

Piedong Yang

List of Publications by Year in Descending Order

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Version: 2024-04-09

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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.

263 papers	85,377 citations	131 h-index	276 g-index
276 ext. papers	93,463 ext. citations	16 avg, IF	8.33 L-index

#	Paper	IF	Citations
263	The Interactive Dynamics of Nanocatalyst Structure and Microenvironment during Electrochemical CO Conversion.. <i>Jacs Au</i> , 2022 , 2, 562-572		5
262	Ferroelectricity in a semiconducting all-inorganic halide perovskite.. <i>Science Advances</i> , 2022 , 8, eabj5881	14.3	8
261	The presence and role of the intermediary CO reservoir in heterogeneous electroreduction of CO.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2201922119	11.5	3
260	Photoelectrochemical CO Reduction toward Multicarbon Products with Silicon Nanowire Photocathodes Interfaced with Copper Nanoparticles.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	3
259	Laser-accelerated phase transformation in cesium lead iodide perovskite. <i>Matter</i> , 2022 , 5, 1455-1465	12.7	2
258	Lattice Dynamics and Optoelectronic Properties of Vacancy-Ordered Double Perovskite Cs ₂ TeX ₆ (X = Cl/Br/I) Single Crystals. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 25126-25139	3.8	5
257	Nanoparticle Assembly Induced Ligand Interactions for Enhanced Electrocatalytic CO Conversion. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19919-19927	16.4	5
256	Photoinduced Charge Transfer and Trapping on Single Gold Metal Nanoparticles on TiO. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 50531-50538	9.5	1
255	The making of a reconfigurable semiconductor with a soft ionic lattice. <i>Matter</i> , 2021 ,	12.7	9
254	Interface Sensitivity in Electron/Ion Yield X-ray Absorption Spectroscopy: The TiO-HO Interface. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 10212-10217	6.4	3
253	Ligand-Free Processable Perovskite Semiconductor Ink. <i>Nano Letters</i> , 2021 , 21, 8856-8862	11.5	3
252	Address the alkalinity problem in CO ₂ electrolysis with catalyst design and translation. <i>Joule</i> , 2021 , 5, 737-742	27.8	24
251	Gold-Nanocluster-Mediated Delivery of siRNA to Intact Plant Cells for Efficient Gene Knockdown. <i>Nano Letters</i> , 2021 , 21, 5859-5866	11.5	16
250	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021 , 15, 10775-10981	16.7	222
249	Sulfur-doped graphene anchoring of ultrafine Au ₂₅ nanoclusters for electrocatalysis. <i>Nano Research</i> , 2021 , 14, 3509-3513	10	11
248	A New Perspective and Design Principle for Halide Perovskites: Ionic Octahedron Network (ION). <i>Nano Letters</i> , 2021 , 21, 5415-5421	11.5	3
247	Kinetics of moisture-induced phase transformation in inorganic halide perovskite. <i>Matter</i> , 2021 , 4, 2392-2402	14.7	9

246	Phase transition dynamics in one-dimensional halide perovskite crystals. <i>MRS Bulletin</i> , 2021 , 46, 310-316	3.2	2
245	Production of PHB From CO-Derived Acetate With Minimal Processing Assessed for Space Biomanufacturing. <i>Frontiers in Microbiology</i> , 2021 , 12, 700010	5.7	1
244	Revealing the Phase Separation Behavior of Thermodynamically Immiscible Elements in a Nanoparticle. <i>Nano Letters</i> , 2021 , 21, 6684-6689	11.5	5
243	Ligand removal of Au nanoclusters by thermal and electrochemical treatments for selective CO electroreduction to CO. <i>Journal of Chemical Physics</i> , 2021 , 155, 051101	3.9	4
242	Molecular insights and future frontiers in cell photosensitization for solar-driven CO conversion. <i>IScience</i> , 2021 , 24, 102952	6.1	4
241	Selective CO ₂ electrocatalysis at the pseudocapacitive nanoparticle/ordered-ligand interlayer. <i>Nature Energy</i> , 2020 , 5, 1032-1042	62.3	28
240	Individually Encapsulated Frame-in-Frame Structure		3
239	Size Transformation of the Au(SG) Nanocluster and Its Surface-Sensitive Kinetics. <i>Journal of the American Chemical Society</i> , 2020 , 142, 11514-11520	16.4	12
238	Morphology-controlled transformation of Cu@Au core-shell nanowires into thermally stable Cu ₃ Au intermetallic nanowires. <i>Nano Research</i> , 2020 , 13, 2564-2569	10	7
237	Photosynthetic semiconductor biohybrids for solar-driven biocatalysis. <i>Nature Catalysis</i> , 2020 , 3, 245-255	36.5	94
236	Lead halide perovskite nanowires stabilized by block copolymers for Langmuir-Blodgett assembly. <i>Nano Research</i> , 2020 , 13, 1453-1458	10	16
235	Two-Step Patterning of Scalable All-Inorganic Halide Perovskite Arrays. <i>ACS Nano</i> , 2020 , 14, 3500-3508	16.7	25
234	Effect of Anisotropic Confinement on Electronic Structure and Dynamics of Band Edge Excitons in Inorganic Perovskite Nanowires. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 1867-1876	2.8	18
233	High-Performance Pt-Co Nanoframes for Fuel-Cell Electrocatalysis. <i>Nano Letters</i> , 2020 , 20, 1974-1979	11.5	72
232	Structural and spectral dynamics of single-crystalline Ruddlesden-Popper phase halide perovskite blue light-emitting diodes. <i>Science Advances</i> , 2020 , 6, eaay4045	14.3	53
231	Lead-free Cesium Europium Halide Perovskite Nanocrystals. <i>Nano Letters</i> , 2020 , 20, 3734-3739	11.5	54
230	Two-dimensional halide perovskite lateral epitaxial heterostructures. <i>Nature</i> , 2020 , 580, 614-620	50.4	142
229	Close-Packed Nanowire-Bacteria Hybrids for Efficient Solar-Driven CO ₂ Fixation. <i>Joule</i> , 2020 , 4, 800-811	27.8	60

228	Scaling Laws of Exciton Recombination Kinetics in Low Dimensional Halide Perovskite Nanostructures. <i>Journal of the American Chemical Society</i> , 2020 , 142, 8871-8879	16.4	12
227	Cu-Ag Tandem Catalysts for High-Rate CO ₂ Electrolysis toward Multicarbon. <i>Joule</i> , 2020 , 4, 1688-1699	27.8	95
226	Solid-State Ionic Rectification in Perovskite Nanowire Heterostructures. <i>Nano Letters</i> , 2020 , 20, 8151-8156	5.5	6
225	Liquid-like Interfaces Mediate Structural Phase Transitions in Lead Halide Perovskites. <i>Matter</i> , 2020 , 3, 534-545	12.7	21
224	Ultrathin Free-Standing Oxide Membranes for Electron and Photon Spectroscopy Studies of Solid-Gas and Solid-Liquid Interfaces. <i>Nano Letters</i> , 2020 , 20, 6364-6371	11.5	11
223	Progress in Perovskite Photocatalysis. <i>ACS Energy Letters</i> , 2020 , 5, 2602-2604	20.1	36
222	Phase Transitions and Anion Exchange in All-Inorganic Halide Perovskites. <i>Accounts of Materials Research</i> , 2020 , 1, 3-15	7.5	36
221	Surface and Interface Control in Nanoparticle Catalysis. <i>Chemical Reviews</i> , 2020 , 120, 1184-1249	68.1	245
220	Electrochemically scrambled nanocrystals are catalytically active for CO-to-multicarbon. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 9194-9201	11.5	57
219	Solar-driven carbon dioxide fixation using photosynthetic semiconductor bio-hybrids. <i>Faraday Discussions</i> , 2019 , 215, 54-65	3.6	16
218	Perovskite nanowire-block copolymer composites with digitally programmable polarization anisotropy. <i>Science Advances</i> , 2019 , 5, eaav8141	14.3	64
217	Quantitative imaging of anion exchange kinetics in halide perovskites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 12648-12653	11.5	52
216	Ion Write Microthermotics: Programing Thermal Metamaterials at the Microscale. <i>Nano Letters</i> , 2019 , 19, 3830-3837	11.5	24
215	Self-Assembly of Two-Dimensional Perovskite Nanosheet Building Blocks into Ordered Ruddlesden-Popper Perovskite Phase. <i>Journal of the American Chemical Society</i> , 2019 , 141, 13028-13032	16.4	42
214	Introduction: 1D Nanomaterials/Nanowires. <i>Chemical Reviews</i> , 2019 , 119, 8955-8957	68.1	56
213	Nanowires for Photonics. <i>Chemical Reviews</i> , 2019 , 119, 9153-9169	68.1	95
212	Copper(I)-Based Highly Emissive All-Inorganic Rare-Earth Halide Clusters. <i>Matter</i> , 2019 , 1, 180-191	12.7	27
211	Nanowire Photoelectrochemistry. <i>Chemical Reviews</i> , 2019 , 119, 9221-9259	68.1	92

210	Designing materials for electrochemical carbon dioxide recycling. <i>Nature Catalysis</i> , 2019 , 2, 648-658	36.5	442
209	Three-Dimensional Phthalocyanine Metal-Catecholates for High Electrochemical Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2019 , 141, 17081-17085	16.4	99
208	Pressure-induced semiconductor-to-metal phase transition of a charge-ordered indium halide perovskite. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 23404-23409	11.5	25
207	Electrocatalytic Rate Alignment Enhances Syngas Generation. <i>Joule</i> , 2019 , 3, 257-264	27.8	40
206	Strongly Quantum Confined Colloidal Cesium Tin Iodide Perovskite Nanoplates: Lessons for Reducing Defect Density and Improving Stability. <i>Nano Letters</i> , 2018 , 18, 2060-2066	11.5	96
205	Thermochromic halide perovskite solar cells. <i>Nature Materials</i> , 2018 , 17, 261-267	27	436
204	Physical Biology of the Materials-Microorganism Interface. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1978-1985	16.4	79
203	Catalyst electro-redeposition controls morphology and oxidation state for selective carbon dioxide reduction. <i>Nature Catalysis</i> , 2018 , 1, 103-110	36.5	479
202	The Making and Breaking of Lead-Free Double Perovskite Nanocrystals of Cesium Silver-Bismuth Halide Compositions. <i>Nano Letters</i> , 2018 , 18, 3502-3508	11.5	184
201	Excited-state vibrational dynamics toward the polaron in methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018 , 9, 2525	17.4	90
200	Tunable Polaron Distortions Control the Extent of Halide Demixing in Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3998-4005	6.4	76
199	Synthesis of Silver Nanowires with Reduced Diameters Using Benzoin-Derived Radicals to Make Transparent Conductors with High Transparency and Low Haze. <i>Nano Letters</i> , 2018 , 18, 5329-5334	11.5	69
198	Effects of Catalyst Processing on the Activity and Stability of Pt-Ni Nanoframe Electrocatalysts. <i>ACS Nano</i> , 2018 , 12, 8697-8705	16.7	59
197	Phase-transition-induced p-n junction in single halide perovskite nanowire. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 8889-8894	11.5	34
196	Electron delocalization and charge mobility as a function of reduction in a metal-organic framework. <i>Nature Materials</i> , 2018 , 17, 625-632	27	182
195	Roadmap on semiconductor-cell biointerfaces. <i>Physical Biology</i> , 2018 , 15, 031002	3	34
194	Intrinsic anion diffusivity in lead halide perovskites is facilitated by a soft lattice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 11929-11934	11.5	108
193	Giant Light-Emission Enhancement in Lead Halide Perovskites by Surface Oxygen Passivation. <i>Nano Letters</i> , 2018 , 18, 6967-6973	11.5	45

192	Bacteria photosensitized by intracellular gold nanoclusters for solar fuel production. <i>Nature Nanotechnology</i> , 2018 , 13, 900-905	28.7	217
191	Cytoprotective metal-organic frameworks for anaerobic bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 10582-10587	11.5	100
190	Interfacing nature's catalytic machinery with synthetic materials for semi-artificial photosynthesis. <i>Nature Nanotechnology</i> , 2018 , 13, 890-899	28.7	197
189	Rich Chemistry in Inorganic Halide Perovskite Nanostructures. <i>Advanced Materials</i> , 2018 , 30, e1802856	24	81
188	Electrical and Optical Tunability in All-Inorganic Halide Perovskite Alloy Nanowires. <i>Nano Letters</i> , 2018 , 18, 3538-3542	11.5	38
187	Structure-Sensitive CO Electroreduction to Hydrocarbons on Ultrathin 5-fold Twinned Copper Nanowires. <i>Nano Letters</i> , 2017 , 17, 1312-1317	11.5	272
186	Investigation of phonon coherence and backscattering using silicon nanomeshes. <i>Nature Communications</i> , 2017 , 8, 14054	17.4	101
185	Benzoin Radicals as Reducing Agent for Synthesizing Ultrathin Copper Nanowires. <i>Journal of the American Chemical Society</i> , 2017 , 139, 3027-3032	16.4	36
184	Structural, optical, and electrical properties of phase-controlled cesium lead iodide nanowires. <i>Nano Research</i> , 2017 , 10, 1107-1114	10	101
183	Ultrathin Epitaxial Cu@Au Core-Shell Nanowires for Stable Transparent Conductors. <i>Journal of the American Chemical Society</i> , 2017 , 139, 7348-7354	16.4	87
182	Tandem Catalysis for CO Hydrogenation to C-C Hydrocarbons. <i>Nano Letters</i> , 2017 , 17, 3798-3802	11.5	124
181	Electrochemical Activation of CO through Atomic Ordering Transformations of AuCu Nanoparticles. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8329-8336	16.4	392
180	Critical Role of Methylammonium Librational Motion in Methylammonium Lead Iodide (CH ₃ NH ₃ PbI ₃) Perovskite Photochemistry. <i>Nano Letters</i> , 2017 , 17, 4151-4157	11.5	39
179	Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted CsPbBr ₃ Nanocrystals. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5309-5312	16.4	301
178	Room-Temperature Dynamics of Vanishing Copper Nanoparticles Supported on Silica. <i>Nano Letters</i> , 2017 , 17, 2732-2737	11.5	18
177	Cyborgian Material Design for Solar Fuel Production: The Emerging Photosynthetic Biohybrid Systems. <i>Accounts of Chemical Research</i> , 2017 , 50, 476-481	24.3	86
176	Bandgap engineering in semiconductor alloy nanomaterials with widely tunable compositions. <i>Nature Reviews Materials</i> , 2017 , 2,	73.3	195
175	Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO ₂ to Formate. <i>Joule</i> , 2017 , 1, 794-805	27.8	263

174	Copper nanoparticle ensembles for selective electroreduction of CO to C-C products. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 10560-10565	11.5	331
173	Ultralow thermal conductivity in all-inorganic halide perovskites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 8693-8697	11.5	156
172	Ruddlesden-Popper Phase in Two-Dimensional Inorganic Halide Perovskites: A Plausible Model and the Supporting Observations. <i>Nano Letters</i> , 2017 , 17, 5489-5494	11.5	72
171	Control of Architecture in Rhombic Dodecahedral Pt-Ni Nanoframe Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11678-11681	16.4	140
170	Spatially resolved multicolor CsPbX nanowire heterojunctions via anion exchange. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 7216-7221	11.5	134
169	Room-Temperature Coherent Optical Phonon in 2D Electronic Spectra of CHNHPbI Perovskite as a Possible Cooling Bottleneck. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3211-3215	6.4	59
168	Tunable Cu Enrichment Enables Designer Syngas Electrosynthesis from CO. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9359-9363	16.4	183
167	Plasmon-Enhanced Photocatalytic CO(2) Conversion within Metal-Organic Frameworks under Visible Light. <i>Journal of the American Chemical Society</i> , 2017 , 139, 356-362	16.4	401
166	Insights into the Mechanism of Tandem Alkene Hydroformylation over a Nanostructured Catalyst with Multiple Interfaces. <i>Journal of the American Chemical Society</i> , 2016 , 138, 11568-74	16.4	66
165	Anisotropic phase segregation and migration of Pt in nanocrystals en route to nanoframe catalysts. <i>Nature Materials</i> , 2016 , 15, 1188-1194	27	205
164	Cysteine-Cystine Photoregeneration for Oxygenic Photosynthesis of Acetic Acid from CO ₂ by a Tandem Inorganic-Biological Hybrid System. <i>Nano Letters</i> , 2016 , 16, 5883-7	11.5	82
163	Atomic Resolution Imaging of Halide Perovskites. <i>Nano Letters</i> , 2016 , 16, 7530-7535	11.5	97
162	Semiconductor nanowire lasers. <i>Nature Reviews Materials</i> , 2016 , 1,	73.3	260
161	A Molecular Surface Functionalization Approach to Tuning Nanoparticle Electrocatalysts for Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2016 , 138, 8120-5	16.4	272
160	Solution-Processed Copper/Reduced-Graphene-Oxide Core/Shell Nanowire Transparent Conductors. <i>ACS Nano</i> , 2016 , 10, 2600-6	16.7	128
159	Synthesis of PtCo ₃ polyhedral nanoparticles and evolution to Pt ₃ Co nanoframes. <i>Surface Science</i> , 2016 , 648, 328-332	1.8	35
158	Low-Temperature Solution-Phase Growth of Silicon and Silicon-Containing Alloy Nanowires. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 20525-20529	3.8	2
157	Single-nanowire photoelectrochemistry. <i>Nature Nanotechnology</i> , 2016 , 11, 609-12	28.7	88

156	Lasing in robust cesium lead halide perovskite nanowires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1993-8	11.5	551
155	TiO ₂ /BiVO ₄ Nanowire Heterostructure Photoanodes Based on Type II Band Alignment. <i>ACS Central Science</i> , 2016 , 2, 80-8	16.8	221
154	Self-photosensitization of nonphotosynthetic bacteria for solar-to-chemical production. <i>Science</i> , 2016 , 351, 74-7	33.3	542
153	Encapsulation of Perovskite Nanocrystals into Macroscale Polymer Matrices: Enhanced Stability and Polarization. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 35523-35533	9.5	288
152	Synthesis of Composition Tunable and Highly Luminescent Cesium Lead Halide Nanowires through Anion-Exchange Reactions. <i>Journal of the American Chemical Society</i> , 2016 , 138, 7236-9	16.4	327
151	Growth and Photoelectrochemical Energy Conversion of Wurtzite Indium Phosphide Nanowire Arrays. <i>ACS Nano</i> , 2016 , 10, 5525-35	16.7	61
150	Ultrathin Colloidal Cesium Lead Halide Perovskite Nanowires. <i>Journal of the American Chemical Society</i> , 2016 , 138, 13155-13158	16.4	193
149	Spectroscopic elucidation of energy transfer in hybrid inorganic-biological organisms for solar-to-chemical production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 11750-11755	11.5	81
148	Directed Assembly of Nanoparticle Catalysts on Nanowire Photoelectrodes for Photoelectrochemical CO ₂ Reduction. <i>Nano Letters</i> , 2016 , 16, 5675-80	11.5	105
147	MoS ₂ -wrapped silicon nanowires for photoelectrochemical water reduction. <i>Nano Research</i> , 2015 , 8, 281-287	10	70
146	Growth and Anion Exchange Conversion of CH ₃ NH ₃ PbX ₃ Nanorod Arrays for Light-Emitting Diodes. <i>Nano Letters</i> , 2015 , 15, 5519-24	11.5	296
145	Solution-Phase Synthesis of Cesium Lead Halide Perovskite Nanowires. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9230-3	16.4	727
144	Organic-inorganic perovskites: Lower threshold for nanowire lasers. <i>Nature Materials</i> , 2015 , 14, 557-8	27	65
143	Nanowire-bacteria hybrids for unassisted solar carbon dioxide fixation to value-added chemicals. <i>Nano Letters</i> , 2015 , 15, 3634-9	11.5	269
142	Atomically thin two-dimensional organic-inorganic hybrid perovskites. <i>Science</i> , 2015 , 349, 1518-21	33.3	959
141	Metal-organic frameworks for electrocatalytic reduction of carbon dioxide. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14129-35	16.4	768
140	Synthesis of Ultrathin Copper Nanowires Using Tris(trimethylsilyl)silane for High-Performance and Low-Haze Transparent Conductors. <i>Nano Letters</i> , 2015 , 15, 7610-5	11.5	145
139	Hybrid bioinorganic approach to solar-to-chemical conversion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11461-6	11.5	174

138	Covalent organic frameworks comprising cobalt porphyrins for catalytic CO ₂ reduction in water. <i>Science</i> , 2015 , 349, 1208-13	33.3	1540
137	Core-Shell CdS-CuS Nanorod Array Solar Cells. <i>Nano Letters</i> , 2015 , 15, 4096-101	11.5	91
136	Highly Luminescent Colloidal Nanoplates of Perovskite Cesium Lead Halide and Their Oriented Assemblies. <i>Journal of the American Chemical Society</i> , 2015 , 137, 16008-11	16.4	820
135	Atomic Structure of Pt ₃ Ni Nanoframe Electrocatalysts by in Situ X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15817-24	16.4	163
134	Mesoscopic constructs of ordered and oriented metal-organic frameworks on plasmonic silver nanocrystals. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2199-202	16.4	120
133	Artificial photosynthesis for sustainable fuel and chemical production. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 3259-66	16.4	444
132	Highly crystalline multimetallic nanoframes with three-dimensional electrocatalytic surfaces. <i>Science</i> , 2014 , 343, 1339-43	33.3	1989
131	Simultaneously efficient light absorption and charge separation in WO ₃ /BiVO ₄ core/shell nanowire photoanode for photoelectrochemical water oxidation. <i>Nano Letters</i> , 2014 , 14, 1099-105	11.5	580
130	25th anniversary article: semiconductor nanowires--synthesis, characterization, and applications. <i>Advanced Materials</i> , 2014 , 26, 2137-84	24	649
129	Semiconductor Nanowires for Artificial Photosynthesis. <i>Chemistry of Materials</i> , 2014 , 26, 415-422	9.6	277
128	All inorganic semiconductor nanowire mesh for direct solar water splitting. <i>ACS Nano</i> , 2014 , 8, 11739-44	16.7	62
127	Salt-induced self-assembly of bacteria on nanowire arrays. <i>Nano Letters</i> , 2014 , 14, 5471-6	11.5	42
126	Synergistic geometric and electronic effects for electrochemical reduction of carbon dioxide using gold-copper bimetallic nanoparticles. <i>Nature Communications</i> , 2014 , 5, 4948	17.4	854
125	Uniform doping of metal oxide nanowires using solid state diffusion. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10521-6	16.4	45
124	Semiconductor nanowires for photovoltaic and photoelectrochemical energy conversion. <i>Frontiers of Physics</i> , 2014 , 9, 289-302	3.7	44
123	Chapter 6: Nanowires for Photovoltaics and Artificial Photosynthesis. <i>RSC Smart Materials</i> , 2014 , 277-311	10.6	2
122	Alumina-coated Ag nanocrystal monolayers as surface-enhanced Raman spectroscopy platforms for the direct spectroscopic detection of water splitting reaction intermediates. <i>Nano Research</i> , 2014 , 7, 132-143	10	33
121	Atomic layer deposition of platinum catalysts on nanowire surfaces for photoelectrochemical water reduction. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12932-5	16.4	240

120	Large-scale synthesis of transition-metal-doped TiO ₂ nanowires with controllable overpotential. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9995-8	16.4	289
119	Electrodeposited cobalt-sulfide catalyst for electrochemical and photoelectrochemical hydrogen generation from water. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17699-702	16.4	463
118	Energy and environment policy case for a global project on artificial photosynthesis. <i>Energy and Environmental Science</i> , 2013 , 6, 695	35.4	236
117	Bacterial recognition of silicon nanowire arrays. <i>Nano Letters</i> , 2013 , 13, 2864-9	11.5	78
116	A fully integrated nanosystem of semiconductor nanowires for direct solar water splitting. <i>Nano Letters</i> , 2013 , 13, 2989-92	11.5	453
115	Cleaved-coupled nanowire lasers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 865-9	11.5	103
114	Oriented assembly of polyhedral plasmonic nanoparticle clusters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 6640-5	11.5	108
113	Quantifying surface roughness effects on phonon transport in silicon nanowires. <i>Nano Letters</i> , 2012 , 12, 2475-82	11.5	244
112	Membrane-protein binding measured with solution-phase plasmonic nanocube sensors. <i>Nature Methods</i> , 2012 , 9, 1189-91	21.6	78
111	Synthesis and Photocatalytic Properties of Single Crystalline (Ga _{1-x} Zn _x)(N _{1-x} O _x) Nanotubes. <i>Israel Journal of Chemistry</i> , 2012 , 52, 1111-1117	3.4	15
110	Zn-doped p-type gallium phosphide nanowire photocathodes from a surfactant-free solution synthesis. <i>Nano Letters</i> , 2012 , 12, 5407-11	11.5	96
109	Si/InGaN core/shell hierarchical nanowire arrays and their photoelectrochemical properties. <i>Nano Letters</i> , 2012 , 12, 1678-82	11.5	195
108	Photoelectrochemical properties of TiO ₂ nanowire arrays: a study of the dependence on length and atomic layer deposition coating. <i>ACS Nano</i> , 2012 , 6, 5060-9	16.7	353
107	Towards systems materials engineering. <i>Nature Materials</i> , 2012 , 11, 560-3	27	232
106	Semiconductor nanowire building blocks: From flux line pinning to artificial photosynthesis. <i>MRS Bulletin</i> , 2012 , 37, 806-813	3.2	18
105	Nanowire-based single-cell endoscopy. <i>Nature Nanotechnology</i> , 2011 , 7, 191-6	28.7	248
104	Self-assembly of uniform polyhedral silver nanocrystals into densest packings and exotic superlattices. <i>Nature Materials</i> , 2011 , 11, 131-7	27	464
103	Absorption of light in a single-nanowire silicon solar cell decorated with an octahedral silver nanocrystal. <i>Nano Letters</i> , 2011 , 11, 5189-95	11.5	65

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