

# ChuBin Wan

## List of Publications by Year in descending order

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44  
papers

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citations

567281

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docs citations

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#	ARTICLE	IF	CITATIONS
1	Structural, hydrogen storage, and electrochemical performance of LaMgNi <sub>4</sub> alloy and theoretical investigation of its hydrides. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 1723-1734.	7.1	20
2	Porous NiCoO <sub>2</sub> nanospheres encapsulated in nitrogen-doped carbon shell achieving high energy storage for aqueous supercapacitors and zinc-ion batteries. <i>Applied Surface Science</i> , 2022, 582, 152456.	6.1	5
3	Oxygen vacancies confined in porous Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> sheets for durable and high-energy aqueous sodium-ion capacitors. <i>Nano Research</i> , 2022, 15, 5123-5133.	10.4	14
4	A Theoretical Study of Fe Adsorbed on Pure and Nonmetal (N, F, P, S, Cl)-Doped Ti <sub>3</sub> C <sub>2</sub> O <sub>2</sub> for Electrocatalytic Nitrogen Reduction. <i>Nanomaterials</i> , 2022, 12, 1081.	4.1	6
5	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. <i>Progress in Energy</i> , 2022, 4, 032007.	10.9	29
6	Effect of Mg content in the La <sub>3-x</sub> Mg <sub>x</sub> Ni <sub>9</sub> battery anode alloys on the structural, hydrogen storage and electrochemical properties. <i>Journal of Alloys and Compounds</i> , 2021, 856, 157443.	5.5	15
7	Metal-organic framework-derived Ni/ZnO nano-sponges with delicate surface vacancies as anode materials for high-performance supercapacitors. <i>Nano Research</i> , 2021, 14, 4063-4072.	10.4	38
8	Preparation of safe water-lipid mixed electrolytes for application in ion capacitor. <i>Chinese Chemical Letters</i> , 2021, 32, 2009-2012.	9.0	5
9	Towards understanding the influence of Mg content on phase transformations in the La <sub>3-x</sub> Mg <sub>x</sub> Ni <sub>9</sub> alloys by in-situ neutron powder diffraction study. <i>Progress in Natural Science: Materials International</i> , 2021, , .	4.4	6
10	Towards understanding the trapping, migration and clustering of He atoms in W-Ta alloy. <i>Journal of Nuclear Materials</i> , 2021, 554, 153095.	2.7	4
11	Controllable nitrogen-doped carbon layers coated on NiCoO <sub>2</sub> as electrodes for high-performance hybrid supercapacitors. <i>Applied Surface Science</i> , 2021, 569, 150924.	6.1	15
12	Effects of Ti substitution for Zr on the electrochemical characteristics and structure of AB <sub>2</sub> -type Laves-phase alloys as metal hydride anodes. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161655.	5.5	9
13	Hybrid density functional theory for the stability and electronic properties of Fe-doped cluster defects in KDP crystal. <i>CrystEngComm</i> , 2021, 23, 7839-7845.	2.6	13
14	Effects of V substitution and annealing on Zr-based AB <sub>2</sub> alloys as anode material of metal hydride batteries. <i>Intermetallics</i> , 2020, 127, 106979.	3.9	6
15	High-capacity Zr-based AB <sub>2</sub> -type alloys as metal hydride battery anodes. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154402.	5.5	12
16	Study of hydrogen storage and electrochemical properties of AB <sub>2</sub> -type Ti <sub>0.15</sub> Zr <sub>0.85</sub> La <sub>0.03</sub> Ni <sub>1.2</sub> Mn <sub>0.7</sub> V <sub>0.12</sub> Fe <sub>0.12</sub> alloy. <i>Journal of Alloys and Compounds</i> , 2019, 793, 564-575.	5.5	46
17	Electrochemical studies and phase-structural characterization of a high-capacity La-doped AB <sub>2</sub> Laves type alloy and its hydride. <i>Journal of Power Sources</i> , 2019, 418, 193-201.	7.8	29
18	Energetics of small helium clusters near tungsten surface by ab initio calculations. <i>Journal of Nuclear Materials</i> , 2018, 499, 539-545.	2.7	10

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19	Porous Ni@C derived from bimetallic Metal-Organic Frameworks and its application for improving LiBH <sub>4</sub> dehydrogenation. <i>Journal of Alloys and Compounds</i> , 2018, 735, 1637-1647.	5.5	25
20	Hydrogen trapping in helium-implanted W and W-Ta alloy: First-principles approach. <i>Journal of Nuclear Materials</i> , 2018, 508, 249-256.	2.7	12
21	Rodlike CeO <sub>2</sub> /carbon nanocomposite derived from metal-organic frameworks for enhanced supercapacitor applications. <i>Journal of Materials Science</i> , 2018, 53, 13966-13975.	3.7	24
22	MgCo <sub>2</sub> -D <sub>2</sub> and MgCoNi-D <sub>2</sub> systems synthesized at high pressures and interaction mechanism during the HDDR processing. <i>Progress in Natural Science: Materials International</i> , 2017, 27, 74-80.	4.4	8
23	Comparison of C14- and C15-Predominated AB <sub>2</sub> Metal Hydride Alloys for Electrochemical Applications. <i>Batteries</i> , 2017, 3, 22.	4.5	29
24	Cell Performance Comparison between C14- and C15-Predominated AB <sub>2</sub> Metal Hydride Alloys. <i>Batteries</i> , 2017, 3, 29.	4.5	13
25	Synergistic effect of Li-Ti and K-Ti co-doping on the dehydrogenation properties of NaAlH <sub>4</sub> : an ab initio study. <i>RSC Advances</i> , 2016, 6, 89895-89900.	3.6	0
26	Phase-structural transformations in a metal hydride battery anode La <sub>1.5</sub> Nd <sub>0.5</sub> MgNi <sub>9</sub> alloy and its electrochemical performance. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 9954-9967.	7.1	35
27	First-principles study of transition metal (Ti, Nb)-doped NaAlH <sub>4</sub> . <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3517-3526.	7.1	6
28	In situ neutron powder diffraction study of phase-structural transformations in the La-Mg-Ni battery anode alloy. <i>Journal of Alloys and Compounds</i> , 2016, 670, 210-216.	5.5	29
29	Nb-doped LiBH <sub>4</sub> (010) surface for hydrogen desorption: First-principles calculations. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 6365-6372.	7.1	8
30	Wall-induced phase transition controlled by layering freezing. <i>Physical Review E</i> , 2014, 89, 032412.	2.1	9
31	Theoretical studies of elastic properties of orthorhombic LiBH <sub>4</sub> . <i>Computational Materials Science</i> , 2014, 81, 378-385.	3.0	38
32	First-principles calculations of structural, elastic and electronic properties of Li <sub>2</sub> B <sub>12</sub> H <sub>12</sub> . <i>Journal of Alloys and Compounds</i> , 2014, 593, 169-175.	5.5	12
33	Structural investigations in helium charged titanium films using grazing incidence XRD and EXAFS spectroscopy. <i>Journal of Nuclear Materials</i> , 2014, 444, 142-146.	2.7	4
34	Pressure-induced phase transitions in LiBH <sub>4</sub> : Density functional theory calculations. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9330-9338.	7.1	6
35	Freezing of Lennard-Jones fluid on a patterned substrate. <i>Physical Review E</i> , 2014, 89, 062410.	2.1	9
36	Investigation of modification of hydrogenation and structure properties of multi-substituted LaNi <sub>5</sub> alloys. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 13234-13242.	7.1	7

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37	EXAFS characterization of TiVCrMn hydrogen storage alloy upon hydrogen absorption-desorption cycles. International Journal of Hydrogen Energy, 2012, 37, 990-994.	7.1	4
38	Synchrotron EXAFS and XRD studies of Ti-V-Cr hydrogen absorbing alloy. International Journal of Hydrogen Energy, 2010, 35, 2915-2920.	7.1	14
39	EXAFS and SAXS studies of ZrCo alloy doped with Hf, Sc and Ti atoms. International Journal of Hydrogen Energy, 2010, 35, 2931-2935.	7.1	35
40	Valence band of catalyst doped sodium alanate by X-ray photoelectron spectroscopy using synchrotron radiation. International Journal of Hydrogen Energy, 2010, 35, 1213-1218.	7.1	2
41	Local and crystal structure of Mg <sub>1.9</sub> Al <sub>0.1</sub> Ni hydrogen storage alloys during hydrogen absorption-desorption cycling. International Journal of Hydrogen Energy, 2010, 35, 8044-8048.	7.1	7
42	A study on crystal structure and chemical state of TiCrVMn hydrogen storage alloys during hydrogen absorption-desorption cycling. International Journal of Hydrogen Energy, 2009, 34, 8944-8950.	7.1	18
43	Synchrotron XRD and XANES studies of cerium-doped NaAlH <sub>4</sub> : Elucidation of doping induced structure changes and electronic state. Journal of Alloys and Compounds, 2009, 481, 60-64.	5.5	16
44	Synchrotron X-ray diffraction and X-ray photoelectron spectroscopy studies of NaAlH <sub>4</sub> containing Ti-Zr hydride additives. Journal of Alloys and Compounds, 2009, 486, 436-441.	5.5	10