

Fermin Cuevas

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6728812/fermin-cuevas-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

152
papers

4,492
citations

35
h-index

62
g-index

158
ext. papers

5,213
ext. citations

6
avg, IF

5.51
L-index

#	Paper	IF	Citations
152	Mechanochemical synthesis of hydrogen storage materials. <i>Progress in Materials Science</i> , 2013 , 58, 30-75	4.2	294
151	Pd nanoparticles embedded into a metal-organic framework: synthesis, structural characteristics, and hydrogen sorption properties. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2991-7	16.4	290
150	Magnesium based materials for hydrogen based energy storage: Past, present and future. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 7809-7859	6.7	264
149	Materials for hydrogen-based energy storage [past, recent progress and future outlook. <i>Journal of Alloys and Compounds</i> , 2020 , 827, 153548	5.7	264
148	Effect of NH ₂ and CF ₃ functionalization on the hydrogen sorption properties of MOFs. <i>Dalton Transactions</i> , 2011 , 40, 4879-81	4.3	218
147	Intermetallic compounds as negative electrodes of Ni/MH batteries. <i>Applied Physics A: Materials Science and Processing</i> , 2001 , 72, 225-238	2.6	150
146	Hydrogen storage properties of Pd nanoparticle/carbon template composites. <i>Carbon</i> , 2008 , 46, 206-214	10.4	116
145	Synthesis, structural and hydrogenation properties of Mg-rich MgH ₂ -TiH ₂ nanocomposites prepared by reactive ball milling under hydrogen gas. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1200-11	3.6	105
144	Occurrence of Uncommon Infinite Chains Consisting of Edge-Sharing Octahedra in a Porous Metal Organic Framework-Type Aluminum Pyromellitate Al ₄ (OH) ₈ [C ₁₀ O ₈ H ₂] (MIL-120): Synthesis, Structure, and Gas Sorption Properties. <i>Chemistry of Materials</i> , 2009 , 21, 5783-5791	9.6	90
143	Elaboration and characterization of magnesium-substituted La ₅ Ni ₁₉ hydride forming alloys as active materials for negative electrode in Ni-MH battery. <i>Electrochimica Acta</i> , 2009 , 54, 1710-1714	6.7	88
142	Hydrogen storage in hybrid nanostructured carbon/palladium materials: Influence of particle size and surface chemistry. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 952-965	6.7	83
141	Size-dependent hydrogen sorption in ultrasmall Pd clusters embedded in a mesoporous carbon template. <i>Journal of the American Chemical Society</i> , 2010 , 132, 7720-9	16.4	83
140	Exploits, advances and challenges benefiting beyond Li-ion battery technologies. <i>Journal of Alloys and Compounds</i> , 2020 , 817, 153261	5.7	79
139	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	6.7	74
138	Highlighting of a Single Reaction Path during Reactive Ball Milling of Mg and TM by Quantitative H ₂ Gas Sorption Analysis To Form Ternary Complex Hydrides (TM = Fe, Co, Ni). <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4971-4979	3.8	71
137	Carboxymethylcellulose and carboxymethylcellulose-formate as binders in MgH ₂ /Carbon composites negative electrode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2011 , 196, 2854-2857	8.9	68
136	Influence of crystallinity on the structural and hydrogenation properties of Mg ₂ X phases (X=Ni, Si, Ge, Sn). <i>Intermetallics</i> , 2006 , 14, 163-169	3.5	67

135	Mechanical milling and subsequent annealing effects on the microstructural and hydrogenation properties of multisubstituted LaNi ₅ alloy. <i>Acta Materialia</i> , 2005 , 53, 2157-2167	8.4	63
134	Reactivity of TiH ₂ hydride with lithium ion: Evidence for a new conversion mechanism. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 7831-7835	6.7	58
133	Tunable synthesis of (MgNi)-based hydrides nanoconfined in templated carbon studied by in situ synchrotron diffraction. <i>Nano Energy</i> , 2013 , 2, 12-20	17.1	57
132	Structural and electrochemical properties of amorphous rich Mg Ni ₁₀₀ nanomaterial obtained by mechanical alloying. <i>Journal of Alloys and Compounds</i> , 2003 , 356-357, 557-561	5.7	53
131	Reactivity of complex hydrides Mg ₂ FeH ₆ , Mg ₂ CoH ₅ and Mg ₂ NiH ₄ with lithium ion: Far from equilibrium electrochemically driven conversion reactions. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 4798-4808	6.7	52
130	Simultaneous differential scanning calorimetry and thermal desorption spectroscopy measurements for the study of the decomposition of metal hydrides. <i>Journal of Alloys and Compounds</i> , 2000 , 298, 244-253	5.7	52
129	Hydrogen spillover measurements of unbridged and bridged metal-organic frameworks--revisited. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 10457-9	3.6	51
128	Synthesis of small metallic Mg-based nanoparticles confined in porous carbon materials for hydrogen sorption. <i>Faraday Discussions</i> , 2011 , 151, 117-31; discussion 199-212	3.6	47
127	Understanding the mechanism of hydrogen uptake at low pressure in carbon/palladium nanostructured composites. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17765		46
126	Nanostructured Si/SnNi/C composite as negative electrode for Li-ion batteries. <i>Journal of Power Sources</i> , 2011 , 196, 4762-4768	8.9	43
125	Mechanochemistry of Metal Hydrides: Recent Advances. <i>Materials</i> , 2019 , 12,	3.5	41
124	Metal hydrides used as negative electrode materials for Li-ion batteries. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	40
123	Li-Driven Electrochemical Conversion Reaction of AlH ₃ , LiAlH ₄ , and NaAlH ₄ . <i>Journal of Physical Chemistry C</i> , 2015 , 119, 4666-4674	3.8	40
122	Structural Properties and Reversible Deuterium Loading of MgD ₂ /TiD ₂ Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 18851-18862	3.8	39
121	An all-solid-state metal hydride Sulfur lithium-ion battery. <i>Journal of Power Sources</i> , 2017 , 357, 56-60	8.9	38
120	In situ synthesis and hydrogen storage properties of PdNi alloy nanoparticles in an ordered mesoporous carbon template. <i>Microporous and Mesoporous Materials</i> , 2009 , 117, 511-514	5.3	38
119	Full-cell hydride-based solid-state Li batteries for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 7875-7887	6.7	37
118	XAS investigations on nanocrystalline Mg ₂ FeH ₆ used as a negative electrode of Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 4706	13	35

117	A novel method for the synthesis of solvent-free Mg(B3H8)2. <i>Dalton Transactions</i> , 2016 , 45, 3687-90	4.3	33
116	Microstructural analysis of the ageing of pseudo-binary (Ti,Zr)Ni intermetallic compounds as negative electrodes of Ni-MH batteries. <i>Electrochimica Acta</i> , 2009 , 54, 2781-2789	6.7	32
115	Influence of the martensitic transformation on the hydrogenation properties of Ti50-xZrxNi50 alloys. <i>Journal of Alloys and Compounds</i> , 2002 , 330-332, 250-255	5.7	31
114	Synthesis by reactive ball milling and cycling properties of MgH2-TiH2 nanocomposites: Kinetics and isotopic effects. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 9918-9923	6.7	30
113	Improvement of the hydrogen storage properties of TiCrVBe BCC alloy by Ce addition. <i>Journal of Alloys and Compounds</i> , 2009 , 476, 403-407	5.7	30
112	Optimization of TiH2 content for fast and efficient hydrogen cycling of MgH2-TiH2 nanocomposites. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 16774-16781	6.7	29
111	A thermodynamic study of the hydrogenation of the pseudo-binary Mg6Pd0.5Ni0.5 intermetallic compound. <i>Intermetallics</i> , 2010 , 18, 233-241	3.5	28
110	Metal (boro-) hydrides for high energy density storage and relevant emerging technologies. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 33687-33730	6.7	28
109	Mechanistic and Kinetic Study of the Electrochemical Charge and Discharge of La2MgNi9 by in Situ Powder Neutron Diffraction. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 12162-12169	3.8	27
108	Gas-phase synthesis of Mg-Ti nanoparticles for solid-state hydrogen storage. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 141-8	3.6	26
107	Hydrogenation properties of shape memory Ti(Ni,Pd) compounds. <i>Intermetallics</i> , 2011 , 19, 876-886	3.5	26
106	Nanostructures of Mg0.65Ti0.35Dx studied with x-ray diffraction, neutron diffraction, and magic-angle-spinning H2 NMR spectroscopy. <i>Physical Review B</i> , 2010 , 81,	3.3	26
105	Substitutional effects in TiFe for hydrogen storage: a comprehensive review. <i>Materials Advances</i> , 2021 , 2, 2524-2560	3.3	25
104	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> , 2019 , 7, 23064-23075 ¹³		24
103	Solid-gas and electrochemical hydrogenation properties of pseudo-binary (Ti,Zr)Ni intermetallic compounds. <i>International Journal of Hydrogen Energy</i> , 2008 , 33, 5795-5800	6.7	24
102	Simulation and design of a three-stage metal hydride hydrogen compressor based on experimental thermodynamic data. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 6666-6676	6.7	23
101	A conjoint XRD-ED analysis of the crystal structures of austenitic and martensitic Ti0.64Zr0.36Ni hydrides. <i>Journal of Solid State Chemistry</i> , 2006 , 179, 3295-3307	3.3	23
100	The hydrogen desorption kinetics of Pd-coated LaNi5-type films. <i>Journal of Alloys and Compounds</i> , 2000 , 313, 269-275	5.7	22

99	X-ray Diffraction and NMR Studies of $\text{Na}_3\text{BLi}_n\text{AlH}_6$ ($n = 0, 1, 2$) Alanates Synthesized by High-Pressure Reactive Ball Milling. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 21242-21252	3.8	20
98	Influence of the microstructure on the desorption kinetics of single- and multiphase LaNiFe alloys. <i>Journal of Alloys and Compounds</i> , 1998 , 266, 255-259	5.7	20
97	Relationship between polymorphism and hydrogenation properties in $\text{Ti}_{0.64}\text{Zr}_{0.36}\text{Ni}$ alloy. <i>Journal of Alloys and Compounds</i> , 2005 , 404-406, 545-549	5.7	20
96	LaNi_5 related AB_5 compounds: Structure, properties and applications. <i>Journal of Alloys and Compounds</i> , 2021 , 862, 158163	5.7	19
95	In operando neutron diffraction study of a commercial graphite/ $(\text{Ni}, \text{Mn}, \text{Co})$ oxide-based multi-component lithium ion battery. <i>Journal of Power Sources</i> , 2016 , 326, 93-103	8.9	18
94	$\text{Ti}(\text{Ni}, \text{Cu})$ pseudobinary compounds as efficient negative electrodes for NiMH batteries. <i>Journal of Power Sources</i> , 2014 , 265, 182-191	8.9	18
93	Synthesis of Mg_2Cu nanoparticles on carbon supports with enhanced hydrogen sorption kinetics. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9983	13	18
92	In operando neutron diffraction study of $\text{LaNdMgNi}_9\text{H}_{13}$ as a metal hydride battery anode. <i>Journal of Power Sources</i> , 2017 , 343, 502-512	8.9	17
91	Enhanced reversibility of the electrochemical Li conversion reaction with $\text{MgH}_2/\text{TiH}_2$ nanocomposites. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 22615-22621	6.7	16
90	Reversible hydrogen storage in the Ni -rich pseudo-binary $\text{Mg}_6\text{Pd}_{0.25}\text{Ni}_{0.75}$ intermetallic compound: Reaction pathway, thermodynamic and kinetic properties. <i>Journal of Alloys and Compounds</i> , 2013 , 548, 96-104	5.7	16
89	Nanostructured $\text{Ni}_{3.5}\text{Sn}_4$ intermetallic compound: An efficient buffering material for Si -containing composite anodes in lithium ion batteries. <i>Electrochimica Acta</i> , 2013 , 89, 365-371	6.7	16
88	Effects of Si addition on the microstructure and the hydrogen storage properties of $\text{Ti}_{26.5}\text{V}_{45}\text{Fe}_{8.5}\text{Cr}_{20}\text{Ce}_{0.5}$ BCC solid solution alloys. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 9385-9392	6.7	15
87	Interaction of hydrogen with the Al_3Mg_2 complex metallic alloy: Experimental reliability of theoretical predictions. <i>Journal of Alloys and Compounds</i> , 2009 , 472, 565-570	5.7	15
86	Thermodynamic Properties of Trialkali ($\text{Li}, \text{Na}, \text{K}$) Hexa-alanates: A Combined DFT and Experimental Study. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 18598-18607	3.8	15
85	In situ neutron diffraction study on Pd -doped $\text{Mg}_{0.65}\text{Sc}_{0.35}$ electrode material. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1141-1148	3.3	15
84	Influence of the preparation conditions of titanium hydride and deuteride $\text{TiH}_x(\text{D}_x)$ ($x \geq 0.0$) on the specific heat around the β transition. <i>Journal of Alloys and Compounds</i> , 1995 , 231, 78-84	5.7	15
83	Milling effect on the microstructural and hydrogenation properties of $\text{TiFe}_{0.9}\text{Mn}_{0.1}$ alloy. <i>Powder Technology</i> , 2018 , 339, 903-910	5.2	15
82	Crystal structure and hydrogenation properties of pseudo-binary $\text{Mg}_6\text{Pd}_{0.5}\text{Ni}_{0.5}$ complex metallic alloy. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 2890-2896	3.3	14

81	Structural, solid-gas and electrochemical characterization of Mg ₂ NiMg ₂ Ni-rich and Mg _x Ni _{100-x} Mg _x Ni _{100-x} amorphous-rich nanomaterials obtained by mechanical alloying. <i>International Journal of Hydrogen Energy</i> , 2006 , 31, 247-250	6.7	14
80	Growth of pyrite thin-films investigated by thermoelectric measurements. <i>Thin Solid Films</i> , 2001 , 387, 97-99	2.2	14
79	Fast synthesis of TiNi by mechanical alloying and its hydrogenation properties. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 10770-10776	6.7	13
78	Electronic and structural influence of Ni by Pd substitution on the hydrogenation properties of TiNi. <i>Journal of Solid State Chemistry</i> , 2013 , 198, 475-484	3.3	13
77	A new pseudo-binary Mg ₆ Ni _{0.5} Pd _{0.5} intermetallic compound stabilised by Pd for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2010 , 495, 663-666	5.7	13
76	Influence of thermal annealing on the hydrogenation properties of mechanically milled AB ₅ -type alloys. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004 , 108, 76-80	3.1	13
75	Hydrogen Storage in Pristine and d10-Block Metal-Anchored Activated Carbon Made from Local Wastes. <i>Energies</i> , 2015 , 8, 3578-3590	3.1	12
74	Mechanochemistry of lithium nitride under hydrogen gas. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 21927-34	3.6	12
73	Pseudo-ternary LiBH ₄ /LiCl/PS system as structurally disordered bulk electrolyte for all-solid-state lithium batteries. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 13872-13879	3.6	12
72	Thermodynamics and reaction pathways of hydrogen sorption in Mg ₆ (Pd,TM) (TM = Ag, Cu and Ni) pseudo-binary compounds. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 18291-18301	6.7	12
71	Nanoconfinement of Mg ₆ Pd particles in porous carbon: size effects on structural and hydrogenation properties. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 18444-18453	13	11
70	Supercritical fluid chemical deposition of Pd nanoparticles on magnesium-cadmium alloy for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2013 , 574, 6-12	5.7	11
69	Influence of polymorphism on the electrochemical properties of (Ti _{0.64} Zr _{0.36})Ni alloys. <i>Journal of Alloys and Compounds</i> , 2003 , 356-357, 730-733	5.7	11
68	Ni ₃ Sn intermetallics as an efficient buffering matrix of Si anodes in Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 18132-18142	13	11
67	Hydrogen storage properties of Mn and Cu for Fe substitution in TiFe _{0.9} intermetallic compound. <i>Journal of Alloys and Compounds</i> , 2021 , 851, 156075	5.7	11
66	Improvement of the ionic conductivity on new substituted borohydride argyrodites. <i>Solid State Ionics</i> , 2019 , 339, 114987	3.3	10
65	X-ray Absorption Spectroscopy and X-ray Diffraction Studies of the Thermal and Li-Driven Electrochemical Dehydrogenation of Nanocrystalline Complex Hydrides Mg ₂ MH _x (M = Co, Ni). <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29554-29567	3.8	10
64	First-principles phase stability calculations and estimation of finite temperature effects on pseudo-binary Mg ₆ (Pd _x Ni _{1-x}) compounds. <i>Intermetallics</i> , 2011 , 19, 502-510	3.5	10

63	Study of the multipeak deuterium thermodesorption in YFe ₂ D _x (1.3 ≤ x ≤ 4.2) by DSC, TD and in situ neutron diffraction. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 2278-2287	6.7	10
62	Zr-substitution in LaNi ₅ -type hydride compound by room temperature ball milling. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004 , 108, 91-95	3.1	10
61	Phase Stabilities in the Mg ₂ Si System Tuned by Mechanochemistry. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 21889-21895	3.8	9
60	Relationship between microstructure and hydrogenation properties of Ti _{0.85} Zr _{0.15} Mn _{1.5} V _{0.5} alloy. <i>Journal of Alloys and Compounds</i> , 2007 , 446-447, 218-223	5.7	9
59	Fundamental hydrogen storage properties of TiFe-alloy with partial substitution of Fe by Ti and Mn. <i>Journal of Alloys and Compounds</i> , 2021 , 874, 159925	5.7	9
58	Cobalt induced multi-plateau behavior in TiNi-based Ni-MH electrodes. <i>Energy Storage Materials</i> , 2017 , 8, 189-193	19.4	8
57	Electrochemical properties of MgH ₂ / TiH ₂ nanocomposite as active materials for all-solid-state lithium batteries. <i>Journal of Power Sources</i> , 2018 , 397, 143-149	8.9	8
56	A step forward to the dehydrogenation reversibility of amine-borane adducts by coupling sodium and hydrocarbon groups. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 2763-2767	6.7	8
55	Hydrogenation, structure and magnetic properties of La(Fe _{0.91} Si _{0.09}) ₁₃ hydrides and deuterides. <i>Chinese Physics B</i> , 2011 , 20, 067502	1.2	8
54	Effect of additives on the structure and magnetic properties of 1:7 type Sm ₂ Fe ₁₅ Ga ₂ C ₃ permanent magnets. <i>Journal of Applied Physics</i> , 2000 , 88, 6618-6622	2.5	8
53	Solid-State Li-Ion Batteries Operating at Room Temperature Using New Borohydride Argyrodite Electrolytes. <i>Materials</i> , 2020 , 13,	3.5	8
52	Reactivity assessment of lithium with the different components of novel Si/Ni _{3.4} Sn ₄ /Al/C composite anode for Li-ion batteries. <i>Journal of Power Sources</i> , 2013 , 238, 210-217	8.9	7
51	Synthesis and properties of the Mg ₂ Ni _{0.5} Co _{0.5} H _{4.4} hydride. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S408-S411	5.7	7
50	Homogeneity range and crystal structure of Ni substituted Mg ₆ (Pd,Ni) complex intermetallic compounds. <i>Journal of Physics and Chemistry of Solids</i> , 2010 , 71, 1259-1263	3.9	7
49	Observation of the β phase transformation in deuterated iodide titanium films by electrical resistance measurements. <i>Journal of Alloys and Compounds</i> , 1997 , 253-254, 158-161	5.7	7
48	Influence of cobalt and manganese content on the dehydrogenation capacity and kinetics of air-exposed LaNi _{5+x} -type alloys in solid gas and electrochemical reactions. <i>Journal of Power Sources</i> , 2007 , 170, 520-526	8.9	7
47	Formation and structure of highly over-stoichiometric LaNi _{5+x} (x~1) alloys obtained by manifold non-equilibrium methods. <i>Journal of Alloys and Compounds</i> , 2001 , 323-324, 4-7	5.7	7
46	Preparation of highly overstoichiometric LaNi _{5+x} (1≤x≤4) single-phase films by ion beam sputtering. <i>Journal of Applied Physics</i> , 1999 , 86, 6690-6696	2.5	7

45	Asymmetric Reaction Paths and Hydrogen Sorption Mechanism in Mechanochemically Synthesized Potassium Alanate (KAlH ₄). <i>Journal of Physical Chemistry C</i> , 2016 , 120, 21299-21308	3.8	6
44	Structural and Magnetic Properties of Pd _x Ni _{1-x} (x = 0 and 0.54) Metallic Nanoparticles in an Ordered Mesoporous Carbon Template. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16921-16926	3.8	6
43	Kinetics of the Iodide Titanium Process by the Thermal Decomposition of Titanium Tetraiodide. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 2589	3.9	6
42	Synthesis of TiFe Hydrogen Absorbing Alloys Prepared by Mechanical Alloying and SPS Treatment. <i>Metals</i> , 2018 , 8, 264	2.3	6
41	Mechanosynthesis and Reversible Hydrogen Storage of Mg ₂ Ni and Mg ₂ Cu Alloys. <i>Materials Transactions</i> , 2019 , 60, 441-449	1.3	5
40	An investigation of the hydrogen desorption from Nd ₂ Fe ₁₇ H _x and Dy ₂ Fe ₁₇ H _x compounds by differential scanning calorimetry. <i>Thermochimica Acta</i> , 2013 , 561, 14-18	2.9	5
39	Microstructural effects in the hydrogenation kinetics of commercial-type LaNi ₅ alloy. <i>Journal of Alloys and Compounds</i> , 2005 , 404-406, 327-331	5.7	5
38	Thin films as model system for understanding the electrochemical reaction mechanisms in conversion reaction of MgH ₂ with lithium. <i>Journal of Power Sources</i> , 2018 , 402, 99-106	8.9	5
37	Structural and hydrogenation study on the ball milled TiH ₂ /MgNi. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 4212-4218	6.7	4
36	Experimental behaviour of a three-stage metal hydride hydrogen compressor. <i>JPhys Energy</i> , 2020 , 2, 034006	4.9	4
35	Influence of the Ti/Zr ratio and the synthesis route on hydrogen absorbing properties of (Ti _{1-x} Zr _x)Mn _{1.5} V _{0.5} alloys. <i>Journal of Physics and Chemistry of Solids</i> , 2006 , 67, 1281-1285	3.9	4
34	In situ neutron-diffraction study of deuterium desorption . from LaNi _{5+x} (x~1) alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2002 , 74, s1175-s1177	2.6	4
33	Hydrogen solubility and diffusivity in amorphous La ₁₄ Ni ₈₆ films. <i>Acta Materialia</i> , 2003 , 51, 701-712	8.4	4
32	Surface activation and hydrogenation kinetics of ti sponge. <i>International Journal of Hydrogen Energy</i> , 1996 , 21, 765-768	6.7	4
31	Mechanochemistry and hydrogen storage properties of 2Li ₃ N+Mg mixture. <i>Rare Metals</i> , 2015 , 1	5.5	3
30	Influence of the stoichiometry on the H-desorption rates measured in solid-gas phase and electrochemical cell for air-exposed LaNi _{5+x} -type alloys. <i>Journal of Alloys and Compounds</i> , 2005 , 404-406, 347-350	5.7	3
29	On the necessary experimental conditions to grow titanium films on hot tungsten filaments using titanium tetraiodide. <i>Journal of Alloys and Compounds</i> , 1995 , 227, 167-174	5.7	3
28	Kinetics of H(D)-absorption in Pd cathodes. <i>Journal of Alloys and Compounds</i> , 1995 , 231, 655-659	5.7	3

27	The Vision of France, Germany, and the European Union on Future Hydrogen Energy Research and Innovation. <i>Engineering</i> , 2021 , 7, 715-718	9.7	3
26	Mechanochemical synthesis in the Li-Mg-N-D system under deuterium gas: a neutron diffraction study. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 23944-53	3.6	3
25	Metallic and complex hydride-based electrochemical storage of energy. <i>Progress in Energy</i> ,	7.7	3
24	Role of silicon and carbon on the structural and electrochemical properties of Si-Ni _{3.4} Sn ₄ -Al-C anodes for Li-ion batteries. <i>Materials Today Communications</i> , 2020 , 23, 101160	2.5	2
23	Experimental Investigation of Neutron Emissions during Thermal Cycling of TiD _x (x 1.00). <i>Fusion Science and Technology</i> , 1997 , 31, 237-247		2
22	H/D Isotope Effects in LaNi _{4.5} Mn _{0.5} Electrodes. <i>Journal of the Electrochemical Society</i> , 2007 , 154, A507	3.9	2
21	The behaviour of highly over-stoichiometric LaNi ₅ Mn ₂ alloy as negative electrode for Ni/MH batteries. <i>Journal of Materials Science</i> , 2004 , 39, 5263-5266	4.3	2
20	The influence of tungsten substrates on hydrogen absorption by iodide titanium films. <i>Journal of Alloys and Compounds</i> , 1995 , 231, 798-803	5.7	2
19	An Interpretation of Some Postelectrolysis Nuclear Effects in Deuterated Titanium. <i>Fusion Science and Technology</i> , 1996 , 29, 390-397		2
18	Influence of anodization time and current density on the photoluminescence of porous N ₂ /Si. <i>Thin Solid Films</i> , 1996 , 276, 212-215	2.2	2
17	Deuterium concentration profiles in electrochemically deuterated titanium and their evolution after electrolysis. <i>Journal of Alloys and Compounds</i> , 1994 , 205, 303-309	5.7	2
16	Hydrogen storage properties of LiMg ₂ Ni ₁₁ B ₂ /ZrCoH ₃ composite with different ball-milling atmospheres. <i>Rare Metals</i> , 2017 , 1	5.5	1
15	A Search for Nuclear Reactions in Deuterated Fresh Iodide-Titanium Films. <i>Fusion Science and Technology</i> , 1997 , 32, 644-654		1
14	Monitoring of iodide titanium growth on tungsten substrates by electrical resistance measurements. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1998 , 54, 141-148	3.1	1
13	Intermetallic alloys as hydrogen getters. <i>Journal of Alloys and Compounds</i> , 2022 , 905, 164173	5.7	1
12	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> , 2020 , 11,	5.4	1
11	Superior effect of Ni-substitution on the hydrogenation kinetics of Mg ₆ Pd ₁ TM (TM = Ag, Cu, Ni) pseudo-binary compounds. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S334-S337	5.7	0
10	Investigation of the phase occurrence and H sorption properties in the Y _{33.33} Ni _{66.67} Al (O ₁₀ B _{3.33}) system. <i>Journal of Alloys and Compounds</i> , 2021 , 888, 161375	5.7	0

- 9 In situ measurement of the rate of H absorption by a Pd cathode during the electrolysis of aqueous solutions. *Review of Scientific Instruments*, **1997**, 68, 1324-1330 1.7
- 8 The coercivity of the melt-spun Sm-Fe-Ga-C permanent magnets and the effect of additives (Nb, Cu and Zr). *Journal of Physics Condensed Matter*, **2001**, 13, 10487-10496 1.8
- 7 Anomalous X-Ray Diffraction in Electrolytically Deuterated Titanium*. *Zeitschrift Fur Physikalische Chemie*, **1993**, 181, 329-334 3.1
- 6 Hydrides compounds for electrochemical applications. *Current Opinion in Electrochemistry*, **2022**, 32, 100921
- 5 Thermodynamic properties of AB compounds **2018**, 52-66
- 4 Electrochemical properties of AB compounds **2018**, 67-70
- 3 Synthesis and crystal structure of alkali alanates **2018**, 252-260
- 2 Synthesis and crystal structure of mixed alkali alanates **2018**, 261-264
- 1 Overview of AB-type metal hydrides **2018**, 71-72