

# Zhenhua Yan

## List of Publications by Year in descending order

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57  
papers

6,231  
citations

117453

34  
h-index

149479

56  
g-index

58  
all docs

58  
docs citations

58  
times ranked

6615  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spinel: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. <i>Chemical Reviews</i> , 2017, 117, 10121-10211.	23.0	1,157
2	Self-Supported Transition-Metal-Based Electrocatalysts for Hydrogen and Oxygen Evolution. <i>Advanced Materials</i> , 2020, 32, e1806326.	11.1	986
3	Advances and Challenges for the Electrochemical Reduction of CO <sub>2</sub> to CO: From Fundamentals to Industrialization. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20627-20648.	7.2	408
4	Anion insertion enhanced electrodeposition of robust metal hydroxide/oxide electrodes for oxygen evolution. <i>Nature Communications</i> , 2018, 9, 2373.	5.8	336
5	Porous Multishelled Ni <sub>2</sub> P Hollow Microspheres as an Active Electrocatalyst for Hydrogen and Oxygen Evolution. <i>Chemistry of Materials</i> , 2017, 29, 8539-8547.	3.2	279
6	Nitrogen-rich covalent organic frameworks with multiple carbonyls for high-performance sodium batteries. <i>Nature Communications</i> , 2020, 11, 178.	5.8	279
7	Boosting Activity on Co <sub>4</sub> N Porous Nanosheet by Coupling CeO <sub>2</sub> for Efficient Electrochemical Overall Water Splitting at High Current Densities. <i>Advanced Functional Materials</i> , 2020, 30, 1910596.	7.8	218
8	Designing Anion-Free Water-Free Zn <sup>2+</sup> Solvation Structure for Robust Zn Metal Anode. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23357-23364.	7.2	179
9	Superhydrophilic amorphous Co-B-P nanosheet electrocatalysts with Pt-like activity and durability for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22062-22069.	5.2	156
10	A 3D Hydroxylated MXene/Carbon Nanotubes Composite as a Scaffold for Dendrite-Free Sodium-Metal Electrodes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 16705-16711.	7.2	138
11	Electroless Formation of a Fluorinated Li/Na Hybrid Interphase for Robust Lithium Anodes. <i>Journal of the American Chemical Society</i> , 2021, 143, 2829-2837.	6.6	119
12	Electrodeposition of (hydro)oxides for an oxygen evolution electrode. <i>Chemical Science</i> , 2020, 11, 10614-10625.	3.7	117
13	Template-free synthesis of porous graphitic carbon nitride/carbon composite spheres for electrocatalytic oxygen reduction reaction. <i>Chemical Communications</i> , 2016, 52, 1725-1728.	2.2	93
14	Advances and Challenges for the Electrochemical Reduction of CO <sub>2</sub> to CO: From Fundamentals to Industrialization. <i>Angewandte Chemie</i> , 2021, 133, 20795-20816.	1.6	82
15	Structure design and mechanism analysis of silicon anode for lithium-ion batteries. <i>Science China Materials</i> , 2019, 62, 1515-1536.	3.5	80
16	A Universal Graphene Quantum Dot Tethering Design Strategy to Synthesize Single-Atom Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21885-21889.	7.2	79
17	Superior Sodium Metal Anodes Enabled by Sodiophilic Carbonized Coconut Framework with 3D Tubular Structure. <i>Advanced Energy Materials</i> , 2021, 11, 2003699.	10.2	77
18	Spinel oxide nanoparticles embedded in nitrogen-doped carbon nanofibers as a robust and self-standing bifunctional oxygen cathode for Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24868-24876.	5.2	76

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19	Regulating Electrocatalytic Oxygen Reduction Activity of a Metal Coordination Polymer via $\pi$ - $\pi$ Conjugation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16937-16941.	7.2	74
20	Insights into the Ionic Conduction Mechanism of Quasi-Solid Polymer Electrolytes through Multispectral Characterization. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22672-22677.	7.2	72
21	Stabilizing Zinc Electrodes with a Vanillin Additive in Mild Aqueous Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 47650-47658.	4.0	70
22	In Situ Polymerized Conjugated Poly(pyrene-4,5,9,10-tetraone)/Carbon Nanotubes Composites for High-Performance Cathode of Sodium Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2002917.	10.2	69
23	Opportunities and challenges for aqueous metal-proton batteries. <i>Matter</i> , 2021, 4, 1252-1273.	5.0	63
24	Boosting Electrocatalytic Oxygen Evolution by Cation Defect Modulation via Electrochemical Etching. <i>CCS Chemistry</i> , 2021, 3, 675-685.	4.6	63
25	Bixbyite-type $\text{Ln}_2\text{O}_3$ as promoters of metallic Ni for alkaline electrocatalytic hydrogen evolution. <i>Nature Communications</i> , 2022, 13, .	5.8	62
26	High-Energy-Density Quinone-Based Electrodes with $[\text{Al}(\text{OTf})]^{2+}$ Storage Mechanism for Rechargeable Aqueous Aluminum Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2102063.	7.8	61
27	Exploring the Interfacial Chemistry between Zinc Anodes and Aqueous Electrolytes via an In Situ Visualized Characterization System. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 55476-55482.	4.0	58
28	Designing Anion-Type Water-Free $\text{Zn}^{2+}$ Solvation Structure for Robust Zn Metal Anode. <i>Angewandte Chemie</i> , 2021, 133, 23545-23552.	1.6	57
29	Nanostructured $\text{NiMoO}_4$ as active electrocatalyst for oxygen evolution. <i>Chinese Chemical Letters</i> , 2019, 30, 319-323.	4.8	55
30	<i>N,N</i> -dimethylformamide tailors solvent effect to boost Zn anode reversibility in aqueous electrolyte. <i>National Science Review</i> , 2022, 9, .	4.6	53
31	Rapid low-temperature synthesis of perovskite/carbon nanocomposites as superior electrocatalysts for oxygen reduction in Zn-air batteries. <i>Nano Research</i> , 2018, 11, 3282-3293.	5.8	44
32	Isolated diatomic $\text{Zn}^{II}\text{Fe}$ in N-doped carbon for electrocatalytic nitrogen reduction to ammonia. <i>Chemical Communications</i> , 2020, 56, 11957-11960.	2.2	43
33	Flexible and Tailorable $\text{Na}^+\text{CO}_2$ Batteries Based on an All-Solid-State Polymer Electrolyte. <i>ChemElectroChem</i> , 2018, 5, 3628-3632.	1.7	42
34	Coupling NiCo Alloy and $\text{CeO}_2$ to Enhance Electrocatalytic Hydrogen Evolution in Alkaline Solution. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000122.	2.7	36
35	Electrodeposition Accelerates Metal-Based Batteries. <i>Joule</i> , 2020, 4, 10-11.	11.7	36
36	Atomic-Level Modulation-Induced Electron Redistribution in Co Coordination Polymers Elucidates the Oxygen Reduction Mechanism. <i>ACS Catalysis</i> , 2022, 12, 7531-7540.	5.5	36

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37	In Situ Surface Self-Reconstruction Strategies in Li-Rich Mn-Based Layered Cathodes for Energy-Dense Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	35
38	An MXene-Based Metal Anode with Stepped Sodiophilic Gradient Structure Enables a Large Current Density for Rechargeable Na-O <sub>2</sub> Batteries. <i>Advanced Materials</i> , 2022, 34, e2106565.	11.1	35
39	In situ Synthesis of a Bismuth Layer on a Sodium Metal Anode for Fast Interfacial Transport in Sodium-Oxygen Batteries. <i>Batteries and Supercaps</i> , 2019, 2, 663-667.	2.4	32
40	Rational design and synthesis of two-dimensional conjugated metal-organic polymers for electrocatalysis applications. <i>CheM</i> , 2022, 8, 1822-1854.	5.8	32
41	Syntheses, challenges and modifications of single-crystal cathodes for lithium-ion battery. <i>Journal of Energy Chemistry</i> , 2021, 63, 217-229.	7.1	30
42	Spent alkaline battery-derived manganese oxides as efficient oxygen electrocatalysts for Zn-air batteries. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2167-2173.	3.0	29
43	Facile synthesis of amorphous MoS <sub>x</sub> -Fe anchored on Zr-MOFs towards efficient and stable electrocatalytic hydrogen evolution. <i>Chemical Communications</i> , 2020, 56, 2763-2766.	2.2	27
44	Ethylene glycol stabilized NaBH <sub>4</sub> reduction for preparation carbon-supported Pt-Co alloy nanoparticles used as oxygen reduction electrocatalysts for microbial fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2014, 18, 1087-1097.	1.2	26
45	Quinone Electrodes for Alkali-Acid Hybrid Batteries. <i>Journal of the American Chemical Society</i> , 2022, 144, 8066-8072.	6.6	23
46	Electrodeposition of Pt-Decorated Ni(OH) <sub>2</sub> /CeO <sub>2</sub> Hybrid as Superior Bifunctional Electrocatalyst for Water Splitting. <i>Research</i> , 2020, 2020, 9068270.	2.8	19
47	Layered H <sub>0.68</sub> Ti <sub>1.83</sub> O <sub>4</sub> /reduced graphene oxide nanosheets as a novel cathode for rechargeable magnesium batteries. <i>Chemical Communications</i> , 2019, 55, 14578-14581.	2.2	14
48	Production and Characterization of Biodiesel Derived from a Novel Source <i>Koelerutera paniculata</i> Seed Oil. <i>Energies</i> , 2020, 13, 791.	1.6	13
49	Optimization, Transesterification and Analytical Study of <i>Rhus typhina</i> Non-Edible Seed Oil as Biodiesel Production. <i>Energies</i> , 2019, 12, 4290.	1.6	12
50	A 3D Hydroxylated MXene/Carbon Nanotubes Composite as a Scaffold for Dendrite-Free Sodium-Metal Electrodes. <i>Angewandte Chemie</i> , 2020, 132, 16848.	1.6	11
51	A Universal Graphene Quantum Dot Tethering Design Strategy to Synthesize Single-Atom Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 22069-22073.	1.6	9
52	Regulating Electrocatalytic Oxygen Reduction Activity of a Metal Coordination Polymer via d- $\pi$ Conjugation. <i>Angewandte Chemie</i> , 2021, 133, 17074-17078.	1.6	9
53	Modulation of 17 $\beta$ -estradiol induced estrogenic responses in male goldfish ( <i>Carassius auratus</i> ) by benzo[a]pyrene and ketoconazole. <i>Environmental Science and Pollution Research</i> , 2016, 23, 9036-9045.	2.7	7
54	Extraction and Quality Evaluation of Biodiesel from Six Familiar Non-Edible Plants Seeds. <i>Processes</i> , 2021, 9, 840.	1.3	6

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55	Insights into the Ionic Conduction Mechanism of Quasi-Solid Polymer Electrolytes through Multispectral Characterization. <i>Angewandte Chemie</i> , 2021, 133, 22854-22859.	1.6	5
56	Influence of organic colloids on uptake, accumulation and effects of benzophenone-3 in aquatic animals. <i>Environmental Science: Nano</i> , , .	2.2	2
57	Hybrid Nanosheet Arrays: Boosting Activity on Co <sub>4</sub> N Porous Nanosheet by Coupling CeO <sub>2</sub> for Efficient Electrochemical Overall Water Splitting at High Current Densities ( <i>Adv. Funct. Mater.</i> 32/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070213.	7.8	1