

# Minghua 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.

67

papers

1,766

citations

25

h-index

40

g-index

76

ext. papers

2,494

ext. citations

8.8

avg, IF

5.37

L-index

#	Paper	IF	Citations
67	Improved light-harvesting and thermal management for efficient solar-driven water evaporation using 3D photothermal cones. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 9874-9881	13	185
66	Sulfur-nitrogen rich carbon as stable high capacity potassium ion battery anode: Performance and storage mechanisms. <i>Energy Storage Materials</i> , <b>2020</b> , 27, 212-225	19.4	129
65	An electrodeposited cobalt selenide-based film as an efficient bifunctional electrocatalyst for full water splitting. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 10933-10939	13	103
64	Alternate assemblies of platinum nanoparticles and metalloporphyrins as tunable electrocatalysts for dioxygen reduction. <i>Langmuir</i> , <b>2005</b> , 21, 323-9	4	80
63	Nanocomposite Multilayer Film of Preyssler-Type Polyoxometalates with Fine Tunable Electrocatalytic Activities. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 9780-9786	3.4	80
62	Asymmetric Trilayer All-Polymer Dielectric Composites with Simultaneous High Efficiency and High Energy Density: A Novel Design Targeting Advanced Energy Storage Capacitors. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100280	15.6	66
61	Sulfur-Rich Graphene Nanoboxes with Ultra-High Potassiation Capacity at Fast Charge: Storage Mechanisms and Device Performance. <i>ACS Nano</i> , <b>2021</b> , 15, 1652-1665	16.7	53
60	Electrochemical Designing of Au/Pt Core Shell Nanoparticles as Nanostructured Catalyst with Tunable Activity for Oxygen Reduction. <i>Electroanalysis</i> , <b>2007</b> , 19, 506-509	3	49
59	Metal-organic framework derived N-doped CNT@ porous carbon for high-performance sodium- and potassium-ion storage. <i>Electrochimica Acta</i> , <b>2019</b> , 319, 541-551	6.7	47
58	Co/MoN hetero-interface nanoflake array with enhanced water dissociation capability achieves the Pt-like hydrogen evolution catalytic performance. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 286, 119882	21.8	47
57	A simple route to incorporate redox mediator into carbon nanotubes/Nafion composite film and its application to determine NADH at low potential. <i>Talanta</i> , <b>2007</b> , 74, 132-9	6.2	44
56	Designed nanostructured Pt film for electrocatalytic activities by underpotential deposition combined chemical replacement techniques. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 15264-71	3.4	42
55	Achieving Concurrent High Energy Density and Efficiency in All-Polymer Layered Paraelectric/Ferroelectric Composites via Introducing a Moderate Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 27522-27532	9.5	40
54	In situ Grown Ni [email protected]12P5 Nanorod Arrays as a Unique Core-Shell Architecture: Competitive Bifunctional Electrocatalysts for Urea Electrolysis at Large Current Densities. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 7463-7471	8.3	38
53	Tuning the morphology and structure of nanocarbons with activating agents for ultrafast ionic liquid-based supercapacitors. <i>Journal of Power Sources</i> , <b>2017</b> , 361, 182-194	8.9	37
52	Thin-Film CuPt(111) Near-Surface Alloys: Active Electrocatalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 1457-1460	13.1	37
51	A Facile and General Strategy to Deposit Polypyrrole on Various Substrates for Efficient Solar-Driven Evaporation. <i>Advanced Sustainable Systems</i> , <b>2019</b> , 3, 1800108	5.9	35

50	Enhanced durability and activity of the perovskite electrocatalyst PrBaCoO by Ca doping for the oxygen evolution reaction at room temperature. <i>Chemical Communications</i> , <b>2017</b> , 53, 5132-5135	5.8	33
49	Hydrogen generation from catalytic glucose oxidation by Fe-based electrocatalysts. <i>Electrochemistry Communications</i> , <b>2017</b> , 83, 11-15	5.1	32
48	Enhanced bifunctional fuel cell catalysis via Pd/PtCu core/shell nanoplates. <i>Chemical Communications</i> , <b>2018</b> , 54, 1315-1318	5.8	32
47	Magnet-assisted assembly of 1-dimensional hollow PtCo nanomaterials on an electrode surface. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 923		30
46	Small molecules as cross-linkers: fabrication of carbon nanotubes/thionine self-assembled multilayers on amino functionalized surfaces. <i>Chemical Communications</i> , <b>2005</b> , 5560-2	5.8	30
45	Fe/Fe C Nanoparticles Encapsulated in N-Doped Hollow Carbon Spheres as Efficient Electrocatalysts for the Oxygen Reduction Reaction over a Wide pH Range. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 9650-9657	4.8	29
44	Salt assisted fabrication of lignin-derived Fe, N, P, S codoped porous carbon as trifunctional catalyst for Zn-air batteries and water-splitting devices. <i>Chemical Engineering Journal</i> , <b>2021</b> , 421, 129704	14.7	28
43	Sustainable nitrogen-doped carbon electrodes for use in high-performance supercapacitors and Li-ion capacitors. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 1789-1800	5.8	26
42	3D PtFe Clusters with Cube-in-Cube Structure Enhance Oxygen Reduction Catalysis and Electrochemical Sensing. <i>Small Methods</i> , <b>2018</b> , 2, 1800073	12.8	25
41	Improved dielectric permittivity and retained low loss in layer-structured films via controlling interfaces. <i>Advanced Composites and Hybrid Materials</i> , <b>2018</b> , 1, 548-557	8.7	24
40	Nitrogen and Sulfur Co-doped Mesoporous Carbon for Sodium Ion Batteries. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 5643-5654	5.6	20
39	Enabling the full exposure of Fe <sub>2</sub> P@Ni <sub>3</sub> P heterostructures in tree-branch-like nanoarrays for promoted urea electrolysis at high current densities. <i>Chemical Engineering Journal</i> , <b>2021</b> , 417, 128067	14.7	20
38	Electrospun hetero-CoP/FeP embedded in porous carbon nanofibers: enhanced Na kinetics and specific capacity. <i>Nanoscale</i> , <b>2020</b> , 12, 24477-24487	7.7	19
37	Dual-doped hierarchical porous carbon derived from biomass for advanced supercapacitors and lithium ion batteries.. <i>RSC Advances</i> , <b>2019</b> , 9, 32382-32394	3.7	19
36	Solar-Intensified Ultrafiltration System Based on Porous Photothermal Membrane for Efficient Water Treatment. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 4889-4896	8.3	18
35	Discovery of Quantitative Electronic Structure-OER Activity Relationship in Metal-Organic Framework Electrocatalysts Using an Integrated Theoretical-Experimental Approach. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102066	15.6	16
34	Coupled cobalt oxide/hollow carbon sphere as an efficient electrocatalyst for the oxygen reduction reaction. <i>RSC Advances</i> , <b>2016</b> , 6, 34159-34164	3.7	14
33	High potassium ion storage capacity with long cycling stability of sustainable oxygen-rich carbon nanosheets. <i>Nanoscale</i> , <b>2021</b> , 13, 2389-2398	7.7	14

32	Bio-derived 3D TiO <sub>2</sub> hollow spheres with a mesocrystal nanostructure to achieve improved electrochemical performance of Na-ion batteries in ether-based electrolytes. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 3399-3407	13	13
31	Nitrogen and Oxygen Co-Doping Assisted Synthesis of Highly Dispersed Pd Nanoparticles on Hollow Carbon Spheres as Efficient Electrocatalysts for Oxygen Reduction Reaction. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 12589-12595	4.8	13
30	Wettable photothermal hollow fibers arrays for efficient solar-driven desalination under omnidirectional illumination without salt precipitation. <i>Materials Today Energy</i> , <b>2020</b> , 16, 100391	7	13
29	Multifunctional perovskite oxide for efficient solar-driven evaporation and energy-saving regeneration. <i>Nano Energy</i> , <b>2020</b> , 70, 104538	17.1	13
28	Controllable amorphization engineering on bimetallic metal-organic frameworks for ultrafast oxygen evolution reaction. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129330	14.7	13
27	Modulation of the crystalline/amorphous interface engineering on Ni-P-O-based catalysts for boosting urea electrolysis at large current densities. <i>Chemical Engineering Journal</i> , <b>2021</b> , 425, 130514	14.7	12
26	A hybrid composite catalyst of Fe <sub>3</sub> O <sub>4</sub> nanoparticles-based carbon for electrochemical reduction of oxygen. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 4959-4965	3.6	11
25	An efficient pH-universal electrocatalyst for oxygen reduction: defect-rich graphitized carbon shell wrapped cobalt within hierarchical porous N-doped carbon aerogel. <i>Materials Today Energy</i> , <b>2020</b> , 17, 100452	7	11
24	The marriage of crystalline/amorphous Co/Co <sub>3</sub> O <sub>4</sub> heterostructures with N-doped hollow carbon spheres: efficient and durable catalysts for oxygen reduction. <i>Materials Today Energy</i> , <b>2020</b> , 18, 100497	7	10
23	Engineering core-shell Co <sub>9</sub> S <sub>8</sub> /Co nanoparticles on reduced graphene oxide: efficient bifunctional Mott-Schottky electrocatalysts in neutral rechargeable Zn-Air batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> ,	12	10
22	High-Performance Sodium-Ion Capacitor Constructed by Well-Matched Dual-Carbon Electrodes from a Single Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> ,	8.3	9
21	Multifunctional Nickel Sulfide Nanosheet Arrays for Solar-Intensified Oxygen Evolution Reaction. <i>Small</i> , <b>2020</b> , 16, e2002550	11	9
20	A new strategy for achieving high K storage capacity with fast kinetics: realizing covalent sulfur-rich carbon by phosphorous doping. <i>Nanoscale</i> , <b>2021</b> , 13, 4911-4920	7.7	9
19	Oxygen Engineering Enables N-Doped Porous Carbon Nanofibers as Oxygen Reduction/Evolution Reaction Electrocatalysts for Flexible Zinc-Air Batteries. <i>ACS Catalysis</i> , <b>2022</b> , 12, 4002-4015	13.1	9
18	N,P-Doped Carbon-Based Freestanding Electrodes Enabled by Cellulose Nanofibers for Superior Asymmetric Supercapacitors. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 2327-2338	6.1	7
17	Morphology-controlled growth of perylene derivative induced by double-hydrophilic block copolymers. <i>APL Materials</i> , <b>2016</b> , 4, 015705	5.7	6
16	Nitrogen-doped Sr <sub>2</sub> Fe <sub>1.5</sub> Mo <sub>0.5</sub> O <sub>6-<math>\delta</math></sub> -perovskite as an efficient and stable catalyst for hydrogen evolution reaction. <i>Materials Today Energy</i> , <b>2021</b> , 20, 100695	7	6
15	All-cellulose-based quasi-solid-state supercapacitor with nitrogen and boron dual-doped carbon electrodes exhibiting high energy density and excellent cyclic stability. <i>Green Energy and Environment</i> , <b>2022</b> ,	5.7	5

14	Engineering solid-liquid-gas interfaces of single-atom cobalt catalyst for enhancing the robust stability of neutral Zn-air batteries under high current density. <i>Chemical Engineering Journal</i> , <b>2021</b> , 433, 133685	14.7	4
13	High-rate sodium storage performance enabled using hollow Co <sub>3</sub> O <sub>4</sub> nanoparticles anchored in porous carbon nanofibers anode. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 868, 159262	5.7	4
12	Facile Synthesis of Size-Controlled Nitrogen-Doped Mesoporous Carbon Nanosphere Supported Ultrafine Ru Nanoparticles for Selective Hydrogenation of Quinolines. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 17000-17004	4.8	3
11	Manipulation of New Married Edge-Adjacent Fe <sub>2</sub> N <sub>5</sub> Catalysts and Identification of Active Species for Oxygen Reduction in Wide pH Range. <i>Advanced Functional Materials</i> , 2111835	15.6	3
10	One-pot synthesis of nanosized MnO incorporated into N-doped carbon nanosheets for high performance lithium storage. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 902, 163827	5.7	2
9	Polyethyleneimine-Mediated Polyamide Composite Membrane with High Perm-Selectivity for Forward Osmosis. <i>Macromolecular Materials and Engineering</i> , <b>2021</b> , 306, 2000818	3.9	2
8	Sandwich-like hierarchical porous dual-carbon catalyst with more accessible sites for boosting oxygen reduction reaction. <i>Materials Today Energy</i> , <b>2021</b> , 21, 100809	7	2
7	Spatially Confined Edge-to-Edge Strategy for Achieving Compact Na <sup>+</sup> /K <sup>+</sup> Storage: Constructing Hetero-Ni/Ni <sub>3</sub> S <sub>2</sub> in Densified Carbons. <i>Advanced Functional Materials</i> , 2203291	15.6	2
6	Evolution of Adsorption/Insertion/K <sup>+</sup> storage behaviors in flower-like carbons with tunable heteroatom doping and graphitic structures. <i>Sustainable Energy and Fuels</i> ,	5.8	1
5	Multifunctional reduced graphene oxide film as electrocatalysts and photothermal layer for broad spectrum solar-enhanced oxygen evolution reaction. <i>Materials Today Energy</i> , <b>2022</b> , 100966	7	1
4	Cable-like heterogeneous porous carbon fibers with ultrahigh-rate capability and long cycle life for fast charging lithium-ion storage devices. <i>Nanoscale</i> , <b>2019</b> , 11, 20893-20902	7.7	1
3	Morphological modulation of CoFe-based metal organic frameworks for oxygen evolution reaction. <i>Catalysis Communications</i> , <b>2022</b> , 165, 106445	3.2	1
2	Synthesis of ultrathin metal oxide and hydroxide nanosheets using formamide in water at room temperature. <i>CrystEngComm</i> , <b>2021</b> , 23, 3794-3801	3.3	0
1	Interconnected honeycomb-like carbon with rich nitrogen/sulfur doping for stable potassium ion storage. <i>Electrochimica Acta</i> , <b>2022</b> , 424, 140596	6.7	