

Xiao-Qing Huang

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

225
papers

20,537
citations

70
h-index

139
g-index

240
ext. papers

25,066
ext. citations

13.5
avg, IF

7.5
L-index

#	Paper	IF	Citations
225	ELECTROCHEMISTRY. High-performance transition metal-doped PtNi octahedra for oxygen reduction reaction. <i>Science</i> , 2015 , 348, 1230-4	33.3	1307
224	Freestanding palladium nanosheets with plasmonic and catalytic properties. <i>Nature Nanotechnology</i> , 2011 , 6, 28-32	28.7	1219
223	Holey graphene frameworks for highly efficient capacitive energy storage. <i>Nature Communications</i> , 2014 , 5, 4554	17.4	1002
222	Biaxially strained PtPb/Pt core/shell nanoplate boosts oxygen reduction catalysis. <i>Science</i> , 2016 , 354, 1410-1414	33.3	950
221	Precise tuning in platinum-nickel/nickel sulfide interface nanowires for synergistic hydrogen evolution catalysis. <i>Nature Communications</i> , 2017 , 8, 14580	17.4	503
220	Surface engineering of hierarchical platinum-cobalt nanowires for efficient electrocatalysis. <i>Nature Communications</i> , 2016 , 7, 11850	17.4	494
219	Amine-assisted synthesis of concave polyhedral platinum nanocrystals having {411} high-index facets. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4718-21	16.4	453
218	Interfacial electronic effects control the reaction selectivity of platinum catalysts. <i>Nature Materials</i> , 2016 , 15, 564-9	27	413
217	Stabilization of high-performance oxygen reduction reaction Pt electrocatalyst supported on reduced graphene oxide/carbon black composite. <i>Journal of the American Chemical Society</i> , 2012 , 134, 12326-9	16.4	400
216	Nanoscale Trimetallic Metal-Organic Frameworks Enable Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1888-1892	16.4	398
215	Core-shell Pd@Au nanoplates as theranostic agents for in-vivo photoacoustic imaging, CT imaging, and photothermal therapy. <i>Advanced Materials</i> , 2014 , 26, 8210-6	24	330
214	Highly Efficient and Selective Generation of Ammonia and Hydrogen on a Graphdiyne-Based Catalyst. <i>Journal of the American Chemical Society</i> , 2019 , 141, 10677-10683	16.4	309
213	Ultrathin Lamellar Ir Superstructure as Highly Efficient Oxygen Evolution Electrocatalyst in Broad pH Range. <i>Nano Letters</i> , 2016 , 16, 4424-30	11.5	267
212	Efficient oxygen reduction catalysis by subnanometer Pt alloy nanowires. <i>Science Advances</i> , 2017 , 3, e1601705	17.05	252
211	Phase and Interface Engineering of Platinum-Nickel Nanowires for Efficient Electrochemical Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 12859-63	16.4	247
210	A General Method for Multimetallic Platinum Alloy Nanowires as Highly Active and Stable Oxygen Reduction Catalysts. <i>Advanced Materials</i> , 2015 , 27, 7204-12	24	246
209	Simplifying the creation of hollow metallic nanostructures: one-pot synthesis of hollow palladium/platinum single-crystalline nanocubes. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4808-12	16.4	244

208	One-pot, high-yield synthesis of 5-fold twinned Pd nanowires and nanorods. <i>Journal of the American Chemical Society</i> , 2009 , 131, 4602-3	16.4	243
207	Metallic nanostructures with low dimensionality for electrochemical water splitting. <i>Chemical Society Reviews</i> , 2020 , 49, 3072-3106	58.5	238
206	Highly Active and Selective Hydrogenation of CO to Ethanol by Ordered Pd-Cu Nanoparticles. <i>Journal of the American Chemical Society</i> , 2017 , 139, 6827-6830	16.4	236
205	General Formation of Monodisperse IrM (M = Ni, Co, Fe) Bimetallic Nanoclusters as Bifunctional Electrocatalysts for Acidic Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017 , 27, 1700886	15.6	230
204	Large-Scale, Bottom-Up Synthesis of Binary Metal-Organic Framework Nanosheets for Efficient Water Oxidation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 7051-7056	16.4	229
203	Ordered PdCu-Based Nanoparticles as Bifunctional Oxygen-Reduction and Ethanol-Oxidation Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 9030-5	16.4	229
202	Controlled formation of concave tetrahedral/trigonal bipyramidal palladium nanocrystals. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13916-7	16.4	222
201	Enhancing the photothermal stability of plasmonic metal nanoplates by a core-shell architecture. <i>Advanced Materials</i> , 2011 , 23, 3420-5	24	215
200	A facile strategy to Pt ₃ Ni nanocrystals with highly porous features as an enhanced oxygen reduction reaction catalyst. <i>Advanced Materials</i> , 2013 , 25, 2974-9	24	211
199	Synthesis of PtPd bimetal nanocrystals with controllable shape, composition, and their tunable catalytic properties. <i>Nano Letters</i> , 2012 , 12, 4265-70	11.5	207
198	Screw Thread-Like Platinum-Copper Nanowires Bounded with High-Index Facets for Efficient Electrocatalysis. <i>Nano Letters</i> , 2016 , 16, 5037-43	11.5	187
197	An assembly route to inorganic catalytic nanoreactors containing sub-10-nm gold nanoparticles with anti-aggregation properties. <i>Small</i> , 2009 , 5, 361-5	11	185
196	One-step strategy to graphene/Ni(OH) ₂ composite hydrogels as advanced three-dimensional supercapacitor electrode materials. <i>Nano Research</i> , 2013 , 6, 65-76	10	182
195	Cobalt-molybdenum nanosheet arrays as highly efficient and stable earth-abundant electrocatalysts for overall water splitting. <i>Nano Energy</i> , 2018 , 45, 448-455	17.1	181
194	Trimetallic Oxyhydroxide Coralloids for Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 4502-4506	16.4	175
193	Biomimetic synthesis of an ultrathin platinum nanowire network with a high twin density for enhanced electrocatalytic activity and durability. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 12577-81	16.4	164
192	Channel-Rich RuCu Nanosheets for pH-Universal Overall Water Splitting Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 13983-13988	16.4	162
191	Oxygen Vacancies in Amorphous InO Nanoribbons Enhance CO Adsorption and Activation for CO Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 5609-5613	16.4	162

190	PtPb/PtNi Intermetallic Core/Atomic Layer Shell Octahedra for Efficient Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9576-9582	16.4	158
189	Morphology and Phase Controlled Construction of Pt-Ni Nanostructures for Efficient Electrocatalysis. <i>Nano Letters</i> , 2016 , 16, 2762-7	11.5	150
188	Crystalline Control of {111} Bounded Pt ₃ Cu Nanocrystals: Multiply-Twinned Pt ₃ Cu Icosahedra with Enhanced Electrocatalytic Properties. <i>ACS Nano</i> , 2015 , 9, 7634-40	16.7	148
187	A rational design of carbon-supported dispersive Pt-based octahedra as efficient oxygen reduction reaction catalysts. <i>Energy and Environmental Science</i> , 2014 , 7, 2957-2962	35.4	147
186	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO ₂ Nanowire Arrays by Nitrogen Implantation. <i>Nano Letters</i> , 2015 , 15, 4692-8	11.5	138
185	Palladium-based nanostructures with highly porous features and perpendicular pore channels as enhanced organic catalysts. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2520-4	16.4	135
184	Plasmonic and catalytic AuPd nanowheels for the efficient conversion of light into chemical energy. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6063-7	16.4	135
183	Ultrathin PtNiM (M = Rh, Os, and Ir) Nanowires as Efficient Fuel Oxidation Electrocatalytic Materials. <i>Advanced Materials</i> , 2019 , 31, e1805833	24	132
182	Amorphization activated ruthenium-tellurium nanorods for efficient water splitting. <i>Nature Communications</i> , 2019 , 10, 5692	17.4	130
181	Opportunities and Challenges of Interface Engineering in Bimetallic Nanostructure for Enhanced Electrocatalysis. <i>Advanced Functional Materials</i> , 2019 , 29, 1806419	15.6	129
180	Etching growth under surface confinement: an effective strategy to prepare mesocrystalline Pd nanocorolla. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15946-9	16.4	127
179	Co O /Fe Co P Interface Nanowire for Enhancing Water Oxidation Catalysis at High Current Density. <i>Advanced Materials</i> , 2018 , 30, e1803551	24	115
178	MoS ₂ Nanosheet Assembling Superstructure with a Three-Dimensional Ion Accessible Site: A New Class of Bifunctional Materials for Batteries and Electrocatalysis. <i>Chemistry of Materials</i> , 2016 , 28, 2074-2080	20.6	114
177	Double Perovskite LaFe Ni O Nanorods Enable Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 2316-2320	16.4	112
176	Synthesis of magnetic, fluorescent and mesoporous core-shell-structured nanoparticles for imaging, targeting and photodynamic therapy. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11244		98
175	Nanoscale Trimetallic Metal-Organic Frameworks Enable Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie</i> , 2018 , 130, 1906-1910	3.6	97
174	Rare-earth-containing perovskite nanomaterials: design, synthesis, properties and applications. <i>Chemical Society Reviews</i> , 2020 , 49, 1109-1143	58.5	96
173	Enhancing Oxygen Evolution Electrocatalysis via the Intimate Hydroxide-Oxide Interface. <i>ACS Nano</i> , 2018 , 12, 6245-6251	16.7	96

172	High density catalytic hot spots in ultrafine wavy nanowires. <i>Nano Letters</i> , 2014 , 14, 3887-94	11.5	93
171	Superior Bifunctional Liquid Fuel Oxidation and Oxygen Reduction Electrocatalysis Enabled by PtNiPd Core-Shell Nanowires. <i>Advanced Materials</i> , 2017 , 29, 1603774	24	90
170	Phase and structure engineering of copper tin heterostructures for efficient electrochemical carbon dioxide reduction. <i>Nature Communications</i> , 2018 , 9, 4933	17.4	90
169	Fast site-to-site electron transfer of high-entropy alloy nanocatalyst driving redox electrocatalysis. <i>Nature Communications</i> , 2020 , 11, 5437	17.4	86
168	Subnanometer PtRh Nanowire with Alleviated Poisoning Effect and Enhanced C-C Bond Cleavage for Ethanol Oxidation Electrocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 6607-6612	13.1	85
167	3D Platinum-Lead Nanowire Networks as Highly Efficient Ethylene Glycol Oxidation Electrocatalysts. <i>Small</i> , 2016 , 12, 4464-70	11	84
166	Hierarchical Pt/PtxPb Core/Shell Nanowires as Efficient Catalysts for Electrooxidation of Liquid Fuels. <i>Chemistry of Materials</i> , 2016 , 28, 4447-4452	9.6	84
165	Ruthenium-nickel sandwiched nanoplates for efficient water splitting electrocatalysis. <i>Nano Energy</i> , 2018 , 47, 1-7	17.1	82
164	Multicomponent Pt-Based Zigzag Nanowires as Selectivity Controllers for Selective Hydrogenation Reactions. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8384-8387	16.4	82
163	Three-Dimensional Pd3Pb Nanosheet Assemblies: High-Performance Non-Pt Electrocatalysts for Bifunctional Fuel Cell Reactions. <i>ACS Catalysis</i> , 2018 , 8, 4569-4575	13.1	78
162	Trimetallic PtSnRh Wavy Nanowires as Efficient Nanoelectrocatalysts for Alcohol Electrooxidation. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 15061-7	9.5	75
161	Synthesis of Stable Shape-Controlled Catalytically Active β -Palladium Hydride. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15672-5	16.4	75
160	Adsorbing and Activating N ₂ on Heterogeneous Au@Fe ₃ O ₄ Nanoparticles for N ₂ Fixation. <i>Advanced Functional Materials</i> , 2020 , 30, 1906579	15.6	75
159	Superior overall water splitting electrocatalysis in acidic conditions enabled by bimetallic Ir-Ag nanotubes. <i>Nano Energy</i> , 2019 , 56, 330-337	17.1	74
158	Fully Tensile Strained PdPb/Pd Tetragonal Nanosheets Enhance Oxygen Reduction Catalysis. <i>Nano Letters</i> , 2019 , 19, 1336-1342	11.5	74
157	A general approach to synthesise ultrathin NiM (M = Fe, Co, Mn) hydroxide nanosheets as high-performance low-cost electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 7769-7775	13	72
156	Surface-modulated palladium-nickel icosahedra as high-performance non-platinum oxygen reduction electrocatalysts. <i>Science Advances</i> , 2018 , 4, eaap8817	14.3	72
155	Solvent-Mediated Shape Tuning of Well-Defined Rhodium Nanocrystals for Efficient Electrochemical Water Splitting. <i>Chemistry of Materials</i> , 2017 , 29, 5009-5015	9.6	68

154	Seedless Growth of Palladium Nanocrystals with Tunable Structures: From Tetrahedra to Nanosheets. <i>Nano Letters</i> , 2015 , 15, 7519-25	11.5	68
153	Crystal-Phase-Engineered PdCu Electrocatalyst for Enhanced Ammonia Synthesis. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 2649-2653	16.4	68
152	Phase and Composition Tuning of 1D Platinum-Nickel Nanostructures for Highly Efficient Electrocatalysis. <i>Advanced Functional Materials</i> , 2017 , 27, 1700830	15.6	67
151	pH-Universal Water Splitting Catalyst: Ru-Ni Nanosheet Assemblies. <i>IScience</i> , 2019 , 11, 492-504	6.1	67
150	Study of CeO ₂ and Its Native Defects by Density Functional Theory with Repulsive Potential. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 24248-24256	3.8	67
149	A General Strategy to Glassy M-Te (M = Ru, Rh, Ir) Porous Nanorods for Efficient Electrochemical N Fixation. <i>Advanced Materials</i> , 2020 , 32, e1907112	24	66
148	Recent Progress in Advanced Electrocatalyst Design for Acidic Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2021 , e2004243	24	63
147	Transition metal-doped ultrathin RuO ₂ networked nanowires for efficient overall water splitting across a broad pH range. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 6411-6416	13	62
146	Simplifying the Creation of Hollow Metallic Nanostructures: One-Pot Synthesis of Hollow Palladium/Platinum Single-Crystalline Nanocubes. <i>Angewandte Chemie</i> , 2009 , 121, 4902-4906	3.6	62
145	Hollow Pd ₈ Sn Nanocrystals for Efficient Direct H ₂ O ₂ Synthesis: The Critical Role of Sn on Structure Evolution and Catalytic Performance. <i>ACS Catalysis</i> , 2018 , 8, 3418-3423	13.1	60
144	Phase and Interface Engineering of Platinum-Nickel Nanowires for Efficient Electrochemical Hydrogen Evolution. <i>Angewandte Chemie</i> , 2016 , 128, 13051-13055	3.6	60
143	Low Dimensional Platinum-Based Bimetallic Nanostructures for Advanced Catalysis. <i>Accounts of Chemical Research</i> , 2019 , 52, 3384-3396	24.3	59
142	A Generalized Surface Chalcogenation Strategy for Boosting the Electrochemical N Fixation of Metal Nanocrystals. <i>Advanced Materials</i> , 2020 , 32, e2001267	24	58
141	Monodisperse Cu@PtCu nanocrystals and their conversion into hollow-PtCu nanostructures for methanol oxidation. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14449	13	57
140	Trimetallic Oxyhydroxide Coralloids for Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie</i> , 2017 , 129, 4573-4577	3.6	56
139	Large-Scale, Bottom-Up Synthesis of Binary Metal-Organic Framework Nanosheets for Efficient Water Oxidation. <i>Angewandte Chemie</i> , 2019 , 131, 7125-7130	3.6	56
138	Partially Pyrolyzed Binary Metal-Organic Framework Nanosheets for Efficient Electrochemical Hydrogen Peroxide Synthesis. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 14373-14377	16.4	56
137	Barrier-free Interface Electron Transfer on PtFe-Fe ₂ C Janus-like Nanoparticles Boosts Oxygen Catalysis. <i>Chem</i> , 2018 , 4, 1153-1166	16.2	56

136	Dynamic Structure Evolution of Composition Segregated Iridium-Nickel Rhombic Dodecahedra toward Efficient Oxygen Evolution Electrocatalysis. <i>ACS Nano</i> , 2018 , 12, 7371-7379	16.7	53
135	Facet and dimensionality control of Pt nanostructures for efficient oxygen reduction and methanol oxidation electrocatalysts. <i>Nano Research</i> , 2016 , 9, 2811-2821	10	53
134	Highly Efficient Acidic Oxygen Evolution Electrocatalysis Enabled by Porous IrCu Nanocrystals with Three-Dimensional Electrocatalytic Surfaces. <i>Chemistry of Materials</i> , 2018 , 30, 8571-8578	9.6	53
133	In situ development of highly concave and composition-confined PtNi octahedra with high oxygen reduction reaction activity and durability. <i>Nano Research</i> , 2016 , 9, 149-157	10	52
132	Palladium-Based Nanostructures with Highly Porous Features and Perpendicular Pore Channels as Enhanced Organic Catalysts. <i>Angewandte Chemie</i> , 2013 , 125, 2580-2584	3.6	52
131	Te-Doped Pd Nanocrystal for Electrochemical Urea Production by Efficiently Coupling Carbon Dioxide Reduction with Nitrite Reduction. <i>Nano Letters</i> , 2020 , 20, 8282-8289	11.5	51
130	Phase and structure modulating of bimetallic CuSn nanowires boosts electrocatalytic conversion of CO ₂ . <i>Nano Energy</i> , 2019 , 59, 138-145	17.1	49
129	A Universal Strategy to Metal Wavy Nanowires for Efficient Electrochemical Water Splitting at pH-Universal Conditions. <i>Advanced Functional Materials</i> , 2018 , 28, 1803722	15.6	49
128	Simplifying the creation of dumbbell-like Cu-Ag nanostructures and their enhanced catalytic activity. <i>Chemistry - A European Journal</i> , 2012 , 18, 9505-10	4.8	49
127	Selective Surface Reconstruction of a Defective Iridium-Based Catalyst for High-Efficiency Water Splitting. <i>Advanced Functional Materials</i> , 2020 , 30, 2004375	15.6	49
126	Ordered PdCu-Based Nanoparticles as Bifunctional Oxygen-Reduction and Ethanol-Oxidation Electrocatalysts. <i>Angewandte Chemie</i> , 2016 , 128, 9176-9181	3.6	47
125	The Design of Water Oxidation Electrocatalysts from Nanoscale Metal-Organic Frameworks. <i>Chemistry - A European Journal</i> , 2018 , 24, 15143-15155	4.8	46
124	Platinum Porous Nanosheets with High Surface Distortion and Pt Utilization for Enhanced Oxygen Reduction Catalysis. <i>Advanced Functional Materials</i> , 2019 , 29, 1904429	15.6	46
123	Cation Exchange Strategy to Single-Atom Noble-Metal Doped CuO Nanowire Arrays with Ultralow Overpotential for HO Splitting. <i>Nano Letters</i> , 2020 , 20, 5482-5489	11.5	45
122	Fe-Doped BiOCl Nanosheets with Light-Switchable Oxygen Vacancies for Photocatalytic Nitrogen Fixation. <i>ACS Applied Energy Materials</i> , 2019 , 2, 8394-8398	6.1	45
121	Trimetallic Molybdate Nanobelts as Active and Stable Electrocatalysts for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2019 , 9, 1013-1018	13.1	45
120	Networked PtSn nanowires as efficient catalysts for alcohol electrooxidation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24626-24630	13	44
119	Amorphous Oxide Nanostructures for Advanced Electrocatalysis. <i>Chemistry - A European Journal</i> , 2019 , 26, 3943	4.8	43

118	Plasmonic and Catalytic AuPd Nanowheels for the Efficient Conversion of Light into Chemical Energy. <i>Angewandte Chemie</i> , 2013 , 125, 6179-6183	3.6	43
117	4f fine-structure levels as the dominant error in the electronic structures of binary lanthanide oxides. <i>Journal of Computational Chemistry</i> , 2016 , 37, 825-35	3.5	43
116	P,Se-Codoped MoS ₂ Nanosheets as Accelerated Electrocatalysts for Hydrogen Evolution. <i>ChemCatChem</i> , 2019 , 11, 689-692	5.2	43
115	Structurally Ordered Pt ₃ Sn Nanofibers with Highlighted Antipoisoning Property as Efficient Ethanol Oxidation Electrocatalysts. <i>ACS Catalysis</i> , 2020 , 10, 3455-3461	13.1	42
114	Porous Pt-Ni Nanowires within In Situ Generated Metal-Organic Frameworks for Highly Chemoselective Cinnamaldehyde Hydrogenation. <i>Small</i> , 2018 , 14, e1704318	11	41
113	Graphene-hemin hybrid material as effective catalyst for selective oxidation of primary C-H bond in toluene. <i>Scientific Reports</i> , 2013 , 3,	4.9	40
112	A Strongly Coupled Ultrasmall Pt ₃ Co Nanoparticle-Ultrathin Co(OH) ₂ Nanosheet Architecture Enhances Selective Hydrogenation of α -Unsaturated Aldehydes. <i>ACS Catalysis</i> , 2019 , 9, 154-159	13.1	40
111	Native Point Defects in CaS: Focus on Intrinsic Defects and Rare Earth Ion Dopant Levels for Up-converted Persistent Luminescence. <i>Inorganic Chemistry</i> , 2015 , 54, 11423-40	5.1	39
110	Oxygen-Incorporated NiMoP Nanotube Arrays as Efficient Bifunctional Electrocatalysts For Urea-Assisted Energy-Saving Hydrogen Production in Alkaline Electrolyte. <i>Advanced Functional Materials</i> , 2021 , 31, 2104951	15.6	39
109	Spin Regulation on 2D Pd-Fe-Pt Nanomeshes Promotes Fuel Electrooxidations. <i>Nano Letters</i> , 2020 , 20, 1967-1973	11.5	38
108	The screened pseudo-charge repulsive potential in perturbed orbitals for band calculations by DFT+U. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 8008-8025	3.6	37
107	Exploring Bi Te Nanoplates as Versatile Catalysts for Electrochemical Reduction of Small Molecules. <i>Advanced Materials</i> , 2020 , 32, e1906477	24	37
106	Atomic PdAu Interlayer Sandwiched into Pd/Pt Core/Shell Nanowires Achieves Superstable Oxygen Reduction Catalysis. <i>ACS Nano</i> , 2020 , 14, 11570-11578	16.7	37
105	Multi-Site Electrocatalysts Boost pH-Universal Nitrogen Reduction by High-Entropy Alloys. <i>Advanced Functional Materials</i> , 2021 , 31, 2006939	15.6	35
104	The Advanced Designs of High-Performance Platinum-Based Electrocatalysts: Recent Progresses and Challenges. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800486	4.6	35
103	Rationally engineered active sites for efficient and durable hydrogen generation. <i>Nature Communications</i> , 2019 , 10, 2281	17.4	34
102	Platinum Group Nanowires for Efficient Electrocatalysis. <i>Small Methods</i> , 2019 , 3, 1800545	12.8	34
101	Surface-Regulated Rhodium-Antimony Nanorods for Nitrogen Fixation. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 8066-8071	16.4	32

100	Superior Electrochemical Oxygen Evolution Enabled by Three-Dimensional Layered Double Hydroxide Nanosheet Superstructures. <i>ChemCatChem</i> , 2017 , 9, 84-88	5.2	32
99	A versatile strategy to the selective synthesis of Cu nanocrystals and the in situ conversion to CuRu nanotubes. <i>Nanoscale</i> , 2013 , 5, 6284-90	7.7	32
98	Surface oxygen-mediated ultrathin PtRuM (Ni, Fe, and Co) nanowires boosting methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 2323-2330	13	32
97	Stabilizing and Activating Metastable Nickel Nanocrystals for Highly Efficient Hydrogen Evolution Electrocatalysis. <i>ACS Nano</i> , 2018 , 12, 11625-11631	16.7	32
96	Defect Engineering of Palladium-Tin Nanowires Enables Efficient Electrocatalysts for Fuel Cell Reactions. <i>Nano Letters</i> , 2019 , 19, 6894-6903	11.5	30
95	Advanced Catalysts Derived from Composition-Segregated Platinum-Nickel Nanostructures: New Opportunities and Challenges. <i>Advanced Functional Materials</i> , 2019 , 29, 1808161	15.6	30
94	Hydroxide-Membrane-Coated Pt ₃ Ni Nanowires as Highly Efficient Catalysts for Selective Hydrogenation Reaction. <i>Advanced Functional Materials</i> , 2018 , 28, 1705918	15.6	29
93	Defect-Rich Metal Nanocrystals in Catalysis. <i>ChemCatChem</i> , 2016 , 8, 480-485	5.2	29
92	Closest Packing Polymorphism Interfaced Metastable Transition Metal for Efficient Hydrogen Evolution. <i>Advanced Materials</i> , 2020 , 32, e2002857	24	28
91	Oxygen Vacancies in Amorphous InOx Nanoribbons Enhance CO ₂ Adsorption and Activation for CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2019 , 131, 5665-5669	3.6	28
90	Double Perovskite LaFexNi _{1-x} O ₃ Nanorods Enable Efficient Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie</i> , 2019 , 131, 2338-2342	3.6	28
89	High-Index Faceted RuCo Nanoscrews for Water Electrosplitting. <i>Advanced Energy Materials</i> , 2020 , 10, 2002860	21.8	27
88	Partially hydroxylated ultrathin iridium nanosheets as efficient electrocatalysts for water splitting. <i>National Science Review</i> , 2020 , 7, 1340-1348	10.8	27
87	Ternary PtNi/PtxPb/Pt core/multishell nanowires as efficient and stable electrocatalysts for fuel cell reactions. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18977-18983	13	27
86	Atomically deviated Pd-Te nanoplates boost methanol-tolerant fuel cells. <i>Science Advances</i> , 2020 , 6, eaba4731	17.5	27
85	Intrinsic energy conversions for photon-generation in piezo-phototronic materials: A case study on alkaline niobates. <i>Nano Energy</i> , 2018 , 47, 150-171	17.1	26
84	Site-Specified Two-Dimensional Heterojunction of Pt Nanoparticles/Metal-Organic Frameworks for Enhanced Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16512-16518	16.4	26
83	Single-Atom In-Doped Subnanometer Pt Nanowires for Simultaneous Hydrogen Generation and Biomass Upgrading. <i>Advanced Functional Materials</i> , 2020 , 30, 2004310	15.6	26

82	Unraveling energy conversion modeling in the intrinsic persistent upconverted luminescence of solids: a study of native point defects in antiferromagnetic Er ₂ O ₃ . <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 13564-82	3.6	26
81	Selective Ethanol Oxidation Reaction at the Rh-SnO Interface. <i>Advanced Materials</i> , 2021 , 33, e2005767	24	26
80	Strong synergy in a lichen-like RuCu nanosheet boosts the direct methane oxidation to methanol. <i>Nano Energy</i> , 2020 , 71, 104566	17.1	25
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35	Tailoring lattice strain in ultra-fine high-entropy alloys for active and stable methanol oxidation. <i>Science China Materials</i> , 2021 , 64, 2454-2466	7.1	9
34	Catalytic Hydrogen Production by Janus CuAg Nanostructures. <i>ChemNanoMat</i> , 2018 , 4, 477-481	3.5	8
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20	Spontaneous amorphous oxide-interfaced ultrafine noble metal nanoclusters for unexpected anodic electrocatalysis. <i>Chem Catalysis</i> , 2021 , 1, 1104-1117		4
19	Boron-doped amorphous iridium oxide with ultrahigh mass activity for acidic oxygen evolution reaction. <i>Science China Materials</i> , ¹	7.1	4
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13	Electronic Coupling of Single Atom and FePS ₃ Boosts Water Electrolysis. <i>Energy and Environmental Materials</i> ,	13	2
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