Hai-bo Hu

List of Publications by Year in Descending Order

55 papers	2,310 citations	28 h-index	47 g-index
60 ext. papers	3,160 ext. citations	10.5 avg, IF	5.77 L-index

#	Paper	IF	Citations
55	Modulation of pore-size in N, S-codoped carbon/Co9S8 hybrid for a stronger O2 affinity toward rechargable zinc-air battery. *Nano Energy*, **2022**, 92, 106750	17.1	3
54	Synergetic Chemistry and Interface Engineering of Hydrogel Electrolyte to Strengthen Durability of Solid-State Zn-Air Batteries.. *Small Methods*, **2022**, 6, e2101276	12.8	7
53	Dual Defocused Laser Pyrolysis: A Lasing-Centric Strategy for Defect and Morphological Optimization in Microsupercapacitor Electrodes.. *Small Methods*, **2022**, e2101616	12.8	
52	Micro-Redoxcapacitor: A Hybrid Architecture Out of the Notorious Energy-Power Density Dilemma (Adv. Funct. Mater. 19/2022). *Advanced Functional Materials*, **2022**, 32, 2270111	15.6	1
51	Interlayer Structure Engineering of MXene-Based Capacitor-Type Electrode for Hybrid Micro-Supercapacitor toward Battery-Level Energy Density. *Advanced Science*, **2021**, 8, e2100775	13.6	28
50	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. *Angewandte Chemie - International Edition*, **2021**, 60, 19262-19271	16.4	81
49	Atomic-Level Modulation of Electronic Density at Cobalt Single-Atom Sites Derived from Metal-Organic Frameworks: Enhanced Oxygen Reduction Performance. *Angewandte Chemie - International Edition*, **2021**, 60, 3212-3221	16.4	180
48	Atomic-Level Modulation of Electronic Density at Cobalt Single-Atom Sites Derived from Metal□Organic Frameworks: Enhanced Oxygen Reduction Performance. *Angewandte Chemie*, **2021**, 133, 3249-3258	3.6	22
47	SnS2/MXene derived TiO2 hybrid for ultra-fast room temperature NO2 gas sensing. *Journal of Materials Chemistry C*, **2021**, 9, 7407-7416	7.1	7
46	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. *Angewandte Chemie*, **2021**, 133, 19411-19420	3.6	11
45	Synchronously manipulating Zn2+ transfer and hydrogen/oxygen evolution kinetics in MXene host electrodes toward symmetric Zn-ions micro-supercapacitor with enhanced areal energy density. *Energy Storage Materials*, **2021**, 40, 10-21	19.4	18
44	Battery-Sensor Hybrid: A New Gas Sensing Paradigm with Complete Energy Self-Sufficiency. *ACS Applied Materials & Interfaces*, **2021**, 13, 46507-46517	9.5	3
43	Liquid□metal-bridge~island design: seamless integration of intrinsically stretchable liquid metal circuits and mechanically deformable structures for ultra-stretchable all-solid-state rechargeable Zn□air battery arrays. *Journal of Materials Chemistry A*, **2021**, 9, 5097-5110	13	12
42	Rolled-up island-bridge (RIB): a new and general electrode configuration design for a wire-shaped stretchable micro-supercapacitor array. *Journal of Materials Chemistry A*, **2021**, 9, 2899-2911	13	7
41	Ion Sieve: Tailoring Zn Desolvation Kinetics and Flux toward Dendrite-Free Metallic Zinc Anodes.. *ACS Nano*, **2021**,	16.7	15
40	Hydrogel Electrolytes for Quasi-Solid Zinc-Based Batteries. *Frontiers in Chemistry*, **2020**, 8, 546728	5	6
39	Electrons/ions dual transport channels design: Concurrently tuning interlayer conductivity and space within re-stacked few-layered MXenes film electrodes for high-areal-capacitance stretchable micro-supercapacitor-arrays. *Nano Energy*, **2020**, 74, 104812	17.1	49

38	Performance Recovery in Degraded Carbon-Based Electrodes for Capacitive Deionization. *Environmental Science & Technology*, **2020**, 54, 1848-1856	10.3	10
37	Fe0.96S/Co8FeS8 nanoparticles co-embedded in porous N, S codoped carbon with enhanced bifunctional electrocatalystic activities for all-solid-state Zn-air batteries. *Applied Surface Science*, **2020**, 505, 144212	6.7	14
36	N-Doped-carbon/cobalt-nanoparticle/N-doped-carbon multi-layer sandwich nanohybrids derived from cobalt MOFs having 3D molecular structures as bifunctional electrocatalysts for on-chip solid-state Zn-air batteries. *Nanoscale*, **2020**, 12, 3750-3762	7.7	40
35	Enhanced Catalytic Activity of LaMnO3 by A-Site Substitution as Air Electrode of Zn–Air Batteries with Attractive Durability. *Energy & Fuels*, **2020**, 34, 10170-10177	4.1	12
34	Concurrently Realizing Geometric Confined Growth and Doping of Transition Metals within Graphene Hosts for Bifunctional Electrocatalysts toward a Solid-State Rechargeable Micro-Zn-Air Battery. *ACS Applied Materials & Interfaces*, **2020**, 12, 38031-38044	9.5	10
33	Inverse-opal-structured hybrids of N, S-codoped-carbon-confined Co9S8 nanoparticles as bifunctional oxygen electrocatalyst for on-chip all-solid-state rechargeable Zn-air batteries. *Applied Catalysis B: Environmental*, **2020**, 260, 118209	21.8	86
32	Kirigami Patterning of MXene/Bacterial Cellulose Composite Paper for All-Solid-State Stretchable Micro-Supercapacitor Arrays. *Advanced Science*, **2019**, 6, 1900529	13.6	143
31	N- and S-doped porous carbon decorated with in-situ synthesized Co–Ni bimetallic sulfides particles: A cathode catalyst of rechargeable Zn-air batteries. *Carbon*, **2019**, 146, 476-485	10.4	40
30	The Synergistic Effect Accelerates the Oxygen Reduction/Evolution Reaction in a Zn-Air Battery. *Frontiers in Chemistry*, **2019**, 7, 524	5	16
29	Planar all-solid-state rechargeable Zn–air batteries for compact wearable energy storage. *Journal of Materials Chemistry A*, **2019**, 7, 17581-17593	13	77
28	Confined growth of MoSe2 nanosheets in N-doped carbon shell with hierarchical porous structure for efficient hydrogen evolution. *Sustainable Energy and Fuels*, **2019**, 3, 2409-2416	5.8	13
27	Facile synthesis of sesame-husk-like porous SnO2 nanocylinders as anodes for high-performance lithium-ion batteries. *Micro and Nano Letters*, **2019**, 14, 178-181	0.9	2
26	A highly durable textile-based sensor as a human-worn material interface for long-term multiple mechanical deformation sensing. *Journal of Materials Chemistry C*, **2019**, 7, 14651-14663	7.1	15
25	Wearable strain sensing textile based on one-dimensional stretchable and weavable yarn sensors. *Nano Research*, **2018**, 11, 5799-5811	10	71
24	Monodisperse Co9S8 nanoparticles in situ embedded within N, S-codoped honeycomb-structured porous carbon for bifunctional oxygen electrocatalyst in a rechargeable Zn–air battery. *NPG Asia Materials*, **2018**, 10, 670-684	10.3	58
23	Binder-free bonding of modularized MXene thin films into thick film electrodes for on-chip micro-supercapacitors with enhanced areal performance metrics. *Journal of Materials Chemistry A*, **2018**, 6, 14876-14884	13	46
22	Carbon-Based Flexible and All-Solid-State Micro-supercapacitors Fabricated by Inkjet Printing with Enhanced Performance. *Nano-Micro Letters*, **2017**, 9, 19	19.5	39
21	Highly Flexible and Bright Electroluminescent Devices Based on Ag Nanowire Electrodes and Top-Emission Structure. *Advanced Electronic Materials*, **2017**, 3, 1600535	6.4	42

20	Fabrication of Orientation-Tunable Si Nanowires on Silicon Pyramids with Omnidirectional Light Absorption. *Langmuir*, **2017**, 33, 3569-3575	4	14
19	Coaxial-Structured Weavable and Wearable Electroluminescent Fibers. *Advanced Electronic Materials*, **2017**, 3, 1700401	6.4	38
18	An easily manipulated protocol for patterning of MXenes on paper for planar micro-supercapacitors. *Journal of Materials Chemistry A*, **2017**, 5, 19639-19648	13	92
17	3D Interdigital Au/MnO2 /Au Stacked Hybrid Electrodes for On-Chip Microsupercapacitors. *Small*, **2016**, 12, 3059-69	11	94
16	Recent advances in designing and fabrication of planar micro-supercapacitors for on-chip energy storage. *Energy Storage Materials*, **2015**, 1, 82-102	19.4	92
15	Flexible Si/PEDOT:PSS hybrid solar cells. *Nano Research*, **2015**, 8, 3141-3149	10	16
14	Flexible and all-solid-state supercapacitors with long-time stability constructed on PET/Au/polyaniline hybrid electrodes. *Journal of Materials Chemistry A*, **2015**, 3, 617-623	13	39
13	Bearing capacity of steel fiber reinforced reactive powder concrete confined by spirals. *Materials and Structures/Materiaux Et Constructions*, **2015**, 48, 2613-2628	3.4	6
12	Study on hole-transport-material-free planar TiO2/CH3NH3PbI3 heterojunction solar cells: the simplest configuration of a working perovskite solar cell. *Journal of Materials Chemistry A*, **2015**, 3, 14902-14909	13	39
11	Flexible, in-plane, and all-solid-state micro-supercapacitors based on printed interdigital Au/polyaniline network hybrid electrodes on a chip. *Journal of Materials Chemistry A*, **2014**, 2, 20916-20922	13	62
10	Magnetically responsive photonic watermarks on banknotes. *Journal of Materials Chemistry C*, **2014** , 2, 3695	7.1	100
9	Low-cost, acid/alkaline-resistant, and fluorine-free superhydrophobic fabric coating from onionlike carbon microspheres converted from waste polyethylene terephthalate. *Environmental Science & Technology*, **2014**, 48, 2928-33	10.3	39
8	Manganese hexacyanoferrate/MnO2 composite nanostructures as a cathode material for supercapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 2621	13	78
7	Magnetically controllable colloidal photonic crystals: unique features and intriguing applications. *Journal of Materials Chemistry C*, **2013**, 1, 6013	7.1	42
6	Invisible photonic printing: computer designing graphics, UV printing and shown by a magnetic field. *Scientific Reports*, **2013**, 3, 1484	4.9	88
5	Visually readable and highly stable self-display photonic humidity sensor. *Journal of Materials Chemistry*, **2012**, 22, 1021-1027		60
4	Photonic anti-counterfeiting using structural colors derived from magnetic-responsive photonic crystals with double photonic bandgap heterostructures. *Journal of Materials Chemistry*, **2012**, 22, 11048		101
3	Thermo- and light-regulated fluorescence resonance energy transfer processes within dually responsive microgels. *Polymer Chemistry*, **2011**, 2, 363-371	4.9	82

2	Reusable photonic wordpad with water as ink prepared by radical polymerization. *Journal of Materials Chemistry*, **2011**, 21, 13062		26
1	Micro-Redoxcapacitor: A Hybrid Architecture Out of the Notorious Energy-Power Density Dilemma. *Advanced Functional Materials*,2111805	15.6	5