Tie-Rui Zhang

List of Publications by Year
in descending order

310	42,354	1094 112	2375 198
papers	citations	h-index	g-index

323	323	323	30412
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Alkaliâ€Assisted Synthesis of Nitrogen Deficient Graphitic Carbon Nitride with Tunable Band Structures for Efficient Visibleâ€Lightâ€Driven Hydrogen Evolution. Advanced Materials, 2017, 29, 1605148.	11.1	1,616
2	Macroscopic Polarization Enhancement Promoting Photoâ€•and Piezoelectricâ€Induced Charge Separation and Molecular Oxygen Activation. Angewandte Chemie - International Edition, 2017, 56, 11860-11864.	7.2	850
3	Tuning Oxygen Vacancies in Ultrathin TiO₂ Nanosheets to Boost Photocatalytic Nitrogen Fixation up to 700 nm. Advanced Materials, 2019, 31, e1806482.	11.1	732
4	Nitrogenâ€Doped Porous Carbon Nanosheets Templated from gâ€C₃N₄ as Metalâ€Free Electrocatalysts for Efficient Oxygen Reduction Reaction. Advanced Materials, 2016, 28, 5080-5086.	11.1	718
5	Anionic Group Self-Doping as a Promising Strategy: Band-Gap Engineering and Multi-Functional Applications of High-Performance CO<sub>3</sup>2â€“</sup>-Doped Bi₂O₂CO₃. ACS Catalysis, 2015, 5, 4094-4103.	5.5	690
6	Ni₃FeN Nanoparticles Derived from Ultrathin NiFeâ€Layered Double Hydroxide Nanosheets: An Efficient Overall Water Splitting Electrocatalyst. Advanced Energy Materials, 2016, 6, 1502585.	10.2	668
7	Wellâ€Dispersed ZIFâ€Derived Co,Nâ€Coâ€doped Carbon Nanoframes through Mesoporousâ€Silicaâ€Protected Calcination as Efficient Oxygen Reduction Electrocatalysts. Advanced Materials, 2016, 28, 1668-1674.	11.1	663
8	Smart Utilization of Carbon Dots in Semiconductor Photocatalysis. Advanced Materials, 2016, 28, 9454-9477.	11.1	622
9	Defectâ€Rich Ultrathin ZnAlâ€Layered Double Hydroxide Nanosheets for Efficient Photoreduction of CO₂ to CO with Water. Advanced Materials, 2015, 27, 7824-7831.	11.1	608
10	Carbon quantum dots/TiO2 composites for efficient photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2014, 2, 3344.	5.2	601
11	Ultrafine NiO Nanosheets Stabilized by TiO₂ from Monolayer NiTi-LDH Precursors: An Active Water Oxidation Electrocatalyst. Journal of the American Chemical Society, 2016, 138, 6517-6524.	6.6	597
12	Precursor-reforming protocol to 3D mesoporous g-C 3 N 4 established by ultrathin self-doped nanosheets for superior hydrogen evolution. Nano Energy, 2017, 38, 72-81.	8.2	596
13	In situ assembly of BiOI@Bi 12 O 17 Cl 2 p - n junction: charge induced unique front-lateral surfaces coupling heterostructure with high exposure of BiOI {001} active facets for robust and nonselective photocatalysis. Applied Catalysis B: Environmental, 2016, 199, 75-86.	10.8	577
14	Permeable Silica Shell through Surface-Protected Etching. Nano Letters, 2008, 8, 2867-2871.	4.5	561
15	Defectâ€Engineered Ultrathin Î´â€MnO₂ Nanosheet Arrays as Bifunctional Electrodes for Efficient Overall Water Splitting. Advanced Energy Materials, 2017, 7, 1700005.	10.2	553
16	Three-dimensional porous g-C3N4 for highly efficient photocatalytic overall water splitting. Nano Energy, 2019, 59, 644-650.	8.2	553
17	Layeredâ€Doubleâ€Hydroxide Nanosheets as Efficient Visibleâ€Lightâ€Driven Photocatalysts for Dinitrogen Fixation. Advanced Materials, 2017, 29, 1703828.	11.1	524
18	A General Route to Prepare Lowâ€Rutheniumâ€Content Bimetallic Electrocatalysts for pHâ€Universal Hydrogen Evolution Reaction by Using Carbon Quantum Dots. Angewandte Chemie - International Edition, 2020, 59, 1718-1726.	7.2	452

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19	Coreâ€“Satellite Nanocomposite Catalysts Protected by a Porous Silica Shell: Controllable Reactivity, High Stability, and Magnetic Recyclability. Angewandte Chemie - International Edition, 2008, 47, 8924-8928.	7.2	444
20	A universal ligand mediated method for large scale synthesis of transition metal single atom catalysts. Nature Communications, 2019, 10, 4585.	5.8	441
21	Piezocatalysis and Piezoâ€Photocatalysis: Catalysts Classification and Modification Strategy, Reaction Mechanism, and Practical Application. Advanced Functional Materials, 2020, 30, 2005158.	7.8	435
22	NiFe Layered Double Hydroxide Nanoparticles on Co,Nâ€Codoped Carbon Nanoframes as Efficient Bifunctional Catalysts for Rechargeable Zincâ€“Air Batteries. Advanced Energy Materials, 2017, 7, 1700467.	10.2	422
23	Layered Double Hydroxide Nanostructured Photocatalysts for Renewable Energy Production. Advanced Energy Materials, 2016, 6, 1501974.	10.2	389
24	Grapheneâ€Supported Ultrafine Metal Nanoparticles Encapsulated by Mesoporous Silica: Robust Catalysts for Oxidation and Reduction Reactions. Angewandte Chemie - International Edition, 2014, 53, 250-254.	7.2	384
25	Ammonia Detection Methods in Photocatalytic and Electrocatalytic Experiments: How to Improve the Reliability of NH₃ Production Rates?. Advanced Science, 2019, 6, 1802109.	5.6	379
26	Macroscopic Spontaneous Polarization and Surface Oxygen Vacancies Collaboratively Boosting CO₂ Photoreduction on BiOIO₃ Single Crystals. Advanced Materials, 2020, 32, e1908350.	11.1	372
27	Nickelâ€“Cobalt Diselenide 3D Mesoporous Nanosheet Networks Supported on Ni Foam: An Allâ€pH Highly Efficient Integrated Electrocatalyst for Hydrogen Evolution. Advanced Materials, 2017, 29, 1606521.	11.1	370
28	A Simple Synthetic Strategy toward Defectâ€Rich Porous Monolayer NiFeâ€Layered Double Hydroxide Nanosheets for Efficient Electrocatalytic Water Oxidation. Advanced Energy Materials, 2019, 9, 1900881.	10.2	363
29	Site-Specific Nucleation and Growth Kinetics in Hierarchical Nanosyntheses of Branched ZnO Crystallites. Journal of the American Chemical Society, 2006, 128, 10960-10968.	6.6	360
30	Shape Effects of Cu₂O Polyhedral Microcrystals on Photocatalytic Activity. Journal of Physical Chemistry C, 2010, 114, 5073-5079.	1.5	359
31	Thicknessâ€Dependent Facet Junction Control of Layered BiOIO₃ Single Crystals for Highly Efficient CO₂ Photoreduction. Advanced Functional Materials, 2018, 28, 1804284.	7.8	358
32	Bi₂O₂(OH)(NO₃) as a desirable [Bi₂O₂]²⁺layered photocatalyst: strong intrinsic polarity, rational band structure and {001} active facets co-beneficial for robust photooxidation capability. Journal of Materials Chemistry A, 2015, 3, 24547-24556.	5.2	352
33	Two-dimensional-related catalytic materials for solar-driven conversion of CO_x into valuable chemical feedstocks. Chemical Society Reviews, 2019, 48, 1972-2010.	18.7	350
34	A General Approach for Transferring Hydrophobic Nanocrystals into Water. Nano Letters, 2007, 7, 3203-3207.	4.5	348
35	A Nanozyme with Photoâ€Enhanced Dual Enzymeâ€Like Activities for Deep Pancreatic Cancer Therapy. Angewandte Chemie - International Edition, 2019, 58, 12624-12631.	7.2	345
36	Chlorine intercalation in graphitic carbon nitride for efficient photocatalysis. Applied Catalysis B: Environmental, 2017, 203, 465-474.	10.8	328

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37	MILâ€101â€Derived Mesoporous Carbon Supporting Highly Exposed Fe Singleâ€Atom Sites as Efficient Oxygen Reduction Reaction Catalysts. Advanced Materials, 2021, 33, e2101038.	11.1	327
38	Mediator-free direct Z-scheme photocatalytic system: BiVO₄/g-C₃N₄ organicâ€“inorganic hybrid photocatalyst with highly efficient visible-light-induced photocatalytic activity. Dalton Transactions, 2015, 44, 4297-4307.	1.6	326
39	Template-free precursor-surface-etching route to porous, thin g-C₃N₄ nanosheets for enhancing photocatalytic reduction and oxidation activity. Journal of Materials Chemistry A, 2017, 5, 17452-17463.	5.2	324
40	In situ co-pyrolysis fabrication of CeO₂/g-C₃N₄ nâ€“n type heterojunction for synchronously promoting photo-induced oxidation and reduction properties. Journal of Materials Chemistry A, 2015, 3, 17120-17129.	5.2	319
41	Selfâ€Assembled Au/CdSe Nanocrystal Clusters for Plasmonâ€Mediated Photocatalytic Hydrogen Evolution. Advanced Materials, 2017, 29, 1700803.	11.1	311
42	Aluminaâ€Supported CoFe Alloy Catalysts Derived from Layeredâ€Doubleâ€Hydroxide Nanosheets for Efficient Photothermal CO₂ Hydrogenation to Hydrocarbons. Advanced Materials, 2018, 30, 1704663.	11.1	309
43	Formation of Hollow Silica Colloids through a Spontaneous Dissolutionâ€“Regrowth Process. Angewandte Chemie - International Edition, 2008, 47, 5806-5811.	7.2	305
44	Efficient wettability-controlled electroreduction of CO2 to CO at Au/C interfaces. Nature Communications, 2020, 11, 3028.	5.8	294
45	Rational design on 3D hierarchical bismuth oxyiodides via in situ self-template phase transformation and phase-junction construction for optimizing photocatalysis against diverse contaminants. Applied Catalysis B: Environmental, 2017, 203, 879-888.	10.8	289
46	Defect Engineering in Photocatalytic Nitrogen Fixation. ACS Catalysis, 2019, 9, 9739-9750.	5.5	286
47	From Solar Energy to Fuels: Recent Advances in Lightâ€Driven C₁ Chemistry. Angewandte Chemie - International Edition, 2019, 58, 17528-17551.	7.2	285
48	Recent Advances in Conjugated Polymers for Visibleâ€Lightâ€Driven Water Splitting. Advanced Materials, 2020, 32, e1907296.	11.1	279
49	Subâ€3 nm Ultrafine Monolayer Layered Double Hydroxide Nanosheets for Electrochemical Water Oxidation. Advanced Energy Materials, 2018, 8, 1703585.	10.2	274
50	Metalâ€“Organicâ€Frameworkâ€Derived Mesoporous Carbon Nanospheres Containing Porphyrinâ€Like Metal Centers for Conformal Phototherapy. Advanced Materials, 2016, 28, 8379-8387.	11.1	264
51	Single-unit-cell layer established Bi2WO6 3D hierarchical architectures: Efficient adsorption, photocatalysis and dye-sensitized photoelectrochemical performance. Applied Catalysis B: Environmental, 2017, 219, 526-537.	10.8	264
52	Intrinsic Carbonâ€Defectâ€Driven Electrocatalytic Reduction of Carbon Dioxide. Advanced Materials, 2019, 31, e1808276.	11.1	263
53	Photocatalytic CO₂ Reduction to CO over Ni Single Atoms Supported on Defectâ€Rich Zirconia. Advanced Energy Materials, 2020, 10, 2002928.	10.2	263
54	Pd Singleâ€Atom Catalysts on Nitrogenâ€Doped Graphene for the Highly Selective Photothermal Hydrogenation of Acetylene to Ethylene. Advanced Materials, 2019, 31, e1900509.	11.1	262

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55	Atomic Cationâ€Vacancy Engineering of NiFeâ€Layered Double Hydroxides for Improved Activity and Stability towards the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2021, 60, 24612-24619.	7.2	259
56	Exploiting Ruâ€Induced Lattice Strain in CoRu Nanoalloys for Robust Bifunctional Hydrogen Production. Angewandte Chemie - International Edition, 2021, 60, 3290-3298.	7.2	254
57	CdS Nanoparticleâ€Decorated Cd Nanosheets for Efficient Visible Lightâ€Driven Photocatalytic Hydrogen Evolution. Advanced Energy Materials, 2016, 6, 1501241.	10.2	253
58	Two-dimensional photocatalyst design: A critical review of recent experimental and computational advances. Materials Today, 2020, 34, 78-91.	8.3	253
59	A Self-Templated Route to Hollow Silica Microspheres. Journal of Physical Chemistry C, 2009, 113, 3168-3175.	1.5	243
60	3D reduced graphene oxide aerogel-mediated Z-scheme photocatalytic system for highly efficient solar-driven water oxidation and removal of antibiotics. Applied Catalysis B: Environmental, 2018, 232, 562-573.	10.8	231
61	Local spatial charge separation and proton activation induced by surface hydroxylation promoting photocatalytic hydrogen evolution of polymeric carbon nitride. Nano Energy, 2018, 50, 383-392.	8.2	226
62	Superparamagnetic Composite Colloids with Anisotropic Structures. Journal of the American Chemical Society, 2007, 129, 8974-8975.	6.6	224
63	Recent Progress in Photocatalytic CO₂ Reduction Over Perovskite Oxides. Solar Rrl, 2017, 1, 1700126.	3.1	224
64	Highâ€Efficiency Oxygen Reduction to Hydrogen Peroxide Catalyzed by Nickel Singleâ€Atom Catalysts with Tetradentate N₂O₂ Coordination in a Threeâ€Phase Flow Cell. Angewandte Chemie - International Edition, 2020, 59, 13057-13062.	7.2	222
65	Intermediate-mediated strategy to horn-like hollow mesoporous ultrathin g-C3N4 tube with spatial anisotropic charge separation for superior photocatalytic H2 evolution. Nano Energy, 2017, 41, 738-748.	8.2	215
66	Controllable synthesis of multi-responsive ferroelectric layered perovskite-like Bi4Ti3O12: Photocatalysis and piezoelectric-catalysis and mechanism insight. Applied Catalysis B: Environmental, 2017, 219, 550-562.	10.8	215
67	Atomicâ€Level Charge Separation Strategies in Semiconductorâ€Based Photocatalysts. Advanced Materials, 2021, 33, e2005256.	11.1	215
68	Selective photocatalytic CO2 reduction over Zn-based layered double hydroxides containing tri or tetravalent metals. Science Bulletin, 2020, 65, 987-994.	4.3	205
69	Underwater superoleophobic porous membrane based on hierarchical TiO₂ nanotubes: multifunctional integration of oilâ€“water separation, flow-through photocatalysis and self-cleaning. Journal of Materials Chemistry A, 2015, 3, 1279-1286.	5.2	204
70	Photocatalytic ammonia synthesis: Recent progress and future. EnergyChem, 2019, 1, 100013.	10.1	204
71	Facet-charge-induced coupling dependent interfacial photocharge separation: A case of BiOI/g-C3N4 p-n junction. Applied Catalysis B: Environmental, 2020, 267, 118697.	10.8	202
72	Template-free large-scale synthesis of g-C3N4 microtubes for enhanced visible light-driven photocatalytic H2 production. Nano Research, 2018, 11, 3462-3468.	5.8	199

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73	Porous Ni5P4 as a promising cocatalyst for boosting the photocatalytic hydrogen evolution reaction performance. Applied Catalysis B: Environmental, 2020, 275, 119144.	10.8	194
74	Supramolecular precursor strategy for the synthesis of holey graphitic carbon nitride nanotubes with enhanced photocatalytic hydrogen evolution performance. Nano Research, 2019, 12, 2385-2389.	5.8	192
75	Exploiting Ruâ€Induced Lattice Strain in CoRu Nanoalloys for Robust Bifunctional Hydrogen Production. Angewandte Chemie, 2021, 133, 3327-3335.	1.6	189
76	Alkali Etching of Layered Double Hydroxide Nanosheets for Enhanced Photocatalytic N₂ Reduction to NH₃. Advanced Energy Materials, 2020, 10, 2002199.	10.2	185
77	Recent Advances in the Development of Singleâ€Atom Catalysts for Oxygen Electrocatalysis and Zincâ€“Air Batteries. Advanced Energy Materials, 2020, 10, 2003018.	10.2	181
78	Oxideâ€Modified Nickel Photocatalysts for the Production of Hydrocarbons in Visible Light. Angewandte Chemie - International Edition, 2016, 55, 4215-4219.	7.2	176
79	Highly luminescent nitrogen-doped carbon quantum dots as effective fluorescent probes for mercuric and iodide ions. Journal of Materials Chemistry C, 2015, 3, 1922-1928.	2.7	173
80	Efficient Photocatalytic Nitrogen Fixation over Cu^{Î´}⁺â€Modified Defective ZnAlâ€Layered Double Hydroxide Nanosheets. Advanced Energy Materials, 2020, 10, 1901973.	10.2	173
81	Recent Advances in Noncontact External-Field-Assisted Photocatalysis: From Fundamentals to Applications. ACS Catalysis, 2021, 11, 4739-4769.	5.5	173
82	Multishelled Niâ€Rich Li(Ni_xCo_yMn_z)O₂ Hollow Fibers with Low Cation Mixing as Highâ€Performance Cathode Materials for Liâ€Ion Batteries. Advanced Science, 2017, 4, 1600262.	5.6	172
83	Effect of Nitrogen Doping Level on the Performance of Nâ€Doped Carbon Quantum Dot/TiO₂ Composites for Photocatalytic Hydrogen Evolution. ChemSusChem, 2017, 10, 4650-4656.	3.6	171
84	Designed controllable nitrogen-doped carbon-dots-loaded MoP nanoparticles for boosting hydrogen evolution reaction in alkaline medium. Nano Energy, 2020, 72, 104730.	8.2	171
85	Readily achieving concentration-tunable oxygen vacancies in Bi2O2CO3: Triple-functional role for efficient visible-light photocatalytic redox performance. Applied Catalysis B: Environmental, 2018, 226, 441-450.	10.8	169
86	Mesoporeâ€Rich Feâ€“Nâ€“C Catalyst with FeN₄â€“Oâ€“NC Singleâ€Atom Sites Delivers Remarkable Oxygen Reduction Reaction Performance in Alkaline Media. Advanced Materials, 2022, 34, e2202544.	11.1	168
87	Facile synthesis of hierarchical ZnIn2S4 submicrospheres composed of ultrathin mesoporous nanosheets as a highly efficient visible-light-driven photocatalyst for H2 production. Journal of Materials Chemistry A, 2013, 1, 4552.	5.2	166
88	In Situ Co-Crystallization for Fabrication of g-C₃N₄/Bi₅O₇I Heterojunction for Enhanced Visible-Light Photocatalysis. Journal of Physical Chemistry C, 2015, 119, 17156-17165.	1.5	165
89	Molten NaClâ€Assisted Synthesis of Porous Feâ€Nâ€C Electrocatalysts with a High Density of Catalytically Accessible FeN₄ÂActive Sites and Outstanding Oxygen Reduction Reaction Performance. Advanced Energy Materials, 2021, 11, 2100219.	10.2	160
90	Highly Photoluminescent Polyoxometaloeuropate-Surfactant Complexes by Ionic Self-Assembly. Chemistry - A European Journal, 2005, 11, 1001-1009.	1.7	159

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91	A coreâ€“satellite structured Z-scheme catalyst Cd_{0.5}Zn_{0.5}S/BiVO₄ for highly efficient and stable photocatalytic water splitting. Journal of Materials Chemistry A, 2018, 6, 16932-16942.	5.2	154
92	3D carbon nanoframe scaffold-immobilized Ni3FeN nanoparticle electrocatalysts for rechargeable zinc-air batteriesâ€™ cathodes. Nano Energy, 2017, 40, 382-389.	8.2	153
93	Cooperation of oxygen vacancies and 2D ultrathin structure promoting CO2 photoreduction performance of Bi4Ti3O12. Science Bulletin, 2020, 65, 934-943.	4.3	151
94	Electrocatalytic Oxygen Reduction to Hydrogen Peroxide: From Homogeneous to Heterogeneous Electrocatalysis. Advanced Energy Materials, 2021, 11, 2003323.	10.2	150
95	Fe Singleâ€Atom Catalysts on MOFâ€5 Derived Carbon for Efficient Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. Advanced Energy Materials, 2022, 12, .	10.2	150
96	Underwater superaerophobic Ni nanoparticle-decorated nickelâ€“molybdenum nitride nanowire arrays for hydrogen evolution in neutral media. Nano Energy, 2020, 78, 105375.	8.2	148
97	Hydrothermal synthesis and structure evolution of hierarchical cobalt sulfidenanostructures. Dalton Transactions, 2011, 40, 243-248.	1.6	146
98	Magnetically recyclable nanocatalysts (MRNCs): a versatile integration of high catalytic activity and facile recovery. Nanoscale, 2012, 4, 6244.	2.8	143
99	Anchored Cu(II) tetra(4-carboxylphenyl)porphyrin to P25 (TiO2) for efficient photocatalytic ability in CO2 reduction. Applied Catalysis B: Environmental, 2018, 239, 599-608.	10.8	143
100	Organized Nanostructured Complexes of Polyoxometalates and Surfactants that Exhibit Photoluminescence and Electrochromism. Advanced Functional Materials, 2009, 19, 642-652.	7.8	141
101	Coâ€Based Catalysts Derived from Layeredâ€Doubleâ€Hydroxide Nanosheets for the Photothermal Production of Light Olefins. Advanced Materials, 2018, 30, e1800527.	11.1	139
102	A Self-Templated Approach to TiO2 Microcapsules. Nano Letters, 2007, 7, 1832-1836.	4.5	135
103	In situ crystallization for fabrication of a coreâ€“satellite structured BiOBrâ€“CdS heterostructure with excellent visible-light-responsive photoreactivity. Nanoscale, 2015, 7, 11702-11711.	2.8	134
104	Subâ€3 nm Ultrafine Cu₂O for Visible Light Driven Nitrogen Fixation. Angewandte Chemie - International Edition, 2021, 60, 2554-2560.	7.2	134
105	Self-Assembly and Field-Responsive Optical Diffractions of Superparamagnetic Colloids. Langmuir, 2008, 24, 3671-3680.	1.6	133
106	Ni³⁺doped monolayer layered double hydroxide nanosheets as efficient electrodes for supercapacitors. Nanoscale, 2015, 7, 7168-7173.	2.8	127
107	The Journey toward Low Temperature, Low Pressure Catalytic Nitrogen Fixation. Advanced Energy Materials, 2020, 10, 2000659.	10.2	127
108	Black phosphorus quantum dot/g-C3N4 composites for enhanced CO2 photoreduction to CO. Science China Materials, 2018, 61, 1159-1166.	3.5	126

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109	Room-temperature electrochemical acetylene reduction to ethylene with high conversion and selectivity. Nature Catalysis, 2021, 4, 565-574.	16.1	121
110	Hierarchical ultrathin carbon encapsulating transition metal doped MoP electrocatalysts for efficient and pH-universal hydrogen evolution reaction. Nano Energy, 2020, 70, 104445.	8.2	118
111	Self-crosslinking carbon dots loaded ruthenium dots as an efficient and super-stable hydrogen production electrocatalyst at all pH values. Nano Energy, 2019, 65, 104023.	8.2	117
112	Control over the permeation of silica nanoshells by surface-protected etching with water. Physical Chemistry Chemical Physics, 2010, 12, 11836.	1.3	116
113	Evolution of Zn(II) single atom catalyst sites during the pyrolysis-induced transformation of ZIF-8 to N-doped carbons. Science Bulletin, 2020, 65, 1743-1751.	4.3	115
114	Synchronously Achieving Plasmonic Bi Metal Deposition and I^{â€“} Doping by Utilizing BiOIO₃ as the Self-Sacrificing Template for High-Performance Multifunctional Applications. ACS Applied Materials & Interfaces, 2015, 7, 27925-27933.	4.0	113
115	Spontaneous Organization of Inorganic Nanoparticles into Nanovesicles Triggered by UV Light. Advanced Materials, 2014, 26, 5613-5618.	11.1	112
116	Tubular assemblies of N-doped carbon nanotubes loaded with NiFe alloy nanoparticles as efficient bifunctional catalysts for rechargeable zinc-air batteries. Nanoscale, 2020, 12, 13129-13136.	2.8	110
117	Feï£¿Nï£¿C Electrocatalysts with Densely Accessible Feï£¿N₄ Sites for Efficient Oxygen Reduction Reaction. Advanced Functional Materials, 2021, 31, 2102420.	7.8	110
118	Controllable Synthesis of Ultrathin Transitionâ€Metal Hydroxide Nanosheets and their Extended Composite Nanostructures for Enhanced Catalytic Activity in the Heck Reaction. Angewandte Chemie - International Edition, 2016, 55, 2167-2170.	7.2	105
119	Layered double hydroxideâ€based photocatalytic materials toward renewable solar fuels production. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 719-738.	8.5	105
120	Multifunctional Nanowire Bioscaffolds on Titanium. Chemistry of Materials, 2007, 19, 4454-4459.	3.2	102
121	Reductive Transformation of Layeredâ€Doubleâ€Hydroxide Nanosheets to Feâ€Based Heterostructures for Efficient Visibleâ€Light Photocatalytic Hydrogenation of CO. Advanced Materials, 2018, 30, e1803127.	11.1	100
122	Highly Efficient Bi₂O₂CO₃ Single-Crystal Lamellas with Dominantly Exposed {001} Facets. Crystal Growth and Design, 2015, 15, 534-537.	1.4	99
123	Cu₂O Film via Hydrothermal Redox Approach: Morphology and Photocatalytic Performance. Journal of Physical Chemistry C, 2014, 118, 16335-16343.	1.5	95
124	Efficient Combination of Gâ€C₃N₄ and CDs for Enhanced Photocatalytic Performance: A Review of Synthesis, Strategies, and Applications. Small, 2021, 17, e2007523.	5.2	93
125	Facile preparation of black Nb⁴⁺self-doped K₄Nb₆O₁₇microspheres with high solar absorption and enhanced photocatalytic activity. Chemical Communications, 2014, 50, 9554.	2.2	92
126	Feâ€Based Catalysts for the Direct Photohydrogenation of CO₂ to Valueâ€Added Hydrocarbons. Advanced Energy Materials, 2021, 11, 2002783.	10.2	90

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127	Triphase Photocatalytic CO₂ Reduction over Silverâ€Decorated Titanium Oxide at a Gasâ€“Water Boundary. Angewandte Chemie - International Edition, 2022, 61, .	7.2	88
128	â€œNakedâ€•Magnetically Recyclable Mesoporous Auâ€“Î³â€Fe₂O₃ Nanocrystal Clusters: A Highly Integrated Catalyst System. Advanced Functional Materials, 2017, 27, 1606215.	7.8	85
129	Bubble template synthesis of Sn2Nb2O7 hollow spheres for enhanced visible-light-driven photocatalytic hydrogen production. Chemical Communications, 2013, 49, 9872.	2.2	84
130	Mesoporous plasmonic Au-loaded Ta2O5 nanocomposites for efficient visible light photocatalysis. Catalysis Today, 2014, 225, 158-163.	2.2	82
131	Substitutionally Dispersed Highâ€Oxidation CoO_x Clusters in the Lattice of Rutile TiO₂ Triggering Efficient Coï£¿Ti Cooperative Catalytic Centers for Oxygen Evolution Reactions. Advanced Functional Materials, 2021, 31, 2009610.	7.8	82
132	Strain Engineering: A Boosting Strategy for Photocatalysis. Advanced Materials, 2022, 34, e2200868.	11.1	82
133	Highly accessible and dense surface single metal FeN₄ active sites for promoting the oxygen reduction reaction. Energy and Environmental Science, 2022, 15, 2619-2628.	15.6	82
134	Engineering local coordination environments and site densities for highâ€performance Feâ€Nâ€C oxygen reduction reaction electrocatalysis. SmartMat, 2021, 2, 154-175.	6.4	81
135	Carbon Dots as New Building Blocks for Electrochemical Energy Storage and Electrocatalysis. Advanced Energy Materials, 2022, 12, .	10.2	81
136	Metal-support interactions in designing noble metal-based catalysts for electrochemical CO2 reduction: Recent advances and future perspectives. Nano Research, 2021, 14, 3795-3809.	5.8	80
137	Facile synthesis of ultrathin SnNb₂O₆ nanosheets towards improved visible-light photocatalytic H₂-production activity. Chemical Communications, 2016, 52, 8239-8242.	2.2	79
138	Ultrafine monolayer Co-containing layered double hydroxide nanosheets for water oxidation. Journal of Energy Chemistry, 2019, 34, 57-63.	7.1	78
139	Recent Advancements of Porphyrinâ€Like Singleâ€Atom Catalysts: Synthesis and Applications. Small Structures, 2021, 2, 2100007.	6.9	77
140	FeOâ€“CeO2 nanocomposites: an efficient and highly selective catalyst system for photothermal CO2 reduction to CO. NPG Asia Materials, 2020, 12, .	3.8	76
141	Heterostructured MoSe₂/Oxygen-Terminated Ti₃C₂ MXene Architectures for Efficient Electrocatalytic Hydrogen Evolution. Energy & Fuels, 2021, 35, 4609-4615.	2.5	76
142	Photothermalâ€Assisted Triphase Photocatalysis Over a Multifunctional Bilayer Paper. Angewandte Chemie - International Edition, 2021, 60, 22963-22969.	7.2	76
143	Architecture-controlled synthesis of M_xO_y (M = Ni, Fe, Cu) microfibres from seaweed biomass for high-performance lithium ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 22708-22715.	5.2	75
144	Achieving tunable photocatalytic activity enhancement by elaborately engineering composition-adjustable polynary heterojunctions photocatalysts. Applied Catalysis B: Environmental, 2016, 194, 62-73.	10.8	73

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145	Macroscopic Polarization Enhancement Promoting Photoâ€•and Piezoelectricâ€Induced Charge Separation and Molecular Oxygen Activation. Angewandte Chemie, 2017, 129, 12022-12026.	1.6	73
146	A Nanozyme with Photoâ€Enhanced Dual Enzymeâ€Like Activities for Deep Pancreatic Cancer Therapy. Angewandte Chemie, 2019, 131, 12754-12761.	1.6	71
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