

# Bin Liu

## List of Publications by Citations

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253  
papers

26,945  
citations

77  
h-index

160  
g-index

273  
ext. papers

32,054  
ext. citations

12.8  
avg, IF

7.71  
L-index

#	Paper	IF	Citations
253	Growth of oriented single-crystalline rutile TiO <sub>2</sub> nanorods on transparent conducting substrates for dye-sensitized solar cells. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 3985-90	16.4	2070
252	Bioprobes based on AIE fluorogens. <i>Accounts of Chemical Research</i> , <b>2013</b> , 46, 2441-53	24.3	1406
251	Hydrothermal synthesis of ZnO nanorods in the diameter regime of 50 nm. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 4430-1	16.4	1191
250	Atomically dispersed Ni(i) as the active site for electrochemical CO <sub>2</sub> reduction. <i>Nature Energy</i> , <b>2018</b> , 3, 140-147	62.3	1046
249	Identification of catalytic sites for oxygen reduction and oxygen evolution in N-doped graphene materials: Development of highly efficient metal-free bifunctional electrocatalyst. <i>Science Advances</i> , <b>2016</b> , 2, e1501122	14.3	884
248	Mesoscale organization of CuO nanoribbons: formation of "dandelions". <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 8124-5	16.4	771
247	Symmetric and asymmetric Ostwald ripening in the fabrication of homogeneous core-shell semiconductors. <i>Small</i> , <b>2005</b> , 1, 566-71	11	563
246	Single Cobalt Atoms Anchored on Porous N-Doped Graphene with Dual Reaction Sites for Efficient Fenton-like Catalysis. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 12469-12475	16.4	551
245	In Operando Identification of Geometrical-Site-Dependent Water Oxidation Activity of Spinel Co <sub>3</sub> O <sub>4</sub> . <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 36-9	16.4	543
244	Recent advances in heterogeneous selective oxidation catalysis for sustainable chemistry. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 3480-524	58.5	516
243	Fabrication of ZnO "dandelions" via a modified Kirkendall process. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 16744-6	16.4	512
242	Carbon nanotube catalysts: recent advances in synthesis, characterization and applications. <i>Chemical Society Reviews</i> , <b>2015</b> , 44, 3295-346	58.5	477
241	A fully integrated nanosystem of semiconductor nanowires for direct solar water splitting. <i>Nano Letters</i> , <b>2013</b> , 13, 2989-92	11.5	453
240	Layer-by-layer self-assembly of CdS quantum dots/graphene nanosheets hybrid films for photoelectrochemical and photocatalytic applications. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 1559-69	16.4	382
239	A p-type Ti(IV)-based metal-organic framework with visible-light photo-response. <i>Chemical Communications</i> , <b>2014</b> , 50, 3786-8	5.8	375
238	Hierarchical Ni-Mo-S nanosheets on carbon fiber cloth: A flexible electrode for efficient hydrogen generation in neutral electrolyte. <i>Science Advances</i> , <b>2015</b> , 1, e1500259	14.3	356
237	Photoelectrochemical properties of TiO <sub>2</sub> nanowire arrays: a study of the dependence on length and atomic layer deposition coating. <i>ACS Nano</i> , <b>2012</b> , 6, 5060-9	16.7	353

236	Recent advances in methanation catalysts for the production of synthetic natural gas. <i>RSC Advances</i> , <b>2015</b> , 5, 22759-22776	3.7	341
235	Ni <sup>3+</sup> -Induced Formation of Active NiOOH on the Spinel Ni <sub>2</sub> O <sub>3</sub> Oxide Surface for Efficient Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500091	21.8	310
234	Nickel-Cobalt Diselenide 3D Mesoporous Nanosheet Networks Supported on Ni Foam: An All-pH Highly Efficient Integrated Electrocatalyst for Hydrogen Evolution. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606524	24	301
233	Large-scale synthesis of transition-metal-doped TiO <sub>2</sub> nanowires with controllable overpotential. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 9995-8	16.4	289
232	Use of Platinum as the Counter Electrode to Study the Activity of Nonprecious Metal Catalysts for the Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1070-1075	20.1	270
231	Room temperature solution synthesis of monodispersed single-crystalline ZnO nanorods and derived hierarchical nanostructures. <i>Langmuir</i> , <b>2004</b> , 20, 4196-204	4	263
230	Graphdiyne: A Metal-Free Material as Hole Transfer Layer To Fabricate Quantum Dot-Sensitized Photocathodes for Hydrogen Production. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 3954-7	16.4	257
229	Layer-by-layer assembly of versatile nanoarchitectures with diverse dimensionality: a new perspective for rational construction of multilayer assemblies. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 3088-121	58.5	244
228	A flexible high-performance oxygen evolution electrode with three-dimensional NiCo <sub>2</sub> O <sub>4</sub> core-shell nanowires. <i>Nano Energy</i> , <b>2015</b> , 11, 333-340	17.1	241
227	Identification of Surface Reactivity Descriptor for Transition Metal Oxides in Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 9978-85	16.4	232
226	Doping high-surface-area mesoporous TiO <sub>2</sub> microspheres with carbonate for visible light hydrogen production. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2592	35.4	232
225	Single-Atom Catalysis toward Efficient CO Conversion to CO and Formate Products. <i>Accounts of Chemical Research</i> , <b>2019</b> , 52, 656-664	24.3	217
224	Formation of porous SnO <sub>2</sub> microboxes via selective leaching for highly reversible lithium storage. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1013	35.4	210
223	Metal-cluster-decorated TiO <sub>2</sub> nanotube arrays: a composite heterostructure toward versatile photocatalytic and photoelectrochemical applications. <i>Small</i> , <b>2015</b> , 11, 554-67	11	209
222	Transferable and flexible nanorod-assembled TiO <sub>2</sub> cloths for dye-sensitized solar cells, photodetectors, and photocatalysts. <i>ACS Nano</i> , <b>2011</b> , 5, 8412-9	16.7	193
221	NiFe Hydroxide Lattice Tensile Strain: Enhancement of Adsorption of Oxygenated Intermediates for Efficient Water Oxidation Catalysis. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 736-740	16.4	188
220	Elucidating the Electrocatalytic CO Reduction Reaction over a Model Single-Atom Nickel Catalyst. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 798-803	16.4	187
219	One-dimensional hybrid nanostructures for heterogeneous photocatalysis and photoelectrocatalysis. <i>Small</i> , <b>2015</b> , 11, 2115-31	11	183

218	Nitrogen-doped cobalt phosphate@nanocarbon hybrids for efficient electrocatalytic oxygen reduction. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2563-2570	35.4	183
217	Optimization of high-yield biological synthesis of single-crystalline gold nanoplates. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 15256-63	3.4	182
216	Carbon Nanotubes Supported Mesoporous Mesocrystals of Anatase TiO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2008</b> , 20, 2711-2718	9.6	180
215	Identifying Active Sites of Nitrogen-Doped Carbon Materials for the CO <sub>2</sub> Reduction Reaction. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800499	15.6	179
214	Enabling Direct H <sub>2</sub> O <sub>2</sub> Production in Acidic Media through Rational Design of Transition Metal Single Atom Catalyst. <i>Chem</i> , <b>2020</b> , 6, 658-674	16.2	176
213	In Situ/Operando Techniques for Characterization of Single-Atom Catalysts. <i>ACS Catalysis</i> , <b>2019</b> , 9, 2521-2531	15.5	173
212	Breaking Long-Range Order in Iridium Oxide by Alkali Ion for Efficient Water Oxidation. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 3014-3023	16.4	172
211	Iron Vacancies Induced Bifunctionality in Ultrathin Feoxyhyte Nanosheets for Overall Water Splitting. <i>Advanced Materials</i> , <b>2018</b> , 30, e1803144	24	160
210	TiO <sub>2</sub> -B/anatase core-shell heterojunction nanowires for photocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 4444-50	9.5	149
209	Stable quantum dot photoelectrolysis cell for unassisted visible light solar water splitting. <i>ACS Nano</i> , <b>2014</b> , 8, 10403-13	16.7	147
208	Layered Structure Causes Bulk NiFe Layered Double Hydroxide Unstable in Alkaline Oxygen Evolution Reaction. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903909	24	142
207	A new surfactant-introduction strategy for separating the pure single-phase of metal-organic frameworks. <i>Chemical Communications</i> , <b>2015</b> , 51, 9479-82	5.8	132
206	Oriented single crystalline titanium dioxide nanowires. <i>Nanotechnology</i> , <b>2008</b> , 19, 505604	3.4	129
205	Bridging the Gap: Electron Relay and Plasmonic Sensitization of Metal Nanocrystals for Metal Clusters. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 10735-44	16.4	120
204	Semiconductor rings fabricated by self-assembly of nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 18262-8	16.4	118
203	A General Method to Probe Oxygen Evolution Intermediates at Operating Conditions. <i>Joule</i> , <b>2019</b> , 3, 1498-1509	27.8	115
202	Supported Noble-Metal Single Atoms for Heterogeneous Catalysis. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902031	23.1	115
201	The nonmetal modulation of composition and morphology of g-C <sub>3</sub> N <sub>4</sub> -based photocatalysts. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 269, 118828	21.8	112

200	One-pot synthesis of ordered mesoporous Ni <sub>4</sub> Al catalysts for CO methanation. <i>Journal of Catalysis</i> , <b>2015</b> , 326, 127-138	7.3	110
199	An Earth-Abundant Catalyst-Based Seawater Photoelectrolysis System with 17.9% Solar-to-Hydrogen Efficiency. <i>Advanced Materials</i> , <b>2018</b> , 30, e1707261	24	110
198	Salt-Assisted Deposition of SnO <sub>2</sub> on $\beta$ -MoO <sub>3</sub> Nanorods and Fabrication of Polycrystalline SnO <sub>2</sub> Nanotubes. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 5867-5874	3.4	109
197	Hierarchical $\beta$ -MnO <sub>2</sub> nanowires@Ni <sub>1-x</sub> Mn <sub>x</sub> O <sub>y</sub> nanoflakes core-shell nanostructures for supercapacitors. <i>Small</i> , <b>2014</b> , 10, 3181-6	11	107
196	Unraveling Oxygen Evolution Reaction on Carbon-Based Electrocatalysts: Effect of Oxygen Doping on Adsorption of Oxygenated Intermediates. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 294-300	20.1	100
195	Tuning chemical bonding of MnO <sub>2</sub> through transition-metal doping for enhanced CO oxidation. <i>Journal of Catalysis</i> , <b>2016</b> , 341, 82-90	7.3	100
194	Amorphous versus Crystalline in Water Oxidation Catalysis: A Case Study of NiFe Alloy. <i>Nano Letters</i> , <b>2020</b> , 20, 4278-4285	11.5	99
193	In Situ Spectroscopic Identification of $\mu$ -OO Bridging on Spinel CoO Water Oxidation Electrocatalyst. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 4847-4853	6.4	99
192	ZIF-8 derived carbon (C-ZIF) as a bifunctional electron acceptor and HER cocatalyst for g-C <sub>3</sub> N <sub>4</sub> : construction of a metal-free, all carbon-based photocatalytic system for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 3822-3827	13	99
191	Atomically dispersed antimony on carbon nitride for the artificial photosynthesis of hydrogen peroxide. <i>Nature Catalysis</i> , <b>2021</b> , 4, 374-384	36.5	96
190	Hollow ZnO Microspheres with Complex Nanobuilding Units. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 5824-5826	9.6	93
189	Nanowire Photoelectrochemistry. <i>Chemical Reviews</i> , <b>2019</b> , 119, 9221-9259	68.1	92
188	Coordination engineering of iridium nanocluster bifunctional electrocatalyst for highly efficient and pH-universal overall water splitting. <i>Nature Communications</i> , <b>2020</b> , 11, 4246	17.4	92
187	In Situ/Operando Characterization Techniques to Probe the Electrochemical Reactions for Energy Conversion. <i>Small Methods</i> , <b>2018</b> , 2, 1700395	12.8	90
186	Spatially branched hierarchical ZnO nanorod-TiO <sub>2</sub> nanotube array heterostructures for versatile photocatalytic and photoelectrocatalytic applications: towards intimate integration of 1D-1D hybrid nanostructures. <i>Nanoscale</i> , <b>2014</b> , 6, 14950-61	7.7	90
185	Electron transport and recombination in dye-sensitized solar cells made from single-crystal rutile TiO <sub>2</sub> nanowires. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 9648-52	3.6	88
184	Revealing Energetics of Surface Oxygen Redox from Kinetic Fingerprint in Oxygen Electrocatalysis. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 13803-13811	16.4	87
183	Microenvironment modulation of single-atom catalysts and their roles in electrochemical energy conversion. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	86

182	Achieving stable and efficient water oxidation by incorporating NiFe layered double hydroxide nanoparticles into aligned carbon nanotubes. <i>Nanoscale Horizons</i> , <b>2016</b> , 1, 156-160	10.8	84
181	Selective photoelectrochemical oxidation of glycerol to high value-added dihydroxyacetone. <i>Nature Communications</i> , <b>2019</b> , 10, 1779	17.4	83
180	Self-assembly of hierarchically ordered CdS quantum dots@TiO <sub>2</sub> nanotube array heterostructures as efficient visible light photocatalysts for photoredox applications. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 12229	13	83
179	Electrochemical fabrication of ZnO-CdSe core-shell nanorod arrays for efficient photoelectrochemical water splitting. <i>Nanoscale</i> , <b>2013</b> , 5, 11118-24	7.7	82
178	Direct and selective hydrogenation of CO <sub>2</sub> to ethylene and propene by bifunctional catalysts. <i>Catalysis Science and Technology</i> , <b>2017</b> , 7, 5602-5607	5.5	81
177	Identification of the Electronic and Structural Dynamics of Catalytic Centers in Single-Fe-Atom Material. <i>Chem</i> , <b>2020</b> , 6, 3440-3454	16.2	79
176	Electrochemical construction of hierarchically ordered CdSe-sensitized TiO <sub>2</sub> nanotube arrays: towards versatile photoelectrochemical water splitting and photoredox applications. <i>Nanoscale</i> , <b>2014</b> , 6, 6727-37	7.7	77
175	A solution-processed, mercaptoacetic acid-engineered CdSe quantum dot photocathode for efficient hydrogen production under visible light irradiation. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1443-1449	35.4	76
174	Hierarchical carbon@Ni <sub>3</sub> S <sub>2</sub> @MoS <sub>2</sub> double core-shell nanorods for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 1319-1325	13	75
173	Photoelectrochemical CO <sub>2</sub> reduction to adjustable syngas on grain-boundary-mediated a-Si/TiO <sub>2</sub> /Au photocathodes with low onset potentials. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 923-928	35.4	74
172	Iridium Oxide-Assisted Plasmon-Induced Hot Carriers: Improvement on Kinetics and Thermodynamics of Hot Carriers. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501339	21.8	74
171	Metal-Organic Frameworks as Promising Photosensitizers for Photoelectrochemical Water Splitting. <i>Advanced Science</i> , <b>2016</b> , 3, 1500243	13.6	74
170	Size Effects of Platinum Nanoparticles in the Photocatalytic Hydrogen Production Over 3D Mesoporous Networks of CdS and Pt Nanojunctions. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8062-8071	15.6	74
169	Coordination Engineering of Single-Atom Catalysts for the Oxygen Reduction Reaction: A Review. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002473	21.8	74
168	Amorphous/Crystalline Heterostructured Cobalt-Vanadium-Iron (Oxy)hydroxides for Highly Efficient Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2002215	21.8	73
167	One-Step Hydrothermal Tailoring of NiCo <sub>2</sub> S <sub>4</sub> Nanostructures on Conducting Oxide Substrates as an Efficient Counter Electrode in Dye-Sensitized Solar Cells. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500384	4.6	72
166	Cesium carbonate functionalized graphene quantum dots as stable electron-selective layer for improvement of inverted polymer solar cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 1092-9	9.5	70
165	Direct growth of enclosed ZnO nanotubes. <i>Nano Research</i> , <b>2009</b> , 2, 201-209	10	69

164	Adaptive Bifunctional Electrocatalyst of Amorphous CoFe Oxide @ 2D Black Phosphorus for Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 21106-21113	16.4	69
163	In situ etching-induced self-assembly of metal cluster decorated one-dimensional semiconductors for solar-powered water splitting: unraveling cooperative synergy by photoelectrochemical investigations. <i>Nanoscale</i> , <b>2017</b> , 9, 17118-17132	7.7	68
162	Fabrication of 3D mesoporous networks of assembled CoO nanoparticles for efficient photocatalytic reduction of aqueous Cr(VI). <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 221, 635-644	21.8	68
161	Highly efficient and durable MoNiNC catalyst for hydrogen evolution reaction. <i>Nano Energy</i> , <b>2017</b> , 37, 1-6	17.1	66
160	Metallic nanocatalysis: an accelerating seamless integration with nanotechnology. <i>Small</i> , <b>2015</b> , 11, 268-891		66
159	Self-assembly of aligned rutile@anatase TiO <sub>2</sub> nanorod@CdS quantum dots ternary core-shell heterostructure: cascade electron transfer by interfacial design. <i>Materials Horizons</i> , <b>2014</b> , 1, 259-263	14.4	66
158	Enhancement of photocatalytic properties of TiO <sub>2</sub> nanoparticles doped with CeO <sub>2</sub> and supported on SiO <sub>2</sub> for phenol degradation. <i>Applied Surface Science</i> , <b>2015</b> , 331, 17-26	6.7	63
157	Sulfur-Mediated Self-Templating Synthesis of Tapered C-PAN/g-C <sub>3</sub> N <sub>4</sub> Composite Nanotubes toward Efficient Photocatalytic H <sub>2</sub> Evolution. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 969-975	20.1	62
156	All inorganic semiconductor nanowire mesh for direct solar water splitting. <i>ACS Nano</i> , <b>2014</b> , 8, 11739-4416.7	16.7	62
155	Anatase TiO <sub>2</sub> films with reactive {001} facets on transparent conductive substrate. <i>Chemical Communications</i> , <b>2011</b> , 47, 9507-9	5.8	62
154	Plasmon-Dictated Photo-Electrochemical Water Splitting for Solar-to-Chemical Energy Conversion: Current Status and Future Perspectives. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1701098	4.6	59
153	Self-assembly of a Ag nanoparticle-modified and graphene-wrapped TiO <sub>2</sub> nanobelt ternary heterostructure: surface charge tuning toward efficient photocatalysis. <i>Nanoscale</i> , <b>2014</b> , 6, 11293-302	7.7	59
152	Graphene quantum dots-incorporated cathode buffer for improvement of inverted polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2013</b> , 117, 214-218	6.4	59
151	In-situ phase transition of WO <sub>3</sub> boosting electron and hydrogen transfer for enhancing hydrogen evolution on Pt. <i>Nano Energy</i> , <b>2020</b> , 71, 104653	17.1	58
150	Unique role of Mössbauer spectroscopy in assessing structural features of heterogeneous catalysts. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 224, 518-532	21.8	58
149	Atomically Dispersed Nickel(I) on an Alloy-Encapsulated Nitrogen-Doped Carbon Nanotube Array for High-Performance Electrochemical CO Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 12055-12061	16.4	56
148	Anchoring Mn <sub>3</sub> O <sub>4</sub> Nanoparticles on Oxygen Functionalized Carbon Nanotubes as Bifunctional Catalyst for Rechargeable Zinc-Air Battery. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 963-969	6.1	55
147	Revisiting one-dimensional TiO <sub>2</sub> based hybrid heterostructures for heterogeneous photocatalysis: a critical review. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 231-250	7.8	55

146	Ordered alignment of CdS nanocrystals on MWCNTs without surface modification. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 23783-6	3.4	53
145	Van der Waals heterojunction for selective visible-light-driven photocatalytic CO <sub>2</sub> reduction. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 284, 119733	21.8	53
144	Multilayer TiO <sub>2</sub> nanorod cloth/nanorod array electrode for dye-sensitized solar cells and self-powered UV detectors. <i>Nanoscale</i> , <b>2012</b> , 4, 3350-8	7.7	52
143	Atomically-precise dopant-controlled single cluster catalysis for electrochemical nitrogen reduction. <i>Nature Communications</i> , <b>2020</b> , 11, 4389	17.4	52
142	Layer-by-layer assembly of nitrogen-doped graphene quantum dots monolayer decorated one-dimensional semiconductor nanoarchitectures for solar-driven water splitting. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 16383-16393	13	51
141	In situ growth of single-layered Ni(OH) <sub>2</sub> nanosheets on a carbon cloth for highly efficient electrocatalytic oxidation of urea. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 13867-13873	13	51
140	Rational design of carbon-based metal-free catalysts for electrochemical carbon dioxide reduction: A review. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 36, 95-105	12	51
139	Orbital coupling of hetero-diatomic nickel-iron site for bifunctional electrocatalysis of CO reduction and oxygen evolution. <i>Nature Communications</i> , <b>2021</b> , 12, 4088	17.4	51
138	Thermodynamically driven one-dimensional evolution of anatase TiO <sub>2</sub> nanorods: one-step hydrothermal synthesis for emerging intrinsic superiority of dimensionality. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 15310-8	16.4	50
137	Bifunctional N-CoSe <sub>2</sub> /3D-MXene as Highly Efficient and Durable Cathode for Rechargeable Zn-Air Battery <b>2019</b> , 1, 432-439		49
136	Atomically Dispersed Fe-Heteroatom (N, S) Bridge Sites Anchored on Carbon Nanosheets for Promoting Oxygen Reduction Reaction. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 379-386	20.1	49
135	High-Performance NiBe Redox Catalysts for Selective CH <sub>4</sub> to Syngas Conversion via Chemical Looping. <i>ACS Catalysis</i> , <b>2018</b> , 8, 1748-1756	13.1	47
134	Light-Induced In Situ Transformation of Metal Clusters to Metal Nanocrystals for Photocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 28105-9	9.5	47
133	Progress of Electrochemical Hydrogen Peroxide Synthesis over Single Atom Catalysts <b>2020</b> , 2, 1008-1024		46
132	Highly Concentrated, Ultrathin Nickel Hydroxide Nanosheet Ink for Wearable Energy Storage Devices. <i>Advanced Materials</i> , <b>2017</b> , 29, 1703455	24	46
131	NiFe Hydroxide Lattice Tensile Strain: Enhancement of Adsorption of Oxygenated Intermediates for Efficient Water Oxidation Catalysis. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 746-750	3.6	45
130	Electrostatic self-assembly of a AgI/Bi <sub>2</sub> Ga <sub>4</sub> O <sub>9</sub> p-n junction photocatalyst for boosting superoxide radical generation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 4083-4090	13	44
129	Controllable synthesis of NiMoC <sub>1-x</sub> and NiMo <sub>2</sub> C nanowires for highly selective CO <sub>2</sub> reduction to CO. <i>Catalysis Communications</i> , <b>2016</b> , 84, 147-150	3.2	44



128	Tuning reactivity of Fischer-Tropsch synthesis by regulating TiO overlayer over Ru/TiO nanocatalysts. <i>Nature Communications</i> , <b>2020</b> , 11, 3185	17.4	43
127	Ultrasmall Transition Metal Carbide Nanoparticles Encapsulated in N, S-Doped Graphene for All-pH Hydrogen Evolution. <i>Small Methods</i> , <b>2018</b> , 2, 1700353	12.8	43
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