

# Nan Zhang

## List of Publications by Year in descending order

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63  
papers

12,993  
citations

87843

38  
h-index

118793

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. <i>Chemical Society Reviews</i> , 2017, 46, 337-365.	18.7	4,505
2	Biaxially strained PtPb/Pt core/shell nanoplate boosts oxygen reduction catalysis. <i>Science</i> , 2016, 354, 1410-1414.	6.0	1,262
3	Waltzing with the Versatile Platform of Graphene to Synthesize Composite Photocatalysts. <i>Chemical Reviews</i> , 2015, 115, 10307-10377.	23.0	1,017
4	3D Nitrogen-Anion-Decorated Nickel Sulfides for Highly Efficient Overall Water Splitting. <i>Advanced Materials</i> , 2017, 29, 1701584.	11.1	478
5	Hierarchically CdS Decorated 1D ZnO Nanorods-2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance. <i>Advanced Functional Materials</i> , 2015, 25, 221-229.	7.8	394
6	Nanochemistry-derived Bi <sub>2</sub> WO <sub>6</sub> nanostructures: towards production of sustainable chemicals and fuels induced by visible light. <i>Chemical Society Reviews</i> , 2014, 43, 5276-5287.	18.7	368
7	Surface/interface nanoengineering for rechargeable Zn-air batteries. <i>Energy and Environmental Science</i> , 2020, 13, 1132-1153.	15.6	344
8	High-purity pyrrole-type FeN <sub>4</sub> sites as a superior oxygen reduction electrocatalyst. <i>Energy and Environmental Science</i> , 2020, 13, 111-118.	15.6	327
9	Near-field dielectric scattering promotes optical absorption by platinum nanoparticles. <i>Nature Photonics</i> , 2016, 10, 473-482.	15.6	298
10	Microstructure and surface control of MXene films for water purification. <i>Nature Sustainability</i> , 2019, 2, 856-862.	11.5	273
11	Interfacial engineering of cobalt sulfide/graphene hybrids for highly efficient ammonia electrosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6635-6640.	3.3	242
12	Ultrathin Cobalt Oxide Layers as Electrocatalysts for High-Performance Flexible Zn-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1807468.	11.1	227
13	Toward the enhanced photoactivity and photostability of ZnO nanospheres via intimate surface coating with reduced graphene oxide. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9380.	5.2	204
14	High-Density Planar-like Fe <sub>2</sub> N <sub>6</sub> Structure Catalyzes Efficient Oxygen Reduction. <i>Matter</i> , 2020, 3, 509-521.	5.0	184
15	Two-Dimensional MoS <sub>2</sub> Nanosheet-Coated Bi <sub>2</sub> S <sub>3</sub> Discoids: Synthesis, Formation Mechanism, and Photocatalytic Application. <i>Langmuir</i> , 2015, 31, 4314-4322.	1.6	178
16	Dynamic Migration of Surface Fluorine Anions on Cobalt-Based Materials to Achieve Enhanced Oxygen Evolution Catalysis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15471-15475.	7.2	178
17	Photoredox catalysis over graphene aerogel-supported composites. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4590-4604.	5.2	171
18	Enhanced Catalytic Activity in Nitrogen-Anion Modified Metallic Cobalt Disulfide Porous Nanowire Arrays for Hydrogen Evolution. <i>ACS Catalysis</i> , 2017, 7, 7405-7411.	5.5	152

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19	Interfacial Defect Engineering for Improved Portable Zinc-Air Batteries with a Broad Working Temperature. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9459-9463.	7.2	139
20	Enhancing the visible light photocatalytic performance of ternary CdS-(graphene-Pd) nanocomposites via a facile interfacial mediator and co-catalyst strategy. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19156-19166.	5.2	130
21	Vertically aligned ZnO-Au@CdS core-shell nanorod arrays as an all-solid-state vectorial Z-scheme system for photocatalytic application. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18804-18814.	5.2	122
22	Graphene and its derivatives as versatile templates for materials synthesis and functional applications. <i>Nanoscale</i> , 2017, 9, 2398-2416.	2.8	121
23	Uncovering the Promotion of CeO <sub>2</sub> /CoS <sub>1.97</sub> Heterostructure with Specific Spatial Architectures on Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2021, 33, e2102593.	11.1	118
24	Nanopore Confinement of Electrocatalysts Optimizing Triple Transport for an Ultrahigh-Power-Density Zinc-Air Fuel Cell with Robust Stability. <i>Advanced Materials</i> , 2020, 32, e2003251.	11.1	104
25	Stress-Transfer-Induced In-Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13082-13085.	7.2	97
26	The endeavour to advance graphene-semiconductor composite-based photocatalysis. <i>CrystEngComm</i> , 2016, 18, 24-37.	1.3	89
27	Solid-liquid phase transition induced electrocatalytic switching from hydrogen evolution to highly selective CO <sub>2</sub> reduction. <i>Nature Catalysis</i> , 2021, 4, 202-211.	16.1	89
28	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10003-10007.	7.2	86
29	Subsize Pt-based intermetallic compound enables long-term cyclic mass activity for fuel-cell oxygen reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	86
30	Water-Induced Formation of Ni <sub>2</sub> P-Ni <sub>12</sub> P <sub>5</sub> Interfaces with Superior Electrocatalytic Activity toward Hydrogen Evolution Reaction. <i>Small</i> , 2021, 17, e2006770.	5.2	83
31	A Unique Silk Mat-Like Structured Pd/CeO <sub>2</sub> as an Efficient Visible Light Photocatalyst for Green Organic Transformation in Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 1258-1266.	3.2	74
32	Surface Nitrogen-Injection Engineering for High Formation Rate of CO <sub>2</sub> Reduction to Formate. <i>Nano Letters</i> , 2020, 20, 6097-6103.	4.5	71
33	Precursor chemistry matters in boosting photoredox activity of graphene/semiconductor composites. <i>Nanoscale</i> , 2015, 7, 18062-18070.	2.8	67
34	MoS <sub>2</sub> /Ni <sub>3</sub> S <sub>2</sub> nanorod arrays well-aligned on Ni foam: a 3D hierarchical efficient bifunctional catalytic electrode for overall water splitting. <i>RSC Advances</i> , 2017, 7, 46286-46296.	1.7	60
35	Stepwise Hollow Prussian Blue Nanoframes/Carbon Nanotubes Composite Film as Ultrahigh Rate Sodium Ion Cathode. <i>Advanced Functional Materials</i> , 2020, 30, 2002624.	7.8	49
36	Constructing Graphitic-Nitrogen-Bonded Pentagons in Interlayer-Expanded Graphene Matrix toward Carbon-Based Electrocatalysts for Acidic Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2021, 33, e2103133.	11.1	47

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37	Aluminum-Based Plasmonic Photocatalysis. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1600357.	1.2	46
38	One-dimensional CdS nanowires-CeO <sub>2</sub> nanoparticles composites with boosted photocatalytic activity. <i>New Journal of Chemistry</i> , 2015, 39, 6756-6764.	1.4	43
39	Insight into the Role of Size Modulation on Tuning the Band Gap and Photocatalytic Performance of Semiconducting Nitrogen-Doped Graphene. <i>Langmuir</i> , 2017, 33, 3161-3169.	1.6	36
40	Tailoring Electronic Structure of Atomically Dispersed Metal-N <sub>3</sub> S <sub>1</sub> Active Sites for Highly Efficient Oxygen Reduction Catalysis. , 2019, 1, 139-146.		34
41	Two-Dimensional Hierarchical Fe-N-C Electrocatalyst for Zn-Air Batteries with Ultrahigh Specific Capacity. , 2020, 2, 35-41.		34
42	Epitaxial Growth of Ultrathin Highly Crystalline Pt-Ni Nanostructure on a Metal Carbide Template for Efficient Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2022, 34, e2109188.	11.1	30
43	An adaptive geometry regulation strategy for 3D graphene materials: towards advanced hybrid photocatalysts. <i>Chemical Science</i> , 2018, 9, 8876-8882.	3.7	29
44	In situ synthesis of hierarchical In <sub>2</sub> S <sub>3</sub> -graphene nanocomposite photocatalyst for selective oxidation. <i>RSC Advances</i> , 2014, 4, 64484-64493.	1.7	28
45	Strength and toughness improvement in a C/SiC composite reinforced with slurry-prone SiC whiskers. <i>Ceramics International</i> , 2014, 40, 14099-14104.	2.3	28
46	Stress-Transfer-Induced In-Situ Formation of Ultrathin Nickel Phosphide Nanosheets for Efficient Hydrogen Evolution. <i>Angewandte Chemie</i> , 2018, 130, 13266-13269.	1.6	26
47	Promoting Visible-Light Photocatalysis with Palladium Species as Cocatalyst. <i>ChemCatChem</i> , 2015, 7, 2047-2054.	1.8	24
48	Carbon nanotubes introduced in different phases of C/PyC/SiC composites: Effect on microstructure and properties of the materials. <i>Composites Science and Technology</i> , 2015, 115, 28-33.	3.8	24
49	Interfacial Defect Engineering for Improved Portable Zinc-Air Batteries with a Broad Working Temperature. <i>Angewandte Chemie</i> , 2019, 131, 9559-9563.	1.6	23
50	Nitrogen-coordinated single-atom catalysts with manganese and cobalt sites for acidic oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5930-5936.	5.2	21
51	High-surface-area titanium nitride nanosheets as zinc anode coating for dendrite-free rechargeable aqueous batteries. <i>Science China Materials</i> , 2022, 65, 1771-1778.	3.5	21
52	Atomic Insights of Iron Doping in Nickel Hydroxide Nanosheets for Enhanced Oxygen Catalysis to Boost Broad Temperature Workable Zinc-Air Batteries. <i>ChemCatChem</i> , 2019, 11, 6002-6007.	1.8	17
53	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. <i>Angewandte Chemie</i> , 2019, 131, 10108-10112.	1.6	17
54	Interfacial Engineering of Metal/Metal Oxide Heterojunctions toward Oxygen Reduction and Evolution Reactions. <i>ChemPlusChem</i> , 2021, 86, 1586-1601.	1.3	14

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55	Highly efficient oxygen evolution catalysis achieved by NiFe oxyhydroxide clusters anchored on carbon black. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10342-10349.	5.2	13
56	Dynamic Migration of Surface Fluorine Anions on Cobalt-Based Materials to Achieve Enhanced Oxygen Evolution Catalysis. <i>Angewandte Chemie</i> , 2018, 130, 15697-15701.	1.6	11
57	Hierarchical Hybrids: Hierarchically CdS Decorated 1D ZnO Nanorods@2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance ( <i>Adv. Funct. Mater.</i> 2/2015). <i>Advanced Functional Materials</i> , 2015, 25, 170-170.	7.8	8
58	Nanostructures Composed of Dual Plasmonic Materials Exhibiting High Thermal Stability and SERS Enhancement. <i>Particle and Particle Systems Characterization</i> , 2021, 38, 2000321.	1.2	8
59	(Gold triangular nanoplate core)@(silver shell) nanostructures as highly sensitive and selective plasmonic nanoprobes for hydrogen sulfide detection. <i>Nanoscale</i> , 2020, 12, 20250-20257.	2.8	7
60	Surface microenvironment optimization-induced robust oxygen reduction for neutral zinc-air batteries. <i>Natural Sciences</i> , 2021, 1, e20210005.	1.0	6
61	Advances in materials engineering of CdS coupled with dual cocatalysts of graphene and MoS <sub>2</sub> for photocatalytic hydrogen evolution. <i>Pure and Applied Chemistry</i> , 2018, 90, 1379-1392.	0.9	4
62	Efficient oxygen reduction electrocatalyst derived from facile Fe,N surface treatment of carbon black. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 101-109.	5.0	4
63	Exploring Structure-function Relationship of Two-dimensional Electrocatalysts with Synchrotron Radiation X-ray Absorption Spectrum. <i>Current Chinese Science</i> , 2021, 1, 22-42.	0.2	2