Hongge Pan

List of Publications by Citations

158 papers	5,613 citations	40 h-index	68 g-index
166 ext. papers	7,093 ext. citations	10.9 avg, IF	6.17 L-index

#	Paper	IF	Citations
158	Advanced hydrogen storage alloys for Ni/MH rechargeable batteries. *Journal of Materials Chemistry* , **2011**, 21, 4743-4755		386
157	Prussian Blue Analogs for Rechargeable Batteries. *IScience*, **2018**, 3, 110-133	6.1	208
156	Lithium alloys and metal oxides as high-capacity anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2013**, 575, 246-256	5.7	199
155	High performance amorphous-Si@SiOx/C composite anode materials for Li-ion batteries derived from ball-milling and in situ carbonization. *Journal of Power Sources*, **2014**, 256, 190-199	8.9	174
154	Superior catalytic activity derived from a two-dimensional Ti3C2 precursor towards the hydrogen storage reaction of magnesium hydride. *Chemical Communications*, **2016**, 52, 705-8	5.8	160
153	A Study of the Structural and Electrochemical Properties of La[sub 0.7]Mg[sub 0.3](Ni[sub 0.85]Co[sub 0.15])[sub x] (x=2.5-5.0) Hydrogen Storage Alloys. *Journal of the Electrochemical Society* , **2003**, 150, A565	3.9	152
152	An investigation on the structural and electrochemical properties of La0.7Mg0.3(Ni0.85Co0.15)x (x=3.15□3.80) hydrogen storage electrode alloys. *Journal of Alloys and Compounds*, **2003**, 351, 228-234	5.7	135
151	Porous anatase TiO2 constructed from a metal□organic framework for advanced lithium-ion battery anodes. *Journal of Materials Chemistry A*, **2014**, 2, 12571	13	128
150	A facile synthesis of Fe3O4/C composite with high cycle stability as anode material for lithium-ion batteries. *Journal of Power Sources*, **2013**, 239, 466-474	8.9	127
149	Low-Coordinate Iridium Oxide Confined on Graphitic Carbon Nitride for Highly Efficient Oxygen Evolution. *Angewandte Chemie - International Edition*, **2019**, 58, 12540-12544	16.4	122
148	A mechanical-force-driven physical vapour deposition approach to fabricating complex hydride nanostructures. *Nature Communications*, **2014**, 5, 3519	17.4	115
147	Enhanced hydrogen storage properties of MgH 2 catalyzed with carbon-supported nanocrystalline TiO 2. *Journal of Power Sources*, **2018**, 398, 183-192	8.9	113
146	A Novel Strategy to Suppress Capacity and Voltage Fading of Li- and Mn-Rich Layered Oxide Cathode Material for Lithium-Ion Batteries. *Advanced Energy Materials*, **2017**, 7, 1601066	21.8	113
145	Cycling durability and degradation behavior of La□MgNi□Co-type metal hydride electrodes. *Journal of Alloys and Compounds*, **2005**, 395, 291-299	5.7	92
144	Li- and Mn-rich layered oxide cathode materials for lithium-ion batteries: a review from fundamentals to research progress and applications. *Molecular Systems Design and Engineering*, **2018**, 3, 748-803	4.6	87
143	Highly dispersed □NiS nanoparticles in porous carbon matrices by a template metal□organic framework method for lithium-ion cathode. *Journal of Materials Chemistry A*, **2014**, 2, 7912	13	80
142	Vanadium oxide nanoparticles supported on cubic carbon nanoboxes as highly active catalyst precursors for hydrogen storage in MgH2. *Journal of Materials Chemistry A*, **2018**, 6, 16177-16185	13	71

141	A novel strategy to significantly enhance the initial voltage and suppress voltage fading of a Li- and Mn-rich layered oxide cathode material for lithium-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 3610-3624	13	68
140	Valleytronics in thermoelectric materials. *Npj Quantum Materials*, **2018**, 3,	5	67
139	A novel catalyst precursor K2TiF6 with remarkable synergetic effects of K, Ti and F together on reversible hydrogen storage of NaAlH4. *Chemical Communications*, **2011**, 47, 1740-2	5.8	67
138	Lanthanide Contraction as a Design Factor for High-Performance Half-Heusler Thermoelectric Materials. *Advanced Materials*, **2018**, 30, e1800881	24	66
137	Non-carbon-supported single-atom site catalysts for electrocatalysis. *Energy and Environmental Science*, **2021**, 14, 2809-2858	35.4	66
136	Improved Hydrogen Storage Properties of LiBH4 Destabilized by in Situ Formation of MgH2 and LaH3. *Journal of Physical Chemistry C*, **2012**, 116, 1588-1595	3.8	65
135	In situ formed ultrafine NbTi nanocrystals from a NbTiC solid-solution MXene for hydrogen storage in MgH2. *Journal of Materials Chemistry A*, **2019**, 7, 14244-14252	13	63
134	Amylose-Derived Macrohollow Core and Microporous Shell Carbon Spheres as Sulfur Host for Superior Lithium-Sulfur Battery Cathodes. *ACS Applied Materials & Interfaces*, **2017**, 9, 10717-10729	9.5	62
133	Chemical vapor deposition prepared bi-morphological carbon-coated Fe3O4 composites as anode materials for lithium-ion batteries. *Journal of Power Sources*, **2015**, 282, 257-264	8.9	61
132	Realizing 6.7 wt% reversible storage of hydrogen at ambient temperature with non-confined ultrafine magnesium hydrides. *Energy and Environmental Science*, **2021**, 14, 2302-2313	35.4	60
131	Improved hydrogen storage kinetics of the Li-Mg-N-H system by addition of Mg(BH4)2. *Dalton Transactions*, **2013**, 42, 3802-11	4.3	58
130	Remarkably improved hydrogen storage properties of NaAlH4 doped with 2D titanium carbide. *Journal of Power Sources*, **2016**, 327, 519-525	8.9	57
129	Mechanisms for the enhanced hydrogen desorption performance of the TiF4-catalyzed Na2LiAlH6 used for hydrogen storage. *Energy and Environmental Science*, **2010**, 3, 645	35.4	52
128	Monoclinic Phase Na3Fe2(PO4)3: Synthesis, Structure, and Electrochemical Performance as Cathode Material in Sodium-Ion Batteries. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 1306-1314	8.3	51
127	Hexagonal Boron Nitride as a Multifunctional Support for Engineering Efficient Electrocatalysts toward the Oxygen Reduction Reaction. *Nano Letters*, **2020**, 20, 6807-6814	11.5	50
126	Tailoring Thermodynamics and Kinetics for Hydrogen Storage in Complex Hydrides towards Applications. *Chemical Record*, **2016**, 16, 189-204	6.6	49
125	Interface Engineering of Air Electrocatalysts for Rechargeable Zinc–Air Batteries. *Advanced Energy Materials*, **2021**, 11, 2002762	21.8	47
124	Highly Stable Cycling of Amorphous Li2CO3-Coated α-Fe2O3 Nanocrystallines Prepared via a New Mechanochemical Strategy for Li-Ion Batteries. *Advanced Functional Materials*, **2017**, 27, 1605011	15.6	46

123	Development of Catalyst-Enhanced Sodium Alanate as an Advanced Hydrogen-Storage Material for Mobile Applications. *Energy Technology*, **2018**, 6, 487-500	3.5	44
122	Understanding the role of K in the significantly improved hydrogen storage properties of a KOH-doped LiMgNH system. *Journal of Materials Chemistry A*, **2013**, 1, 5031	13	44
121	Chemical Preinsertion of Lithium: An Approach to Improve the Intrinsic Capacity Retention of Bulk Si Anodes for Li-ion Batteries. *Journal of Physical Chemistry Letters*, **2012**, 3, 3555-8	6.4	44
120	A hybrid Si@FeSiy/SiOx anode structure for high performance lithium-ion batteries via ammonia-assisted one-pot synthesis. *Journal of Materials Chemistry A*, **2015**, 3, 10767-10776	13	43
119	A novel complex oxide TiVO3.5 as a highly active catalytic precursor for improving the hydrogen storage properties of MgH2. *International Journal of Hydrogen Energy*, **2018**, 43, 23327-23335	6.7	43
118	Remarkably improved hydrogen storage properties of nanocrystalline TiO2-modified NaAlH4 and evolution of Ti-containing species during dehydrogenation/hydrogenation. *Nano Research*, **2015**, 8, 533-545	10	40
117	Gradient substitution: an intrinsic strategy towards high performance sodium storage in Prussian blue-based cathodes. *Journal of Materials Chemistry A*, **2018**, 6, 8947-8954	13	39
116	Achieving ambient temperature hydrogen storage in ultrafine nanocrystalline TiO2@C-doped NaAlH4. *Journal of Materials Chemistry A*, **2016**, 4, 1087-1095	13	39
115	Mesoporous Fe2O3 flakes of high aspect ratio encased within thin carbon skeleton for superior lithium-ion battery anodes. *Journal of Materials Chemistry A*, **2015**, 3, 14178-14187	13	37
114	A New Strategy to Effectively Suppress the Initial Capacity Fading of Iron Oxides by Reacting with LiBH4. *Advanced Functional Materials*, **2017**, 27, 1700342	15.6	36
113	Synthesis, Structure Transformation, and Electrochemical Properties of Li2MgSi as a Novel Anode for Li-Ion Batteries. *Advanced Functional Materials*, **2014**, 24, 3944-3952	15.6	36
112	In situ formation of lithium fast-ion conductors and improved hydrogen desorption properties of the LiNH2MgH2 system with the addition of lithium halides. *Journal of Materials Chemistry A*, **2014**, 2, 3155	13	36
111	Green synthesis of graphite from CO without graphitization process of amorphous carbon. *Nature Communications*, **2021**, 12, 119	17.4	36
110	Superior long-term cyclability of a nanocrystalline NiO anode enabled by a mechanochemical reaction-induced amorphous protective layer for Li-ion batteries. *Journal of Power Sources*, **2018**, 397, 134-142	8.9	34
109	Improved hydrogen storage performance of Ca(BH4)2: a synergetic effect of porous morphology and in situ formed TiO2. *Energy and Environmental Science*, **2013**, 6, 847	35.4	34
108	In Situ Encapsulation of the Nanoscale ErO Phase To Drastically Suppress Voltage Fading and Capacity Degradation of a Li- and Mn-Rich Layered Oxide Cathode for Lithium Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 33863-33875	9.5	34
107	Ca(BH4)2LiBH4MgH2: a novel ternary hydrogen storage system with superior long-term cycling performance. *Journal of Materials Chemistry A*, **2013**, 1, 12285	13	33
106	Graphene-induced growth of N-doped niobium pentaoxide nanorods with high catalytic activity for hydrogen storage in MgH2. *Chemical Engineering Journal*, **2021**, 406, 126831	14.7	33

105	Bi-structural fibers of carbon nanotube coated with nitrogen/oxygen dual-doped porous carbon layer as superior sulfur host for lithium-sulfur batteries. *Journal of Alloys and Compounds*, **2019**, 797, 1205-1215	5.7	32
104	A novel solid-solution MXene (Ti0.5V0.5)3C2 with high catalytic activity for hydrogen storage in MgH2. *Materialia*, **2018**, 1, 114-120	3.2	32
103	Hydrogen storage properties and mechanisms of the Mg(BH4)2–NaAlH4 system. *International Journal of Hydrogen Energy*, **2012**, 37, 17137-17145	6.7	32
102	Dispersion-strengthened microparticle silicon composite with high anti-pulverization capability for Li-ion batteries. *Energy Storage Materials*, **2018**, 14, 279-288	19.4	31
101	A mechanochemical synthesis of submicron-sized Li2S and a mesoporous Li2S/C hybrid for high performance lithium/sulfur battery cathodes. *Journal of Materials Chemistry A*, **2017**, 5, 6471-6482	13	30
100	Novel MAX-phase Ti3AlC2 catalyst for improving the reversible hydrogen storage properties of MgH2. *International Journal of Hydrogen Energy*, **2017**, 42, 4244-4251	6.7	30
99	Facile Synthesis and Superior Catalytic Activity of Nano-TiN@N-C for Hydrogen Storage in NaAlH. *ACS Applied Materials & Interfaces*, **2018**, 10, 15767-15777	9.5	29
98	Effects of triphenyl phosphate on the hydrogen storage performance of the Mg(NH2)2–LiH system. *Journal of Materials Chemistry*, **2009**, 19, 2141		29
97	An ammonia-stabilized mixed-cation borohydride: synthesis, structure and thermal decomposition behavior. *Physical Chemistry Chemical Physics*, **2014**, 16, 135-43	3.6	28
96	Conversion-Alloying Anode Materials for Sodium Ion Batteries. *Small*, **2021**, 17, e2101137	11	27
95	Tuning Li2MO3 phase abundance and suppressing migration of transition metal ions to improve the overall performance of Li- and Mn-rich layered oxide cathode. *Journal of Power Sources*, **2018**, 380, 1-11	8.9	25
94	A Novel Multielement, Multiphase, and B-Containing SiOx Composite as a Stable Anode Material for Li-Ion Batteries. *Advanced Materials Interfaces*, **2019**, 6, 1801631	4.6	25
93	Triggering highly stable catalytic activity of metallic titanium for hydrogen storage in NaAlH4 by preparing ultrafine nanoparticles. *Journal of Materials Chemistry A*, **2019**, 7, 4651-4659	13	24
92	Hydrogen storage properties and mechanisms of Mg(BH4)2–2NH3–MgH2 combination systems. *Journal of Alloys and Compounds*, **2014**, 585, 674-680	5.7	24
91	Highly active multivalent multielement catalysts derived from hierarchical porous TiNb2O7 nanospheres for the reversible hydrogen storage of MgH2. *Nano Research*, **2021**, 14, 148-156	10	24
90	Si/Ti3SiC2 composite anode with enhanced elastic modulus and high electronic conductivity for lithium-ion batteries. *Journal of Power Sources*, **2019**, 431, 55-62	8.9	23
89	High-temperature failure behaviour and mechanism of K-based additives in Li–Mg–N–H hydrogen storage systems. *Journal of Materials Chemistry A*, **2014**, 2, 7345-7353	13	23
88	Co/CoP Heterojunction on Hierarchically Ordered Porous Carbon as a Highly Efficient Electrocatalyst for Hydrogen and Oxygen Evolution. *Advanced Energy Materials*, **2021**, 11, 2102134	21.8	23

87	Reaction-Ball-Milling-Driven Surface Coating Strategy to Suppress Pulverization of Microparticle Si Anodes. *ACS Applied Materials & Interfaces*, **2018**, 10, 20591-20598	9.5	23
86	Significantly improved kinetics, reversibility and cycling stability for hydrogen storage in NaAlH4 with the Ti-incorporated metal organic framework MIL-125(Ti). *Journal of Materials Chemistry A*, **2014**, 2, 1847-1854	13	22
85	Incorporation of Ammonia Borane Groups in the Lithium Borohydride Structure Enables Ultrafast Lithium Ion Conductivity at Room Temperature for Solid-State Batteries. *Chemistry of Materials*, **2020**, 32, 671-678	9.6	22
84	Manipulating the Coordination Chemistry of Ru?N(O)?C Moieties for Fast Alkaline Hydrogen Evolution Kinetics. *Advanced Functional Materials*, **2021**, 31, 2100698	15.6	22
83	Linking particle size to improved electrochemical performance of SiO anodes for Li-ion batteries. *RSC Advances*, **2017**, 7, 2273-2280	3.7	21
82	Li□Si-alloy-assisted improvement in the intrinsic cyclability of Mg2Si as an anode material for Li-ion batteries. *Acta Materialia*, **2015**, 98, 128-134	8.4	21
81	Fluorine-substituted Mg(BH4)2□2NH3 with improved dehydrogenation properties for hydrogen storage. *Journal of Materials Chemistry A*, **2015**, 3, 570-578	13	20
80	LiBH4 Nanoconfined in Porous Hollow Carbon Nanospheres with High Loading, Low Dehydrogenation Temperature, Superior Kinetics, and Favorable Reversibility. *ACS Applied Energy Materials*, **2020**, 3, 3928-3938	6.1	20
79	Insight into the synergistic effect mechanism between the Li2MO3 phase and the LiMO2 phase (M = Ni, Co, and Mn) in Li- and Mn-rich layered oxide cathode materials. *Electrochimica Acta*, **2018**, 266, 66-77	6.7	20
78	Role of Co3O4 in improving the hydrogen storage properties of a LiBH4□LiNH2 composite. *Journal of Materials Chemistry A*, **2014**, 2, 11155	13	20
77	Mg2Si anode for Li-ion batteries: Linking structural change to fast capacity fading. *Applied Physics Letters*, **2014**, 105, 213901	3.4	20
76	Improved lithium storage properties of Mg2Si anode material synthesized by hydrogen-driven chemical reaction. *Electrochemistry Communications*, **2012**, 25, 15-18	5.1	20
75	Lattice-Confined Ir Clusters on Pd Nanosheets with Charge Redistribution for the Hydrogen Oxidation Reaction under Alkaline Conditions. *Advanced Materials*, **2021**, 33, e2105400	24	20
74	Superior Kinetic and Cyclic Performance of a 2D Titanium Carbide Incorporated 2LiH + MgB2 Composite toward Highly Reversible Hydrogen Storage. *ACS Applied Energy Materials*, **2019**, 2, 4853-4864	6.1	19
73	Ultrafine Nanocrystalline CeO2@C-Containing NaAlH4 with Fast Kinetics and Good Reversibility for Hydrogen Storage. *ChemSusChem*, **2015**, 8, 4180-8	8.3	19
72	Towards the endothermic dehydrogenation of nanoconfined magnesium borohydride ammoniate. *Journal of Materials Chemistry A*, **2015**, 3, 11057-11065	13	19
71	Non-Platinum Group Metal Electrocatalysts toward Efficient Hydrogen Oxidation Reaction. *Advanced Functional Materials*, **2021**, 31, 2010633	15.6	19
70	Higher Than 90% Initial Coulombic Efficiency with Staghorn-Coral-Like 3D Porous LiFeO as Anode Materials for Li-Ion Batteries. *Advanced Materials*, **2020**, 32, e1908285	24	19

69	Enabling Full Conversion Reaction with High Reversibility to Approach Theoretical Capacity for Sodium Storage. *Advanced Functional Materials*, **2019**, 29, 1906680	15.6	18
68	Na2Fe(SO4)2: an anhydrous 3.6 V, low-cost and good-safety cathode for a rechargeable sodium-ion battery. *Journal of Materials Chemistry A*, **2019**, 7, 13197-13204	13	17
67	A Unique Double-Layered Carbon Nanobowl-Confined Lithium Borohydride for Highly Reversible Hydrogen Storage. *Small*, **2020**, 16, e2001963	11	17
66	TiO2 decorated porous carbonaceous network structures offer confinement, catalysis and thermal conductivity for effective hydrogen storage of LiBH4. *Chemical Engineering Journal*, **2021**, 407, 127156	14.7	16
65	Single-Atom Electrocatalysts for Multi-Electron Reduction of CO. *Small*, **2021**, 17, e2101443	11	16
64	Reversible hydrogen storage behavior of LiBH4–Mg(OH)2 composites. *International Journal of Hydrogen Energy*, **2014**, 39, 7868-7875	6.7	15
63	Implanting Single Zn Atoms Coupled with Metallic Co Nanoparticles into Porous Carbon Nanosheets Grafted with Carbon Nanotubes for High-Performance Lithium-Sulfur Batteries. *Advanced Functional Materials*,2200424	15.6	15
62	Atomic-Level Modulation of the Interface Chemistry of Platinum-Nickel Oxide toward Enhanced Hydrogen Electrocatalysis Kinetics. *Nano Letters*, **2021**, 21, 4845-4852	11.5	15
61	An ultrasound-assisted wet-chemistry approach towards uniform Mg(BH4)2·6NH3 nanoparticles with improved dehydrogenation properties. *Journal of Materials Chemistry A*, **2016**, 4, 8366-8373	13	15
60	Preparation and Catalytic Activity of a Novel Nanocrystalline ZrO @C Composite for Hydrogen Storage in NaAlH. *Chemistry - an Asian Journal*, **2016**, 11, 3541-3549	4.5	14
59	An eggshell-structured N-doped silicon composite anode with high anti-pulverization and favorable electronic conductivity. *Journal of Power Sources*, **2019**, 443, 227265	8.9	14
58	A high-strength SiCw/SiC–Si composite derived from pyrolyzed rice husks by liquid silicon infiltration. *Journal of Materials Science*, **2012**, 47, 4921-4927	4.3	13
57	Porous Carbon Architecture Assembled by Cross-Linked Carbon Leaves with Implanted Atomic Cobalt for High-Performance Li-S Batteries. *Nano-Micro Letters*, **2021**, 13, 151	19.5	13
56	A facile method for determining a suitable voltage window for an amorphous Li12Si7 anode. *Electrochimica Acta*, **2014**, 129, 373-378	6.7	12
55	A Novel Perovskite Electron-Ion Conductive Coating to Simultaneously Enhance Cycling Stability and Rate Capability of Li Ni Co Mn O Cathode Material for Lithium-Ion Batteries. *Small*, **2021**, 17, e2008132	11	12
54	Multifunctional bayberry-like composites consisting of CoFe encapsulated by carbon nanotubes for overall water splitting and zinc–air batteries. *Journal of Materials Chemistry A*,	13	12
53	Nanosheet-like Lithium Borohydride Hydrate with 10 wt % Hydrogen Release at 70 °C as a Chemical Hydrogen Storage Candidate. *Journal of Physical Chemistry Letters*, **2019**, 10, 1872-1877	6.4	11
52	Superior catalytic activity of in situ reduced metallic Co for hydrogen storage in a Co(OH) 2 -containing LiBH 4 /2LiNH 2 composite. *Materials Research Bulletin*, **2018**, 97, 544-552	5.1	11

51	Low-Coordinate Iridium Oxide Confined on Graphitic Carbon Nitride for Highly Efficient Oxygen Evolution. *Angewandte Chemie*, **2019**, 131, 12670-12674	3.6	11
50	In Situ Introduction of LiBO and NbH Leads to Superior Cyclic Stability and Kinetics of a LiBH-Based Hydrogen Storage System. *ACS Applied Materials & Interfaces*, **2020**, 12, 893-903	9.5	11
49	Amorphous Dual-Layer Coating: Enabling High Li-Ion Conductivity of Non-Sintered Garnet-Type Solid Electrolyte. *Advanced Functional Materials*, **2021**, 31, 2009692	15.6	11
48	Intercalation Pseudocapacitance Boosting Ultrafast Sodium Storage in Prussian Blue Analogs. *ChemSusChem*, **2019**, 12, 2415-2420	8.3	10
47	Recent Development of Lithium Borohydride-Based Materials for Hydrogen Storage. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100073	1.6	10
46	Enhanced Hydrogen Storage Performance of MgH2 by the Catalysis of a Novel Intersected Y2O3/NiO Hybrid. *Processes*, **2021**, 9, 892	2.9	10
45	Synthesis process and catalytic activity of Nb2O5 hollow spheres for reversible hydrogen storage of MgH2. *International Journal of Energy Research*, **2021**, 45, 3129-3141	4.5	10
44	New insights into the effects of NaCl and LiCl on the hydrogen storage behaviours of a 6LiBH4–Mg(AlH4)2 composite. *RSC Advances*, **2015**, 5, 12144-12151	3.7	9
43	Room Temperature Conversion of Carbon Dioxide into Fuel Gases by Mechanochemically Reacting with Metal Hydrides. *ChemistrySelect*, **2017**, 2, 5244-5247	1.8	9
42	Mechanistic insights into the remarkable catalytic activity of nanosized Co@C composites for hydrogen desorption from the LiBH4–LiNH2 system. *Catalysis Science and Technology*, **2017**, 7, 1838-1847	5.5	8
41	Improved hydrogen storage properties of combined Ca(BH4)2 and LiBH4 system motivated by addition of LaMg3 assisted with ball milling in H2. *International Journal of Hydrogen Energy*, **2015**, 40, 12325-12335	6.7	8
40	A Unique Structural Highly Compacted Binder-Free Silicon-Based Anode with High Electronic Conductivity for High-Performance Lithium-Ion Batteries. *Small Structures*,2100174	8.7	8
39	Structural Engineering in Graphite-Based Metal-Ion Batteries. *Advanced Functional Materials*,2107277	15.6	8
38	On the Durability of Iridium-Based Electrocatalysts toward the Oxygen Evolution Reaction under Acid Environment. *Advanced Functional Materials*,2108465	15.6	8
37	2D Metal-Free Nanomaterials Beyond Graphene and Its Analogues toward Electrocatalysis Applications. *Advanced Energy Materials*, **2021**, 11, 2101202	21.8	8
36	A Novel Tin-Bonded Silicon Anode for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 45578-45588	9.5	8
35	Remarkably Improved Cycling Stability of Boron-Strengthened Multicomponent Layer Protected Micron-Si Composite Anode. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19167-19175	8.3	7
34	SYNTHESIS AND CHARACTERIZATION OF LiFePO4/C PREPARED VIA A SOL–GEL METHOD. *Surface Review and Letters*, **2008**, 15, 133-138	1.1	7

33	Reversible Magnesium Metal Anode Enabled by Cooperative Solvation/Surface Engineering in Carbonate Electrolytes. *Nano-Micro Letters*, **2021**, 13, 195	19.5	7
32	Amorphous-Carbon-Supported Ultrasmall TiB Nanoparticles With High Catalytic Activity for Reversible Hydrogen Storage in NaAlH. *Frontiers in Chemistry*, **2020**, 8, 419	5	6
31	A Redox Couple Strategy Enables Long-Cycling Li- and Mn-Rich Layered Oxide Cathodes by Suppressing Oxygen Release.. *Advanced Materials*, **2022**, e2108543	24	6
30	Homogeneous Na Deposition Enabling High-Energy Na-Metal Batteries. *Advanced Functional Materials*,2110280	15.6	6
29	High-loading, ultrafine Ni nanoparticles dispersed on porous hollow carbon nanospheres for fast (de)hydrogenation kinetics of MgH2. *Journal of Magnesium and Alloys*, **2021**,	8.8	6
28	A nanoconfined-LiBH4 system using a unique multifunctional porous scaffold of carbon wrapped ultrafine Fe3O4 skeleton for reversible hydrogen storage with high capacity. *Chemical Engineering Journal*, **2022**, 428, 131056	14.7	6
27	Energetic Aqueous Batteries. *Advanced Energy Materials*,2201074	21.8	6
26	Improved overall hydrogen storage properties of a CsH and KH co-doped Mg(NH2)2/2LiH system by forming mixed amides of LiK and CsMg. *RSC Advances*, **2017**, 7, 30357-30364	3.7	5
25	Composition-Dependent Reaction Pathways and Hydrogen Storage Properties of LiBH4/Mg(AlH4)2 Composites. *Chemistry - an Asian Journal*, **2015**, 10, 2452-9	4.5	5
24	Hydrogen Storage Properties of the Mg(NH3)6Cl2-LiH Combined System. *Materials Transactions*, **2011**, 52, 627-634	1.3	5
23	Hybrid Design of Bulk-Na Metal Anode to Minimize Cycle-Induced Interface Deterioration of Solid Na Metal Battery. *Advanced Energy Materials*, **2022**, 12, 2102579	21.8	5
22	Zero-Strain Structure for Efficient Potassium Storage Nitrogen-Enriched Carbon Dual-Confinement CoP Composite. *Advanced Energy Materials*,2103341	21.8	5
21	Solid-State Sintering Strategy for Simultaneous Nanosizing and Surface Coating of Iron Oxides as High-Capacity Anodes for Long-Life Li-Ion Batteries. *ACS Applied Energy Materials*, **2018**, 1, 6330-6337	6.1	5
20	Supported Sub-Nanometer Clusters for Electrocatalysis Applications. *Advanced Functional Materials*,2202227	15.6	5
19	Hydrogen Pressure-Dependent Dehydrogenation Performance of the Mg(NH)-2LiH-0.07KOH System. *ACS Applied Materials & Interfaces*, **2020**, 12, 15255-15261	9.5	4
18	Synthesis and thermal decomposition properties of a novel dual-cation/anion complex hydride Li2Mg(BH4)2(NH2)2. *International Journal of Hydrogen Energy*, **2018**, 43, 13981-13989	6.7	4
17	Hierarchical Ion/Electron Networks Enable Efficient Red Phosphorus Anode with High Mass Loading for Sodium Ion Batteries. *Advanced Functional Materials*,2110444	15.6	4
16	Solid State Electrolytes: Amorphous Dual-Layer Coating: Enabling High Li-Ion Conductivity of Non-Sintered Garnet-Type Solid Electrolyte (Adv. Funct. Mater. 15/2021). *Advanced Functional Materials*, **2021**, 31, 2170100	15.6	4

15	A Unique Nanoflake-Shape Bimetallic Ti-Nb Oxide of Superior Catalytic Effect for Hydrogen Storage of MgH.. *Small*, **2022**, e2107013	11	4
14	Synthesis temperature dependence of the structural and electrochemical properties of Mg2Si anodic materials prepared via a hydrogen-driven chemical reaction. *Ionics*, **2015**, 21, 2439-2445	2.7	3
13	Controllable synthesis of 2D TiH2 nanoflakes with superior catalytic activity for low-temperature hydrogen cycling of NaAlH4. *Chemical Engineering Journal*, **2022**, 427, 131546	14.7	3
12	Ion Hopping: Design Principles for Strategies to Improve Ionic Conductivity for Inorganic Solid Electrolytes.. *Small*, **2022**, e2107064	11	3
11	Ultrafast hydrogenation of magnesium enabled by tetragonal ZrO2 hierarchical nanoparticles. *Materials Today Nano*, **2022**, 100200	9.7	3
10	Enriched d -Band Holes Enabling Fast Oxygen Evolution Kinetics on Atomic-Layered Defect-Rich Lithium Cobalt Oxide Nanosheets. *Advanced Functional Materials*,2200663	15.6	3
9	Hierarchical conformal coating enables highly stable microparticle Si anodes for advanced Li-ion batteries. *Applied Materials Today*, **2022**, 26, 101403	6.6	2
8	In-situ introduction of highly active TiO for enhancing hydrogen storage performance of LiBH4. *Chemical Engineering Journal*, **2022**, 433, 134485	14.7	2
7	Impact of residual gas on the optoelectronic properties of Cs-sensitized InGaAs (001) surface. *Journal of Colloid and Interface Science*, **2021**, 594, 47-53	9.3	2
6	Interaction of metallic magnesium with ammonia: Mechanochemical synthesis of Mg(NH2)2 for hydrogen storage. *Journal of Alloys and Compounds*, **2022**, 907, 164397	5.7	2
5	Cobalt Single Atoms Enabling Efficient Methanol Oxidation Reaction on Platinum Anchored on Nitrogen-Doped Carbon.. *Small*, **2022**, e2107067	11	2
4	Catalyzed LiBH4 Hydrogen Storage System with In Situ Introduced Li3BO3 and V for Enhanced Dehydrogenation and Hydrogenation Kinetics as Well as High Cycling Stability. *ACS Applied Energy Materials*, **2022**, 5, 1226-1234	6.1	1
3	Titanium Hydride Nanoplates Enable 5 wt% of Reversible Hydrogen Storage by Sodium Alanate below 80°C.. *Research*, **2021**, 2021, 9819176	7.8	1
2	A novel surface modification strategy for Li-rich Mn-based layered oxide cathodes of high-capacity and high-cyclic stability by an additive of LiBH4 to the electrolyte. *Functional Materials Letters*, **2021**, 14, 2140003	1.2	0
1	Constructing Complementary Catalytic Components on Co 4 N Nanowires to Achieve Efficient Hydrogen Evolution Catalysis. *Advanced Energy and Sustainability Research*,2100219	1.6	0