Bo-Long Huang

List of Publications by Citations

264 papers	10,079 citations	52 h-index	92 g-index
279 ext. papers	14,389 ext. citations	13.4 avg, IF	7.05 L-index

#	Paper	IF	Citations
264	All-inorganic perovskite nanocrystal scintillators. *Nature*, **2018**, 561, 88-93	50.4	773
263	Anchoring zero valence single atoms of nickel and iron on graphdiyne for hydrogen evolution. *Nature Communications*, **2018**, 9, 1460	17.4	538
262	A Eu-Eu ion redox shuttle imparts operational durability to Pb-I perovskite solar cells. *Science*, **2019**, 363, 265-270	33.3	533
261	Highly Efficient and Selective Generation of Ammonia and Hydrogen on a Graphdiyne-Based Catalyst. *Journal of the American Chemical Society*, **2019**, 141, 10677-10683	16.4	309
260	Engineering stepped edge surface structures of MoS2 sheet stacks to accelerate the hydrogen evolution reaction. *Energy and Environmental Science*, **2017**, 10, 593-603	35.4	236
259	General synthesis of two-dimensional van der Waals heterostructure arrays. *Nature*, **2020**, 579, 368-374	50.4	195
258	Confining Excitation Energy in Er -Sensitized Upconversion Nanocrystals through Tm -Mediated Transient Energy Trapping. *Angewandte Chemie - International Edition*, **2017**, 56, 7605-7609	16.4	188
257	Overall water splitting by graphdiyne-exfoliated and -sandwiched layered double-hydroxide nanosheet arrays. *Nature Communications*, **2018**, 9, 5309	17.4	188
256	Strongly Coupled Nickel-Cobalt Nitrides/Carbon Hybrid Nanocages with Pt-Like Activity for Hydrogen Evolution Catalysis. *Advanced Materials*, **2019**, 31, e1805541	24	184
255	Bonding origin of optical contrast in phase-change memory materials. *Physical Review B*, **2010**, 81,	3.3	175
254	Channel-Rich RuCu Nanosheets for pH-Universal Overall Water Splitting Electrocatalysis. *Angewandte Chemie - International Edition*, **2019**, 58, 13983-13988	16.4	162
253	Ultrathin PtNiM (M = Rh, Os, and Ir) Nanowires as Efficient Fuel Oxidation Electrocatalytic Materials. *Advanced Materials*, **2019**, 31, e1805833	24	132
252	Amorphization activated ruthenium-tellurium nanorods for efficient water splitting. *Nature Communications*, **2019**, 10, 5692	17.4	130
251	Iridium Single Atoms Coupling with Oxygen Vacancies Boosts Oxygen Evolution Reaction in Acid Media. *Journal of the American Chemical Society*, **2020**, 142, 18378-18386	16.4	128
250	Impacts of alkaline on the defects property and crystallization kinetics in perovskite solar cells. *Nature Communications*, **2019**, 10, 1112	17.4	124
249	Exploiting Ru-Induced Lattice Strain in CoRu Nanoalloys for Robust Bifunctional Hydrogen Production. *Angewandte Chemie - International Edition*, **2021**, 60, 3290-3298	16.4	120
248	Toward Bi3+ Red Luminescence with No Visible Reabsorption through Manageable Energy Interaction and Crystal Defect Modulation in Single Bi3+-Doped ZnWO4 Crystal. *Chemistry of Materials*, **2017**, 29, 8412-8424	9.6	119

247	Co O /Fe Co P Interface Nanowire for Enhancing Water Oxidation Catalysis at High Current Density. *Advanced Materials*, **2018**, 30, e1803551	24	115
246	High-resolution X-ray luminescence extension imaging. *Nature*, **2021**, 590, 410-415	50.4	113
245	Intermetallic hcp-PtBi/fcc-Pt Core/Shell Nanoplates Enable Efficient Bifunctional Oxygen Reduction and Methanol Oxidation Electrocatalysis. *ACS Catalysis*, **2018**, 8, 5581-5590	13.1	106
244	Ultrathin Nanosheet of Graphdiyne-Supported Palladium Atom Catalyst for Efficient Hydrogen Production. *IScience*, **2019**, 11, 31-41	6.1	104
243	Atomic Arrangement in Metal-Doped NiS Boosts the Hydrogen Evolution Reaction in Alkaline Media. *Angewandte Chemie - International Edition*, **2019**, 58, 18676-18682	16.4	103
242	Interfacial Defect Engineering for Improved Portable Zinc-Air Batteries with a Broad Working Temperature. *Angewandte Chemie - International Edition*, **2019**, 58, 9459-9463	16.4	98
241	A General Method for Transition Metal Single Atoms Anchored on Honeycomb-Like Nitrogen-Doped Carbon Nanosheets. *Advanced Materials*, **2020**, 32, e1906905	24	97
240	Rare-earth-containing perovskite nanomaterials: design, synthesis, properties and applications. *Chemical Society Reviews*, **2020**, 49, 1109-1143	58.5	96
239	Graphdiyne Interface Engineering: Highly Active and Selective Ammonia Synthesis. *Angewandte Chemie - International Edition*, **2020**, 59, 13021-13027	16.4	89
238	Multimodal Luminescent Yb /Er /Bi -Doped Perovskite Single Crystals for X-ray Detection and Anti-Counterfeiting. *Advanced Materials*, **2020**, 32, e2004506	24	88
237	Piezophotonic effect based on mechanoluminescent materials for advanced flexible optoelectronic applications. *Nano Energy*, **2019**, 55, 389-400	17.1	87
236	Fast site-to-site electron transfer of high-entropy alloy nanocatalyst driving redox electrocatalysis. *Nature Communications*, **2020**, 11, 5437	17.4	86
235	Transition metal-doped nickel phosphide nanoparticles as electro- and photocatalysts for hydrogen generation reactions. *Applied Catalysis B: Environmental*, **2019**, 242, 186-193	21.8	84
234	Multimetal Borides Nanochains as Efficient Electrocatalysts for Overall Water Splitting. *Small*, **2019**, 15, e1804212	11	83
233	Self-Elimination of Intrinsic Defects Improves the Low-Temperature Performance of Perovskite Photovoltaics. *Joule*, **2020**, 4, 1961-1976	27.8	82
232	Wrinkled Rh2P Nanosheets as Superior pH-Universal Electrocatalysts for Hydrogen Evolution Catalysis. *Advanced Energy Materials*, **2018**, 8, 1801891	21.8	77
231	Oxygen Vacancies on Layered Niobic Acid That Weaken the Catalytic Conversion of Polysulfides in Lithium-Sulfur Batteries. *Angewandte Chemie - International Edition*, **2019**, 58, 11491-11496	16.4	76
230	Fluorographdiyne: A Metal-Free Catalyst for Applications in Water Reduction and Oxidation. *Angewandte Chemie - International Edition*, **2019**, 58, 13897-13903	16.4	72

229	High-efficiency direct methane conversion to oxygenates on a cerium dioxide nanowires supported rhodium single-atom catalyst. *Nature Communications*, **2020**, 11, 954	17.4	70
228	Mechanically Excited Multicolor Luminescence in Lanthanide Ions. *Advanced Materials*, **2019**, 31, e1807062	24	70
227	Atomically targeting NiFe LDH to create multivacancies for OER catalysis with a small organic anchor. *Nano Energy*, **2021**, 81, 105606	17.1	69
226	Coupled s-p-d Exchange in Facet-Controlled Pd3Pb Tripods Enhances Oxygen Reduction Catalysis. *CheM*, **2018**, 4, 359-371	16.2	68
225	Crystal-Phase-Engineered PdCu Electrocatalyst for Enhanced Ammonia Synthesis. *Angewandte Chemie - International Edition*, **2020**, 59, 2649-2653	16.4	68
224	pH-Universal Water Splitting Catalyst: Ru-Ni Nanosheet Assemblies. *IScience*, **2019**, 11, 492-504	6.1	67
223	Locally collective hydrogen bonding isolates lead octahedra for white emission improvement. *Nature Communications*, **2019**, 10, 5190	17.4	67
222	Study of CeO2 and Its Native Defects by Density Functional Theory with Repulsive Potential. *Journal of Physical Chemistry C*, **2014**, 118, 24248-24256	3.8	67
221	A General Strategy to Glassy M-Te (M = Ru, Rh, Ir) Porous Nanorods for Efficient Electrochemical N Fixation. *Advanced Materials*, **2020**, 32, e1907112	24	66
220	Efficient Optimization of Electron/Oxygen Pathway by Constructing Ceria/Hydroxide Interface for Highly Active Oxygen Evolution Reaction. *Advanced Functional Materials*, **2020**, 30, 1908367	15.6	61
219	A Generalized Surface Chalcogenation Strategy for Boosting the Electrochemical N Fixation of Metal Nanocrystals. *Advanced Materials*, **2020**, 32, e2001267	24	58
218	Fabrication of layered double hydroxide microcapsules mediated by cerium doping in metal–organic frameworks for boosting water splitting. *Energy and Environmental Science*, **2020**, 13, 2949-2956	35.4	58
217	The Spacer Cations Interplay for Efficient and Stable Layered 2D Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1901566	21.8	57
216	Barrier-free Interface Electron Transfer on PtFe-Fe2C Janus-like Nanoparticles Boosts Oxygen Catalysis. *CheM*, **2018**, 4, 1153-1166	16.2	56
215	Integrating temporal and spatial control of electronic transitions for bright multiphoton upconversion. *Nature Communications*, **2019**, 10, 1811	17.4	55
214	2D graphdiyne loading ruthenium atoms for high efficiency water splitting. *Nano Energy*, **2020**, 72, 104667	17.1	55
213	Tailored transition metal-doped nickel phosphide nanoparticles for the electrochemical oxygen evolution reaction (OER). *Chemical Communications*, **2018**, 54, 8630-8633	5.8	52
212	Theory of piezotronics and piezo-phototronics. *MRS Bulletin*, **2018**, 43, 928-935	3.2	50

211	A ZnS/CaZnOS Heterojunction for Efficient Mechanical-to-Optical Energy Conversion by Conduction Band Offset. *Advanced Materials*, **2020**, 32, e1907747	24	49
210	Selective Surface Reconstruction of a Defective Iridium-Based Catalyst for High-Efficiency Water Splitting. *Advanced Functional Materials*, **2020**, 30, 2004375	15.6	49
209	Platinum Porous Nanosheets with High Surface Distortion and Pt Utilization for Enhanced Oxygen Reduction Catalysis. *Advanced Functional Materials*, **2019**, 29, 1904429	15.6	46
208	Mapping of atomic catalyst on graphdiyne. *Nano Energy*, **2019**, 62, 754-763	17.1	45
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204	Graphdiyne-based metal atomic catalysts for synthesizing ammonia. *National Science Review*, **2021**, 8, nwaa213	10.8	42
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200	Ultrathin RuRh Alloy Nanosheets Enable High-Performance Lithium-CO2 Battery. *Matter*, **2020**, 2, 1494-1508	12.8	39
199	NiCo O -Based Nanosheets with Uniform 4 nm Mesopores for Excellent Zn-Air Battery Performance. *Advanced Materials*, **2020**, 32, e2001651	24	39
198	Oxygen-Incorporated NiMoP Nanotube Arrays as Efficient Bifunctional Electrocatalysts For Urea-Assisted Energy-Saving Hydrogen Production in Alkaline Electrolyte. *Advanced Functional Materials*, **2021**, 31, 2104951	15.6	39
197	The screened pseudo-charge repulsive potential in perturbed orbitals for band calculations by DFT+U. *Physical Chemistry Chemical Physics*, **2017**, 19, 8008-8025	3.6	37
196	Trifunctional Fishbone-like PtCo/Ir Enables High-Performance Zinc–Air Batteries to Drive the Water-Splitting Catalysis. *Chemistry of Materials*, **2019**, 31, 8136-8144	9.6	37
195	Exploring Bi Te Nanoplates as Versatile Catalysts for Electrochemical Reduction of Small Molecules. *Advanced Materials*, **2020**, 32, e1906477	24	37
194	Enhanced electron transfer and light absorption on imino polymer capped PdAg nanowire networks for efficient room-temperature dehydrogenation of formic acid. *Journal of Materials Chemistry A*, **2018**, 6, 1979-1984	13	37

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190	Fundamental View of Electronic Structures of ENaYF4, ENaGdF4, and ENaLuF4. *Journal of Physical Chemistry C*, **2016**, 120, 18858-18870	3.8	35
189	Multi-Site Electrocatalysts Boost pH-Universal Nitrogen Reduction by High-Entropy Alloys. *Advanced Functional Materials*, **2021**, 31, 2006939	15.6	35
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179	Defect Engineering of Palladium-Tin Nanowires Enables Efficient Electrocatalysts for Fuel Cell Reactions. *Nano Letters*, **2019**, 19, 6894-6903	11.5	30
178	Room-temperature methane gas sensing properties based on in situ reduced graphene oxide incorporated with tin dioxide. *Journal of Materials Chemistry A*, **2017**, 5, 11131-11142	13	29
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176	Analysis of Ultrahigh Apparent Mobility in Oxide Field-Effect Transistors. *Advanced Science*, **2019**, 6, 1801189	13	28

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174	High-Index Faceted RuCo Nanoscrews for Water Electrosplitting. *Advanced Energy Materials*, **2020**, 10, 2002860	21.8	27
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171	WOx-Surface Decorated PtNi@Pt Dendritic Nanowires as Efficient pH-Universal Hydrogen Evolution Electrocatalysts. *Advanced Energy Materials*, **2021**, 11, 2003192	21.8	27
170	A highly efficient atomically thin curved PdIr bimetallene electrocatalyst. *National Science Review*, **2021**, 8, nwab019	10.8	27
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163	Loading Copper Atoms on Graphdiyne for Highly Efficient Hydrogen Production. *ChemPhysChem*, **2020**, 21, 2145-2149	3.2	25
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160	On-Demand, Ultraselective Hydrogenation System Enabled by Precisely Modulated Pd-Cd Nanocubes. *Journal of the American Chemical Society*, **2020**, 142, 962-972	16.4	24
159	Self-Recoverable Mechanically Induced Instant Luminescence from Cr3+-Doped LiGa5O8. *Advanced Functional Materials*, **2021**, 31, 2010685	15.6	24
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157	"Energy Selection Channels" for High-Performance Electrolyte: Anion-Frenkel Defect Pair as Dominant Source for O Ion Conductions in Pyrochlore-type Lanthanide Hafnium Oxides SOFC. *Inorganic Chemistry*, **2017**, 56, 7975-7984	5.1	23
156	Anti-poisoned oxygen reduction by the interface modulated Pd@NiO core@shell. *Nano Energy*, **2019**, 58, 234-243	17.1	23
155	Alloyed Palladium-Silver Nanowires Enabling Ultrastable Carbon Dioxide Reduction to Formate. *Advanced Materials*, **2021**, 33, e2005821	24	23
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151	Channel-Rich RuCu Nanosheets for pH-Universal Overall Water Splitting Electrocatalysis. *Angewandte Chemie*, **2019**, 131, 14121-14126	3.6	21
150	Self-Validated Machine Learning Study of Graphdiyne-Based Dual Atomic Catalyst. *Advanced Energy Materials*, **2021**, 11, 2003796	21.8	21
149	A Review on Ceo2-Based Electrocatalyst and Photocatalyst in Energy Conversion. *Advanced Energy and Sustainability Research*, **2021**, 2, 2000063	1.6	21
148	Fluorographdiyne: A Metal-Free Catalyst for Applications in Water Reduction and Oxidation. *Angewandte Chemie*, **2019**, 131, 14035-14041	3.6	20
147	One-Step Controllable Synthesis of Catalytic Ni4Mo/MoOx/Cu Nanointerfaces for Highly Efficient Water Reduction. *Advanced Energy Materials*, **2019**, 9, 1901454	21.8	20
146	Atomic Arrangement in Metal-Doped NiS2 Boosts the Hydrogen Evolution Reaction in Alkaline Media. *Angewandte Chemie*, **2019**, 131, 18849-18855	3.6	20
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141	Predictions of mechanical and thermodynamic properties of Mg17Al12 and Mg2Sn from first-principles calculations. *Philosophical Magazine*, **2015**, 95, 1626-1645	1.6	19
140	Universal Strategy for Ultrathin Pt-M (M = Fe, Co, Ni) Nanowires for Efficient Catalytic Hydrogen Generation. *ACS Applied Materials & Interfaces*, **2018**, 10, 22257-22263	9.5	19

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138	High-performance diluted nickel nanoclusters decorating ruthenium nanowires for pH-universal overall water splitting. *Energy and Environmental Science*, **2021**, 14, 3194-3202	35.4	19
137	Graphdiyne Ultrathin Nanosheets for Efficient Water Splitting. *Advanced Functional Materials*, **2021**, 31, 2010112	15.6	19
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115	Two-Dimensional Metal□Organic Frameworks-Based Electrocatalysts for Oxygen Evolution and Oxygen Reduction Reactions. *Advanced Energy and Sustainability Research*, **2021**, 2, 2000067	1.6	12
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111	A newly-explored Pd-based nanocrystal for the pH-universal electrosynthesis of H2O2. *Nano Energy* , **2021**, 89, 106480	17.1	11
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