Kwo-hsiung Young

List of Publications by Year
in descending order

79 papers	1,984 citations	201385 27 h-index	276539 41 g-index
80 all docs	80 docs citations	80 times ranked	878 citing authors

#	Article	IF	Citations
1	The Current Status of Hydrogen Storage Alloy Development for Electrochemical Applications. Materials, 2013, 6, 4574-4608.	1.3	159
2	Annealing effects on structural and electrochemical properties of (LaPrNdZr)0.83Mg0.17(NiCoAlMn)3.3 alloy. Journal of Alloys and Compounds, 2009, 471, 371-377.	2.8	94
3	Pressureâ€“compositionâ€“temperature hysteresis in C14 Laves phase alloys: Part 1. Simple ternary alloys. Journal of Alloys and Compounds, 2009, 480, 428-433.	2.8	76
4	The correlation of C14/C15 phase abundance and electrochemical properties in the AB2 alloys. Journal of Alloys and Compounds, 2010, 506, 841-848.	2.8	72
5	Structural, thermodynamic, and electrochemical properties of TixZr1â^'x(VNiCrMnCoAl)2 C14 Laves phase alloys. Journal of Alloys and Compounds, 2008, 464, 238-247.	2.8	67
6	Effects of Mo additive on the structure and electrochemical properties of low-temperature AB5 metal hydride alloys. Journal of Alloys and Compounds, 2011, 509, 3995-4001.	2.8	56
7	Effects of annealing and stoichiometry to (Nd, Mg)(Ni, Al)3.5 metal hydride alloys. Journal of Power Sources, 2012, 215, 152-159.	4.0	56
8	Phase abundances in AB2 metal hydride alloys and their correlations to various properties. Journal of Alloys and Compounds, 2011, 509, 2277-2284.	2.8	51
9	Effects of aluminum substitution in C14-rich multi-component alloys for NiMH battery application. Journal of Alloys and Compounds, 2010, 490, 282-292.	2.8	50
10	Capacity Degradation Mechanisms in Nickel/Metal Hydride Batteries. Batteries, 2016, 2, 3.	2.1	50
11	Performance Comparison of Rechargeable Batteries for Stationary Applications (Ni/MH vs. Niâ€“Cd and) Tj ETQq1 1 0.784314 rgBT /Ove	2.1	46
12	Effect of molybdenum content on structural, gaseous storage, and electrochemical properties of C14-predominant AB2 metal hydride alloys. Journal of Power Sources, 2011, 196, 8815-8821.	4.0	44
13	Fabrications of High-Capacity Alpha-Ni(OH)2. Batteries, 2017, 3, 6.	2.1	44
14	Structural, hydrogen storage, and electrochemical properties of Laves phase-related body-centered-cubic solid solution metal hydride alloys. International Journal of Hydrogen Energy, 2014, 39, 21489-21499.	3.8	43
15	A Technical Report of the Robust Affordable Next Generation Energy Storage System-BASF Program. Batteries, 2016, 2, 2.	2.1	40
16	Determination of C14/C15 phase abundance in Laves phase alloys. Materials Chemistry and Physics, 2012, 136, 520-527.	2.0	37
17	Reviews on the U.S. Patents Regarding Nickel/Metal Hydride Batteries. Batteries, 2016, 2, 10.	2.1	37
18	Effects of various annealing conditions on (Nd, Mg, Zr)(Ni, Al, Co)3.74 metal hydride alloys. Journal of Power Sources, 2014, 248, 147-153.	4.0	36

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19	Effects of Al- and Mn-contents in the negative MH alloy on the self-discharge and long-term storage properties of Ni/MH battery. Journal of Power Sources, 2012, 213, 128-139.	4.0	35
20	Gaseous phase hydrogen storage and electrochemical properties of Zr8Ni21, Zr7Ni10, Zr9Ni11, and ZrNi metal hydride alloys. International Journal of Hydrogen Energy, 2012, 37, 16042-16055.	3.8	34
21	Hydrides of Laves type Tiâ€“Zr alloys with enhanced H storage capacity as advanced metal hydride battery anodes. Journal of Alloys and Compounds, 2020, 828, 154354.	2.8	34
22	Roles of Ni, Cr, Mn, Sn, Co, and Al in C14 Laves phase alloys for NiMH battery application. Journal of Alloys and Compounds, 2009, 476, 774-781.	2.8	32
23	Structural and electrochemical properties of TixZr7â^'xNi10. Journal of Alloys and Compounds, 2009, 480, 521-528.	2.8	32
24	Compositional optimization of vanadium-free hypo-stoichiometric AB2 metal hydride alloy for Ni/MH battery application. Journal of Alloys and Compounds, 2012, 510, 97-106.	2.8	31
25	Comparison of C14- and C15-Predomiated AB2 Metal Hydride Alloys for Electrochemical Applications. Batteries, 2017, 3, 22.	2.1	29
26	Optimization of Co-content in C14 Laves phase multi-component alloys for NiMH battery application. Journal of Alloys and Compounds, 2010, 489, 202-210.	2.8	28
27	Ionic Liquid-Based Non-Aqueous Electrolytes for Nickel/Metal Hydride Batteries. Batteries, 2017, 3, 4.	2.1	28
28	Structural and electrochemical properties of Ti1.5Zr5.5VxNi10â^'x. International Journal of Hydrogen Energy, 2009, 34, 8695-8706.	3.8	27
29	Studies of Co, Al, and Mn substitutions in NdNi5 metal hydride alloys. Journal of Alloys and Compounds, 2012, 543, 90-98.	2.8	27
30	Hydrogenated amorphous silicon thin film anode for proton conducting batteries. Journal of Power Sources, 2016, 302, 31-38.	4.0	26
31	Studies of copper as a modifier in C14-predominant AB2 metal hydride alloys. Journal of Power Sources, 2012, 204, 205-212.	4.0	25
32	The Importance of Rare-Earth Additions in Zr-Based AB2 Metal Hydride Alloys. Batteries, 2016, 2, 25.	2.1	25
33	C14 Laves Phase Metal Hydride Alloys for Ni/MH Batteries Applications. Batteries, 2017, 3, 27.	2.1	25
34	Effects of annealing on Zr8Ni19X2 (XÂ=ÂNi, Mg, Al, Sc, V, Mn, Co, Sn, La, and Hf): Hydrogen storage and electrochemical properties. International Journal of Hydrogen Energy, 2012, 37, 8418-8427.	3.8	23
35	Studies on the Synergetic Effects in Multi-Phase Metal Hydride Alloys. Batteries, 2016, 2, 15.	2.1	22
36	Reviews on the Japanese Patent Applications Regarding Nickel/Metal Hydride Batteries. Batteries, 2016, 2, 21.	2.1	21

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37	Effects of annealing on Zr8Ni19X2 (X=Ni, Mg, Al, Sc, V, Mn, Co, Sn, La, and Hf): Structural characteristics. Journal of Alloys and Compounds, 2012, 516, 144-152.	2.8	19
38	Electrochemical Open-Circuit Voltage and Pressure-Concentration-Temperature Isotherm Comparison for Metal Hydride Alloys. Batteries, 2016, 2, 6.	2.1	19
39	Effects of Salt Additives to the KOH Electrolyte Used in Ni/MH Batteries. Batteries, 2015, 1, 54-73.	2.1	18
40	Studies on Incorporation of Mg in Zr-Based AB2 Metal Hydride Alloys. Batteries, 2016, 2, 11.	2.1	18
41	Studies of Ti1.5Zr5.5V0.5(MxNi1â^'x)9.5 (M=Cr, Mn, Fe, Co, Cu, Al): Part 1. Structural characteristics. Journal of Alloys and Compounds, 2010, 501, 236-244.	2.8	17
42	Failure Mechanisms of Nickel/Metal Hydride Batteries with Cobalt-Substituted Superlattice Hydrogen-Absorbing Alloy Anodes at 50 Â°C. Batteries, 2016, 2, 20.	2.1	17
43	Research in Nickel/Metal Hydride Batteries 2017. Batteries, 2018, 4, 9.	2.1	17
44	Study of AB2 alloy electrodes for Ni/MH battery prepared by centrifugal casting and gas atomization. Journal of Alloys and Compounds, 2010, 496, 669-677.	2.8	16
45	Microstructure Investigation on Metal Hydride Alloys by Electron Backscatter Diffraction Technique. Batteries, 2016, 2, 26.	2.1	16
46	Effects of Vanadium/Nickel Contents in Laves Phase-Related Body-Centered-Cubic Solid Solution Metal Hydride Alloys. Batteries, 2015, 1, 34-53.	2.1	15
47	Structure, Hydrogen Storage, and Electrochemical Properties of Body-Centered-Cubic Ti40V30Cr15Mn13X2 Alloys (X = B, Si, Mn, Ni, Zr, Nb, Mo, and La). Batteries, 2015, 1, 74-90.	2.1	13
48	Research in Nickel/Metal Hydride Batteries 2016. Batteries, 2016, 2, 31.	2.1	13
49	Cell Performance Comparison between C14- and C15-Predomiated AB2 Metal Hydride Alloys. Batteries, 2017, 3, 29.	2.1	13
50	Studies of Zr-based C15 type metal hydride battery anode alloys prepared by rapid solidification. Journal of Alloys and Compounds, 2019, 804, 527-537.	2.8	13
51	Studies on MgNi-Based Metal Hydride Electrode with Aqueous Electrolytes Composed of Various Hydroxides. Batteries, 2016, 2, 27.	2.1	12
52	Effects of rare-earth element additions to Laves phase-related body-centered-cubic solid solution metal hydride alloys: Thermodynamic and electrochemical properties. Journal of Alloys and Compounds, 2018, 737, 174-183.	2.8	12
53	High-Quality YBa2Cu3O7-ÎThin Films Grown on SrLaAlO4(001) and (1118) Substrates. Japanese Journal of Applied Physics, 1992, 31, L402-L405.	0.8	11
54	Hydrogenation of AB5 and AB2 metal hydride alloys studied by in situ X-ray diffraction. Journal of Alloys and Compounds, 2014, 616, 300-305.	2.8	11

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55	Gaseous Phase and Electrochemical Hydrogen Storage Properties of Ti50Zr1Ni44X5 (X = Ni, Cr, Mn, Fe,) Tj ETQq1 1 0.784314 rgBT /Ove	2.1	10
56	Comparison among Constituent Phases in Superlattice Metal Hydride Alloys for Battery Applications. Batteries, 2017, 3, 34.	2.1	9
57	Reviews on Chinese Patents Regarding the Nickel/Metal Hydride Battery. Batteries, 2017, 3, 24.	2.1	9
58	The electrochemical performance of melt-spun C14-Laves type Ti Zr-based alloy. International Journal of Hydrogen Energy, 2020, 45, 1297-1303.	3.8	9
59	Microstructures of the Activated Si-Containing AB2 Metal Hydride Alloy Surface by Transmission Electron Microscope. Batteries, 2016, 2, 4.	2.1	8
60	Clean Grain Boundary Found in C14/Body-Center-Cubic Multi-Phase Metal Hydride Alloys. Batteries, 2016, 2, 22.	2.1	8
61	Reviews of European Patents on Nickel/Metal Hydride Batteries. Batteries, 2017, 3, 25.	2.1	8
62	Increase in the Surface Catalytic Ability by Addition of Palladium in C14 Metal Hydride Alloy. Batteries, 2017, 3, 26.	2.1	8
63	Effects of Alkaline Pre-Etching to Metal Hydride Alloys. Batteries, 2017, 3, 30.	2.1	8
64	Performance Comparison between AB5 and Superlattice Metal Hydride Alloys in Sealed Cells. Batteries, 2017, 3, 35.	2.1	8
65	Effects of Boron-Incorporation in a V-Containing Zr-Based AB2 Metal Hydride Alloy. Batteries, 2017, 3, 36.	2.1	8
66	Fe-Substitution for Ni in Misch Metal-Based Superlattice Hydrogen Absorbing Alloysâ€"Part 1. Structural, Hydrogen Storage, and Electrochemical Properties. Batteries, 2016, 2, 34.	2.1	7
67	A BCC-C14 alloy suitable for EV application of Ni/MH battery. International Journal of Hydrogen Energy, 2019, 44, 29338-29343.	3.8	7
68	New Type of Alkaline Rechargeable Batteryâ€"Ni-Ni Battery. Batteries, 2016, 2, 16.	2.1	6
69	A Ni/MH Pouch Cell with High-Capacity Ni(OH)2. Batteries, 2017, 3, 38.	2.1	6
70	Effects of Cs2CO3 Additive in KOH Electrolyte Used in Ni/MH Batteries. Batteries, 2017, 3, 41.	2.1	6
71	Fine Structure in Multi-Phase Zr8Ni21-Zr7Ni10-Zr2Ni7 Alloy Revealed by Transmission Electron Microscope. Materials, 2015, 8, 4618-4630.	1.3	5
72	Fe-Substitution for Ni in Misch Metal-Based Superlattice Hydrogen Absorbing Alloysâ€"Part 2. Ni/MH Battery Performance and Failure Mechanisms. Batteries, 2017, 3, 28.	2.1	4

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73	First-Principles Point Defect Models for Zr7Ni10 and Zr2Ni7 Phases. Batteries, 2016, 2, 23.	2.1	3
74	Hydrogen Storage Characteristics and Corrosion Behavior of Ti24V40Cr34Fe2 Alloy. Batteries, 2017, 3, 19.	2.1	3
75	Electron Backscatter Diffraction Studies on the Formation of Superlattice Metal Hydride Alloys. Batteries, 2017, 3, 40.	2.1	3
76	Effects of lithium addition in AB2 metal hydride alloy by solid-state diffusion. International Journal of Hydrogen Energy, 2019, 44, 29319-29328.	3.8	3
77	Capacity degradation of Laves phase-related body-centered-cubic solid solution metal hydride alloys in battery. Journal of Alloys and Compounds, 2019, 792, 260-266.	2.8	3
78	Properties of Nickel Metal Hydride Battery Using Molybdenum-added Superlattice Metal Hydride Alloy. Material Science and Engineering With Advanced Research, 2018, 2, 1-14.	0.3	3
79	Epitaxial YBCO(F) films directly deposited on sapphire and its microwave properties. Cryogenics, 1992, 32, 587-591.	0.9	0