Ning Zhang

List of Publications by Year
in descending order

88 papers	8,203 citations	81743 39 h-index	49773 87 g-index
90 all docs	90 docs citations	90 times ranked	10382 citing authors

#	Article	IF	Citations
1	Oxide Defect Engineering Enables to Couple Solar Energy into Oxygen Activation. Journal of the American Chemical Society, 2016, 138, 8928-8935.	6.6	840
2	Optoelectronic resistive random access memory for neuromorphic vision sensors. Nature Nanotechnology, 2019, 14, 776-782.	15.6	783
3	Defect engineering in photocatalytic materials. Nano Energy, 2018, 53, 296-336.	8.2	732
4	Refining Defect States in W₁₈O₄₉ by Mo Doping: A Strategy for Tuning N₂ Activation towards Solar-Driven Nitrogen Fixation. Journal of the American Chemical Society, 2018, 140, 9434-9443.	6.6	722
5	Lattice oxygen activation enabled by high-valence metal sites for enhanced water oxidation. Nature Communications, 2020, 11, 4066.	5.8	337
6	Strong and Robust Polyanilineâ€Based Supramolecular Hydrogels for Flexible Supercapacitors. Angewandte Chemie - International Edition, 2016, 55, 9196-9201.	7.2	312
7	CeO₂-Induced Interfacial Co²⁺ Octahedral Sites and Oxygen Vacancies for Water Oxidation. ACS Catalysis, 2019, 9, 6484-6490.	5.5	278
8	Layer-by-layer Î²-Ni(OH)2/graphene nanohybrids for ultraflexible all-solid-state thin-film supercapacitors with high electrochemical performance. Nano Energy, 2013, 2, 65-74.	8.2	271
9	Self-doped SrTiO3âˆ'Î´ photocatalyst with enhanced activity for artificial photosynthesis under visible light. Energy and Environmental Science, 2011, 4, 4211.	15.6	244
10	Metalâ€"Organic Framework Coating Enhances the Performance of Cu₂O in Photoelectrochemical CO₂ Reduction. Journal of the American Chemical Society, 2019, 141, 10924-10929.	6.6	219
11	Bioinspired ultra-stretchable and anti-freezing conductive hydrogel fibers with ordered and reversible polymer chain alignment. Nature Communications, 2018, 9, 3579.	5.8	201
12	Lattice oxygen redox chemistry in solid-state electrocatalysts for water oxidation. Energy and Environmental Science, 2021, 14, 4647-4671.	15.6	190
13	Recent progress on advanced design for photoelectrochemical reduction of CO2 to fuels. Science China Materials, 2018, 61, 771-805.	3.5	172
14	Long-circulating siRNA nanoparticles for validating Prohibitin1-targeted non-small cell lung cancer treatment. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7779-7784.	3.3	170
15	Nobleâ€Metalâ€Free Janusâ€like Structures by Cation Exchange for Zâ€Scheme Photocatalytic Water Splitting under Broadband Light Irradiation. Angewandte Chemie - International Edition, 2017, 56, 4206-4210.	7.2	166
16	Defect engineering: A versatile tool for tuning the activation of key molecules in photocatalytic reactions. Journal of Energy Chemistry, 2019, 37, 43-57.	7.1	143
17	Metalâ€"Organic Framework Hexagonal Nanoplates: Bottom-up Synthesis, Topotactic Transformation, and Efficient Oxygen Evolution Reaction. Journal of the American Chemical Society, 2020, 142, 7317-7321.	6.6	140
18	Strong and Robust Polyanilineâ€Based Supramolecular Hydrogels for Flexible Supercapacitors. Angewandte Chemie, 2016, 128, 9342-9347.	1.6	107

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19	Enhancing the Properties of Conductive Polymer Hydrogels by Freezeâ€“Thaw Cycles for High-Performance Flexible Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 20142-20149.	4.0	106
20	A Ternary Dumbbell Structure with Spatially Separated Catalytic Sites for Photocatalytic Overall Water Splitting. Advanced Science, 2020, 7, 1903568.	5.6	104
21	Engineering of carbon and other protective coating layers for stabilizing silicon anode materials. , 2019, 1, 219-245.		94
22	Nano Highâ€Entropy Materials: Synthesis Strategies and Catalytic Applications. Small Structures, 2020, 1, 2000033.	6.9	80
23	Governing Interlayer Strain in Bismuth Nanocrystals for Efficient Ammonia Electrosynthesis from Nitrate Reduction. ACS Nano, 2022, 16, 4795-4804.	7.3	76
24	Ambient rutile VO2(R) hollow hierarchitectures with rich grain boundaries from new-state nsutite-type VO2, displaying enhanced hydrogen adsorption behavior. Physical Chemistry Chemical Physics, 2012, 14, 4810.	1.3	65
25	Electrosynthesis of Co3O4 and Co(OH)2 ultrathin nanosheet arrays for efficient electrocatalytic water splitting in alkaline and neutral media. Nano Research, 2018, 11, 323-333.	5.8	65
26	Bioinspired Design of Strong, Tough, and Highly Conductive Polyol-Polypyrrole Composites for Flexible Electronics. ACS Applied Materials & Interfaces, 2017, 9, 5692-5698.	4.0	64
27	Controllable Fabrication and Tuned Electrochemical Performance of Potassium Coâ€“Ni Phosphate Microplates as Electrodes in Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 3506-3514.	4.0	63
28	Defective Tungsten Oxide Hydrate Nanosheets for Boosting Aerobic Coupling of Amines: Synergistic Catalysis by Oxygen Vacancies and BrÃ¸nsted Acid Sites. Small, 2017, 13, 1701354.	5.2	62
29	Nobleâ€Metalâ€Free Janusâ€like Structures by Cation Exchange for Zâ€Scheme Photocatalytic Water Splitting under Broadband Light Irradiation. Angewandte Chemie, 2017, 129, 4270-4274.	1.6	62
30	Computational Design of Transition Metal Single-Atom Electrocatalysts on PtS₂ for Efficient Nitrogen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 20448-20455.	4.0	58
31	Metal Substitution Steering Electron Correlations in Pyrochlore Ruthenates for Efficient Acidic Water Oxidation. ACS Nano, 2021, 15, 8537-8548.	7.3	54
32	Ni₂P₂O₇Nanoarrays with Decorated C₃N₄Nanosheets as Efficient Electrode for Supercapacitors. ACS Applied Energy Materials, 2018, 1, 2016-2023.	2.5	50
33	Hexagonal Zn_{1âˆ'x}Cd_xS (0.2 â‰ x â‰ 1) solid solution photocatalysts for H₂ generation from water. Catalysis Science and Technology, 2017, 7, 982-987.	2.1	47
34	Programmable Polymer Actuators Perform Continuous Helical Motions Driven by Moisture. ACS Applied Materials & Interfaces, 2019, 11, 20473-20481.	4.0	45
35	PdPt Alloy Nanocatalysts Supported on TiO₂: Maneuvering Metalâ€“Hydrogen Interactions for Lightâ€Driven and Waterâ€Donating Selective Alkyne Semihydrogenation. Small, 2017, 13, 1604173.	5.2	44
36	Plasma-treatment induced H2O dissociation for the enhancement of photocatalytic CO2 reduction to CH4 over graphitic carbon nitride. Applied Surface Science, 2020, 508, 145173.	3.1	44

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37	Advanced Electrocatalytic Performance of Ni-Based Materials for Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 341-349.	3.2	43
38	Hybrid Nanostructures of Bimetallic NiCo Nitride/N-Doped Reduced Graphene Oxide as Efficient Bifunctional Electrocatalysts for Rechargeable Znâ€“Air Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 19612-19620.	3.2	41
39	Insights into the critical dual-effect of acid treatment on ZnxCd1-xS for enhanced photocatalytic production of syngas under visible light. Applied Catalysis B: Environmental, 2021, 288, 119976.	10.8	41
40	Cobalt-based nanosheet arrays as efficient electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 17640-17646.	5.2	40
41	Post-synthesis isomorphous substitution of layered Coâ€“Mn hydroxide nanocones with graphene oxide as high-performance supercapacitor electrodes. Nanoscale, 2019, 11, 6165-6173.	2.8	39
42	Hierarchical CoO/MnCo₂O_{4.5} nanorod arrays on flexible carbon cloth as high-performance anode materials for lithium-ion batteries. Dalton Transactions, 2018, 47, 3775-3784.	1.6	38
43	Î²â€cyclodextrin as Lithiumâ€ion Diffusion Channel with Enhanced Kinetics for Stable Silicon Anode. Energy and Environmental Materials, 2021, 4, 72-80.	7.3	36
44	Activating Hematite Nanoplates via Partial Reduction for Electrocatalytic Oxygen Reduction Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 11841-11849.	3.2	35
45	Spatially Confined Formation of Single Atoms in Highly Porous Carbon Nitride Nanoreactors. ACS Nano, 2021, 15, 7790-7798.	7.3	33
46	Tuning Interfacial Active Sites over Porous Mo₂N-Supported Cobalt Sulfides for Efficient Hydrogen Evolution Reactions in Acid and Alkaline Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 41573-41583.	4.0	30
47	Self-Supported Fe-Doped CoP Nanowire Arrays Grown on Carbon Cloth with Enhanced Properties in Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 406-412.	2.5	29
48	Molecular-Scale Manipulation of Layer Sequence in Heteroassembled Nanosheet Films toward Oxygen Evolution Electrocatalysts. ACS Nano, 2022, 16, 4028-4040.	7.3	29
49	Three-dimensionally interconnected Si frameworks derived from natural halloysite clay: a high-capacity anode material for lithium-ion batteries. Dalton Transactions, 2018, 47, 7522-7527.	1.6	28
50	Serpentine CoxNi3-xGe2O5(OH)4 nanosheets with tuned electronic energy bands for highly efficient oxygen evolution reaction in alkaline and neutral electrolytes. Applied Catalysis B: Environmental, 2020, 260, 118184.	10.8	28
51	Hierarchical yolkâ€“shell layered potassium niobate for tuned pH-dependent photocatalytic H₂ evolution. Catalysis Science and Technology, 2017, 7, 1000-1005.	2.1	27
52	Maneuvering charge polarization and transport in 2H-MoS2 for enhanced electrocatalytic hydrogen evolution reaction. Nano Research, 2016, 9, 2662-2671.	5.8	26
53	Advanced Supercapacitors Based on Î±-Ni(OH)₂ Nanoplates/Graphene Composite Electrodes with High Energy and Power Density. ACS Applied Energy Materials, 2018, 1, 1496-1505.	2.5	26
54	Synthesis of Co(II)-Fe(III) Hydroxide Nanocones with Mixed Octahedral/Tetrahedral Coordination toward Efficient Electrocatalysis. Chemistry of Materials, 2020, 32, 4232-4240.	3.2	26

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55	Serpentine Ni₃Ge₂O₅(OH)₄ Nanosheets with Tailored Layers and Size for Efficient Oxygen Evolution Reactions. Small, 2018, 14, e1803015.	5.2	24
56	Cobalt iron phosphide nanoparticles embedded within a carbon matrix as highly efficient electrocatalysts for the oxygen evolution reaction. Chemical Communications, 2019, 55, 9212-9215.	2.2	23
57	Lithium doped nickel oxide nanocrystals with a tuned electronic structure for oxygen evolution reaction. Chemical Communications, 2021, 57, 6070-6073.	2.2	22
58	Robust Photoelectrochemical Oxygen Evolution with N, Feâ€“CoS₂ Nanorod Arrays. ACS Applied Materials & Interfaces, 2019, 11, 44214-44222.	4.0	21
59	Metal-free tellurene cocatalyst with tunable bandgap for enhanced photocatalytic hydrogen production. Materials Today Energy, 2021, 21, 100720.	2.5	18
60	Topological phase change transistors based on tellurium Weyl semiconductor. Science Advances, 2022, 8, .	4.7	17
61	Magnetically directed soft actuators driven by moisture. Journal of Materials Chemistry C, 2017, 5, 4129-4133.	2.7	16
62	Layered rare-earth hydroxide nanocones with facile host composition modification and anion-exchange feature: topotactic transformation into oxide nanocones for upconversion. Nanoscale, 2017, 9, 8185-8191.	2.8	15
63	Tuning nanosheet Fe₂O₃ photoanodes with C₃N₄ and p-type CoO_x decoration for efficient and stable water splitting. Catalysis Science and Technology, 2018, 8, 3144-3150.	2.1	15
64	Double Confined MoO₂/Sn/NC@NC Nanotubes: Solidâ€“Liquid Synthesis, Conformal Transformation, and Excellent Lithium-Ion Storage. ACS Applied Materials & Interfaces, 2021, 13, 19836-19845.	4.0	15
65	Controllable Fabrication of Rare-Earth-Doped Gd₂O₂SO₄@SiO₂ Double-Shell Hollow Spheres for Efficient Upconversion Luminescence and Magnetic Resonance Imaging. ACS Sustainable Chemistry and Engineering, 2018, 6, 10463-10471.	3.2	14
66	Ag1.69Sb2.27O6.25 coupled carbon nitride photocatalyst with high redox potential for efficient multifunctional environmental applications. Applied Surface Science, 2019, 487, 82-90.	3.1	14
67	Efficient Mini-Transporter for Cytosolic Protein Delivery. ACS Applied Materials & Interfaces, 2016, 8, 25725-25732.	4.0	13
68	Binder-Free Co₄N Nanoarray on Carbon Cloth as Flexible High-Performance Anode for Lithium-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 4432-4439.	2.5	13
69	Fieldâ€Effect Chiral Anomaly Devices with Dirac Semimetal. Advanced Functional Materials, 2021, 31, 2104192.	7.8	13
70	Ultrathin Nanosheet-Assembled Coâ€“Fe Hydroxide Nanotubes: Sacrificial Template Synthesis, Topotactic Transformation, and Their Application as Electrocatalysts for Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 46578-46587.	4.0	12
71	Phosphate-induced interfacial electronic engineering in VPO4-Ni2P heterostructure for improved electrochemical water oxidation. Chinese Chemical Letters, 2022, 33, 452-456.	4.8	12
72	Photo-irradiation tunes highly active sites over Î²-Ni(OH)₂ nanosheets for the electrocatalytic oxygen evolution reaction. Chemical Communications, 2021, 57, 9060-9063.	2.2	12

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73	Synergizing Inter and Intraband Transitions in Defective Tungsten Oxide for Efficient Photocatalytic Alcohol Dehydration to Alkenes. Jacs Au, 2022, 2, 1160-1168.	3.6	12
74	Improving Câ€“Nâ€“FeO_{<i>x</i>} Oxygen Evolution Electrocatalysts through Hydroxyl-Modulated Local Coordination Environment. ACS Catalysis, 2022, 12, 7443-7452.	5.5	12
75	Selective fabrication of porous iron oxides hollow spheres and nanofibers by electrospinning for photocatalytic water purification. Solid State Sciences, 2018, 82, 24-28.	1.5	11
76	Activity enhancement of layered cobalt hydroxide nanocones by tuning interlayer spacing and phosphidation for electrocatalytic water oxidation in neutral solutions. Inorganic Chemistry Frontiers, 2019, 6, 1744-1752.	3.0	11
77	Boosting electrochemical hydrogen evolution by coupling anodically oxidative dehydrogenation of benzylamine to benzonitrile. Chinese Chemical Letters, 2023, 34, 107319.	4.8	10
78	Rare-earth-doped yttrium oxide nanoplatelets and nanotubes: controllable fabrication, topotactic transformation and upconversion luminescence. CrystEngComm, 2018, 20, 5025-5032.	1.3	7
79	Heterostructured NiFe oxide/phosphide nanoflakes for efficient water oxidation. Dalton Transactions, 2019, 48, 8442-8448.	1.6	6
80	Multi-shelled cobaltâ€“nickel oxide/phosphide hollow spheres for an efficient oxygen evolution reaction. Dalton Transactions, 2020, 49, 10918-10927.	1.6	6
81	Self-reconstruction mediates isolated Pt tailored nanoframes for highly efficient catalysis. Journal of Materials Chemistry A, 2021, 9, 22501-22508.	5.2	5
82	Electronic configuration modulation of tin dioxide by phosphorus dopant for pathway change in electrocatalytic water oxidation. Inorganic Chemistry Frontiers, 2021, 9, 83-89.	3.0	5
83	Alloy-buffer-controlled van der Waals epitaxial growth of aligned tellurene. Nano Research, 2022, 15, 5712-5718.	5.8	4
84	Serpentine Ni₃Ge₂O₅(OH)₄ Nanosheets Grow on Porous Mo₂N for an Efficient Oxygen Evolution Reaction. Energy & Fuels, 2022, 36, 11467-11476.	2.5	4
85	Preparation of carbon nitride from different precursors through pyrolysis: Correlating the photocatalytic activity to the crystallinity and disorder. Journal of Environmental Chemical Engineering, 2021, 9, 106410.	3.3	3
86	One-Pot Synthesis of Nitrogen-Doped TiO2 with Supported Copper Nanocrystalline for Photocatalytic Environment Purification under Household White LED Lamp. Molecules, 2021, 26, 6221.	1.7	3
87	Electrocatalytic oxygen and hydrogen evolution reactions at Ni3B/Fe2O3 nanotube arrays under visible light radiation. Catalysis Science and Technology, 2020, 10, 8305-8313.	2.1	2
88	Tuning the Electronic Structure of Layered Co-based Serpentine Nanosheets for Efficient Oxygen Evolution Reaction. Journal Physics D: Applied Physics, 0, , .	1.3	2