

# Zhaodong Huang

## List of Publications by Citations

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

91  
papers

4,707  
citations

41  
h-index

67  
g-index

103  
ext. papers

6,872  
ext. citations

16.7  
avg, IF

6.2  
L-index

#	Paper	IF	Citations
91	Voltage issue of aqueous rechargeable metal-ion batteries. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 180-232	58.5	301
90	Do Zinc Dendrites Exist in Neutral Zinc Batteries: A Developed Electrohealing Strategy to In Situ Rescue In-Service Batteries. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903778	24	285
89	Graphene-Rich Wrapped Petal-Like Rutile TiO <sub>2</sub> tuned by Carbon Dots for High-Performance Sodium Storage. <i>Advanced Materials</i> , <b>2016</b> , 28, 9391-9399	24	226
88	One-Dimensional Rod-Like Sb <sub>2</sub> Se <sub>3</sub> -Based Anode for High-Performance Sodium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 19362-9	9.5	193
87	Achieving High-Voltage and High-Capacity Aqueous Rechargeable Zinc Ion Battery by Incorporating Two-Species Redox Reaction. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1902446	21.8	183
86	A Wholly Degradable, Rechargeable Zn-TiC MXene Capacitor with Superior Anti-Self-Discharge Function. <i>ACS Nano</i> , <b>2019</b> , 13, 8275-8283	16.7	145
85	Hydrogen-Substituted Graphdiyne Ion Tunnels Directing Concentration Redistribution for Commercial-Grade Dendrite-Free Zinc Anodes. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001755	24	136
84	Layer-Tunable Phosphorene Modulated by the Cation Insertion Rate as a Sodium-Storage Anode. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702372	24	128
83	3D interconnected ultrathin cobalt selenide nanosheets as cathode materials for hybrid supercapacitors. <i>Electrochimica Acta</i> , <b>2018</b> , 269, 30-37	6.7	123
82	An Overview of Fiber-Shaped Batteries with a Focus on Multifunctionality, Scalability, and Technical Difficulties. <i>Advanced Materials</i> , <b>2020</b> , 32, e1902151	24	117
81	Metal-Organic Framework-Derived Materials for Sodium Energy Storage. <i>Small</i> , <b>2018</b> , 14, 1702648	11	102
80	Phase Transition Induced Unusual Electrochemical Performance of VCT MXene for Aqueous Zinc Hybrid-Ion Battery. <i>ACS Nano</i> , <b>2020</b> , 14, 541-551	16.7	99
79	Phosphorene as Cathode Material for High-Voltage, Anti-Self-Discharge Zinc Ion Hybrid Capacitors. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001024	21.8	96
78	Cube-shaped Porous Carbon Derived from MOF-5 as Advanced Material for Sodium-Ion Batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 196, 413-421	6.7	92
77	Molybdenum Phosphide: A Conversion-type Anode for Ultralong-Life Sodium-Ion Batteries. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7313-7322	9.6	89
76	Initiating Hexagonal MoO <sub>3</sub> for Superb-Stable and Fast NH <sub>3</sub> Storage Based on Hydrogen Bond Chemistry. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907802	24	83
75	A Flexible Solid-State Aqueous Zinc Hybrid Battery with Flat and High-Voltage Discharge Plateau. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1902473	21.8	79

74	Highly Efficient Electrochemical Reduction of Nitrogen to Ammonia on Surface Termination Modified TiCT MXene Nanosheets. <i>ACS Nano</i> , <b>2020</b> , 14, 9089-9097	16.7	71
73	Vertically Aligned Sn <sup>4+</sup> Preintercalated Ti <sub>2</sub> CTX MXene Sphere with Enhanced Zn Ion Transportation and Superior Cycle Lifespan. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001394	21.8	71
72	Pinecone-like hierarchical anatase TiO <sub>2</sub> bonded with carbon enabling ultrahigh cycling rates for sodium storage. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 12591-12601	13	70
71	Carbon-coated rutile titanium dioxide derived from titanium-metal organic framework with enhanced sodium storage behavior. <i>Journal of Power Sources</i> , <b>2016</b> , 325, 25-34	8.9	70
70	Pseudo-Bonding and Electric-Field Harmony for Li-Rich Mn-Based Oxide Cathode. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004302	15.6	70
69	Effects of Anion Carriers on Capacitance and Self-Discharge Behaviors of Zinc Ion Capacitors. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 1011-1021	16.4	70
68	Size-Tunable Olive-Like Anatase TiO Coated with Carbon as Superior Anode for Sodium-Ion Batteries. <i>Small</i> , <b>2016</b> , 12, 5554-5563	11	65
67	Preparation of S/N-codoped carbon nanosheets with tunable interlayer distance for high-rate sodium-ion batteries. <i>Green Chemistry</i> , <b>2017</b> , 19, 4622-4632	10	65
66	A Usage Scenario Independent Air Chargeable Flexible Zinc Ion Energy Storage Device. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1900509	21.8	59
65	In Situ Electrochemical Synthesis of MXenes without Acid/Alkali Usage in/for an Aqueous Zinc Ion Battery. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001791	21.8	56
64	Enhanced stability of sodium storage exhibited by carbon coated Sb <sub>2</sub> S <sub>3</sub> hollow spheres. <i>Materials Chemistry and Physics</i> , <b>2018</b> , 203, 185-192	4.4	54
63	Electrochemical Exfoliation of Graphite into Nitrogen-doped Graphene in Glycine Solution and its Energy Storage Properties. <i>Electrochimica Acta</i> , <b>2016</b> , 204, 100-107	6.7	50
62	Halogenated TiC MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. <i>ACS Nano</i> , <b>2021</b> , 15, 1077-1085	16.7	50
61	Dendrites issues and advances in Zn anode for aqueous rechargeable Zn-based batteries. <i>EcoMat</i> , <b>2020</b> , 2, e12035	9.4	48
60	Hydrated hybrid vanadium oxide nanowires as the superior cathode for aqueous Zn battery. <i>Materials Today Energy</i> , <b>2019</b> , 14, 100361	7	48
59	Calendar Life of Zn Batteries Based on Zn Anode with Zn Powder/Current Collector Structure. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003931	21.8	48
58	Cypress leaf-like Sb as anode material for high-performance sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17549-17552	13	47
57	Antimony Anchored with Nitrogen-Doping Porous Carbon as a High-Performance Anode Material for Na-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 26118-26125	9.5	47

56	3D Porous Carbon Encapsulated SnO <sub>2</sub> Nanocomposite for Ultrastable Sodium Ion Batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 214, 156-164	6.7	47
55	Commencing an Acidic Battery Based on a Copper Anode with Ultrafast Proton-Regulated Kinetics and Superior Dendrite-Free Property. <i>Advanced Materials</i> , <b>2019</b> , 31, e1905873	24	46
54	Aqueous Zinc-Tellurium Batteries with Ultraflat Discharge Plateau and High Volumetric Capacity. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001469	24	45
53	Grafted MXene/polymer electrolyte for high performance solid zinc batteries with enhanced shelf life at low/high temperatures. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3492-3501	35.4	44
52	A zinc battery with ultra-flat discharge plateau through phase transition mechanism. <i>Nano Energy</i> , <b>2020</b> , 71, 104583	17.1	43
51	Pd doping-weakened intermediate adsorption to promote electrocatalytic nitrate reduction on TiO <sub>2</sub> nanoarrays for ammonia production and energy supply with zinc/nitrate batteries. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3938-3944	35.4	41
50	Ni <sub>3</sub> S <sub>2</sub> /Ni nanosheet arrays for high-performance flexible zinc hybrid batteries with evident two-stage charge and discharge processes. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 18915-18924	13	39
49	Enhanced Redox Kinetics and Duration of Aqueous I <sup>-</sup> /I <sup>0</sup> Conversion Chemistry by MXene Confinement. <i>Advanced Materials</i> , <b>2021</b> , 33, e2006897	24	39
48	Activating the I <sup>0</sup> /I <sup>+</sup> redox couple in an aqueous I <sub>2</sub> /I <sup>-</sup> battery to achieve a high voltage plateau. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 407-413	35.4	38
47	Commencing mild Ag <sub>2</sub> Zn batteries with long-term stability and ultra-flat voltage platform. <i>Energy Storage Materials</i> , <b>2020</b> , 25, 86-92	19.4	37
46	Mo-doped Gray Anatase TiO <sub>2</sub> : Lattice Expansion for Enhanced Sodium Storage. <i>Electrochimica Acta</i> , <b>2016</b> , 219, 227-234	6.7	36
45	Environmental Stability of MXenes as Energy Storage Materials. <i>Frontiers in Materials</i> , <b>2019</b> , 6,	4	35
44	Zinc/selenium conversion battery: a system highly compatible with both organic and aqueous electrolytes. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2441-2450	35.4	35
43	MXene chemistry, electrochemistry and energy storage applications. <i>Nature Reviews Chemistry</i> ,	34.6	35
42	Dual Functions of Potassium Antimony(III)-Tartrate in Tuning Antimony/Carbon Composites for Long-Life Na-Ion Batteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705744	15.6	30
41	Insight on Organic Molecules in Aqueous Zn-Ion Batteries with an Emphasis on the Zn Anode Regulation. <i>Advanced Energy Materials</i> , 2102707	21.8	29
40	Confining Aqueous Zn-Br Halide Redox Chemistry by TiCT MXene. <i>ACS Nano</i> , <b>2021</b> , 15, 1718-1726	16.7	28
39	Metal-Tuned Acetylene Linkages in Hydrogen Substituted Graphdiyne Boosting the Electrochemical Oxygen Reduction. <i>Small</i> , <b>2020</b> , 16, e1907341	11	26

38	A rechargeable Al <sub>N</sub> 2 battery for energy storage and highly efficient N <sub>2</sub> fixation. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 2888-2895	35.4	26
37	Electrocatalytic Iodine Reduction Reaction Enabled by Aqueous Zinc-Iodine Battery with Improved Power and Energy Densities. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 3791-3798	16.4	26
36	Toward a Practical Zn Powder Anode: TiCT MXene as a Lattice-Match Electrons/Ions Redistributor. <i>ACS Nano</i> , <b>2021</b> , 15, 14631-14642	16.7	26
35	Manipulating anion intercalation enables a high-voltage aqueous dual ion battery. <i>Nature Communications</i> , <b>2021</b> , 12, 3106	17.4	25
34	Building durable aqueous K-ion capacitors based on MXene family <b>2022</b> , 2		23
33	Stabilizing Interface pH by N-Modified Graphdiyne for Dendrite-Free and High-Rate Aqueous Zn-ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> ,	16.4	21
32	Scalable synthesis of 2D hydrogen-substituted graphdiyne on Zn substrate for high-yield N <sub>2</sub> fixation. <i>Nano Energy</i> , <b>2020</b> , 78, 105283	17.1	21
31	Alternating Voltage Introduced [001]-Oriented $\alpha$ -MoO <sub>3</sub> Microrods for High-Performance Sodium-ion Batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 245, 949-956	6.7	20
30	Intrinsic voltage plateau of a Nb <sub>2</sub> CT <sub>x</sub> MXene cathode in an aqueous electrolyte induced by high-voltage scanning. <i>Joule</i> , <b>2021</b> ,	27.8	20
29	Porous Carbon Induced Anatase TiO <sub>2</sub> Nanodots/Carbon Composites for High-Performance Sodium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, A3117-A3125	3.9	19
28	Human joint-inspired structural design for a bendable/foldable/stretchable/twistable battery: achieving multiple deformabilities. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3599-3608	35.4	19
27	Metal-Tellurium Batteries: A Rising Energy Storage System. <i>Small Structures</i> , <b>2020</b> , 1, 2000005	8.7	18
26	Alternating voltage induced ordered anatase TiO <sub>2</sub> nanopores: An electrochemical investigation of sodium storage. <i>Journal of Power Sources</i> , <b>2016</b> , 336, 196-202	8.9	17
25	Activated Flake Graphite Coated with Pyrolysis Carbon as Promising Anode for Lithium Storage. <i>Electrochimica Acta</i> , <b>2016</b> , 196, 405-412	6.7	17
24	Evaluating the Storage Behavior of Superior Low-Cost Anode Material from Biomass for High-Rate Sodium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, A1431-A1437	3.9	16
23	Molecular Crowding Effect in Aqueous Electrolytes to Suppress Hydrogen Reduction Reaction and Enhance Electrochemical Nitrogen Reduction. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101699	21.8	16
22	Lattice Matching and Halogen Regulation for Synergistically Induced Uniform Zinc Electrodeposition by Halogenated TiC MXenes.. <i>ACS Nano</i> , <b>2021</b> ,	16.7	15
21	Small-Dipole-Molecule-Containing Electrolytes for High-Voltage Aqueous Rechargeable Batteries. <i>Advanced Materials</i> , <b>2021</b> , e2106180	24	14

20	Electrocatalytic Iodine Reduction Reaction Enabled by Aqueous Zinc-Iodine Battery with Improved Power and Energy Densities. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 3835-3842	3.6	14
19	Initiating a wearable solid-state Mg hybrid ion full battery with high voltage, high capacity and ultra-long lifespan in air. <i>Energy Storage Materials</i> , <b>2020</b> , 31, 451-458	19.4	13
18	Effects of Anion Carriers on Capacitance and Self-Discharge Behaviors of Zinc Ion Capacitors. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 1024-1034	3.6	11
17	Efficient Ammonia Electrosynthesis and Energy Conversion through a Zn-Nitrate Battery by Iron Doping Engineered Nickel Phosphide Catalyst. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2103872	21.8	10
16	Conversion-Type Nonmetal Elemental Tellurium Anode with High Utilization for Mild/Alkaline Zinc Batteries. <i>Advanced Materials</i> , <b>2021</b> , e2105426	24	10
15	Regulating nitrogenous adsorption and desorption on Pd clusters by the acetylene linkages of hydrogen substituted graphdiyne for efficient electrocatalytic ammonia synthesis. <i>Nano Energy</i> , <b>2021</b> , 86, 106099	17.1	10
14	A universal method towards conductive textile for flexible batteries with superior softness. <i>Energy Storage Materials</i> , <b>2021</b> , 36, 272-278	19.4	9
13	Cathode Engineering for High Energy Density Aqueous Zn Batteries. <i>Accounts of Materials Research</i> , <b>2021</b> , 1, 1-10	7.5	5
12	Vacancy Modulating Co Sn S Topological Semimetal for Aqueous Zinc-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 61, e202111826	16.4	5
11	Bifunctional separators design for safe lithium-ion batteries: Suppressed lithium dendrites and fire retardance. <i>Nano Energy</i> , <b>2022</b> , 97, 107204	17.1	5
10	In situ/operando analysis of surface reconstruction of transition metal-based oxygen evolution electrocatalysts. <i>Cell Reports Physical Science</i> , <b>2022</b> , 3, 100729	6.1	3
9	Electrochemical Nitrate Production Nitrogen Oxidation with Atomically Dispersed Fe on N-Doped Carbon Nanosheets. <i>ACS Nano</i> , <b>2021</b> , 15, 10210	16.7	3
8	Mechanistic Study of Interfacial Modification for Stable Zn Anode Based on a Thin Separator. <i>Small</i> , <b>2022</b> , e2201045	11	3
7	Few-layer bismuth selenide cathode for low-temperature quasi-solid-state aqueous zinc metal batteries. <i>Nature Communications</i> , <b>2022</b> , 13, 752	17.4	2
6	Vacancy Modulating Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> Topological Semimetal for Aqueous Zinc-Ion Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 1024-1034	3.6	2
5	Stable bismuth-antimony alloy cathode with a conversion-dissolution/deposition mechanism for high-performance zinc batteries. <i>Materials Today</i> , <b>2021</b> , 51, 87-87	21.8	2
4	Recent advances and future perspectives for aqueous zinc-ion capacitors <b>2022</b> , 1, 022101		2
3	Highly Thermally/Electrochemically Stable I <sup>-</sup> /I <sub>3</sub> <sup>-</sup> Bonded Organic Salts with High I Content for Long-Life Li <sup>+</sup> Batteries. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2103648	21.8	0

- 2 Bis-ammonium salts with strong chemisorption to halide ions for fast and durable aqueous redox Zn ion batteries. *Nano Energy*, **2022**, 98, 107278 17.1 ○
- 1 Organic materials-based cathode for zinc ion battery. *SmartMat*, 22.8 ○