Yang Hou

List of Publications by Citations

224 papers	15,428 citations	65 h-index	120 g-index
236 ext. papers	18,646 ext. citations	12 avg, IF	7.08 L-index

#	Paper	IF	Citations
224	Constructing 2D porous graphitic C3 N4 nanosheets/nitrogen-doped graphene/layered MoS2 ternary nanojunction with enhanced photoelectrochemical activity. *Advanced Materials*, **2013**, 25, 6291-7	24	683
223	Vertically oriented cobalt selenide/NiFe layered-double-hydroxide nanosheets supported on exfoliated graphene foil: an efficient 3D electrode for overall water splitting. *Energy and Environmental Science*, **2016**, 9, 478-483	35.4	646
222	An Advanced Nitrogen-Doped Graphene/Cobalt-Embedded Porous Carbon Polyhedron Hybrid for Efficient Catalysis of Oxygen Reduction and Water Splitting. *Advanced Functional Materials*, **2015**, 25, 872-882	15.6	612
221	High-performance bi-functional electrocatalysts of 3D crumpled graphene□cobalt oxide nanohybrids for oxygen reduction and evolution reactions. *Energy and Environmental Science*, **2014**, 7, 609-616	35.4	524
220	Metal□Organic Framework-Derived Nitrogen-Doped Core-Shell-Structured Porous Fe/Fe3C@C Nanoboxes Supported on Graphene Sheets for Efficient Oxygen Reduction Reactions. *Advanced Energy Materials*, **2014**, 4, 1400337	21.8	461
219	Visible light-driven □Fe□□nanorod/graphene/BiV□kMoxO□core/shell heterojunction array for efficient photoelectrochemical water splitting. *Nano Letters*, **2012**, 12, 6464-73	11.5	392
218	Microporous Framework Induced Synthesis of Single-Atom Dispersed Fe-N-C Acidic ORR Catalyst and Its in Situ Reduced Fe-N4 Active Site Identification Revealed by X-ray Absorption Spectroscopy. *ACS Catalysis*, **2018**, 8, 2824-2832	13.1	306
217	Efficient alkaline hydrogen evolution on atomically dispersed Ni□Nx Species anchored porous carbon with embedded Ni nanoparticles by accelerating water dissociation kinetics. *Energy and Environmental Science*, **2019**, 12, 149-156	35.4	299
216	Flexible All-Solid-State Supercapacitors with High Volumetric Capacitances Boosted by Solution Processable MXene and Electrochemically Exfoliated Graphene. *Advanced Energy Materials*, **2017**, 7, 1601847	21.8	298
215	Branched WO3 nanosheet array with layered C3 N4 heterojunctions and CoOx nanoparticles as a flexible photoanode for efficient photoelectrochemical water oxidation. *Advanced Materials*, **2014**, 26, 5043-9	24	283
214	Atomically dispersed nickel-nitrogen-sulfur species anchored on porous carbon nanosheets for efficient water oxidation. *Nature Communications*, **2019**, 10, 1392	17.4	280
213	Electrochemical Method for Synthesis of a ZnFe2O4/TiO2 Composite Nanotube Array Modified Electrode with Enhanced Photoelectrochemical Activity. *Advanced Functional Materials*, **2010**, 20, 2165-2174	15.6	278
212	Oxygen reduction reaction catalysts used in microbial fuel cells for energy-efficient wastewater treatment: a review. *Materials Horizons*, **2016**, 3, 382-401	14.4	257
211	Porous carbon nanosheets: Synthetic strategies and electrochemical energy related applications. *Nano Today*, **2019**, 24, 103-119	17.9	241
210	Photoeletrocatalytic activity of a Cu2O-loaded self-organized highly oriented TiO2 nanotube array electrode for 4-chlorophenol degradation. *Environmental Science & Technology*, **2009**, 43, 858-63	10.3	220
209	A general, one-step and template-free synthesis of sphere-like zinc ferrite nanostructures with enhanced photocatalytic activity for dye degradation. *Journal of Colloid and Interface Science*, **2011**, 358, 102-8	9.3	217
208	Integrated Hierarchical Cobalt Sulfide/Nickel Selenide Hybrid Nanosheets as an Efficient Three-dimensional Electrode for Electrochemical and Photoelectrochemical Water Splitting. *Nano Letters*, **2017**, 17, 4202-4209	11.5	216

207	Strongly Coupled Ternary Hybrid Aerogels of N-deficient Porous Graphitic-C3N4 Nanosheets/N-Doped Graphene/NiFe-Layered Double Hydroxide for Solar-Driven Photoelectrochemical Water Oxidation. *Nano Letters*, **2016**, 16, 2268-77	11.5	215
206	Wafer-sized multifunctional polyimine-based two-dimensional conjugated polymers with high mechanical stiffness. *Nature Communications*, **2016**, 7, 13461	17.4	213
205	A three-dimensional branched cobalt-doped □Fe2O3 nanorod/MgFe2O4 heterojunction array as a flexible photoanode for efficient photoelectrochemical water oxidation. *Angewandte Chemie - International Edition*, **2013**, 52, 1248-52	16.4	211
204	Role of hydroxyl radicals and mechanism of Escherichia coli inactivation on Ag/AgBr/TiO2 nanotube array electrode under visible light irradiation. *Environmental Science & Technology*, **2012**, 46, 4042-50	10.3	209
203	N-doped graphene/porous g-C3N4 nanosheets supported layered-MoS2 hybrid as robust anode materials for lithium-ion batteries. *Nano Energy*, **2014**, 8, 157-164	17.1	208
202	Co3O4 nanoparticles embedded in nitrogen-doped porous carbon dodecahedrons with enhanced electrochemical properties for lithium storage and water splitting. *Nano Energy*, **2015**, 12, 1-8	17.1	193
201	Ternary Porous Cobalt Phosphoselenide Nanosheets: An Efficient Electrocatalyst for Electrocatalytic and Photoelectrochemical Water Splitting. *Advanced Materials*, **2017**, 29, 1701589	24	192
200	In situ preparation of a Ti□+ self-doped TiO□film with enhanced activity as photoanode by N□□ reduction. *Angewandte Chemie - International Edition*, **2014**, 53, 10485-9	16.4	176
199	A 3D hybrid of layered MoS2/nitrogen-doped graphene nanosheet aerogels: an effective catalyst for hydrogen evolution in microbial electrolysis cells. *Journal of Materials Chemistry A*, **2014**, 2, 13795-13800	13	172
198	Electrochemically assisted photocatalytic degradation of 4-chlorophenol by ZnFe2O4-modified TiO2 nanotube array electrode under visible light irradiation. *Environmental Science & Technology*, **2010**, 44, 5098-103	10.3	163
197	Electrocatalysis for CO conversion: from fundamentals to value-added products. *Chemical Society Reviews*, **2021**, 50, 4993-5061	58.5	157
196	Facile one-pot, one-step synthesis of a carbon nanoarchitecture for an advanced multifunctonal electrocatalyst. *Angewandte Chemie - International Edition*, **2014**, 53, 6496-500	16.4	155
195	NiCoMo Hydroxide Nanosheet Arrays Synthesized via Chloride Corrosion for Overall Water Splitting. *ACS Energy Letters*, **2019**, 4, 952-959	20.1	152
194	Fe?N4 Sites Embedded into Carbon Nanofiber Integrated with Electrochemically Exfoliated Graphene for Oxygen Evolution in Acidic Medium. *Advanced Energy Materials*, **2018**, 8, 1801912	21.8	149
193	Strongly Coupled 3D Hybrids of N-doped Porous Carbon Nanosheet/CoNi Alloy-Encapsulated Carbon Nanotubes for Enhanced Electrocatalysis. *Small*, **2015**, 11, 5940-8	11	148
192	Enhanced photovoltaic performance of perovskite CH□NH□PbI□solar cells with freestanding TiO□ nanotube array films. *Chemical Communications*, **2014**, 50, 6368-71	5.8	142
191	ZnFe2O4 multi-porous microbricks/graphene hybrid photocatalyst: Facile synthesis, improved activity and photocatalytic mechanism. *Applied Catalysis B: Environmental*, **2013**, 142-143, 80-88	21.8	142
190	Atomic Ni Anchored Covalent Triazine Framework as High Efficient Electrocatalyst for Carbon Dioxide Conversion. *Advanced Functional Materials*, **2019**, 29, 1806884	15.6	139

189	Efficient Electrochemical and Photoelectrochemical Water Splitting by a 3D Nanostructured Carbon Supported on Flexible Exfoliated Graphene Foil. *Advanced Materials*, **2017**, 29, 1604480	24	139
188	A three-dimensionally interconnected carbon nanotube/layered MoS2 nanohybrid network for lithium ion battery anode with superior rate capacity and long-cycle-life. *Nano Energy*, **2015**, 16, 10-18	17.1	137
187	Tunable Synthesis of Yolk-Shell Porous Silicon@Carbon for Optimizing Si/C-Based Anode of Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 42084-42092	9.5	135
186	A strongly coupled 3D ternary Fe2O3@Ni2P/Ni(PO3)2 hybrid for enhanced electrocatalytic oxygen evolution at ultra-high current densities. *Journal of Materials Chemistry A*, **2019**, 7, 965-971	13	123
185	Ag3PO4 Oxygen Evolution Photocatalyst Employing Synergistic Action of Ag/AgBr Nanoparticles and Graphene Sheets. *Journal of Physical Chemistry C*, **2012**, 116, 20132-20139	3.8	118
184	Controllable Synthesis and Tunable Photocatalytic Properties of Ti(3+)-doped TiO2. *Scientific Reports*, **2015**, 5, 10714	4.9	115
183	Atomically Defined Undercoordinated Active Sites for Highly Efficient CO2 Electroreduction. *Advanced Functional Materials*, **2020**, 30, 1907658	15.6	115
182	Nitrogen-doped graphene/CoNi alloy encased within bamboo-like carbon nanotube hybrids as cathode catalysts in microbial fuel cells. *Journal of Power Sources*, **2016**, 307, 561-568	8.9	113
181	Nanostructured Ternary Metal Tungstate-Based Photocatalysts for Environmental Purification and Solar Water Splitting: A Review. *Nano-Micro Letters*, **2018**, 10, 69	19.5	110
180	Scalable and low-cost synthesis of black amorphous Al-Ti-O nanostructure for high-efficient photothermal desalination. *Nano Energy*, **2017**, 41, 600-608	17.1	107
179	Boron carbides as efficient, metal-free, visible-light-responsive photocatalysts. *Angewandte Chemie - International Edition*, **2013**, 52, 3241-5	16.4	106
178	Carbon-Rich Nonprecious Metal Single Atom Electrocatalysts for CO2 Reduction and Hydrogen Evolution. *Small Methods*, **2019**, 3, 1900210	12.8	105
177	Synthesis and photoinduced charge-transfer properties of a ZnFe2O4-sensitized TiO2 nanotube array electrode. *Langmuir*, **2011**, 27, 3113-20	4	100
176	Monocopper doping in Cd-In-S supertetrahedral nanocluster via two-step strategy and enhanced photoelectric response. *Journal of the American Chemical Society*, **2013**, 135, 10250-3	16.4	98
175	Recent Advances in Earth-Abundant Heterogeneous Electrocatalysts for Photoelectrochemical Water Splitting. *Small Methods*, **2017**, 1, 1700090	12.8	85
174	3D dual-confined sulfur encapsulated in porous carbon nanosheets and wrapped with graphene aerogels as a cathode for advanced lithium sulfur batteries. *Nanoscale*, **2016**, 8, 8228-35	7.7	85
173	TiO2 nanotube/Ag□AgBr three-component nanojunction for efficient photoconversion. *Journal of Materials Chemistry*, **2011**, 21, 18067		85
172	Copper-surface-mediated synthesis of acetylenic carbon-rich nanofibers for active metal-free photocathodes. *Nature Communications*, **2018**, 9, 1140	17.4	84

171	Capability of novel ZnFe□□ nanotube arrays for visible-light induced degradation of 4-chlorophenol. *Chemosphere*, **2011**, 82, 581-6	8.4	83
170	Designed synthesis of anatase□□iO2 (B) biphase nanowire/ZnO nanoparticle heterojunction for enhanced photocatalysis. *Journal of Materials Chemistry A*, **2018**, 6, 8289-8298	13	82
169	Gas Diffusion Strategy for Inserting Atomic Iron Sites into Graphitized Carbon Supports for Unusually High-Efficient CO Electroreduction and High-Performance Zn-CO Batteries. *Advanced Materials*, **2020**, 32, e2002430	24	80
168	Porous Carbon Nanosheets Codoped with Nitrogen and Sulfur for Oxygen Reduction Reaction in Microbial Fuel Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 18672-8	9.5	77
167	Dynamic Activation of Adsorbed Intermediates via Axial Traction for the Promoted Electrochemical CO Reduction. *Angewandte Chemie - International Edition*, **2021**, 60, 4192-4198	16.4	75
166	Rational design of mesoporous NiFe-alloy-based hybrids for oxygen conversion electrocatalysis. *Journal of Materials Chemistry A*, **2015**, 3, 7986-7993	13	74
165	Self-templated formation of ZnFe2O4 double-shelled hollow microspheres for photocatalytic degradation of gaseous o-dichlorobenzene. *Journal of Materials Chemistry A*, **2017**, 5, 8909-8915	13	73
164	Ultrasensitive quantum dot fluorescence quenching assay for selective detection of mercury ions in drinking water. *Scientific Reports*, **2014**, 4, 5624	4.9	73
163	Structural and photovoltaic properties of highly ordered ZnFe2O4 nanotube arrays fabricated by a facile sol□el template method. *Acta Materialia*, **2009**, 57, 2684-2690	8.4	72
162	A Three-Dimensional Branched Cobalt-Doped □Fe2O3 Nanorod/MgFe2O4 Heterojunction Array as a Flexible Photoanode for Efficient Photoelectrochemical Water Oxidation. *Angewandte Chemie*, **2013**, 125, 1286-1290	3.6	70
161	Tuning d-band center of tungsten carbide via Mo doping for efficient hydrogen evolution and Zn□I2O cell over a wide pH range. *Nano Energy*, **2020**, 74, 104850	17.1	69
160	Ultrasensitive chemical sensing through facile tuning defects and functional groups in reduced graphene oxide. *Analytical Chemistry*, **2014**, 86, 7516-22	7.8	68
159	One-pot synthesis of MgFe2O4 nanospheres by solvothermal method. *Materials Letters*, **2013**, 96, 85-88	3.3	65
158	An ultrathin cobalt-based zeolitic imidazolate framework nanosheet array with a strong synergistic effect towards the efficient oxygen evolution reaction. *Journal of Materials Chemistry A*, **2018**, 6, 18877-18883	13	65
157	Synthesis of ZnO/TiO2 nanotube composite film by a two-step route. *Materials Letters*, **2008**, 62, 3691-3693	3.3	61
156	Boosting Electroreduction Kinetics of Nitrogen to Ammonia via Tuning Electron Distribution of Single-Atomic Iron Sites. *Angewandte Chemie - International Edition*, **2021**, 60, 9078-9085	16.4	60
155	Designing 3d dual transition metal electrocatalysts for oxygen evolution reaction in alkaline electrolyte: Beyond oxides. *Nano Energy*, **2020**, 77, 105162	17.1	58
154	Proton Capture Strategy for Enhancing Electrochemical CO Reduction on Atomically Dispersed Metal-Nitrogen Active Sites*. *Angewandte Chemie - International Edition*, **2021**, 60, 11959-11965	16.4	57

153	Emerging nanostructured carbon-based non-precious metal electrocatalysts for selective electrochemical CO2 reduction to CO. *Journal of Materials Chemistry A*, **2019**, 7, 25191-25202	13	57
152	Highly Selective Electrochemical Conversion of CO2 to HCOOH on Dendritic Indium Foams. *ChemElectroChem*, **2018**, 5, 253-259	4.3	57
151	A Superaerophobic Bimetallic Selenides Heterostructure for Efficient Industrial-Level Oxygen Evolution at Ultra-High Current Densities. *Nano-Micro Letters*, **2020**, 12, 104	19.5	56
150	Highly active metallic nickel sites confined in N-doped carbon nanotubes toward significantly enhanced activity of CO2 electroreduction. *Carbon*, **2019**, 150, 52-59	10.4	54
149	Strongly Coupled 3D N-Doped MoO/NiS Hybrid for High Current Density Hydrogen Evolution Electrocatalysis and Biomass Upgrading. *ACS Applied Materials & Interfaces*, **2019**, 11, 27743-27750	9.5	52
148	Nitrogen Vacancy Structure Driven Photoeletrocatalytic Degradation of 4-Chlorophenol Using Porous Graphitic Carbon Nitride Nanosheets. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 6497-6506	8.3	49
147	Nanostructured Carbon Based Heterogeneous Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. *ChemCatChem*, **2019**, 11, 5855-5874	5.2	49
146	In Situ Preparation of a Ti3+ Self-Doped TiO2 Film with Enhanced Activity as Photoanode by N2H4 Reduction. *Angewandte Chemie*, **2014**, 126, 10653-10657	3.6	49
145	Boosting alkaline hydrogen evolution and Zn–H2O cell induced by interfacial electron transfer. *Nano Energy*, **2020**, 71, 104621	17.1	48
144	One-pot synthesis of high-performance Co/graphene electrocatalysts for glucose fuel cells free of enzymes and precious metals. *Chemical Communications*, **2015**, 51, 9354-7	5.8	46
143	Facile solvothermal synthesis of MnFe2O4 hollow nanospheres and their photocatalytic degradation of benzene investigated by in situ FTIR. *Catalysis Communications*, **2015**, 68, 11-14	3.2	44
142	Nitrogen-Doped Carbon-Encased Bimetallic Selenide for High-Performance Water Electrolysis. *Nano-Micro Letters*, **2019**, 11, 67	19.5	44
141	Controllably Engineering Mesoporous Surface and Dimensionality of SnO2 toward High-Performance CO2 Electroreduction. *Advanced Functional Materials*, **2020**, 30, 2002092	15.6	44
140	Water-Plasma Assisted Synthesis of Oxygen-Enriched Ni–Fe Layered Double Hydroxide Nanosheets for Efficient Oxygen Evolution Reaction. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 4247-4254	8.3	43
139	Bioinspired Binders Actively Controlling Ion Migration and Accommodating Volume Change in High Sulfur Loading Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2019**, 9, 1902938	21.8	42
138	In Situ Growth of Nitrogen-Doped Carbon-Coated γ-Fe2O3 Nanoparticles on Carbon Fabric for Electrochemical N2 Fixation. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 8853-8859	8.3	41
137	Elucidation of the Synergistic Effect of Dopants and Vacancies on Promoted Selectivity for CO Electroreduction to Formate. *Advanced Materials*, **2021**, 33, e2005113	24	41
136	ZIF-Derived Carbon Nanoarchitecture as a Bifunctional pH-Universal Electrocatalyst for Energy-Efficient Hydrogen Evolution. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10044-10051	8.3	40

135	3D porous carbon nanofibers with CeO2-decorated as cathode matrix for high performance lithium-sulfur batteries. *Journal of Power Sources*, **2020**, 473, 228588	8.9	40
134	Boron and nitrogen co-doped porous carbon nanofibers as metal-free electrocatalysts for highly efficient ammonia electrosynthesis. *Journal of Materials Chemistry A*, **2019**, 7, 26272-26278	13	40
133	In situ growing of Bi/Bi2O2CO3 on Bi2WO6 nanosheets for improved photocatalytic performance. *Catalysis Today*, **2018**, 314, 2-9	5.3	40
132	Integrated System of Solar Cells with Hierarchical NiCoO Battery-Supercapacitor Hybrid Devices for Self-Driving Light-Emitting Diodes. *Nano-Micro Letters*, **2019**, 11, 42	19.5	39
131	Facile preparation of sphere-like copper ferrite nanostructures and their enhanced visible-light-induced photocatalytic conversion of benzene. *Materials Research Bulletin*, **2013**, 48, 4216-4222	5.1	39
130	Scalable Production of Few-Layer Niobium Disulfide Nanosheets via Electrochemical Exfoliation for Energy-Efficient Hydrogen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2019**, 11, 13205-13213	9.5	38
129	Highly Boosted Reaction Kinetics in Carbon Dioxide Electroreduction by Surface-Introduced Electronegative Dopants. *Advanced Functional Materials*, **2021**, 31, 2008146	15.6	38
128	CuSn Alloy Nanoparticles on Nitrogen-Doped Graphene for Electrocatalytic CO2 Reduction. *ChemElectroChem*, **2019**, 6, 5951-5957	4.3	37
127	Thiophene-Bridged Donor-Acceptor sp -Carbon-Linked 2D Conjugated Polymers as Photocathodes for Water Reduction. *Advanced Materials*, **2021**, 33, e2006274	24	37
126	Efficient Electrocatalytic Oxygen Evolution at Extremely High Current Density over 3D Ultrasmall Zero-Valent Iron-Coupled Nickel Sulfide Nanosheets. *ChemElectroChem*, **2018**, 5, 3866-3872	4.3	37
125	Poly(1,4-Diethynylbenzene) Gradient Homojunction with Enhanced Charge Carrier Separation for Photoelectrochemical Water Reduction. *Advanced Materials*, **2019**, 31, e1900961	24	35
124	Effects of solids retention time on the performance and microbial community structures in membrane bioreactors treating synthetic oil refinery wastewater. *Chemical Engineering Journal*, **2018**, 344, 462-468	14.7	35
123	Ultrathin tin monosulfide nanosheets with the exposed (001) plane for efficient electrocatalytic conversion of CO into formate. *Chemical Science*, **2020**, 11, 3952-3958	9.4	34
122	Cerium oxide embedded bilayer separator enabling fast polysulfide conversion for high-performance lithium-sulfur batteries. *Chemical Engineering Journal*, **2020**, 388, 124120	14.7	34
121	Porous metal-porphyrin triazine-based frameworks for efficient CO2 electroreduction. *Applied Catalysis B: Environmental*, **2020**, 270, 118908	21.8	34
120	Enhanced visible light photocatalytic degradation of metoprolol by AgBi2WO6graphene composite. *Separation and Purification Technology*, **2015**, 142, 1-7	8.3	34
119	Synergistic Effect of Atomically Dispersed Ni-Zn Pair Sites for Enhanced CO Electroreduction. *Advanced Materials*, **2021**, 33, e2102212	24	33
118	Designing flexible, smart and self-sustainable supercapacitors for portable/wearable electronics: from conductive polymers. *Chemical Society Reviews*, **2021**, 50, 12702-12743	58.5	32

117	In situ identification of the electrocatalytic water oxidation behavior of a nickel-based metal-organic framework nanoarray. *Materials Horizons*, **2021**, 8, 556-564	14.4	31
116	A Universal Principle to Accurately Synthesize Atomically Dispersed Metal-N Sites for CO Electroreduction. *Nano-Micro Letters*, **2020**, 12, 108	19.5	30
115	Enhanced visible-light induced degradation of benzene on Mg-ferrite/hematite/PANI nanospheres: in situ FTIR investigation. *Journal of Hazardous Materials*, **2012**, 241-242, 472-7	12.8	30
114	Dual Cross-Linked Fluorinated Binder Network for High-Performance Silicon and Silicon Oxide Based Anodes in Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 46800-46807	9.5	30
113	Nanocarbon-Enhanced 2D Photoelectrodes: A New Paradigm in Photoelectrochemical Water Splitting. *Nano-Micro Letters*, **2020**, 13, 24	19.5	28
112	Nanoconfined Tin Oxide within N-Doped Nanocarbon Supported on Electrochemically Exfoliated Graphene for Efficient Electroreduction of CO to Formate and C1 Products. *ACS Applied Materials & Interfaces*, **2020**, 12, 16178-16185	9.5	27
111	Promotional effect of nitrogen-doping on a ceria unary oxide catalyst with rich oxygen vacancies for selective catalytic reduction of NO with NH3. *Chemical Engineering Journal*, **2020**, 379, 122302	14.7	27
110	Bi/Bi2O3 nanoparticles supported on N-doped reduced graphene oxide for highly efficient CO2 electroreduction to formate. *Chinese Chemical Letters*, **2020**, 31, 1415-1421	8.1	25
109	Construction of Defect-Rich Ni-Fe-Doped K MnO Cubic Nanoflowers via Etching Prussian Blue Analogue for Efficient Overall Water Splitting. *Small*, **2020**, 16, e1905223	11	25
108	Boron Carbides as Efficient, Metal-Free, Visible-Light-Responsive Photocatalysts. *Angewandte Chemie*, **2013**, 125, 3323-3327	3.6	25
107	Recent progress and perspective of electrochemical CO2 reduction towards C2-C5 products over non-precious metal heterogeneous electrocatalysts. *Nano Research*, **2021**, 14, 3188-3207	10	25
106	Molecular Engineering of Conjugated Acetylenic Polymers for Efficient Cocatalyst-free Photoelectrochemical Water Reduction. *Angewandte Chemie - International Edition*, **2019**, 58, 10368-10374	16.4	24
105	Porous Cobalt Oxynitride Nanosheets for Efficient Electrocatalytic Water Oxidation. *ChemSusChem*, **2018**, 11, 1479-1485	8.3	24
104	Facile One-Pot, One-Step Synthesis of a Carbon Nanoarchitecture for an Advanced Multifunctonal Electrocatalyst. *Angewandte Chemie*, **2014**, 126, 6614-6618	3.6	24
103	Facile fabrication, characterization, and enhanced photoelectrocatalytic degradation performance of highly oriented TiO2 nanotube arrays. *Journal of Nanoparticle Research*, **2009**, 11, 2153-2162	2.3	24
102	Water Splitting-Biosynthetic Hybrid System for CO Conversion using Nickel Nanoparticles Embedded in N-Doped Carbon Nanotubes. *ChemSusChem*, **2018**, 11, 2382-2387	8.3	24
101	Temperature-dependent Crystallization of MoS Nanoflakes on Graphene Nanosheets for Electrocatalysis. *Nanoscale Research Letters*, **2017**, 12, 479	5	23
100	Deformable and flexible electrospun nanofiber-supported cross-linked gel polymer electrolyte membranes for high safety lithium-ion batteries. *RSC Advances*, **2017**, 7, 22728-22734	3.7	22

99	High-Performance Metal-Free Nanosheets Array Electrocatalyst for Oxygen Evolution Reaction in Acid. *Advanced Functional Materials*, **2020**, 30, 2003000	15.6	22
98	Beyond lotus: Plasma nanostructuring enables efficient energy and water conversion and use. *Nano Energy*, **2019**, 66, 104125	17.1	21
97	Exfoliated metallic niobium disulfate nanosheets for enhanced electrochemical ammonia synthesis and Zn-N2 battery. *Applied Catalysis B: Environmental*, **2020**, 270, 118892	21.8	21
96	3D Edge-Enriched Fe C@C Nanocrystals with a Core-Shell Structure Grown on Reduced Graphene Oxide Networks for Efficient Oxygen Reduction Reaction. *ChemSusChem*, **2018**, 11, 3292-3298	8.3	21
95	Surface photovoltage property of magnesium ferrite/hematite heterostructured hollow nanospheres prepared with one-pot strategy. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 403, 35-40	5.1	21
94	Uniform □Fe2O3 nanotubes fabricated for adsorption and photocatalytic oxidation of naphthalene. *Materials Chemistry and Physics*, **2011**, 129, 683-687	4.4	21
93	Interface coupling 2D/2D SnSe2/graphene heterostructure as long-cycle anode for all-climate lithium-ion battery. *Chemical Engineering Journal*, **2021**, 407, 126973	14.7	21
92	An exfoliated iron phosphorus trisulfide nanosheet with rich sulfur vacancy for efficient dinitrogen fixation and Zn-N2 battery. *Nano Energy*, **2021**, 81, 105613	17.1	20
91	Hierarchical Cross-Linked Carbon Aerogels with Transition Metal-Nitrogen Sites for Highly Efficient Industrial-Level CO2 Electroreduction. *Advanced Functional Materials*, **2021**, 31, 2104377	15.6	20
90	High-index faceted binary-metal selenide nanosheet arrays as efficient 3D electrodes for alkaline hydrogen evolution. *Nanoscale*, **2019**, 11, 17571-17578	7.7	19
89	Zeolitic Imidazolate Framework-Derived Core-Shell-Structured CoS2/CoS2-N-C Supported on Electrochemically Exfoliated Graphene Foil for Efficient Oxygen Evolution. *Batteries and Supercaps*, **2019**, 2, 348-354	5.6	19
88	Atomically Dispersed Zinc(I) Active Sites to Accelerate Nitrogen Reduction Kinetics for Ammonia Electrosynthesis. *Advanced Materials*, **2021**, e2103548	24	19
87	Fast expansion of graphite into superior three-dimensional anode for microbial fuel cells. *Journal of Power Sources*, **2019**, 412, 86-92	8.9	19
86	Electrochemical exfoliation of ultrathin ternary molybdenum sulfoselenide nanosheets to boost the energy-efficient hydrogen evolution reaction. *Nanoscale*, **2019**, 11, 16200-16207	7.7	18
85	Evidence of the Strong Metal Support Interaction in a Palladium-Ceria Hybrid Electrocatalyst for Enhancement of the Hydrogen Evolution Reaction. *Journal of the Electrochemical Society*, **2018**, 165, F1147-F1153	3.9	18
84	Embedding Co2P Nanoparticles in N-Doped Carbon Nanotubes Grown on Porous Carbon Polyhedra for High-Performance Lithium-Ion Batteries. *Industrial & Engineering Chemistry Research*, **2018**, 57, 13019-13025	3.9	18
83	Interfacial engineering of Ru-S-Sb/antimonene electrocatalysts for highly efficient electrolytic hydrogen generation in neutral electrolyte. *Chemical Communications*, **2019**, 55, 10884-10887	5.8	17
82	Strongly coupling of amorphous/crystalline reduced FeOOH/□Ni(OH) heterostructure for extremely efficient water oxidation at ultra-high current density. *Journal of Colloid and Interface Science*, **2020**, 579, 340-346	9.3	16

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80	Highly Effective Electrochemical Exfoliation of Ultrathin Tantalum Disulfide Nanosheets for Energy-Efficient Hydrogen Evolution Electrocatalysis. *ACS Applied Materials & Interfaces*, **2020**, 12, 24675-24682	9.5	15
79	Conjugated Acetylenic Polymers Grafted Cuprous Oxide as an Efficient Z-Scheme Heterojunction for Photoelectrochemical Water Reduction. *Advanced Materials*, **2020**, 32, e2002486	24	15
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