 98-104	6.7	77
125	Structural transitions induced by hydrogen absorption in metallic hydrides. <i>Zeitschrift für Kristallographie</i> , <b>2008</b> , 223,		5
124	Development and simulation of a hydrogen storage unit using metal hydrides. <i>Mecanique Et Industries</i> , <b>2007</b> , 8, 241-246		
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118	Lead Halide Layers Linked by trans-Cu(Gly) <sub>2</sub> (Gly = D <sub>2</sub> CCH <sub>2</sub> NH <sub>2</sub> ) Pillars in Heterometallic Glycinate Based Organic-Inorganic Hybrids. <i>European Journal of Inorganic Chemistry</i> , <b>2006</b> , 2006, 4225-4228	2.3	11
117	Hydrogen Storage in the Giant-Pore Metal-Organic Frameworks MIL-100 and MIL-101. <i>Angewandte Chemie</i> , <b>2006</b> , 118, 8407-8411	3.6	113
116	Synthesis of MIL-102, a chromium carboxylate metal-organic framework, with gas sorption analysis. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 14889-96	16.4	213
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52	Powder diffraction line broadening in hydrogen activated LaNi <sub>3.55</sub> Mn <sub>0.4</sub> Al <sub>0.3</sub> Co <sub>0.75</sub> and its hydride studied by synchrotron radiation. <i>Journal of Alloys and Compounds</i> , <b>1998</b> , 265, 311-314	5.7	8
51	Investigation of the crystallographic structures of LaNi <sub>4</sub> CoD <sub>4.4</sub> and LaNi <sub>3.55</sub> Mn <sub>0.4</sub> Al <sub>0.3</sub> Co <sub>0.75</sub> D <sub>x</sub> (x=2.0 and 4.6 D/f.u.) by neutron powder diffraction. <i>Journal of Alloys and Compounds</i> , <b>1998</b> , 265, 209-214	5.7	19
50	Thermodynamic and structural comparison between two potential metal-hydride battery materials LaNi <sub>3.55</sub> Mn <sub>0.4</sub> Al <sub>0.3</sub> Co <sub>0.75</sub> and CeNi <sub>3.55</sub> Mn <sub>0.4</sub> Al <sub>0.3</sub> Co <sub>0.75</sub> . <i>Journal of Alloys and Compounds</i> , <b>1998</b> , 275-277, 118-122	5.7	20
49	Temperature dependence study of YMn <sub>2</sub> D <sub>4.5</sub> by means of neutron powder diffraction. <i>Journal of Alloys and Compounds</i> , <b>1998</b> , 274, 59-64	5.7	27
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47	Improvement of the thermodynamical and electrochemical properties of multicomponent Laves phase hydrides by thermal annealing. <i>Journal of Alloys and Compounds</i> , <b>1998</b> , 280, 284-289	5-7	17
46	Refinement of the crystal structure of zirconium nickel, Zr <sub>8</sub> Ni <sub>21</sub> . <i>Zeitschrift Fur Kristallographie - New Crystal Structures</i> , <b>1998</b> , 213, 227-228	0.2	5
45	Optical study of a new phase LaGa <sub>3</sub> O <sub>6</sub> :RE <sup>3+</sup> (RE=Pr, Nd, Eu) in the La <sub>2</sub> O <sub>3</sub> -Ga <sub>2</sub> O <sub>3</sub> system. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 250, 342-346	5-7	6
44	Effects of lanthanum or cerium on the equilibrium of ZrNi <sub>1.2</sub> Mn <sub>0.6</sub> V <sub>0.2</sub> Cr <sub>0.1</sub> and its related hydrogenation properties. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 248, 215-219	5-7	27
43	In situ neutron diffraction study of solid gas desorption of non-stoichiometric AB <sub>5</sub> type hydrides. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 253-254, 295-297	5-7	11
42	Structural and magnetic study of new YFe <sub>2</sub> D <sub>x</sub> compounds (0. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 253-254, 272-274	5-7	16
41	Multiplateau isotherms related to a multiphase behaviour in the YFe <sub>2</sub> -D <sub>2</sub> system. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 255, 195-202	5-7	23
40	Electrochemical performances of ZrM <sub>2</sub> (M=V, Cr, Mn, Ni) Laves phases and the relation to microstructures and thermodynamical properties. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 253-254, 564-569	5-7	32
39	Activation behaviour of mechanically Ni-coated Zr-based laves phase hydride electrode. <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 257, 302-305	5-7	23
38	Local structural and magnetic properties of YFe <sub>2</sub> D <sub>x</sub> compounds (0 <i>Journal of Alloys and Compounds</i> , <b>1997</b> , 262-263, 45-48	5-7	7
37	Muon study of Gd <sub>2</sub> In, Sm <sub>2</sub> In and Ho <sub>2</sub> In. <i>Physica B: Condensed Matter</i> , <b>1997</b> , 234-236, 647-649	2.8	3
36	Neutron diffraction study of YMn <sub>2</sub> D <sub>1</sub> . <i>Physica B: Condensed Matter</i> , <b>1997</b> , 234-236, 599-601	2.8	9
35	Zirconium Nickel, Zr <sub>7</sub> Ni <sub>10</sub> : Space Group Revision for the Stoichiometric Phase. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , <b>1997</b> , 53, 1536-1538		28
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33	Muon spin relaxation in deuterides. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, 4603-4615	1.8	4
32	Temperature- and pressure-induced structural transitions in rare-earth-deficient (R = Y, Sm, Gd, Tb) Laves phases. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, 8351-8361	1.8	47
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27	Deuteride absorption and desorption effects on magnetic properties of YFe <sub>2</sub> D <sub>x</sub> . <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 4253	2-5	19
26	The Zr-Ni-Cr system at 1000 °C in the ZrCr <sub>2</sub> -ZrNi-Ni-Cr region. <i>Journal of Phase Equilibria and Diffusion</i> , <b>1995</b> , 16, 485-492		12
25	Structural study of YMn <sub>2</sub> hydrides. <i>Journal of Alloys and Compounds</i> , <b>1995</b> , 225, 436-439	5-7	24
24	Intrinsic behaviour analysis of substituted LaNi <sub>5</sub> -type electrodes by means of in-situ neutron diffraction. <i>Journal of Alloys and Compounds</i> , <b>1995</b> , 231, 537-545	5-7	40
23	Electrochemical pressure-composition isotherms for amorphous Ni <sub>1-x</sub> Zr <sub>x</sub> alloys. <i>Journal of Alloys and Compounds</i> , <b>1995</b> , 231, 321-324	5-7	7
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