Wei Zhou

List of Publications by Year
in descending order

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99 papers	10,090 citations	53794 45 h-index	34986 98 g-index
99 all docs	99 docs citations	99 times ranked	11621 citing authors

#	Article	IF	Citations
1	Design of BiOBr0.25I0.75 for synergy photoreduction Cr(VI) and capture Cr(III) over wide pH range. Chinese Chemical Letters, 2022, 33, 3053-3060.	9.0	13
2	Hydrated electrons mediated in-situ construction of cubic phase CdS/Cd thin layer on a millimeter-scale support for photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2022, 607, 769-781.	9.4	20
3	Prediction of functionalized graphene as potential catalysts for overall water splitting. Applied Surface Science, 2022, 578, 151989.	6.1	8
4	Regulating the surface state of ZnIn₂S₄ by gamma-ray irradiation for enhanced photocatalytic hydrogen evolution. Catalysis Science and Technology, 2022, 12, 927-934.	4.1	9
5	Unravelling unsaturated edge S in amorphous NiSx for boosting photocatalytic H2 evolution of metastable phase CdS confined inside hydrophilic beads. Applied Catalysis B: Environmental, 2022, 305, 121055.	20.2	58
6	Rational Design of a High-Durability Pt-Based ORR Catalyst Supported on Mn/N Codoped Carbon Sheets for PEMFCs. Energy & Fuels, 2022, 36, 1707-1715.	5.1	22
7	Single-atom catalysts for thermal- and electro-catalytic hydrogenation reactions. Journal of Materials Chemistry A, 2022, 10, 5743-5757.	10.3	22
8	Dissolution of the Heteroatom Dopants and Formation of Ortho-Quinone Moieties in the Doped Carbon Materials during Water Electrooxidation. Journal of the American Chemical Society, 2022, 144, 3250-3258.	13.7	45
9	Ru ions enhancing the interface bonding between the Pt nanoparticle catalyst and perovskite support for super anti-sintering performance. Journal of Materials Chemistry A, 2022, 10, 8227-8237.	10.3	2
10	Transition-metal hydroxide nanosheets with peculiar double-layer structures as efficient electrocatalysts. Chem Catalysis, 2022, 2, 867-882.	6.1	10
11	Hollow core-shell Z-scheme heterojunction on self-floating carbon fiber cloth with robust photocatalytic-photothermal performance. Journal of Cleaner Production, 2022, 360, 132166.	9.3	11
12	Ptâ€“Ni Alloy Nanoparticles via High-Temperature Shock as Efficient Electrocatalysts in the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2022, 5, 8243-8250.	5.0	8
13	Fabrication of Ultrathin Two-Dimensional/Two-Dimensional MoS₂/ZnIn₂S₄ Hybrid Nanosheets for Highly Efficient Visible-Light-Driven Photocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2022, 5, 8232-8240.	5.1	14
14	Pulsed electrocatalysis enables the stabilization and activation of carbon-based catalysts towards H2O2 production. Applied Catalysis B: Environmental, 2022, 316, 121688.	20.2	32
15	Amorphous molybdenum sulfide mediated EDTA with multiple active sites to boost heavy metal ions removal. Chinese Chemical Letters, 2021, 32, 2797-2802.	9.0	31
16	Integrated selective nitrite reduction to ammonia with tetrahydroisoquinoline semi-dehydrogenation over a vacancy-rich Ni bifunctional electrode. Journal of Materials Chemistry A, 2021, 9, 239-243.	10.3	65
17	Tridecaboron diphosphide: a new infrared light active photocatalyst for efficient CO₂ photoreduction under mild reaction conditions. Journal of Materials Chemistry A, 2021, 9, 2421-2428.	10.3	19
18	Construction of a 3D/2D g-C₃N₄/ZnIn₂S₄ hollow spherical heterostructure for efficient CO₂ photoreduction under visible light. Catalysis Science and Technology, 2021, 11, 1282-1291.	4.1	28

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19	Efficient electrochemical water oxidation to hydrogen peroxide over intrinsic carbon defect-rich carbon nanofibers. Journal of Materials Chemistry A, 2021, 9, 23994-24001.	10.3	11
20	Sulfur-Doped Flowerlike Porous Carbon Derived from Metalâ€“Organic Frameworks as a High-Performance Potassium-Ion Battery Anode. ACS Applied Energy Materials, 2021, 4, 2282-2291.	5.1	28
21	Activated edge of single layered TiO2 nanoribbons through transition metal doping and strain approaches for hydrogen production. Applied Surface Science, 2021, 545, 148947.	6.1	10
22	Fumaric Acid Assistant Band Structure Tunable Nitrogen Defective g-C₃N₄ Fabrication for Enhanced Photocatalytic Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2021, 9, 7529-7540.	6.7	47
23	Synthesis of a Boronâ€“Imidazolate Framework Nanosheet with Dimer Copper Units for CO₂ Electroreduction to Ethylene. Angewandte Chemie - International Edition, 2021, 60, 16687-16692.	13.8	99
24	Synthesis of a Boronâ€“Imidazolate Framework Nanosheet with Dimer Copper Units for CO 2 Electroreduction to Ethylene. Angewandte Chemie, 2021, 133, 16823-16828.	2.0	10
25	Hydrogen-Intercalation-Induced Lattice Expansion of Pd@Pt Coreâ€“Shell Nanoparticles for Highly Efficient Electrocatalytic Alcohol Oxidation. Journal of the American Chemical Society, 2021, 143, 11262-11270.	13.7	121
26	Selectivity Origin of Organic Electrosynthesis Controlled by Electrode Materials: A Case Study on Pinacols. ACS Catalysis, 2021, 11, 8958-8967.	11.2	45
27	First-principles study of the quasi-one-dimensional organic-inorganic hybrid perovskites <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mi>MV</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Cl</mml:mi><mml:mn>2</mml:mn></mml:msub>		

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37	Anion Etching for Accessing Rapid and Deep Self-Reconstruction of Precatalysts for Water Oxidation. Matter, 2020, 3, 2124-2137.	10.0	177
38	Tunable HER activity from doping and strain strategies for Î²-Sb monolayer: DFT calculations. Computational Materials Science, 2020, 185, 109966.	3.0	14
39	Unveiling the Origin of Catalytic Sites of Pt Nanoparticles Decorated on Oxygen-Deficient Vanadium-Doped Cobalt Hydroxide Nanosheet for Hybrid Sodiumâ€“Air Batteries. ACS Applied Energy Materials, 2020, 3, 7464-7473.	5.1	9
40	Selective Photo-oxidation of Methane to Methanol with Oxygen over Dual-Cocatalyst-Modified Titanium Dioxide. ACS Catalysis, 2020, 10, 14318-14326.	11.2	114
41	Nitrogen-doped ultrathin graphene encapsulated Cu nanoparticles decorated on SrTiO3 as an efficient water oxidation photocatalyst with activity comparable to BiVO4 under visible-light irradiation. Applied Catalysis B: Environmental, 2020, 279, 119352.	20.2	47
42	Computational Design of Copper doped Indium for electrocatalytic Reduction of CO₂ to Formic Acid. ChemCatChem, 2020, 12, 5632-5636.	3.7	13
43	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 22470-22474.	13.8	257
44	Large Interlayer Spacing of Few-Layered Cobaltâ€“Tin-Based Sulfide Providing Superior Sodium Storage. ACS Applied Materials & Interfaces, 2020, 12, 41546-41556.	8.0	11
45	Implanting Isolated Ru Atoms into Edgeâ€Rich Carbon Matrix for Efficient Electrocatalytic Hydrogen Evolution. Advanced Energy Materials, 2020, 10, 2000882.	19.5	144
46	Stabilizing CuGaS₂ by crystalline CdS through an interfacial Z-scheme charge transfer for enhanced photocatalytic CO₂ reduction under visible light. Nanoscale, 2020, 12, 8693-8700.	5.6	39
47	Boron enhances oxygen evolution reaction activity over Ni foam-supported iron boride nanowires. Journal of Materials Chemistry A, 2020, 8, 13638-13645.	10.3	61
48	Ultrathin graphene encapsulated Cu nanoparticles: A highly stable and efficient catalyst for photocatalytic H2 evolution and degradation of isopropanol. Chemical Engineering Journal, 2020, 390, 124558.	12.7	55
49	Unveiling the Activity Origin of a Copperâ€based Electrocatalyst for Selective Nitrate Reduction to Ammonia. Angewandte Chemie - International Edition, 2020, 59, 5350-5354.	13.8	760
50	Built-In Electric Field Hindering Photogenerated Carrier Recombination in Polar Bilayer SnO/BiOX (X =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.1	22
51	Construction of Porous Co₉S₈ Hollow Boxes with Double Open Ends toward High-Performance Half/Full Sodium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 6305-6314.	6.7	46
52	Visible light driven hydrogen evolution using external and confined CdS: Effect of chitosan on carriers separation. Applied Catalysis B: Environmental, 2020, 277, 119152.	20.2	39
53	Constructing Conductive Interfaces between Nickel Oxide Nanocrystals and Polymer Carbon Nitride for Efficient Electrocatalytic Oxygen Evolution Reaction. Advanced Functional Materials, 2019, 29, 1904020.	14.9	140
54	Superionic conduction along ordered hydroxyl networks in molecular-thin nanosheets. Materials Horizons, 2019, 6, 2087-2093.	12.2	22

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55	Constructing Sn(<scp>ii</scp>)-doped SrNb₂O₆ for visible light response driven H₂ and O₂ evolution from water. Catalysis Science and Technology, 2019, 9, 3619-3622.	4.1	4
56	Oxygen vacancies induced special CO2 adsorption modes on Bi2MoO6 for highly selective conversion to CH4. Applied Catalysis B: Environmental, 2019, 259, 118088.	20.2	221
57	Coexistence of Magnetism and Ferroelectricity in 3d Transition-Metal-Doped SnTe Monolayer. Journal of Physical Chemistry C, 2019, 123, 28919-28924.	3.1	12
58	Superficial Hydroxyl and Amino Groups Synergistically Active Polymeric Carbon Nitride for CO₂ Electroreduction. ACS Catalysis, 2019, 9, 10983-10989.	11.2	105
59	Powder exfoliated MoS₂ nanosheets with highly monolayer-rich structures as high-performance lithium-/sodium-ion-battery electrodes. Nanoscale, 2019, 11, 1887-1900.	5.6	93
60	Cation Vacancy-Initiated CO₂ Photoreduction over ZnS for Efficient Formate Production. ACS Energy Letters, 2019, 4, 1387-1393.	17.4	102
61	Hierarchical MoS₂ Hollow Architectures with Abundant Mo Vacancies for Efficient Sodium Storage. ACS Nano, 2019, 13, 5533-5540.	14.6	187
62	Ultrathin FeOOH nanosheets as an efficient cocatalyst for photocatalytic water oxidation. Journal of Materials Chemistry A, 2019, 7, 9222-9229.	10.3	100
63	Intramolecular electronic coupling in porous iron cobalt (oxy)phosphide nanoboxes enhances the electrocatalytic activity for oxygen evolution. Energy and Environmental Science, 2019, 12, 3348-3355.	30.8	234
64	Enhanced adsorption of Cr(<scp>vi</scp>) on BiOBr under alkaline conditions: interlayer anion exchange. Environmental Science: Nano, 2019, 6, 3601-3610.	4.3	27
65	Direct and Selective Photocatalytic Oxidation of CH₄ to Oxygenates with O₂ on Cocatalysts/ZnO at Room Temperature in Water. Journal of the American Chemical Society, 2019, 141, 20507-20515.	13.7	253
66	Tunable Photocatalytic HER Activity of Single-Layered TiO₂ Nanosheets with Transition-Metal Doping and Biaxial Strain. Journal of Physical Chemistry C, 2019, 123, 526-533.	3.1	34
67	Probing the role of nickel dopant in aqueous colloidal ZnS nanocrystals for efficient solar-driven CO2 reduction. Applied Catalysis B: Environmental, 2019, 244, 1013-1020.	20.2	50
68	Tunable electronic and magnetic properties of antimonene system via Fe doping and defect complex: A first-principles perspective. Applied Surface Science, 2018, 448, 281-287.	6.1	24
69	Dynamic traction of lattice-confined platinum atoms into mesoporous carbon matrix for hydrogen evolution reaction. Science Advances, 2018, 4, eaao6657.	10.3	460
70	Interface engineered in situ anchoring of Co₉S₈ nanoparticles into a multiple doped carbon matrix: highly efficient zincâ€“air batteries. Nanoscale, 2018, 10, 2649-2657.	5.6	66
71	Efficient photocatalytic CO2 reduction over Co(II) species modified CdS in aqueous solution. Applied Catalysis B: Environmental, 2018, 226, 252-257.	20.2	70
72	Photoassisted Construction of Holey Defective gâ€C₃N₄ Photocatalysts for Efficient Visibleâ€Lightâ€Driven H₂O₂ Production. Small, 2018, 14, 1703142.	10.0	353

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73	Enhanced Lubrication and Photocatalytic Degradation of Liquid Paraffin by Hollow MoS₂ Microspheres. ACS Omega, 2018, 3, 3120-3128.	3.5	14
74	Hittorf's violet phosphorene as a promising candidate for optoelectronic and photocatalytic applications: first-principles characterization. Physical Chemistry Chemical Physics, 2018, 20, 11967-11975.	2.8	45
75	Doping Î²-CoMoO₄ Nanoplates with Phosphorus for Efficient Hydrogen Evolution Reaction in Alkaline Media. ACS Applied Materials & Interfaces, 2018, 10, 37038-37045.	8.0	81
76	Open hollow Coâ€“Pt clusters embedded in carbon nanoflake arrays for highly efficient alkaline water splitting. Journal of Materials Chemistry A, 2018, 6, 20214-20223.	10.3	42
77	Surface Modulation of Hierarchical MoS₂ Nanosheets by Ni Single Atoms for Enhanced Electrocatalytic Hydrogen Evolution. Advanced Functional Materials, 2018, 28, 1807086.	14.9	314
78	Synthesis of Particulate Hierarchical Tandem Heterojunctions toward Optimized Photocatalytic Hydrogen Production. Advanced Materials, 2018, 30, e1804282.	21.0	411
79	A rapidly room-temperature-synthesized Cd/ZnS:Cu nanocrystal photocatalyst for highly efficient solar-light-powered CO2 reduction. Applied Catalysis B: Environmental, 2018, 237, 68-73.	20.2	65
80	Tuning the ferromagnetism of a single layered titanium dioxide nanosheet with hole doping and uniaxial strain. Journal of Physics Condensed Matter, 2018, 30, 305804.	1.8	6
81	Enhanced Visible-Light-Driven Hydrogen Production of Carbon Nitride by Band Structure Tuning. Journal of Physical Chemistry C, 2018, 122, 17261-17267.	3.1	23
82	A modular strategy for decorating isolated cobalt atoms into multichannel carbon matrix for electrocatalytic oxygen reduction. Energy and Environmental Science, 2018, 11, 1980-1984.	30.8	225
83	Spontaneous Direct Band Gap, High Hole Mobility, and Huge Exciton Energy in Atomic-Thin TiO₂ Nanosheet. Chemistry of Materials, 2018, 30, 6449-6457.	6.7	50
84	Periodically Ordered Nanoporous Perovskite Photoelectrode for Efficient Photoelectrochemical Water Splitting. ACS Nano, 2018, 12, 6335-6342.	14.6	74
85	Recent Progress in Metalâ€Organic Frameworks for Applications in Electrocatalytic and Photocatalytic Water Splitting. Advanced Science, 2017, 4, 1600371.	11.2	594
86	Novel optical and magnetic properties of Li-doped quasi-2D manganate Ca₃Mn₂O₇ particles. Journal of Materials Chemistry C, 2017, 5, 7011-7019.	5.5	18
87	Viable approach toward efficient p-type conductivity in Al-doped anatase TiO₂via strain engineering. RSC Advances, 2017, 7, 20542-20547.	3.6	4
88	Engineering the crystallinity of MoS₂ monolayers for highly efficient solar hydrogen production. Journal of Materials Chemistry A, 2017, 5, 8591-8598.	10.3	69
89	Cubic quantum dot/hexagonal microsphere ZnIn₂S₄ heterophase junctions for exceptional visible-light-driven photocatalytic H₂ evolution. Journal of Materials Chemistry A, 2017, 5, 8451-8460.	10.3	176
90	Rational design of freestanding MoS2 monolayers for hydrogen evolution reaction. Nano Energy, 2017, 39, 409-417.	16.0	107

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91	Electronic and Optical Properties of TiO₂ Solid-Solution Nanosheets for Bandgap Engineering: A Hybrid Functional Study. Journal of Physical Chemistry C, 2017, 121, 18683-18691.	3.1	5
92	Barium disilicide as a promising thin-film photovoltaic absorber: structural, electronic, and defect properties. Journal of Materials Chemistry A, 2017, 5, 25293-25302.	10.3	68
93	Improved charge separation and surface activation via boron-doped layered polyhedron SrTiO3 for co-catalyst free photocatalytic CO2 conversion. Applied Catalysis B: Environmental, 2017, 219, 10-17.	20.2	113
94	In Situ Bond Modulation of Graphitic Carbon Nitride to Construct pâ€“n Homojunctions for Enhanced Photocatalytic Hydrogen Production. Advanced Functional Materials, 2016, 26, 6822-6829.	14.9	583
95	n-type boron phosphide as a highly stable, metal-free, visible-light-active photocatalyst for hydrogen evolution. Nano Energy, 2016, 28, 158-163.	16.0	94
96	Emerging Multifunctional Metalâ€“Organic Framework Materials. Advanced Materials, 2016, 28, 8819-8860.	21.0	1,227
97	High performance Auâ€“Cu alloy for enhanced visible-light water splitting driven by coinage metals. Chemical Communications, 2016, 52, 4694-4697.	4.1	54
98	Band gap engineering of bulk and nanosheet SnO: an insight into the interlayer Snâ€“Sn lone pair interactions. Physical Chemistry Chemical Physics, 2015, 17, 17816-17820.	2.8	100
99	Tailoring Band Structure of TiO₂ To Enhance Photoelectrochemical Activity by Codoping S and Mg. Journal of Physical Chemistry C, 2015, 119, 11557-11562.	3.1	34