

Fermin Cuevas

List of Publications by Year in descending order

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154
papers

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158
docs citations

158
times ranked

4870
citing authors

#	ARTICLE	IF	CITATIONS
1	Materials for hydrogen-based energy storage – past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	2.8	518
2	Magnesium based materials for hydrogen based energy storage: Past, present and future. International Journal of Hydrogen Energy, 2019, 44, 7809-7859.	3.8	460
3	Mechanochemical synthesis of hydrogen storage materials. Progress in Materials Science, 2013, 58, 30-75.	16.0	345
4	Pd Nanoparticles Embedded into a Metal-Organic Framework: Synthesis, Structural Characteristics, and Hydrogen Sorption Properties. Journal of the American Chemical Society, 2010, 132, 2991-2997.	6.6	320
5	Effect of NH ₂ and CF ₃ functionalization on the hydrogen sorption properties of MOFs. Dalton Transactions, 2011, 40, 4879.	1.6	257
6	Intermetallic compounds as negative electrodes of Ni/MH batteries. Applied Physics A: Materials Science and Processing, 2001, 72, 225-238.	1.1	182
7	Exploits, advances and challenges benefiting beyond Li-ion battery technologies. Journal of Alloys and Compounds, 2020, 817, 153261.	2.8	144
8	Hydrogen storage properties of Pd nanoparticle/carbon template composites. Carbon, 2008, 46, 206-214.	5.4	129
9	Synthesis, structural and hydrogenation properties of Mg-rich MgH ₂ -TiH ₂ nanocomposites prepared by reactive ball milling under hydrogen gas. Physical Chemistry Chemical Physics, 2012, 14, 1200-1211.	1.3	123
10	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. Chemistry of Materials, 2009, 21, 5783-5791.	3.2	102
11	Elaboration and characterization of magnesium-substituted La ₅ Ni ₁₉ hydride forming alloys as active materials for negative electrode in Ni-MH battery. Electrochimica Acta, 2009, 54, 1710-1714.	2.6	101
12	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. International Journal of Hydrogen Energy, 2016, 41, 14404-14428.	3.8	94
13	Substitutional effects in TiFe for hydrogen storage: a comprehensive review. Materials Advances, 2021, 2, 2524-2560.	2.6	90
14	Size-Dependent Hydrogen Sorption in Ultrasmall Pd Clusters Embedded in a Mesoporous Carbon Template. Journal of the American Chemical Society, 2010, 132, 7720-7729.	6.6	89
15	Hydrogen storage in hybrid nanostructured carbon/palladium materials: Influence of particle size and surface chemistry. International Journal of Hydrogen Energy, 2013, 38, 952-965.	3.8	87
16	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). Journal of Physical Chemistry C, 2011, 115, 4971-4979.	1.5	79
17	Carboxymethylcellulose and carboxymethylcellulose-formate as binders in MgH ₂ -carbon composites negative electrode for lithium-ion batteries. Journal of Power Sources, 2011, 196, 2854-2857.	4.0	77
18	Mechanical milling and subsequent annealing effects on the microstructural and hydrogenation properties of multisubstituted LaNi ₅ alloy. Acta Materialia, 2005, 53, 2157-2167.	3.8	71

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19	Influence of crystallinity on the structural and hydrogenation properties of Mg ₂ X phases (X=Ni, Si). <i>Tj ETQq1 1 0.784314 rgBJ1/Overlock</i>	1.8	71
20	Mechanochemistry of Metal Hydrides: Recent Advances. <i>Materials</i> , 2019, 12, 2778.	1.3	71
21	LaNi ₅ related AB ₅ compounds: Structure, properties and applications. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158163.	2.8	64
22	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.	3.8	62
23	Tunable synthesis of (Mg-Ni)-based hydrides nanoconfined in templated carbon studied by in situ synchrotron diffraction. <i>Nano Energy</i> , 2013, 2, 12-20.	8.2	61
24	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.	2.8	60
25	Hydrogen spillover measurements of unbridged and bridged metal-organic frameworks revisited. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 10457.	1.3	57
26	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.	3.8	56
27	Synthesis of small metallic Mg-based nanoparticles confined in porous carbon materials for hydrogen sorption. <i>Faraday Discussions</i> , 2011, 151, 117.	1.6	54
28	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.	2.8	53
29	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.	5.2	53
30	Metal (boro-) hydrides for high energy density storage and relevant emerging technologies. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 33687-33730.	3.8	53
31	Understanding the mechanism of hydrogen uptake at low pressure in carbon/palladium nanostructured composites. <i>Journal of Materials Chemistry</i> , 2011, 21, 17765.	6.7	50
32	Metal hydrides used as negative electrode materials for Li-ion batteries. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	48
33	An all-solid-state metal hydride Sulfur lithium-ion battery. <i>Journal of Power Sources</i> , 2017, 357, 56-60.	4.0	46
34	Full-cell hydride-based solid-state Li batteries for energy storage. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7875-7887.	3.8	46
35	Nanostructured Si/Sn-Ni/C composite as negative electrode for Li-ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 4762-4768.	4.0	44
36	Li-Driven Electrochemical Conversion Reaction of AlH ₃ , LiAlH ₄ , and NaAlH ₄ . <i>Journal of Physical Chemistry C</i> , 2015, 119, 4666-4674.	1.5	44

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37	Structural Properties and Reversible Deuterium Loading of MgD ₂ â€“TiD ₂ Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18851-18862.	1.5	42
38	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.	2.2	39
39	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.	2.8	39
40	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.	5.2	38
41	Improvement of the hydrogen storage properties of Tiâ€“Crâ€“Vâ€“Fe BCC alloy by Ce addition. <i>Journal of Alloys and Compounds</i> , 2009, 476, 403-407.	2.8	37
42	Synthesis by reactive ball milling and cycling properties of MgH ₂ â€“TiH ₂ nanocomposites: Kinetics and isotopic effects. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9918-9923.	3.8	37
43	A novel method for the synthesis of solvent-free Mg(B ₃ H ₈) ₂ . <i>Dalton Transactions</i> , 2016, 45, 3687-3690.	1.6	35
44	Optimization of TiH ₂ content for fast and efficient hydrogen cycling of MgH ₂ -TiH ₂ nanocomposites. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 16774-16781.	3.8	35
45	Influence of the martensitic transformation on the hydrogenation properties of Ti ₅₀ â€“xZrxNi ₅₀ alloys. <i>Journal of Alloys and Compounds</i> , 2002, 330-332, 250-255.	2.8	34
46	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.	2.6	34
47	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.	2.8	34
48	Gas-phase synthesis of Mgâ€“Ti nanoparticles for solid-state hydrogen storage. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 141-148.	1.3	33
49	Milling effect on the microstructural and hydrogenation properties of TiFe _{0.9} Mn _{0.1} alloy. <i>Powder Technology</i> , 2018, 339, 903-910.	2.1	32
50	Mechanistic and Kinetic Study of the Electrochemical Charge and Discharge of La ₂ MgNi ₉ by in Situ Powder Neutron Diffraction. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12162-12169.	1.5	31
51	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.	3.8	30
52	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. <i>Progress in Energy</i> , 2022, 4, 032007.	4.6	29
53	A thermodynamic study of the hydrogenation of the pseudo-binary Mg ₆ Pd _{0.5} Ni _{0.5} intermetallic compound. <i>Intermetallics</i> , 2010, 18, 233-241.	1.8	28
54	Hydrogenation properties of shape memory Ti(Ni,Pd) compounds. <i>Intermetallics</i> , 2011, 19, 876-886.	1.8	28

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55	Nanostructures of $\text{Mg}_{0.65}\text{Ni}_{0.35}$ with x-ray diffraction, neutron diffraction, and magic-angle-spinning. Physical Review B, 2010, 81, .	1.1	27
56	Metallic and complex hydride-based electrochemical storage of energy. Progress in Energy, 2022, 4, 032001.	4.6	26
57	A conjoint XRD-ND analysis of the crystal structures of austenitic and martensitic $\text{Ti}_{0.64}\text{Zr}_{0.36}\text{Ni}$ hydrides. Journal of Solid State Chemistry, 2006, 179, 3295-3307.	1.4	25
58	Solid-gas and electrochemical hydrogenation properties of pseudo-binary (Ti,Zr)Ni intermetallic compounds. International Journal of Hydrogen Energy, 2008, 33, 5795-5800.	3.8	25
59	Fast synthesis of TiNi by mechanical alloying and its hydrogenation properties. International Journal of Hydrogen Energy, 2019, 44, 10770-10776.	3.8	25
60	The hydrogen desorption kinetics of Pd-coated LaNi ₅ -type films. Journal of Alloys and Compounds, 2000, 313, 269-275.	2.8	24
61	Influence of the microstructure on the desorption kinetics of single- and multiphase LaNiFe alloys. Journal of Alloys and Compounds, 1998, 266, 255-259.	2.8	23
62	Relationship between polymorphism and hydrogenation properties in $\text{Ti}_{0.64}\text{Zr}_{0.36}\text{Ni}$ alloy. Journal of Alloys and Compounds, 2005, 404-406, 545-549.	2.8	23
63	Pseudo-ternary $\text{LiBH}_4\text{-LiCl}_2\text{-P}_2\text{S}_5$ system as structurally disordered bulk electrolyte for all-solid-state lithium batteries. Physical Chemistry Chemical Physics, 2020, 22, 13872-13879.	1.3	23
64	In operando neutron diffraction study of $\text{LaNdMgNi}_9\text{H}_{13}$ as a metal hydride battery anode. Journal of Power Sources, 2017, 343, 502-512.	4.0	22
65	X-ray Diffraction and NMR Studies of $\text{Na}_3\text{Li}_n\text{AlH}_6$ ($n = 0, 1, 2$) Alanates Synthesized by High-Pressure Reactive Ball Milling. Journal of Physical Chemistry C, 2009, 113, 21242-21252.	1.5	21
66	Synthesis of Mg_2Cu nanoparticles on carbon supports with enhanced hydrogen sorption kinetics. Journal of Materials Chemistry A, 2013, 1, 9983.	5.2	21
67	Ti(Ni,Cu) pseudobinary compounds as efficient negative electrodes for Ni-MH batteries. Journal of Power Sources, 2014, 265, 182-191.	4.0	21
68	In operando neutron diffraction study of a commercial graphite/(Ni, Mn, Co) oxide-based multi-component lithium ion battery. Journal of Power Sources, 2016, 326, 93-103.	4.0	21
69	The Vision of France, Germany, and the European Union on Future Hydrogen Energy Research and Innovation. Engineering, 2021, 7, 715-718.	3.2	21
70	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. International Journal of Hydrogen Energy, 2009, 34, 9385-9392.	3.8	20
71	Hydrogen Storage in Pristine and d ₁₀ -Block Metal-Anchored Activated Carbon Made from Local Wastes. Energies, 2015, 8, 3578-3590.	1.6	20
72	Enhanced reversibility of the electrochemical Li conversion reaction with MgH_2 -TiH ₂ nanocomposites. International Journal of Hydrogen Energy, 2017, 42, 22615-22621.	3.8	20

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73	Nanostructured Ni _{3.5} 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.	2.6	19
74	Ni-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.	5.2	19
75	Interaction of hydrogen with the β -Al ₃ Mg ₂ complex metallic alloy: Experimental reliability of theoretical predictions. <i>Journal of Alloys and Compounds</i> , 2009, 472, 565-570.	2.8	18
76	In situ neutron diffraction study on Pd-doped Mg _{0.65} Sc _{0.35} electrode material. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1141-1148.	1.4	17
77	Crystal structure and hydrogenation properties of pseudo-binary Mg ₆ Pd _{0.5} Ni _{0.5} complex metallic alloy. <i>Journal of Solid State Chemistry</i> , 2009, 182, 2890-2896.	1.4	17
78	Reversible hydrogen storage in the Ni-rich pseudo-binary Mg ₆ Pd _{0.25} Ni _{0.75} intermetallic compound: Reaction pathway, thermodynamic and kinetic properties. <i>Journal of Alloys and Compounds</i> , 2013, 548, 96-104.	2.8	17
79	Influence of the preparation conditions of titanium hydride and deuteride TiH _x (D _x) (X $\hat{=}$ 2.00) on the specific heat around the β - γ transition. <i>Journal of Alloys and Compounds</i> , 1995, 231, 78-84.	2.8	16
80	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.	1.7	16
81	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.	3.8	16
82	Growth of pyrite thin-films investigated by thermoelectric measurements. <i>Thin Solid Films</i> , 2001, 387, 97-99.	0.8	15
83	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.	3.8	15
84	Thermodynamic Properties of Trialkali (Li, Na, K) Hexa-alanates: A Combined DFT and Experimental Study. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18598-18607.	1.5	15
85	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.	4.0	15
86	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.	2.8	14
87	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.	1.4	14
88	Improvement of the ionic conductivity on new substituted borohydride argyrodites. <i>Solid State Ionics</i> , 2019, 339, 114987.	1.3	14
89	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.	2.8	13
90	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.	1.7	13

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91	Supercritical fluid chemical deposition of Pd nanoparticles on magnesium-scandium alloy for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2013, 574, 6-12.	2.8	13
92	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.	5.2	13
93	Study of the multipeak deuterium thermodesorption in YFe ₂ D _x (1.3Å%Å%Å4.2) by DSC, TD and in situ neutron diffraction. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 2278-2287.	3.8	12
94	Mechanochemistry of lithium nitride under hydrogen gas. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21927-21934.	1.3	12
95	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.	2.8	11
96	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.	1.8	11
97	Synthesis of TiFe Hydrogen Absorbing Alloys Prepared by Mechanical Alloying and SPS Treatment. <i>Metals</i> , 2018, 8, 264.	1.0	11
98	Solid-State Li-Ion Batteries Operating at Room Temperature Using New Borohydride Argyrodite Electrolytes. <i>Materials</i> , 2020, 13, 4028.	1.3	11
99	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.	1.1	10
100	Formation and structure of highly over-stoichiometric LaNi _{5+x} (x ^{1/4} 1) alloys obtained by manifold non-equilibrium methods. <i>Journal of Alloys and Compounds</i> , 2001, 323-324, 4-7.	2.8	10
101	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.	1.5	10
102	Phase Stabilities in the Mg-Si-H System Tuned by Mechanochemistry. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21889-21895.	1.5	10
103	Hydrogen solubility and diffusivity in amorphous La ₁₄ Ni ₈₆ films. <i>Acta Materialia</i> , 2003, 51, 701-712.	3.8	9
104	Microstructural effects in the hydrogenation kinetics of commercial-type LaNi ₅ alloy. <i>Journal of Alloys and Compounds</i> , 2005, 404-406, 327-331.	2.8	9
105	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.	0.7	9
106	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.	3.8	9
107	Preparation of highly overstoichiometric LaNi _{5+x} (1 ^{1/2} x ^{1/4}) single-phase films by ion beam sputtering. <i>Journal of Applied Physics</i> , 1999, 86, 6690-6696.	1.1	8
108	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.	4.0	8

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109	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.	4.0	8
110	Mechanochemistry and hydrogen storage properties of 2Li ₃ N+Mg mixture. <i>Rare Metals</i> , 2022, 41, 4223-4229.	3.6	8
111	Cobalt induced multi-plateau behavior in TiNi-based Ni-MH electrodes. <i>Energy Storage Materials</i> , 2017, 8, 189-193.	9.5	8
112	Mechanosynthesis and Reversible Hydrogen Storage of Mg ₂ Ni and Mg ₂ Cu Alloys. <i>Materials Transactions</i> , 2019, 60, 441-449.	0.4	8
113	Experimental behaviour of a three-stage metal hydride hydrogen compressor. <i>JPhys Energy</i> , 2020, 2, 034006.	2.3	8
114	Intermetallic alloys as hydrogen getters. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164173.	2.8	8
115	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.	2.8	7
116	Structural and Magnetic Properties of Pd _x Ni _{1-x} ($x = 0$) Tj ETQq0 0 0 rgBT /Overlock 10 Chemistry C, 2009, 113, 16921-16926.	1.5	7
117	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.	1.9	7
118	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.	2.8	7
119	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.	1.5	7
120	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.	4.0	7
121	Kinetics of the Iodide Titanium Process by the Thermal Decomposition of Titanium Tetraiodide. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2589.	1.3	6
122	In situ neutron-diffraction study of deuterium desorption . from LaNi _{5-x} ($x \geq 1$) alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1175-s1177.	1.1	6
123	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.	1.9	5
124	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.	1.2	5
125	Structural and hydrogenation study on the ball milled TiH ₂ -Mg-Ni. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 4212-4218.	3.8	5
126	Surface activation and hydrogenation kinetics of ti sponge. <i>International Journal of Hydrogen Energy</i> , 1996, 21, 765-768.	3.8	4

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127	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. Journal of Alloys and Compounds, 2005, 404-406, 347-350.	2.8	4
128	Mechanochemical synthesis in the Li-Mg-Nd system under deuterium gas: a neutron diffraction study. Physical Chemistry Chemical Physics, 2016, 18, 23944-23953.	1.3	4
129	Investigation of the phase occurrence and H sorption properties in the Y _{33.33} Ni _{66.67} Al (O _x 33.33) system. Journal of Alloys and Compounds, 2021, 888, 161375.	2.8	4
130	Deuterium concentration profiles in electrochemically deuterated titanium and their evolution after electrolysis. Journal of Alloys and Compounds, 1994, 205, 303-309.	2.8	3
131	On the necessary experimental conditions to grow titanium films on hot tungsten filaments using titanium tetraiodide. Journal of Alloys and Compounds, 1995, 227, 167-174.	2.8	3
132	Kinetics of H(D)-absorption in Pd cathodes. Journal of Alloys and Compounds, 1995, 231, 655-659.	2.8	3
133	An Interpretation of Some Postelectrolysis Nuclear Effects in Deuterated Titanium. Fusion Science and Technology, 1996, 29, 390-397.	0.6	3
134	Influence of anodization time and current density on the photoluminescence of porous Ni-Si. Thin Solid Films, 1996, 276, 212-215.	0.8	3
135	Hydrogen storage properties of Li-Mg-Nd-B-H/ZrCoH ₃ composite with different ball-milling atmospheres. Rare Metals, 2023, 42, 1036-1042.	3.6	3
136	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. Materials Today Communications, 2020, 23, 101160.	0.9	3
137	Hydrogen Storage by Titanium Based Sulfides: Nanoribbons (TiS ₃) and Nanoplates (TiS ₂). J of Electrical Engineering, 2015, 3, .	0.1	3
138	Impact of Surface Chemistry of Silicon Nanoparticles on the Structural and Electrochemical Properties of Si/Ni _{3.4} Sn ₄ Composite Anode for Li-Ion Batteries. Nanomaterials, 2021, 11, 18.	1.9	3
139	Hydrides compounds for electrochemical applications. Current Opinion in Electrochemistry, 2022, 32, 100921.	2.5	3
140	The influence of tungsten substrates on hydrogen absorption by iodide titanium films. Journal of Alloys and Compounds, 1995, 231, 798-803.	2.8	2
141	Experimental Investigation of Neutron Emissions during Thermal Cycling of TiD _{2.00} . Fusion Science and Technology, 1997, 31, 237-247.	0.6	2
142	The behaviour of highly over-stoichiometric LaNi ₅ Mn ₂ alloy as negative electrode for Ni/MH batteries. Journal of Materials Science, 2004, 39, 5263-5266.	1.7	2
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