

Jian Zhang

List of Publications by Year in descending order

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papers

16,187
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30551

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Functional Aqueous Zinc-Acetylene Batteries for Electricity Generation and Electrochemical Acetylene Reduction to Ethylene. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
2	Œ-Adsorption promoted electrocatalytic acetylene semihydrogenation on single-atom Ni dispersed N-doped carbon. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6122-6128.	5.2	14
3	Functional Aqueous Zinc-Acetylene Batteries for Electricity Generation and Electrochemical Acetylene Reduction to Ethylene. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	17
4	Highly accessible and dense surface single metal FeN ₄ active sites for promoting the oxygen reduction reaction. <i>Energy and Environmental Science</i> , 2022, 15, 2619-2628.	15.6	82
5	Epitaxial growth of prussian blue analogue derived NiFeP thin film for efficient electrocatalytic hydrogen evolution reaction. <i>Journal of Solid State Chemistry</i> , 2021, 293, 121779.	1.4	14
6	Monoclinic Scheelite Bismuth Vanadate Derived Bismuthene Nanosheets with Rapid Kinetics for Electrochemically Reducing Carbon Dioxide to Formate. <i>Advanced Functional Materials</i> , 2021, 31, 2006704.	7.8	52
7	Transforming Damage into Benefit: Corrosion Engineering Enabled Electrocatalysts for Water Splitting. <i>Advanced Functional Materials</i> , 2021, 31, 2009032.	7.8	70
8	Hollow Concave Zinc-Doped Co ₃ O ₄ Nanosheets/Carbon Composites as Ultrahigh Capacity Anode Materials for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2021, 8, 172-178.	1.7	9
9	2D organic single crystals: Synthesis, novel physics, high-performance optoelectronic devices and integration. <i>Materials Today</i> , 2021, 50, 442-475.	8.3	32
10	Emulsion-Guided Controllable Construction of Anisotropic Particles: Droplet Size Determines Particle Structure. <i>Advanced Materials</i> , 2021, 33, e2102930.	11.1	24
11	Selective electrocatalytic semihydrogenation of acetylene impurities for the production of polymer-grade ethylene. <i>Nature Catalysis</i> , 2021, 4, 557-564.	16.1	90
12	Recent Advances on Transition Metal Dichalcogenides for Electrochemical Energy Conversion. <i>Advanced Materials</i> , 2021, 33, e2008376.	11.1	114
13	Regulating Water Reduction Kinetics on MoP Electrocatalysts Through Se Doping for Accelerated Alkaline Hydrogen Production. <i>Frontiers in Chemistry</i> , 2021, 9, 737495.	1.8	6
14	Efficient electrocatalytic acetylene semihydrogenation by electron-rich metal sites in N-heterocyclic carbene metal complexes. <i>Nature Communications</i> , 2021, 12, 6574.	5.8	30
15	In-situ formed N doped bamboo-like carbon nanotube decorated with Fe-Ni-Cr nanoparticles as efficient electrocatalysts for overall water-splitting. <i>Materials Chemistry and Physics</i> , 2020, 241, 122375.	2.0	13
16	Topochemical Synthesis of Two-Dimensional Transition-Metal Phosphides Using Phosphorene Templates. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 465-470.	7.2	94
17	Confined growth of porous nitrogen-doped cobalt oxide nanoarrays as bifunctional oxygen electrocatalysts for rechargeable zinc-air batteries. <i>Energy Storage Materials</i> , 2020, 26, 157-164.	9.5	79
18	Fully Conjugated Phthalocyanine Copper Metal-Organic Frameworks for Sodium-Iodine Batteries with Long-Time Cycling Durability. <i>Advanced Materials</i> , 2020, 32, e1905361.	11.1	143

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19	Controllable Synthesis of Two-Dimensional Molybdenum Disulfide (MoS ₂) for Energy-Storage Applications. <i>ChemSusChem</i> , 2020, 13, 1379-1391.	3.6	60
20	A High-Voltage, Dendrite-Free, and Durable Zn-Graphite Battery. <i>Advanced Materials</i> , 2020, 32, e1905681.	11.1	96
21	Promoted oxygen reduction kinetics on nitrogen-doped hierarchically porous carbon by engineering proton-feeding centers. <i>Energy and Environmental Science</i> , 2020, 13, 2849-2855.	15.6	101
22	Single-Crystalline Mo-Nanowire-Mediated Directional Growth of High-Index-Faceted MoNi Electrocatalyst for Ultralong-Term Alkaline Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36259-36267.	4.0	18
23	Polypyrrole assisted synthesis of nanosized iridium oxide for oxygen evolution reaction in acidic medium. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 33491-33499.	3.8	11
24	Conjugated Acetylenic Polymers Grafted Cuprous Oxide as an Efficient Zn-Scheme Heterojunction for Photoelectrochemical Water Reduction. <i>Advanced Materials</i> , 2020, 32, e2002486.	11.1	34
25	High-performance, long lifetime chloride ion battery using a NiFe-Cl layered double hydroxide cathode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12548-12555.	5.2	47
26	Synergistic electroreduction of carbon dioxide to carbon monoxide on bimetallic layered conjugated metal-organic frameworks. <i>Nature Communications</i> , 2020, 11, 1409.	5.8	317
27	Multi-scale X-ray tomography and machine learning algorithms to study MoNi ₄ electrocatalysts anchored on MoO ₂ cuboids aligned on Ni foam. <i>BMC Materials</i> , 2020, 2, .	6.8	14
28	Zinc-Mediated Template Synthesis of Fe-Na-C Electrochemical Catalysts with Densely Accessible Fe-Na-C Active Sites for Efficient Oxygen Reduction. <i>Advanced Materials</i> , 2020, 32, e1907399.	11.1	319
29	Recent advances on metal alkoxide-based electrocatalysts for water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10130-10149.	5.2	43
30	HZIF-based hybrids for electrochemical energy applications. <i>Nanoscale</i> , 2019, 11, 15763-15769.	2.8	18
31	Facile Protocol for Alkaline Electrolyte Purification and Its Influence on a Ni-Co Oxide Catalyst for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2019, 9, 8165-8170.	5.5	59
32	A Nonaqueous Na-Kon Hybrid Micro-Supercapacitor with Wide Potential Window and Ultrahigh Areal Energy Density. <i>Batteries and Supercaps</i> , 2019, 2, 918-923.	2.4	30
33	Dirac Nodal Arc Semimetal PtSn ₄ : An Ideal Platform for Understanding Surface Properties and Catalysis for Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13107-13112.	7.2	59
34	Dirac Nodal Arc Semimetal PtSn ₄ : An Ideal Platform for Understanding Surface Properties and Catalysis for Hydrogen Evolution. <i>Angewandte Chemie</i> , 2019, 131, 13241-13246.	1.6	28
35	Mechanically strong MXene/Kevlar nanofiber composite membranes as high-performance nanofluidic osmotic power generators. <i>Nature Communications</i> , 2019, 10, 2920.	5.8	373
36	Cation-Modulated HER and OER Activities of Hierarchical VOOH Hollow Architectures for High-Efficiency and Stable Overall Water Splitting. <i>Small</i> , 2019, 15, e1904688.	5.2	85

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37	Vanadium-cobalt oxyhydroxide shows ultralow overpotential for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21911-21917.	5.2	59
38	Tunable Synthesis of Hollow Metal-Nitrogen-Carbon Capsules for Efficient Oxygen Reduction Catalysis in Proton Exchange Membrane Fuel Cells. <i>ACS Nano</i> , 2019, 13, 8087-8098.	7.3	106
39	Molecular Engineering of Conjugated Acetylenic Polymers for Efficient Cocatalyst-free Photoelectrochemical Water Reduction. <i>Angewandte Chemie</i> , 2019, 131, 10476-10482.	1.6	27
40	Molecular Engineering of Conjugated Acetylenic Polymers for Efficient Cocatalyst-free Photoelectrochemical Water Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10368-10374.	7.2	42
41	A Phthalocyanine-Based Layered Two-Dimensional Conjugated Metal-Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2019, 131, 10787-10792.	1.6	58
42	A Phthalocyanine-Based Layered Two-Dimensional Conjugated Metal-Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10677-10682.	7.2	278
43	Hierarchical MoS ₂ Hollow Architectures with Abundant Mo Vacancies for Efficient Sodium Storage. <i>ACS Nano</i> , 2019, 13, 5533-5540.	7.3	187
44	Support and Interface Effects in Water-Splitting Electrocatalysts. <i>Advanced Materials</i> , 2019, 31, e1808167.	11.1	531
45	Poly(1,4-Diethynylbenzene) Gradient Homojunction with Enhanced Charge Carrier Separation for Photoelectrochemical Water Reduction. <i>Advanced Materials</i> , 2019, 31, e1900961.	11.1	53
46	Chemical Approaches to Carbon-Based Metal-Free Catalysts. <i>Advanced Materials</i> , 2019, 31, e1804863.	11.1	90
47	Single-Walled Carbon Nanotubes Wrapped CoFe ₂ O ₄ Nanorods with Enriched Oxygen Vacancies for Efficient Overall Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 1026-1032.	2.5	47
48	A Polymer Encapsulation Strategy to Synthesize Porous Nitrogen-Doped Carbon Nanosphere-Supported Metal Isolated-Atomic-Site Catalysts. <i>Advanced Materials</i> , 2018, 30, e1706508.	11.1	266
49	Thermoswitchable on-chip microsupercapacitors: one potential self-protection solution for electronic devices. <i>Energy and Environmental Science</i> , 2018, 11, 1717-1722.	15.6	79
50	Accelerated Hydrogen Evolution Kinetics on NiFe-Layered Double Hydroxide Electrocatalysts by Tailoring Water Dissociation Active Sites. <i>Advanced Materials</i> , 2018, 30, 1706279.	11.1	601
51	Surface step decoration of isolated atom as electron pumping: Atomic-level insights into visible-light hydrogen evolution. <i>Nano Energy</i> , 2018, 45, 109-117.	8.2	118
52	Cobalt Boron Imidazolate Framework Derived Cobalt Nanoparticles Encapsulated in B/N Codoped Nanocarbon as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <i>Advanced Functional Materials</i> , 2018, 28, 1801136.	7.8	155
53	A Dual-Stimuli-Responsive Sodium-Bromine Battery with Ultrahigh Energy Density. <i>Advanced Materials</i> , 2018, 30, e1800028.	11.1	56
54	Free-standing, flexible γ -Ni(OH) ₂ /electrochemically-exfoliated graphene film electrode for efficient oxygen evolution. <i>Applied Surface Science</i> , 2018, 433, 88-93.	3.1	17

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55	Vertically Aligned MoS ₂ Nanosheets Patterned on Electrochemically Exfoliated Graphene for High-Performance Lithium and Sodium Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1702254.	10.2	274
56	Graphdiyne Electrocatalyst. <i>Joule</i> , 2018, 2, 1396-1398.	11.7	23
57	Cobalt-Based Metal-Organic Framework Nanoarrays as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. <i>Chemistry - A European Journal</i> , 2018, 24, 18413-18418.	1.7	60
58	Ordered Porous Nitrogen-Doped Carbon Matrix with Atomically Dispersed Cobalt Sites as an Efficient Catalyst for Dehydrogenation and Transfer Hydrogenation of Heterocycles. <i>Angewandte Chemie</i> , 2018, 130, 11432-11436.	1.6	24
59	Ordered Porous Nitrogen-Doped Carbon Matrix with Atomically Dispersed Cobalt Sites as an Efficient Catalyst for Dehydrogenation and Transfer Hydrogenation of Heterocycles. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11262-11266.	7.2	165
60	Carbon-Tailored Semimetal MoP as an Efficient Hydrogen Evolution Electrocatalyst in Both Alkaline and Acid Media. <i>Advanced Energy Materials</i> , 2018, 8, 1801258.	10.2	111
61	Interface Designing over WS ₂ /W ₂ C for Enhanced Hydrogen Evolution Catalysis. <i>ACS Applied Energy Materials</i> , 2018, 1, 3377-3384.	2.5	54
62	Carbon-Rich Nanomaterials: Fascinating Hydrogen and Oxygen Electrocatalysts. <i>Advanced Materials</i> , 2018, 30, e1800528.	11.1	135
63	Polarity-Switchable Symmetric Graphite Batteries with High Energy and High Power Densities. <i>Advanced Materials</i> , 2018, 30, e1802949.	11.1	51
64	Soft-Template Construction of 3D Macroporous Polypyrrole Scaffolds. <i>Small</i> , 2017, 13, 1604099.	5.2	31
65	A Smart Flexible Zinc Battery with Cooling Recovery Ability. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7871-7875.	7.2	141
66	Assembling Polyoxo-Titanium Clusters and CdS Nanoparticles to a Porous Matrix for Efficient and Tunable H ₂ -Evolution Activities with Visible Light. <i>Advanced Materials</i> , 2017, 29, 1603369.	11.1	113
67	Efficient hydrogen production on MoNi ₄ electrocatalysts with fast water dissociation kinetics. <i>Nature Communications</i> , 2017, 8, 15437.	5.8	813
68	Molybdenum Carbide-Embedded Nitrogen-Doped Porous Carbon Nanosheets as Electrocatalysts for Water Splitting in Alkaline Media. <i>ACS Nano</i> , 2017, 11, 3933-3942.	7.3	367
69	One-pot synthesis of holey MoS ₂ nanostructures as efficient electrocatalysts for hydrogen evolution. <i>Applied Surface Science</i> , 2017, 396, 1719-1725.	3.1	17
70	Toward Activity Origin of Electrocatalytic Hydrogen Evolution Reaction on Carbon-Rich Crystalline Coordination Polymers. <i>Small</i> , 2017, 13, 1700783.	5.2	16
71	Iridium nanoparticles anchored on 3D graphite foam as a bifunctional electrocatalyst for excellent overall water splitting in acidic solution. <i>Nano Energy</i> , 2017, 40, 27-33.	8.2	139
72	Ruthenium/nitrogen-doped carbon as an electrocatalyst for efficient hydrogen evolution in alkaline solution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25314-25318.	5.2	136

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73	Hollow N-Doped Carbon Spheres with Isolated Cobalt Single Atomic Sites: Superior Electrocatalysts for Oxygen Reduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 17269-17272.	6.6	556
74	Immobilizing Molecular Metal Dithioleneâ€“Diamine Complexes on 2D Metalâ€“Organic Frameworks for Electrocatalytic H ₂ Production. <i>Chemistry - A European Journal</i> , 2017, 23, 2255-2260.	1.7	208
75	Twoâ€“Dimensional Mesoscaleâ€“Ordered Conducting Polymers. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12516-12521.	7.2	89
76	Dualâ€“Template Synthesis of 2D Mesoporous Polypyrrole Nanosheets with Controlled Pore Size. <i>Advanced Materials</i> , 2016, 28, 8365-8370.	11.1	163
77	Engineering water dissociation sites in MoS ₂ nanosheets for accelerated electrocatalytic hydrogen production. <i>Energy and Environmental Science</i> , 2016, 9, 2789-2793.	15.6	503
78	Interface Engineering of MoS ₂ /Ni ₃ S ₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€“Waterâ€“Splitting Activity. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6702-6707.	7.2	1,159
79	Interface Engineering of MoS ₂ /Ni ₃ S ₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€“Waterâ€“Splitting Activity. <i>Angewandte Chemie</i> , 2016, 128, 6814-6819.	1.6	403
80	Vertically oriented cobalt selenide/NiFe layered-double-hydroxide nanosheets supported on exfoliated graphene foil: an efficient 3D electrode for overall water splitting. <i>Energy and Environmental Science</i> , 2016, 9, 478-483.	15.6	774
81	Largeâ€“Area, Freeâ€“Standing, Twoâ€“Dimensional Supramolecular Polymer Singleâ€“Layer Sheets for Highly Efficient Electrocatalytic Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12058-12063.	7.2	514
82	Hierarchical Transitionâ€“Metal Dichalcogenide Nanosheets for Enhanced Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2015, 27, 7426-7431.	11.1	123
83	Molecular metalâ€“Nx centres in porous carbon for electrocatalytic hydrogen evolution. <i>Nature Communications</i> , 2015, 6, 7992.	5.8	575
84	Cooperative Dehydrogenation Coupling of Isopropanol and Hydrogenation Coupling of Acetone Over a Sodium Tantalate Photocatalyst. <i>ChemCatChem</i> , 2014, 6, 1673-1678.	1.8	14
85	Construction of Twoâ€“Dimensional MoS ₂ /CdS pâ€“n Nanohybrids for Highly Efficient Photocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2014, 20, 10632-10635.	1.7	156
86	Construction of a Mo _x C/Ni Network Electrode with Low Overpotential for Hydrogen Generation. <i>ChemCatChem</i> , 2014, 6, 2059-2064.	1.8	20
87	Titania Nanosheetâ€“Mediated Construction of a Twoâ€“Dimensional Titania/Cadmium Sulfide Heterostructure for High Hydrogen Evolution Activity. <i>Advanced Materials</i> , 2014, 26, 734-738.	11.1	95
88	Dendrite-Free Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. <i>Journal of the American Chemical Society</i> , 2013, 135, 4450-4456.	6.6	1,736
89	Synthesis and electrocatalytic performance of nitrogen-doped macroporous carbons. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9469.	5.2	29
90	Graphene encapsulated hollow TiO ₂ nanospheres: efficient synthesis and enhanced photocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3752.	5.2	92

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91	Robustness of topological order and formation of quantum well states in topological insulators exposed to ambient environment. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3694-3698.	3.3	158
92	Selective oxidation of sacrificial ethanol over TiO ₂ -based photocatalysts during water splitting. Energy and Environmental Science, 2011, 4, 3384.	15.6	107
93	Ionic Liquids as Precursors for Nitrogen-Doped Graphitic Carbon. Advanced Materials, 2010, 22, 87-92.	11.1	574
94	Regulated iron corrosion towards fabricating large-area self-supporting electrodes for efficient oxygen evolution reaction. Journal of Materials Chemistry A, 0, , .	5.2	14