Nan Zhang

List of Publications by Year
in descending order

63 papers	12,993 citations	87888 38 h-index	118850 62 g-index
66 all docs	66 docs citations	66 times ranked	15600 citing authors

#	Article	IF	Citations
1	Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. Chemical Society Reviews, 2017, 46, 337-365.	38.1	4,505
2	Biaxially strained PtPb/Pt core/shell nanoplate boosts oxygen reduction catalysis. Science, 2016, 354, 1410-1414.	12.6	1,262
3	Waltzing with the Versatile Platform of Graphene to Synthesize Composite Photocatalysts. Chemical Reviews, 2015, 115, 10307-10377.	47.7	1,017
4	3D Nitrogenâ€Anionâ€Decorated Nickel Sulfides for Highly Efficient Overall Water Splitting. Advanced Materials, 2017, 29, 1701584.	21.0	478
5	Hierarchically CdS Decorated 1D ZnO Nanorodsâ€2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance. Advanced Functional Materials, 2015, 25, 221-229.	14.9	394
6	Nanochemistry-derived Bi₂WO₆nanostructures: towards production of sustainable chemicals and fuels induced by visible light. Chemical Society Reviews, 2014, 43, 5276-5287.	38.1	368
7	Surface/interface nanoengineering for rechargeable Znâ€“air batteries. Energy and Environmental Science, 2020, 13, 1132-1153.	30.8	344
8	High-purity pyrrole-type FeN₄ sites as a superior oxygen reduction electrocatalyst. Energy and Environmental Science, 2020, 13, 111-118.	30.8	327
9	Near-field dielectric scattering promotes optical absorption by platinum nanoparticles. Nature Photonics, 2016, 10, 473-482.	31.4	298
10	Microstructure and surface control of MXene films for water purification. Nature Sustainability, 2019, 2, 856-862.	23.7	273
11	Interfacial engineering of cobalt sulfide/graphene hybrids for highly efficient ammonia electrosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6635-6640.	7.1	242
12	Ultrathin Cobalt Oxide Layers as Electrocatalysts for Highâ€Performance Flexible Znâ€“Air Batteries. Advanced Materials, 2019, 31, e1807468.	21.0	227
13	Toward the enhanced photoactivity and photostability of ZnO nanospheres via intimate surface coating with reduced graphene oxide. Journal of Materials Chemistry A, 2014, 2, 9380.	10.3	204
14	High-Density Planar-like Fe2N6 Structure Catalyzes Efficient Oxygen Reduction. Matter, 2020, 3, 509-521.	10.0	184
15	Two-Dimensional MoS₂ Nanosheet-Coated Bi₂S₃ Discoids: Synthesis, Formation Mechanism, and Photocatalytic Application. Langmuir, 2015, 31, 4314-4322.	3.5	178
16	Dynamic Migration of Surface Fluorine Anions on Cobaltâ€Based Materials to Achieve Enhanced Oxygen Evolution Catalysis. Angewandte Chemie - International Edition, 2018, 57, 15471-15475.	13.8	178
17	Photoredox catalysis over graphene aerogel-supported composites. Journal of Materials Chemistry A, 2018, 6, 4590-4604.	10.3	171
18	Enhanced Catalytic Activity in Nitrogen-Anion Modified Metallic Cobalt Disulfide Porous Nanowire Arrays for Hydrogen Evolution. ACS Catalysis, 2017, 7, 7405-7411.	11.2	152

#	Article	IF	Citations
19	Interfacial Defect Engineering for Improved Portable Zincâ€“Air Batteries with a Broad Working Temperature. Angewandte Chemie - International Edition, 2019, 58, 9459-9463.	13.8	139
20	Enhancing the visible light photocatalytic performance of ternary CdSâ€“(grapheneâ€“Pd) nanocomposites via a facile interfacial mediator and co-catalyst strategy. Journal of Materials Chemistry A, 2014, 2, 19156-19166.	10.3	130
21	Vertically aligned ZnOâ€“Au@CdS coreâ€“shell nanorod arrays as an all-solid-state vectorial Z-scheme system for photocatalytic application. Journal of Materials Chemistry A, 2016, 4, 18804-18814.	10.3	122
22	Graphene and its derivatives as versatile templates for materials synthesis and functional applications. Nanoscale, 2017, 9, 2398-2416.	5.6	121
23	Uncovering the Promotion of CeO₂/CoS_{1.97} Heterostructure with Specific Spatial Architectures on Oxygen Evolution Reaction. Advanced Materials, 2021, 33, e2102593.	21.0	118
24	Nanopore Confinement of Electrocatalysts Optimizing Triple Transport for an Ultrahighâ€Powerâ€Density Zincâ€“Air Fuel Cell with Robust Stability. Advanced Materials, 2020, 32, e2003251.	21.0	104
25	Stressâ€Transferâ€Induced Inâ€…Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 13082-13085.	13.8	97
26	The endeavour to advance grapheneâ€“semiconductor composite-based photocatalysis. CrystEngComm, 2016, 18, 24-37.	2.6	89
27	Solidâ€“liquid phase transition induced electrocatalytic switching from hydrogen evolution to highly selective CO2 reduction. Nature Catalysis, 2021, 4, 202-211.	34.4	89
28	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. Angewandte Chemie - International Edition, 2019, 58, 10003-10007.	13.8	86
29	Subsize Pt-based intermetallic compound enables long-term cyclic mass activity for fuel-cell oxygen reduction. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	86
30	Waterâ€Induced Formation of Ni₂Pâ€“Ni₁₂P₅ Interfaces with Superior Electrocatalytic Activity toward Hydrogen Evolution Reaction. Small, 2021, 17, e2006770.	10.0	83
31	A Unique Silk Mat-Like Structured Pd/CeO₂ as an Efficient Visible Light Photocatalyst for Green Organic Transformation in Water. ACS Sustainable Chemistry and Engineering, 2013, 1, 1258-1266.	6.7	74
32	Surface Nitrogen-Injection Engineering for High Formation Rate of CO₂ Reduction to Formate. Nano Letters, 2020, 20, 6097-6103.	9.1	71
33	Precursor chemistry matters in boosting photoredox activity of graphene/semiconductor composites. Nanoscale, 2015, 7, 18062-18070.	5.6	67
34	MoS₂/Ni₃S₂ nanorod arrays well-aligned on Ni foam: a 3D hierarchical efficient bifunctional catalytic electrode for overall water splitting. RSC Advances, 2017, 7, 46286-46296.	3.6	60
35	Stepwise Hollow Prussian Blue Nanoframes/Carbon Nanotubes Composite Film as Ultrahigh Rate Sodium Ion Cathode. Advanced Functional Materials, 2020, 30, 2002624.	14.9	49
36	Constructing Graphiticâ€Nitrogenâ€Bonded Pentagons in Interlayerâ€Expanded Graphene Matrix toward Carbonâ€Based Electrocatalysts for Acidic Oxygen Reduction Reaction. Advanced Materials, 2021, 33, e2103133.	21.0	47

#	Article	IF	Citations
37	Aluminumâ€Based Plasmonic Photocatalysis. Particle and Particle Systems Characterization, 2017, 34, 1600357.	2.3	46
38	One-dimensional CdS nanowiresâ€“CeO₂ nanoparticles composites with boosted photocatalytic activity. New Journal of Chemistry, 2015, 39, 6756-6764.	2.8	43
39	Insight into the Role of Size Modulation on Tuning the Band Gap and Photocatalytic Performance of Semiconducting Nitrogen-Doped Graphene. Langmuir, 2017, 33, 3161-3169.	3.5	36
40	Tailoring Electronic Structure of Atomically Dispersed Metalâ€“N₃S₁ Active Sites for Highly Efficient Oxygen Reduction Catalysis. , 2019, 1, 139-146.		34
41	Two-Dimensional Hierarchical Feâ€“Nâ€“C Electrocatalyst for Zn-Air Batteries with Ultrahigh Specific Capacity. , 2020, 2, 35-41.		34
42	Epitaxial Growth of Ultrathin Highly Crystalline Ptâ€“Ni Nanostructure on a Metal Carbide Template for Efficient Oxygen Reduction Reaction. Advanced Materials, 2022, 34, e2109188.	21.0	30
43	An adaptive geometry regulation strategy for 3D graphene materials: towards advanced hybrid photocatalysts. Chemical Science, 2018, 9, 8876-8882.	7.4	29
44	In situ synthesis of hierarchical In₂S₃â€“graphene nanocomposite photocatalyst for selective oxidation. RSC Advances, 2014, 4, 64484-64493.	3.6	28
45	Strength and toughness improvement in a C/SiC composite reinforced with slurry-prone SiC whiskers. Ceramics International, 2014, 40, 14099-14104.	4.8	28
46	Stressâ€Transferâ€Induced Inâ€…Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. Angewandte Chemie, 2018, 130, 13266-13269.	2.0	26
47	Promoting Visibleâ€Light Photocatalysis with Palladium Species as Cocatalyst. ChemCatChem, 2015, 7, 2047-2054.	3.7	24
48	Carbon nanotubes introduced in different phases of C/PyC/SiC composites: Effect on microstructure and properties of the materials. Composites Science and Technology, 2015, 115, 28-33.	7.8	24
49	Interfacial Defect Engineering for Improved Portable Zincâ€“Air Batteries with a Broad Working Temperature. Angewandte Chemie, 2019, 131, 9559-9563.	2.0	23
50	Nitrogen-coordinated single-atom catalysts with manganese and cobalt sites for acidic oxygen reduction. Journal of Materials Chemistry A, 2022, 10, 5930-5936.	10.3	21
51	High-surface-area titanium nitride nanosheets as zinc anode coating for dendrite-free rechargeable aqueous batteries. Science China Materials, 2022, 65, 1771-1778.	6.3	21
52	Atomic Insights of Iron Doping in Nickel Hydroxide Nanosheets for Enhanced Oxygen Catalysis to Boost Broad Temperature Workable Zincâ”Air Batteries. ChemCatChem, 2019, 11, 6002-6007.	3.7	17
53	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. Angewandte Chemie, 2019, 131, 10108-10112.	2.0	17
54	Interfacial Engineering of Metal/Metal Oxide Heterojunctions toward Oxygen Reduction and Evolution Reactions. ChemPlusChem, 2021, 86, 1586-1601.	2.8	14

#	Article	IF	Citations
55	Highly efficient oxygen evolution catalysis achieved by NiFe oxyhydroxide clusters anchored on carbon black. Journal of Materials Chemistry A, 2022, 10, 10342-10349.	10.3	13
56	Dynamic Migration of Surface Fluorine Anions on Cobaltâ€Based Materials to Achieve Enhanced Oxygen Evolution Catalysis. Angewandte Chemie, 2018, 130, 15697-15701.	2.0	11
57	Hierarchical Hybrids: Hierarchically CdS Decorated 1D ZnO Nanorodsâ€2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance (Adv. Funct. Mater. 2/2015). Advanced Functional Materials, 2015, 25, 170-170.	14.9	8
58	Nanostructures Composed of Dual Plasmonic Materials Exhibiting High Thermal Stability and SERS Enhancement. Particle and Particle Systems Characterization, 2021, 38, 2000321.	2.3	8
59	(Gold triangular nanoplate core)@(silver shell) nanostructures as highly sensitive and selective plasmonic nanoprobes for hydrogen sulfide detection. Nanoscale, 2020, 12, 20250-20257.	5.6	7
60	Surface microenvironment optimizationâ€induced robust oxygen reduction for neutral zincâ€air batteries. Natural Sciences, 2021, 1, e20210005.	2.1	6
61	Advances in materials engineering of CdS coupled with dual cocatalysts of graphene and MoS₂ for photocatalytic hydrogen evolution. Pure and Applied Chemistry, 2018, 90, 1379-1392.	1.9	4
62	Efficient oxygen reduction electrocatalyst derived from facile Fe,Nâ^surface treatment of carbon black. Journal of Colloid and Interface Science, 2022, 605, 101-109.	9.4	4
63	Exploring Structure-function Relationship of Two-dimensional Electrocatalysts with Synchrotron Radiation X-ray Absorption Spectrum. Current Chinese Science, 2021, 1, 22-42.	0.5	2