Tie-Rui Zhang

List of Publications by Citations

Source: https://exaly.com/author-pdf/6199350/tie-rui-zhang-publications-by-citations.pdf
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

292 papers	28,543 citations	94 h-index	163 g-index
323 ext. papers	35,076 ext. citations	12.8 avg, IF	7.74 L-index

#	Paper	IF	Citations
292	Alkali-Assisted Synthesis of Nitrogen Deficient Graphitic Carbon Nitride with Tunable Band Structures for Efficient Visible-Light-Driven Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1605148	24	951
291	Macroscopic Polarization Enhancement Promoting Photo- and Piezoelectric-Induced Charge Separation and Molecular Oxygen Activation. *Angewandte Chemie - International Edition*, **2017**, 56, 11860-11864	16.4	662
290	Anionic Group Self-Doping as a Promising Strategy: Band-Gap Engineering and Multi-Functional Applications of High-Performance CO32−Doped Bi2O2CO3. *ACS Catalysis*, **2015**, 5, 4094-4103	13.1	596
289	Nitrogen-Doped Porous Carbon Nanosheets Templated from g-C3 N4 as Metal-Free Electrocatalysts for Efficient Oxygen Reduction Reaction. *Advanced Materials*, **2016**, 28, 5080-6	24	573
288	Well-Dispersed ZIF-Derived Co,N-Co-doped Carbon Nanoframes through Mesoporous-Silica-Protected Calcination as Efficient Oxygen Reduction Electrocatalysts. *Advanced Materials*, **2016**, 28, 1668-74	24	558
287	Permeable silica shell through surface-protected etching. *Nano Letters*, **2008**, 8, 2867-71	11.5	526
286	Ni3FeN Nanoparticles Derived from Ultrathin NiFe-Layered Double Hydroxide Nanosheets: An Efficient Overall Water Splitting Electrocatalyst. *Advanced Energy Materials*, **2016**, 6, 1502585	21.8	522
285	Carbon quantum dots/TiO2 composites for efficient photocatalytic hydrogen evolution. *Journal of Materials Chemistry A*, **2014**, 2, 3344	13	510
284	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	21.8	494
283	Smart Utilization of Carbon Dots in Semiconductor Photocatalysis. *Advanced Materials*, **2016**, 28, 9454-9477	24	483
282	Tuning Oxygen Vacancies in Ultrathin TiO Nanosheets to Boost Photocatalytic Nitrogen Fixation up to 700 nm. *Advanced Materials*, **2019**, 31, e1806482	24	452
281	Ultrafine NiO Nanosheets Stabilized by TiO2 from Monolayer NiTi-LDH Precursors: An Active Water Oxidation Electrocatalyst. *Journal of the American Chemical Society*, **2016**, 138, 6517-24	16.4	452
280	Defect-Rich Ultrathin ZnAl-Layered Double Hydroxide Nanosheets for Efficient Photoreduction of CO2 to CO with Water. *Advanced Materials*, **2015**, 27, 7824-31	24	445
279	Precursor-reforming protocol to 3D mesoporous g-C3N4 established by ultrathin self-doped nanosheets for superior hydrogen evolution. *Nano Energy*, **2017**, 38, 72-81	17.1	441
278	Core-satellite nanocomposite catalysts protected by a porous silica shell: controllable reactivity, high stability, and magnetic recyclability. *Angewandte Chemie - International Edition*, **2008**, 47, 8924-8	16.4	421
277	Defect-Engineered Ultrathin δMnO2 Nanosheet Arrays as Bifunctional Electrodes for Efficient Overall Water Splitting. *Advanced Energy Materials*, **2017**, 7, 1700005	21.8	373
276	Three-dimensional porous g-C3N4 for highly efficient photocatalytic overall water splitting. *Nano Energy*, **2019**, 59, 644-650	17.1	347

275	Layered-Double-Hydroxide Nanosheets as Efficient Visible-Light-Driven Photocatalysts for Dinitrogen Fixation. *Advanced Materials*, **2017**, 29, 1703828	24	342
274	Graphene-supported ultrafine metal nanoparticles encapsulated by mesoporous silica: robust catalysts for oxidation and reduction reactions. *Angewandte Chemie - International Edition*, **2014**, 53, 250-4	16.4	341
273	Site-specific nucleation and growth kinetics in hierarchical nanosyntheses of branched ZnO crystallites. *Journal of the American Chemical Society*, **2006**, 128, 10960-8	16.4	340
272	Shape Effects of Cu2O Polyhedral Microcrystals on Photocatalytic Activity. *Journal of Physical Chemistry C*, **2010**, 114, 5073-5079	3.8	330
271	A general approach for transferring hydrophobic nanocrystals into water. *Nano Letters*, **2007**, 7, 3203-7	11.5	325
270	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	13	310
269	Nickel-Cobalt Diselenide 3D Mesoporous Nanosheet Networks Supported on Ni Foam: An All-pH Highly Efficient Integrated Electrocatalyst for Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1606521	24	301
268	Layered Double Hydroxide Nanostructured Photocatalysts for Renewable Energy Production. *Advanced Energy Materials*, **2016**, 6, 1501974	21.8	289
267	Formation of hollow silica colloids through a spontaneous dissolution-regrowth process. *Angewandte Chemie - International Edition*, **2008**, 47, 5806-11	16.4	283
266	NiFe Layered Double Hydroxide Nanoparticles on Co,N-Codoped Carbon Nanoframes as Efficient Bifunctional Catalysts for Rechargeable Zinc–Air Batteries. *Advanced Energy Materials*, **2017**, 7, 1700467	21.8	280
265	Mediator-free direct Z-scheme photocatalytic system: BiVO4/g-C3N4 organic-inorganic hybrid photocatalyst with highly efficient visible-light-induced photocatalytic activity. *Dalton Transactions*, **2015**, 44, 4297-307	4.3	275
264	Thickness-Dependent Facet Junction Control of Layered BiOIO3 Single Crystals for Highly Efficient CO2 Photoreduction. *Advanced Functional Materials*, **2018**, 28, 1804284	15.6	275
263	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	13	260
262	Self-Assembled Au/CdSe Nanocrystal Clusters for Plasmon-Mediated Photocatalytic Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1700803	24	258
261	In situ co-pyrolysis fabrication of CeO2/g-C3N4 n□ type heterojunction for synchronously promoting photo-induced oxidation and reduction properties. *Journal of Materials Chemistry A*, **2015**, 3, 17120-17129	13	256
260	A General Route to Prepare Low-Ruthenium-Content Bimetallic Electrocatalysts for pH-Universal Hydrogen Evolution Reaction by Using Carbon Quantum Dots. *Angewandte Chemie - International Edition*, **2020**, 59, 1718-1726	16.4	250
259	Chlorine intercalation in graphitic carbon nitride for efficient photocatalysis. *Applied Catalysis B: Environmental*, **2017**, 203, 465-474	21.8	241
258	Two-dimensional-related catalytic materials for solar-driven conversion of CO into valuable chemical feedstocks. *Chemical Society Reviews*, **2019**, 48, 1972-2010	58.5	233

257	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	21.8	230
256	A Simple Synthetic Strategy toward Defect-Rich Porous Monolayer NiFe-Layered Double Hydroxide Nanosheets for Efficient Electrocatalytic Water Oxidation. *Advanced Energy Materials*, **2019**, 9, 1900881	21.8	220
255	Ammonia Detection Methods in Photocatalytic and Electrocatalytic Experiments: How to Improve the Reliability of NH Production Rates?. *Advanced Science*, **2019**, 6, 1802109	13.6	220
254	A universal ligand mediated method for large scale synthesis of transition metal single atom catalysts. *Nature Communications*, **2019**, 10, 4585	17.4	219
253	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	21.8	217
252	Macroscopic Spontaneous Polarization and Surface Oxygen Vacancies Collaboratively Boosting CO Photoreduction on BiOIO Single Crystals. *Advanced Materials*, **2020**, 32, e1908350	24	212
251	A Nanozyme with Photo-Enhanced Dual Enzyme-Like Activities for Deep Pancreatic Cancer Therapy. *Angewandte Chemie - International Edition*, **2019**, 58, 12624-12631	16.4	209
250	Superparamagnetic composite colloids with anisotropic structures. *Journal of the American Chemical Society*, **2007**, 129, 8974-5	16.4	209
249	Alumina-Supported CoFe Alloy Catalysts Derived from Layered-Double-Hydroxide Nanosheets for Efficient Photothermal CO Hydrogenation to Hydrocarbons. *Advanced Materials*, **2018**, 30, 1704663	24	208
248	Metal-Organic-Framework-Derived Mesoporous Carbon Nanospheres Containing Porphyrin-Like Metal Centers for Conformal Phototherapy. *Advanced Materials*, **2016**, 28, 8379-8387	24	207
247	A Self-Templated Route to Hollow Silica Microspheres. *Journal of Physical Chemistry C*, **2009**, 113, 3168-3175	5.8	201
246	CdS Nanoparticle-Decorated Cd Nanosheets for Efficient Visible Light-Driven Photocatalytic Hydrogen Evolution. *Advanced Energy Materials*, **2016**, 6, 1501241	21.8	193
245	Sub-3 nm Ultrafine Monolayer Layered Double Hydroxide Nanosheets for Electrochemical Water Oxidation. *Advanced Energy Materials*, **2018**, 8, 1703585	21.8	190
244	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	21.8	189
243	From Solar Energy to Fuels: Recent Advances in Light-Driven C Chemistry. *Angewandte Chemie - International Edition*, **2019**, 58, 17528-17551	16.4	181
242	Underwater superoleophobic porous membrane based on hierarchical TiO2 nanotubes: multifunctional integration of oil–water separation, flow-through photocatalysis and self-cleaning. *Journal of Materials Chemistry A*, **2015**, 3, 1279-1286	13	181
241	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	17.1	179
240	Pd Single-Atom Catalysts on Nitrogen-Doped Graphene for the Highly Selective Photothermal Hydrogenation of Acetylene to Ethylene. *Advanced Materials*, **2019**, 31, e1900509	24	164

239	Defect Engineering in Photocatalytic Nitrogen Fixation. *ACS Catalysis*, **2019**, 9, 9739-9750	13.1	163
238	Recent Progress in Photocatalytic CO2 Reduction Over Perovskite Oxides. *Solar Rrl*, **2017**, 1, 1700126	7.1	163
237	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	17.1	158
236	Oxide-Modified Nickel Photocatalysts for the Production of Hydrocarbons in Visible Light. *Angewandte Chemie - International Edition*, **2016**, 55, 4215-9	16.4	157
235	Intrinsic Carbon-Defect-Driven Electrocatalytic Reduction of Carbon Dioxide. *Advanced Materials*, **2019**, 31, e1808276	24	155
234	Highly photoluminescent polyoxometaloeuropate-surfactant complexes by ionic self-assembly. *Chemistry - A European Journal*, **2005**, 11, 1001-9	4.8	153
233	Template-free large-scale synthesis of g-C3N4 microtubes for enhanced visible light-driven photocatalytic H2 production. *Nano Research*, **2018**, 11, 3462-3468	10	149
232	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	13	149
231	Multishelled Ni-Rich Li(Ni Co Mn)O Hollow Fibers with Low Cation Mixing as High-Performance Cathode Materials for Li-Ion Batteries. *Advanced Science*, **2017**, 4, 1600262	13.6	145
230	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	7.1	144
229	Core□atellite Nanocomposite Catalysts Protected by a Porous Silica Shell: Controllable Reactivity, High Stability, and Magnetic Recyclability. *Angewandte Chemie*, **2008**, 120, 9056-9060	3.6	143
228	Recent Advances in Conjugated Polymers for Visible-Light-Driven Water Splitting. *Advanced Materials*, **2020**, 32, e1907296	24	141
227	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	3.8	138
226	Magnetically recyclable nanocatalysts (MRNCs): a versatile integration of high catalytic activity and facile recovery. *Nanoscale*, **2012**, 4, 6244-55	7.7	133
225	Piezocatalysis and Piezo-Photocatalysis: Catalysts Classification and Modification Strategy, Reaction Mechanism, and Practical Application. *Advanced Functional Materials*, **2020**, 30, 2005158	15.6	133
224	Organized Nanostructured Complexes of Polyoxometalates and Surfactants that Exhibit Photoluminescence and Electrochromism. *Advanced Functional Materials*, **2009**, 19, 642-652	15.6	132
223	A self-templated approach to TiO2 microcapsules. *Nano Letters*, **2007**, 7, 1832-6	11.5	130
222	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	21.8	129

221	Effect of Nitrogen Doping Level on the Performance of N-Doped Carbon Quantum Dot/TiO Composites for Photocatalytic Hydrogen Evolution. *ChemSusChem*, **2017**, 10, 4650-4656	8.3	127
220	Hydrothermal synthesis and structure evolution of hierarchical cobalt sulfide nanostructures. *Dalton Transactions*, **2011**, 40, 243-8	4.3	124
219	Exploiting Ru-Induced Lattice Strain in CoRu Nanoalloys for Robust Bifunctional Hydrogen Production. *Angewandte Chemie - International Edition*, **2021**, 60, 3290-3298	16.4	120
218	Efficient wettability-controlled electroreduction of CO to CO at Au/C interfaces. *Nature Communications*, **2020**, 11, 3028	17.4	119
217	Graphene-Supported Ultrafine Metal Nanoparticles Encapsulated by Mesoporous Silica: Robust Catalysts for Oxidation and Reduction Reactions. *Angewandte Chemie*, **2014**, 126, 254-258	3.6	118
216	3D carbon nanoframe scaffold-immobilized Ni3FeN nanoparticle electrocatalysts for rechargeable zinc-air batteries cathodes. *Nano Energy*, **2017**, 40, 382-389	17.1	116
215	Porous Ni5P4 as a promising cocatalyst for boosting the photocatalytic hydrogen evolution reaction performance. *Applied Catalysis B: Environmental*, **2020**, 275, 119144	21.8	116
214	Two-dimensional photocatalyst design: A critical review of recent experimental and computational advances. *Materials Today*, **2020**, 34, 78-91	21.8	116
213	Supramolecular precursor strategy for the synthesis of holey graphitic carbon nitride nanotubes with enhanced photocatalytic hydrogen evolution performance. *Nano Research*, **2019**, 12, 2385-2389	10	115
212	In situ crystallization for fabrication of a core-satellite structured BiOBr-CdS heterostructure with excellent visible-light-responsive photoreactivity. *Nanoscale*, **2015**, 7, 11702-11	7.7	115
211	Self-assembly and field-responsive optical diffractions of superparamagnetic colloids. *Langmuir*, **2008**, 24, 3671-80	4	114
210	Photocatalytic ammonia synthesis: Recent progress and future. *EnergyChem*, **2019**, 1, 100013	36.9	109
209	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	21.8	108
208	Control over the permeation of silica nanoshells by surface-protected etching with water. *Physical Chemistry Chemical Physics*, **2010**, 12, 11836-42	3.6	108
207	A core atellite structured Z-scheme catalyst Cd0.5Zn0.5S/BiVO4 for highly efficient and stable photocatalytic water splitting. *Journal of Materials Chemistry A*, **2018**, 6, 16932-16942	13	106
206	Designed controllable nitrogen-doped carbon-dots-loaded MoP nanoparticles for boosting hydrogen evolution reaction in alkaline medium. *Nano Energy*, **2020**, 72, 104730	17.1	105
205	Facet-charge-induced coupling dependent interfacial photocharge separation: A case of BiOI/g-C3N4 p-n junction. *Applied Catalysis B: Environmental*, **2020**, 267, 118697	21.8	104
204	Spontaneous organization of inorganic nanoparticles into nanovesicles triggered by UV light. *Advanced Materials*, **2014**, 26, 5613-8	24	104

203	Synchronously Achieving Plasmonic Bi Metal Deposition and I(-) Doping by Utilizing BiOIO3 as the Self-Sacrificing Template for High-Performance Multifunctional Applications. *ACS Applied Materials & Interfaces*, **2015**, 7, 27925-33	9.5	99
202	Ni3+ doped monolayer layered double hydroxide nanosheets as efficient electrodes for supercapacitors. *Nanoscale*, **2015**, 7, 7168-73	7.7	98
201	High-Efficiency Oxygen Reduction to Hydrogen Peroxide Catalyzed by Nickel Single-Atom Catalysts with Tetradentate N O Coordination in a Three-Phase Flow Cell. *Angewandte Chemie - International Edition*, **2020**, 59, 13057-13062	16.4	98
200	Multifunctional Nanowire Bioscaffolds on Titanium. *Chemistry of Materials*, **2007**, 19, 4454-4459	9.6	94
199	MIL-101-Derived Mesoporous Carbon Supporting Highly Exposed Fe Single-Atom Sites as Efficient Oxygen Reduction Reaction Catalysts. *Advanced Materials*, **2021**, 33, e2101038	24	94
198	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	21.8	92
197	Co-Based Catalysts Derived from Layered-Double-Hydroxide Nanosheets for the Photothermal Production of Light Olefins. *Advanced Materials*, **2018**, 30, e1800527	24	92
196	Photocatalytic CO2 Reduction to CO over Ni Single Atoms Supported on Defect-Rich Zirconia. *Advanced Energy Materials*, **2020**, 10, 2002928	21.8	92
195	Highly Efficient Bi2O2CO3 Single-Crystal Lamellas with Dominantly Exposed {001} Facets. *Crystal Growth and Design*, **2015**, 15, 534-537	3.5	88
194	Selective photocatalytic CO2 reduction over Zn-based layered double hydroxides containing tri or tetravalent metals. *Science Bulletin*, **2020**, 65, 987-994	10.6	86
193	Black phosphorus quantum dot/g-C3N4 composites for enhanced CO2 photoreduction to CO. *Science China Materials*, **2018**, 61, 1159-1166	7.1	84
192	Controllable Synthesis of Ultrathin Transition-Metal Hydroxide Nanosheets and their Extended Composite Nanostructures for Enhanced Catalytic Activity in the Heck Reaction. *Angewandte Chemie - International Edition*, **2016**, 55, 2167-70	16.4	83
191	Efficient Photocatalytic Nitrogen Fixation over Cu□-Modified Defective ZnAl-Layered Double Hydroxide Nanosheets. *Advanced Energy Materials*, **2020**, 10, 1901973	21.8	82
190	Facile preparation of black Nb4+ self-doped K4Nb6O17 microspheres with high solar absorption and enhanced photocatalytic activity. *Chemical Communications*, **2014**, 50, 9554-6	5.8	81
189	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	17.1	80
188	Cu2O Film via Hydrothermal Redox Approach: Morphology and Photocatalytic Performance. *Journal of Physical Chemistry C*, **2014**, 118, 16335-16343	3.8	79
187	Alkali Etching of Layered Double Hydroxide Nanosheets for Enhanced Photocatalytic N2 Reduction to NH3. *Advanced Energy Materials*, **2020**, 10, 2002199	21.8	78
186	Atomic-Level Charge Separation Strategies in Semiconductor-Based Photocatalysts. *Advanced Materials*, **2021**, 33, e2005256	24	78

185	Bubble template synthesis of Sn2Nb2O7 hollow spheres for enhanced visible-light-driven photocatalytic hydrogen production. *Chemical Communications*, **2013**, 49, 9872-4	5.8	75
184	Cooperation of oxygen vacancies and 2D ultrathin structure promoting CO2 photoreduction performance of Bi4Ti3O12. *Science Bulletin*, **2020**, 65, 934-943	10.6	74
183	Recent Advances in the Development of Single-Atom Catalysts for Oxygen Electrocatalysis and Zinc–Air Batteries. *Advanced Energy Materials*, **2020**, 10, 2003018	21.8	72
182	Naked-Magnetically Recyclable Mesoporous Au–Fe2O3 Nanocrystal Clusters: A Highly Integrated Catalyst System. *Advanced Functional Materials*, **2017**, 27, 1606215	15.6	71
181	Reductive Transformation of Layered-Double-Hydroxide Nanosheets to Fe-Based Heterostructures for Efficient Visible-Light Photocatalytic Hydrogenation of CO. *Advanced Materials*, **2018**, 30, e1803127	24	70
180	Formation of Hollow Silica Colloids through a Spontaneous Dissolution–Regrowth Process. *Angewandte Chemie*, **2008**, 120, 5890-5895	3.6	69
179	Facile synthesis of ultrathin SnNb2O6 nanosheets towards improved visible-light photocatalytic H2-production activity. *Chemical Communications*, **2016**, 52, 8239-42	5.8	68
178	Mesoporous plasmonic Au-loaded Ta2O5 nanocomposites for efficient visible light photocatalysis. *Catalysis Today*, **2014**, 225, 158-163	5.3	68
177	Multifunctional, catalytic nanowire membranes and the membrane-based 3D devices. *Journal of Physical Chemistry B*, **2006**, 110, 16819-22	3.4	67
176	Architecture-controlled synthesis of MxOy (M = Ni, Fe, Cu) microfibres from seaweed biomass for high-performance lithium ion battery anodes. *Journal of Materials Chemistry A*, **2015**, 3, 22708-22715	13	62
175	Shape-controlled synthesis of polyhedral 50-facet Cu2O microcrystals with high-index facets. *CrystEngComm*, **2012**, 14, 4431	3.3	62
174	Hierarchical ultrathin carbon encapsulating transition metal doped MoP electrocatalysts for efficient and pH-universal hydrogen evolution reaction. *Nano Energy*, **2020**, 70, 104445	17.1	61
173	Achieving tunable photocatalytic activity enhancement by elaborately engineering composition-adjustable polynary heterojunctions photocatalysts. *Applied Catalysis B: Environmental* , **2016**, 194, 62-73	21.8	61
172	Recent Advances in Noncontact External-Field-Assisted Photocatalysis: From Fundamentals to Applications. *ACS Catalysis*, **2021**, 11, 4739-4769	13.1	59
171	Facile In Situ Self-Sacrifice Approach to Ternary Hierarchical Architecture Ag/AgX (X = Cl, Br, I)/AgIO3 Distinctively Promoting Visible-Light Photocatalysis with Composition-Dependent Mechanism. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3305-3315	8.3	59
170	Layered MoS2 nanoparticles on TiO2 nanotubes by a photocatalytic strategy for use as high-performance electrocatalysts in hydrogen evolution reactions. *Green Chemistry*, **2015**, 17, 2764-2768	10	58
169	Nanostructured porous ZnO film with enhanced photocatalytic activity. *Thin Solid Films*, **2011**, 519, 5673-5678	2.2	58
168	Underwater superaerophobic Ni nanoparticle-decorated nickel–molybdenum nitride nanowire arrays for hydrogen evolution in neutral media. *Nano Energy*, **2020**, 78, 105375	17.1	58

167	Molten NaCl-Assisted Synthesis of Porous Fe-N-C Electrocatalysts with a High Density of Catalytically Accessible FeN4 Active Sites and Outstanding Oxygen Reduction Reaction Performance. *Advanced Energy Materials*, **2021**, 11, 2100219	21.8	58
166	Ultrafine monolayer Co-containing layered double hydroxide nanosheets for water oxidation. *Journal of Energy Chemistry*, **2019**, 34, 57-63	12	56
165	The Journey toward Low Temperature, Low Pressure Catalytic Nitrogen Fixation. *Advanced Energy Materials*, **2020**, 10, 2000659	21.8	56
164	Macroscopic Polarization Enhancement Promoting Photo- and Piezoelectric-Induced Charge Separation and Molecular Oxygen Activation. *Angewandte Chemie*, **2017**, 129, 12022-12026	3.6	55
163	Fluorescence signal amplification by cation exchange in ionic nanocrystals. *Angewandte Chemie - International Edition*, **2009**, 48, 1588-91	16.4	55
162	Fabrication of Heterogeneous-Phase Solid-Solution Promoting Band Structure and Charge Separation for Enhancing Photocatalytic CO Reduction: A Case of ZnCaInS. *ACS Applied Materials & Interfaces*, **2017**, 9, 27773-27783	9.5	54
161	Towards functional nanostructures: Ionic self-assembly of polyoxometalates and surfactants. *Current Opinion in Colloid and Interface Science*, **2009**, 14, 62-70	7.6	52
160	Sub-3 nm Ultrafine Cu O for Visible Light Driven Nitrogen Fixation. *Angewandte Chemie - International Edition*, **2021**, 60, 2554-2560	16.4	51
159	Graphene with Atomic-Level In-Plane Decoration of h-BN Domains for Efficient Photocatalysis. *Chemistry of Materials*, **2017**, 29, 2769-2776	9.6	50
158	Amplifying emission enhancement and proton response in a two-component gel. *Langmuir*, **2013**, 29, 417-25	4	50
157	Iodide surface decoration: a facile and efficacious approach to modulating the band energy level of semiconductors for high-performance visible-light photocatalysis. *Chemical Communications*, **2016**, 52, 354-7	5.8	49
156	FeO eO2 nanocomposites: an efficient and highly selective catalyst system for photothermal CO2 reduction to CO. *NPG Asia Materials*, **2020**, 12,	10.3	48
155	Silica-Protected Ultrathin Ni3FeN Nanocatalyst for the Efficient Hydrolytic Dehydrogenation of NH3BH3. *Advanced Energy Materials*, **2018**, 8, 1702780	21.8	48
154	Novel Y doped Bi2WO6 photocatalyst: Hydrothermal fabrication, characterization and enhanced visible-light-driven photocatalytic activity for Rhodamine B degradation and photocurrent generation. *Materials Characterization*, **2015**, 101, 166-172	3.9	48
153	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	10.6	47
152	Flower-like CdSe ultrathin nanosheet assemblies for enhanced visible-light-driven photocatalytic H2 production. *Chemical Communications*, **2015**, 51, 4677-80	5.8	46
151	Type-II ZnO nanorod-SnO2 nanoparticle heterostructures: characterization of structural, optical and photocatalytic properties. *Nanoscale*, **2013**, 5, 3828-33	7.7	46
150	Moderate band-gap-broadening induced high separation of electron-hole pairs in Br substituted BiOI: a combined experimental and theoretical investigation. *Physical Chemistry Chemical Physics*, **2015**, 17, 3673-9	3.6	45

149	Electrocatalytic Oxygen Reduction to Hydrogen Peroxide: From Homogeneous to Heterogeneous Electrocatalysis. *Advanced Energy Materials*, **2021**, 11, 2003323	21.8	45
148	Preparation of Au nanoparticles in the presence of low generational poly(amidoamine) dendrimer with surface hydroxyl groups. *Materials Chemistry and Physics*, **2003**, 81, 160-165	4.4	44
147	Electrocatalysts: Nickel□Cobalt Diselenide 3D Mesoporous Nanosheet Networks Supported on Ni Foam: An All-pH Highly Efficient Integrated Electrocatalyst for Hydrogen Evolution (Adv. Mater. 19/2017). *Advanced Materials*, **2017**, 29,	24	43
146	Photothermal hydrocarbon synthesis using alumina-supported cobalt metal nanoparticle catalysts derived from layered-double-hydroxide nanosheets. *Nano Energy*, **2019**, 60, 467-475	17.1	43
145	A Blown Film Process to Disk-Shaped Polymer Ellipsoids. *Advanced Materials*, **2008**, 20, 4599-4602	24	43
144	Fabrication of versatile cyclodextrin-functionalized upconversion luminescence nanoplatform for biomedical imaging. *Analytical Chemistry*, **2014**, 86, 6508-15	7.8	42
143	Layered double hydroxide-based photocatalytic materials toward renewable solar fuels production. *Informa□□Materi□y*, **2021**, 3, 719-738	23.1	42
142	Controllable sonochemical synthesis of Cu2O/Cu2(OH)3NO3 composites toward synergy of adsorption and photocatalysis. *Applied Catalysis B: Environmental*, **2015**, 164, 234-240	21.8	40
141	Graphene modified mesoporous titania single crystals with controlled and selective photoredox surfaces. *Chemical Communications*, **2016**, 52, 1689-92	5.8	40
140	Size-controlled synthesis of highly water-soluble silver nanocrystals. *Journal of Solid State Chemistry*, **2008**, 181, 1524-1529	3.3	40
139	Evolution of thiolate-stabilized Ag nanoclusters from Ag-thiolate cluster intermediates. *Nature Communications*, **2018**, 9, 2379	17.4	39
138	A Nanozyme with Photo-Enhanced Dual Enzyme-Like Activities for Deep Pancreatic Cancer Therapy. *Angewandte Chemie*, **2019**, 131, 12754-12761	3.6	38
137	Substitutionally Dispersed High-Oxidation CoOx Clusters in the Lattice of Rutile TiO2 Triggering Efficient Co?Ti Cooperative Catalytic Centers for Oxygen Evolution Reactions. *Advanced Functional Materials*, **2021**, 31, 2009610	15.6	38
136	pH-Responsive reversible self-assembly of gold nanoparticles into nanovesicles. *Nanoscale*, **2016**, 8, 3923-5	7.7	37
135	Achieving UV and visible-light photocatalytic activity enhancement of AgI/BiOIO3 heterostructure: Decomposition for diverse industrial contaminants and high mineralization ability. *Chinese Chemical Letters*, **2017**, 28, 2244-2250	8.1	37
134	Dual redox couples Ag/Ag+ and I□(IO3)□self-sacrificed transformation for realizing multiplex hierarchical architectures with universally powerful photocatalytic performance. *Applied Catalysis B: Environmental*, **2017**, 200, 620-632	21.8	37
133	Photochromic polyoxotungstoeuropate K12[EuP5W30O110]/polyvinylpyrrolidone nanocomposite films. *Journal of Solid State Chemistry*, **2003**, 172, 458-463	3.3	37
132	Highly ordered photoluminescent self-assembled films based on polyoxotungstoeuropate complex Na9[EuW10O36]. *Journal of Materials Chemistry*, **2003**, 13, 580-584		37

131	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	7.7	36
130	Carbon Nanosheets: Nitrogen-Doped Porous Carbon Nanosheets Templated from g-C3 N4 as Metal-Free Electrocatalysts for Efficient Oxygen Reduction Reaction (Adv. Mater. 25/2016). *Advanced Materials*, **2016**, 28, 5140	24	36
129	Wettability controlled photocatalytic reactive oxygen generation and Klebsiella pneumoniae inactivation over triphase systems. *Applied Catalysis B: Environmental*, **2020**, 264, 118518	21.8	35
128	Fe-Based Catalysts for the Direct Photohydrogenation of CO2 to Value-Added Hydrocarbons. *Advanced Energy Materials*, **2021**, 11, 2002783	21.8	35
127	Copper(I) cysteine complexes: efficient earth-abundant oxidation co-catalysts for visible light-driven photocatalytic H2 production. *Chemical Communications*, **2015**, 51, 12556-9	5.8	34
126	Two-component gel of a D□A□D carbazole donor and a fullerene acceptor. *RSC Advances*, **2013**, 3, 26403	3.7	34
125	Recent Advancements of Porphyrin-Like Single-Atom Catalysts: Synthesis and Applications. *Small Structures*, **2021**, 2, 2100007	8.7	34
124	Thiolate-Mediated Photoinduced Synthesis of Ultrafine Ag S Quantum Dots from Silver Nanoparticles. *Angewandte Chemie - International Edition*, **2016**, 55, 14952-14957	16.4	33
123	Self-assembled organic□inorganic composite superlattice thin films incorporating photo- and electro-chemically active phosphomolybdate anion. *Journal of Materials Chemistry*, **2002**, 12, 1453-1458		33
122	Engineering local coordination environments and site densities for high-performance Fe-N-C oxygen reduction reaction electrocatalysis. *SmartMat*, **2021**, 2, 154-175	22.8	33
121	Two-dimensional Sn2Ta2O7 nanosheets as efficient visible light-driven photocatalysts for hydrogen evolution. *Rare Metals*, **2019**, 38, 397-403	5.5	33
120	Recent Advances in the Synthesis, Characterization and Application of Zn-containing Heterogeneous Catalysts. *Advanced Science*, **2016**, 3, 1500424	13.6	32
119	Ultraviolet photodetectors with high photosensitivity based on type-II ZnS/SnO2 core/shell heterostructured ribbons. *Nanoscale*, **2015**, 7, 5311-9	7.7	32
118	Efficient Combination of G-C N and CDs for Enhanced Photocatalytic Performance: A Review of Synthesis, Strategies, and Applications. *Small*, **2021**, 17, e2007523	11	32
117	TiO2 nanoparticles as a soft X-ray molecular probe. *Chemical Communications*, **2008**, 2471-3	5.8	31
116	Atomic Cation-Vacancy Engineering of NiFe-Layered Double Hydroxides for Improved Activity and Stability towards the Oxygen Evolution Reaction. *Angewandte Chemie - International Edition*, **2021**, 60, 24612-24619	16.4	31
115	Fe?N?C Electrocatalysts with Densely Accessible Fe?N4 Sites for Efficient Oxygen Reduction Reaction. *Advanced Functional Materials*, **2021**, 31, 2102420	15.6	29
114	Readily attainable spongy foam photocatalyst for promising practical photocatalysis. *Applied Catalysis B: Environmental*, **2017**, 208, 75-81	21.8	28

113	Oxide-Modified Nickel Photocatalysts for the Production of Hydrocarbons in Visible Light. *Angewandte Chemie*, **2016**, 128, 4287-4291	3.6	28
112	A Sustainable Strategy for the Synthesis of Pyrochlore H Nb O Hollow Microspheres as Photocatalysts for Overall Water Splitting. *ChemPlusChem*, **2017**, 82, 181-185	2.8	28
111	Manganese Oxide Modified Nickel Catalysts for Photothermal CO Hydrogenation to Light Olefins. *Advanced Energy Materials*, **2020**, 10, 1902860	21.8	28
110	Room-temperature electrochemical acetylene reduction to ethylene with high conversion and selectivity. *Nature Catalysis*,	36.5	27
109	Mesopore-rich Fe-N-C catalyst with FeN -O-NC Single Atom Sites Delivers Remarkable Oxygen Reduction Reaction Performance in Alkaline Media.. *Advanced Materials*, **2022**, e2202544	24	27
108	Broadband visible-light-harvesting trans-bis(alkylphosphine) platinum(II)-alkynyl complexes with singlet energy transfer between BODIPY and naphthalene diimide ligands. *Chemistry - A European Journal*, **2014**, 20, 14282-95	4.8	26
107	A General Route to Prepare Low-Ruthenium-Content Bimetallic Electrocatalysts for pH-Universal Hydrogen Evolution Reaction by Using Carbon Quantum Dots. *Angewandte Chemie*, **2020**, 132, 1735-1743	3.6	26
106	Electronically Modified Atomic Sites Within a Multicomponent Co/Cu Composite for Efficient Oxygen Electroreduction. *Advanced Energy Materials*, **2021**, 11, 2100303	21.8	26
105	Photoreduction: Defect-Rich Ultrathin ZnAl-Layered Double Hydroxide Nanosheets for Efficient Photoreduction of CO2 to CO with Water (Adv. Mater. 47/2015). *Advanced Materials*, **2015**, 27, 7823-7823	24	25
104	Hyperbranched poly(amine-ester) templates for the synthesis of Au nanoparticles. *Materials Chemistry and Physics*, **2003**, 82, 812-817	4.4	25
103	A Photochemical Route towards Metal Sulfide Nanosheets from Layered Metal Thiolate Complexes. *Angewandte Chemie - International Edition*, **2019**, 58, 8443-8447	16.4	24
102	Recent advances in niobium-based semiconductors for solar hydrogen production. *Coordination Chemistry Reviews*, **2020**, 419, 213399	23.2	24
101	Low-temperature crystallization of anodized TiO2 nanotubes at the solid-gas interface and their photoelectrochemical properties. *Nanoscale*, **2013**, 5, 6139-44	7.7	24
100	Heterostructured MoSe2/Oxygen-Terminated Ti3C2 MXene Architectures for Efficient Electrocatalytic Hydrogen Evolution. *Energy & Fuels*, **2021**, 35, 4609-4615	4.1	24
99	How to make use of methanol in green catalytic hydrogen production?. *Nano Select*, **2020**, 1, 12-29	3.1	23
98	Fe Single-Atom Catalysts on MOF-5 Derived Carbon for Efficient Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. *Advanced Energy Materials*, **2022**, 12, 2102688	21.8	23
97	Complex alloy nanostructures as advanced catalysts for oxygen electrocatalysis: from materials design to applications. *Journal of Materials Chemistry A*, **2020**, 8, 23142-23161	13	21
96	One-Pot Hydrothermal Synthesis and Photocatalytic Hydrogen Evolution of Pyrochlore Type K2Nb2O6. *Chinese Journal of Chemistry*, **2014**, 32, 485-490	4.9	21

95	Thermochromic Organoaminomodified Silica Composite Films Containing Phosphomolybdic Acid. *Journal of Solid State Chemistry*, **2002**, 166, 259-263	3.3	21
94	Von Sonnenlicht zu Brennstoffen: aktuelle Fortschritte der C1-Solarchemie. *Angewandte Chemie*, **2019**, 131, 17690-17715	3.6	20
93	Site- and Spatial-Selective Integration of Non-noble Metal Ions into Quantum Dots for Robust Hydrogen Photogeneration. *Matter*, **2020**, 3, 571-585	12.7	20
92	Kinetically Probing Site-Specific Heterogeneous Nucleation and Hierarchical Growth of Nanobranches. *Journal of Physical Chemistry C*, **2007**, 111, 13691-13695	3.8	20
91	Biocompatible nanofiber scaffolds on metal for controlled release and cell colonization. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2006**, 2, 248-52	6	20
90	Evaluation of photochromic properties in heteropolyoxometallate-based inorganic polymeric thin films. *Materials Chemistry and Physics*, **2003**, 77, 294-298	4.4	19
89	Effects of surfactants on visible-light-driven photocatalytic hydrogen evolution activities of AgInZn7S9 nanorods. *Applied Surface Science*, **2015**, 358, 485-490	6.7	18
88	Enhanced solar photoreduction of CO2 to liquid fuel over rGO grafted NiO-CeO2 heterostructure nanocomposite. *Nano Energy*, **2021**, 79, 105483	17.1	18
87	Nanocrystals@Hollow Mesoporous Silica Reverse-Bumpy-Ball Structure Nanoreactors by a Versatile Microemulsion-Templated Approach. *Small Methods*, **2018**, 2, 1800105	12.8	17
86	C3-Symmetrical Cyano-Substituted Triphenylbenzenes for Organogels and Organic Nanoparticles with Controllable Fluorescence and Aggregation-Induced Emission. *European Journal of Organic Chemistry*, **2014**, 2014, 2907-2916	3.2	17
85	Future approaches of nanomedicine in clinical science. *Medical Clinics of North America*, **2007**, 91, 963-1076	7	17
84	Silver decorated manganese dioxide nanorods for alkaline battery cathode. *Journal of Power Sources*, **2009**, 186, 532-538	8.9	16
83	Metal-support interactions in designing noble metal-based catalysts for electrochemical CO2 reduction: Recent advances and future perspectives. *Nano Research*, **2021**, 14, 3795	10	16
82	Photothermal-Assisted Triphase Photocatalysis Over a Multifunctional Bilayer Paper. *Angewandte Chemie - International Edition*, **2021**, 60, 22963-22969	16.4	16
81	Ni-based catalysts derived from layered-double-hydroxide nanosheets for efficient photothermal CO2 reduction under flow-type system. *Nano Research*,1	10	15
80	Hollow PtFe Alloy Nanoparticles Derived from Pt-Fe O Dimers through a Silica-Protection Reduction Strategy as Efficient Oxygen Reduction Electrocatalysts. *Chemistry - A European Journal*, **2019**, 26, 4090	4.8	14
79	Exploiting Ru-Induced Lattice Strain in CoRu Nanoalloys for Robust Bifunctional Hydrogen Production. *Angewandte Chemie*, **2021**, 133, 3327-3335	3.6	13
78	Carbon Dots as New Building Blocks for Electrochemical Energy Storage and Electrocatalysis. *Advanced Energy Materials*, **2022**, 12, 2103426	21.8	13

77	Two-step hydrothermal synthesis of Sn2Nb2O7 nanocrystals with enhanced visible-light-driven H2 evolution activity. *Chinese Journal of Catalysis*, **2018**, 39, 395-400	11.3	12
76	Titania-Supported Ni P/Ni Catalysts for Selective Solar-Driven CO Hydrogenation. *Advanced Materials*, **2021**, 33, e2103248	24	12
75	A versatile 'click chemistry' route to size-restricted, robust, and functionalizable hydrophilic nanocrystals. *Small*, **2015**, 11, 1644-8	11	11
74	Heterogeneous 3-D nanotubular arrays of CdS-TiO2: efficient collections of reflection light for enhanced photoelectric output. *Journal of Materials Chemistry*, **2012**, 22, 22120		11
73	Multilayer films of cationic surfactants incorporating polyoxometalate on electrodes. *Journal of Solid State Electrochemistry*, **2002**, 7, 25-29	2.6	11
72	Noble-metal-free dye-sensitized selective oxidation of methane to methanol with green light (550 nm). *Nano Research*,1	10	11
71	Enhanced electrocatalytic activity of Pt-nanostructures prepared by electrodeposition using poly(vinyl pyrrolidone) as a shape-control agent. *Electrochimica Acta*, **2012**, 83, 383-386	6.7	10
70	Design and hierarchical synthesis of branched heteromicrostructures. *Smart Materials and Structures*, **2006**, 15, N46-N50	3.4	10
69	Rationally Designed NiNi3S2 Interfaces for Efficient Overall Water Electrolysis. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100078	1.6	10
68	Controllable Synthesis of Ultrathin Transition-Metal Hydroxide Nanosheets and their Extended Composite Nanostructures for Enhanced Catalytic Activity in the Heck Reaction. *Angewandte Chemie*, **2016**, 128, 2207-2210	3.6	10
67	Revealing Ammonia Quantification Minefield in Photo/Electrocatalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 21728-21731	16.4	10
66	Three Phase Interface Engineering for Advanced Catalytic Applications. *ACS Applied Energy Materials*, **2021**, 4, 1045-1052	6.1	10
65	Perylene diimide self-assembly: From electronic structural modulation to photocatalytic applications. *Journal of Semiconductors*, **2020**, 41, 091708	2.3	9
64	High-Efficiency Oxygen Reduction to Hydrogen Peroxide Catalyzed by Nickel Single-Atom Catalysts with Tetradentate N2O2 Coordination in a Three-Phase Flow Cell. *Angewandte Chemie*, **2020**, 132, 13157-13162	2.6	8
63	Ultrasound-induced change of microstructure and photochromic properties of polyacrylamide thin films containing a polyoxometalate. *Journal of Materials Research*, **2003**, 18, 709-713	2.5	8
62	Effect of Support on Catalytic Performance of Photothermal Fischer-Tropsch Synthesis to Produce Lower Olefins over Fe5C2-based Catalysts. *Chemical Research in Chinese Universities*, **2020**, 36, 1006-1012	2.2	8
61	Carbon Nanoframes: Well-Dispersed ZIF-Derived Co,N-Co-doped Carbon Nanoframes through Mesoporous-Silica-Protected Calcination as Efficient Oxygen Reduction Electrocatalysts (Adv. Mater. 8/2016). *Advanced Materials*, **2016**, 28, 1712-1712	24	8
60	A Metal-Segregation Approach to Generate CoMn Alloy for Enhanced Photothermal Conversion of Syngas to Light Olefins. *Solar Rrl*, **2021**, 5, 2000488	7.1	8

59	Solar Photocatalysis. *Solar Rrl*, **2021**, 5, 2100037	7.1	8
58	Enhancing the Supply of Activated Hydrogen to Promote Photocatalytic Nitrogen Fixation1521-1527		8
57	Photocatalysis: Alkali-Assisted Synthesis of Nitrogen Deficient Graphitic Carbon Nitride with Tunable Band Structures for Efficient Visible-Light-Driven Hydrogen Evolution (Adv. Mater. 16/2017). *Advanced Materials*, **2017**, 29,	24	7
56	Dynamic changes of single-atom Pt-C3N4 photocatalysts. *Science Bulletin*, **2020**, 65, 1055-1056	10.6	7
55	Fluorescence Signal Amplification by Cation Exchange in Ionic Nanocrystals. *Angewandte Chemie*, **2009**, 121, 1616-1619	3.6	7
54	Synthesis of hyperbranched poly(amine□ester)-protected noble metal nanoparticles in aqueous solution. *Journal of Materials Research*, **2003**, 18, 1392-1398	2.5	7
53	Photothermal-Assisted Photocatalytic Nitrogen Oxidation to Nitric Acid on Palladium-Decorated Titanium Oxide. *Advanced Energy Materials*,2103740	21.8	7
52	An ion-exchange strategy for I-doped BiOCOOH nanoplates with enhanced visible light photocatalytic NOx removal. *Pure and Applied Chemistry*, **2018**, 90, 353-361	2.1	7
51	A mild one-step solvothermal route to truncated octahedral magnetite crystals. *Particuology*, **2014**, 15, 51-55	2.8	6
50	Innentitelbild: Graphene-Supported Ultrafine Metal Nanoparticles Encapsulated by Mesoporous Silica: Robust Catalysts for Oxidation and Reduction Reactions (Angew. Chem. 1/2014). *Angewandte Chemie*, **2014**, 126, 2-2	3.6	6
49	Editorial for rare metals, special issue on photocatalysis. *Rare Metals*, **2019**, 38, 359-360	5.5	5
48	CoAl-layered double hydroxide nanosheet-based fluorescence assay for fast DNA detection. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2020**, 240, 118618	4.4	5
47	Thiolate-Mediated Photoinduced Synthesis of Ultrafine Ag2S Quantum Dots from Silver Nanoparticles. *Angewandte Chemie*, **2016**, 128, 15176-15181	3.6	5
46	Sub-3 nm Ultrafine Cu2O for Visible Light Driven Nitrogen Fixation. *Angewandte Chemie*, **2021**, 133, 2584-2590	3.6	5
45	Atomic Cation-Vacancy Engineering of NiFe-Layered Double Hydroxides for Improved Activity and Stability towards the Oxygen Evolution Reaction. *Angewandte Chemie*, **2021**, 133, 24817	3.6	5
44	Charge localization to optimize reactant adsorption on KCu7S4/CuO interfacial structure toward selective CO2 electroreduction. *Applied Catalysis B: Environmental*, **2021**, 298, 120531	21.8	5
43	Strain Engineering: A Boosting Strategy for Photocatalysis.. *Advanced Materials*, **2022**, e2200868	24	5
42	Photothermal Catalysis: Co-Based Catalysts Derived from Layered-Double-Hydroxide Nanosheets for the Photothermal Production of Light Olefins (Adv. Mater. 31/2018). *Advanced Materials*, **2018**, 30, 1870230	24	4

41	Zinc-Air Batteries: NiFe Layered Double Hydroxide Nanoparticles on Co,N-Codoped Carbon Nanoframes as Efficient Bifunctional Catalysts for Rechargeable Zinc–Air Batteries (Adv. Energy Mater. 21/2017). *Advanced Energy Materials*, **2017**, 7,	21.8	4
40	Deciphering the Dynamic Structure Evolution of Fe- and Ni-Codoped CoS2 for Enhanced Water Oxidation. *ACS Catalysis*, **2022**, 12, 3743-3751	13.1	4
39	Water Splitting: Defect-Engineered Ultrathin δ-MnO2 Nanosheet Arrays as Bifunctional Electrodes for Efficient Overall Water Splitting (Adv. Energy Mater. 18/2017). *Advanced Energy Materials*, **2017**, 7,	21.8	3
38	Electrochemical urea production directly from N2 and CO2 in ambient aqueous media. *Science China Chemistry*, **2020**, 63, 1580-1581	7.9	3
37	Nitrogen-doped ZnNi oxide for electrochemical reduction of carbon dioxide in sea water. *Rare Metals*, **2021**, 40, 3117	5.5	3
36	Hydrogen Evolution: CdS Nanoparticle-Decorated Cd Nanosheets for Efficient Visible Light-Driven Photocatalytic Hydrogen Evolution (Adv. Energy Mater. 3/2016). *Advanced Energy Materials*, **2016**, 6,	21.8	3
35	Phototherapy: Metal–Organic-Framework-Derived Mesoporous Carbon Nanospheres Containing Porphyrin-Like Metal Centers for Conformal Phototherapy (Adv. Mater. 38/2016). *Advanced Materials*, **2016**, 28, 8318-8318	24	3
34	Research Progress on Triphase Interface Electrocatalytic Carbon Dioxide Reduction. *Acta Chimica Sinica*, **2021**, 79, 369	3.3	3
33	Revealing Ammonia Quantification Minefield in Photo/Electrocatalysis. *Angewandte Chemie*, **2021**, 133, 21896-21899	3.6	3
32	Progress and Prospect of Photothermal Catalysis. *Chemical Research in Chinese Universities*,1	2.2	3
31	NiFe Nanoalloys Derived from Layered Double Hydroxides for Photothermal Synergistic Reforming of CH 4 with CO 2. *Advanced Functional Materials*,2204056	15.6	3
30	Reassessing effects of Zn2+ toward oxygen electrocatalytic activity in ternary spinel. *Science Bulletin*, **2020**, 65, 974-976	10.6	2
29	Revealing active sites in N-doped carbon for CO2 electroreduction by well-defined molecular model catalysts. *Science Bulletin*, **2020**, 65, 781-782	10.6	2
28	Single-atom Ni integrated gas diffusion electrode for high performance carbon dioxide electroreduction. *Science Bulletin*, **2020**, 65, 696-697	10.6	2
27	Self-assembling and photophysical properties of the organogelators based on cyanostyryl-substituted carbazoles. *Comptes Rendus Chimie*, **2018**, 21, 88-96	2.7	2
26	Photothermal CO2 Hydrogenation: Alumina-Supported CoFe Alloy Catalysts Derived from Layered-Double-Hydroxide Nanosheets for Efficient Photothermal CO2 Hydrogenation to Hydrocarbons (Adv. Mater. 3/2018). *Advanced Materials*, **2018**, 30, 1870015	24	2
25	Water Splitting: Ni3FeN Nanoparticles Derived from Ultrathin NiFe-Layered Double Hydroxide Nanosheets: An Efficient Overall Water Splitting Electrocatalyst (Adv. Energy Mater. 10/2016). *Advanced Energy Materials*, **2016**, 6,	21.8	2
24	Nanostructured Photothermal Materials for Environmental and Catalytic Applications.. *Molecules*, **2021**, 26,	4.8	2

23	Efficient photocatalytic aerobic oxidation of bisphenol A via gas-liquid-solid triphase interfaces. *Materials Today Energy*, **2021**, 100908	7	2
22	Energy-Efficient Hydrogen Production via Electrochemical Methanol Oxidation Using a Bifunctional Nickel Nanoparticle-Embedded Carbon Prism-Like Microrod Electrode. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2020**, 2007079-0	3.8	2
21	Three-phase electrochemistry for green ethylene production. *Current Opinion in Electrochemistry*, **2021**, 30, 100789	7.2	2
20	A Review on the Bioinspired Photocatalysts and Photocatalytic Systems. *Advanced Sustainable Systems*,2100477	5.9	2
19	Ordered PtFeIr Intermetallic Nanowires Prepared through a Silica-Protection Strategy for the Oxygen Reduction Reaction. *Angewandte Chemie*, **2022**, 134,	3.6	2
18	Interfacial wettability and mass transfer characterizations for gas□quid□olid triple-phase catalysis. *Exploration*,20210046		2
17	Electronically Activated Fe5C2 via N-Doped Carbon to Enhance Photothermal Syngas Conversion to Light Olefins. *ACS Catalysis*,5316-5326	13.1	2
16	Catalysts: □aked□Magnetically Recyclable Mesoporous Au□Fe2O3 Nanocrystal Clusters: A Highly Integrated Catalyst System (Adv. Funct. Mater. 9/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	1
15	Photocatalytic alkane production from fatty acid decarboxylation over hydrogenated catalyst. *Science Bulletin*, **2020**, 65, 870-871	10.6	1
14	Photocatalysts: Layered-Double-Hydroxide Nanosheets as Efficient Visible-Light-Driven Photocatalysts for Dinitrogen Fixation (Adv. Mater. 42/2017). *Advanced Materials*, **2017**, 29,	24	1
13	Vertical Graphene Array for Efficient Electrocatalytic Reduction of Oxygen to Hydrogen Peroxide. *Nano Energy*, **2022**, 107046	17.1	1
12	A Rhenium Single-Atom Catalyst for the Electrocatalytic Oxygen Reduction Reaction.. *ChemPlusChem*, **2021**, 86, 1635-1639	2.8	1
11	Flux-Assisted Low Temperature Synthesis of SnNb2O6 Nanoplates with Enhanced Visible Light Driven Photocatalytic H2-Production. *Journal of Physical Chemistry C*, **2021**, 125, 23219-23225	3.8	1
10	In Situ Detection of Low Amounts of Ammonia. *Trends in Chemistry*, **2021**, 3, 339-341	14.8	1
9	Emerging Solar Photocatalysis. *Solar Rrl*, **2021**, 5, 2100252	7.1	1
8	Artificial photocatalytic nitrogen fixation: Where are we now? Where is its future?. *Molecular Catalysis*, **2022**, 518, 112107	3.3	0
7	Oxygen Reduction Reaction: Electronically Modified Atomic Sites Within a Multicomponent Co/Cu Composite for Efficient Oxygen Electroreduction (Adv. Energy Mater. 17/2021). *Advanced Energy Materials*, **2021**, 11, 2170067	21.8	0
6	Band structure engineering and defect control of Ta3N5 with enhanced photoelectrochemical water oxidation performance. *Science Bulletin*, **2021**, 66, 651-652	10.6	0

5	Photothermal-Assisted Triphase Photocatalysis Over a Multifunctional Bilayer Paper. *Angewandte Chemie*, **2021**, 133, 23145	3.6	0
4	A Photochemical Route towards Metal Sulfide Nanosheets from Layered Metal Thiolate Complexes. *Angewandte Chemie*, **2019**, 131, 8531	3.6	
3	Nanoparticles: Spontaneous Organization of Inorganic Nanoparticles into Nanovesicles Triggered by UV Light (Adv. Mater. 32/2014). *Advanced Materials*, **2014**, 26, 5731-5731	24	
2	Foreword to the Special Issue on Photocatalysis. *Transactions of Tianjin University*, **2021**, 27, 279-279	2.9	
1	R□ktitelbild: Controllable Synthesis of Ultrathin Transition-Metal Hydroxide Nanosheets and their Extended Composite Nanostructures for Enhanced Catalytic Activity in the Heck Reaction (Angew. Chem. 6/2016). *Angewandte Chemie*, **2016**, 128, 2316-2316	3.6	