

Piedong Yang

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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	Room-temperature ultraviolet nanowire nanolasers. <i>Science</i> , 2001 , 292, 1897-9	33.3	7931
262	Nanowire dye-sensitized solar cells. <i>Nature Materials</i> , 2005 , 4, 455-9	27	4919
261	Enhanced thermoelectric performance of rough silicon nanowires. <i>Nature</i> , 2008 , 451, 163-7	50.4	3293
260	Shape Control of Colloidal Metal Nanocrystals. <i>Small</i> , 2008 , 4, 310-325	11	2019
259	Highly crystalline multimetallic nanoframes with three-dimensional electrocatalytic surfaces. <i>Science</i> , 2014 , 343, 1339-43	33.3	1989
258	Light trapping in silicon nanowire solar cells. <i>Nano Letters</i> , 2010 , 10, 1082-7	11.5	1783
257	Covalent organic frameworks comprising cobalt porphyrins for catalytic CO ₂ reduction in water. <i>Science</i> , 2015 , 349, 1208-13	33.3	1540
256	Low-temperature wafer-scale production of ZnO nanowire arrays. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 3031-4	16.4	1486
255	Nanowire photonics. <i>Nature Photonics</i> , 2009 , 3, 569-576	33.9	1379
254	Thermal conductivity of individual silicon nanowires. <i>Applied Physics Letters</i> , 2003 , 83, 2934-2936	3.4	1342
253	General route to vertical ZnO nanowire arrays using textured ZnO seeds. <i>Nano Letters</i> , 2005 , 5, 1231-6	11.5	1280
252	Thermally stable Pt/mesoporous silica core-shell nanocatalysts for high-temperature reactions. <i>Nature Materials</i> , 2009 , 8, 126-31	27	1256
251	Semiconductor nanowires for energy conversion. <i>Chemical Reviews</i> , 2010 , 110, 527-46	68.1	1220
250	SEMICONDUCTOR NANOWIRES AND NANOTUBES. <i>Annual Review of Materials Research</i> , 2004 , 34, 83-122	22.8	1210
249	Langmuir-Blodgett Silver Nanowire Monolayers for Molecular Sensing Using Surface-Enhanced Raman Spectroscopy. <i>Nano Letters</i> , 2003 , 3, 1229-1233	11.5	1167
248	Shaping binary metal nanocrystals through epitaxial seeded growth. <i>Nature Materials</i> , 2007 , 6, 692-7	27	1073
247	Single gallium nitride nanowire lasers. <i>Nature Materials</i> , 2002 , 1, 106-10	27	1036

246	Atomically thin two-dimensional organic-inorganic hybrid perovskites. <i>Science</i> , 2015 , 349, 1518-21	33.3	959
245	Direct Observation of Vapor-Liquid-Solid Nanowire Growth. <i>Journal of the American Chemical Society</i> , 2001 , 123, 3165-3166	16.4	874
244	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
243	Block-by-Block Growth of Single-Crystalline Si/SiGe Superlattice Nanowires. <i>Nano Letters</i> , 2002 , 2, 83-86	11.5	853
242	Platonic gold nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 3673-7	16.4	822
241	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
240	Nanoribbon waveguides for subwavelength photonics integration. <i>Science</i> , 2004 , 305, 1269-73	33.3	803
239	Metal-organic frameworks for electrocatalytic reduction of carbon dioxide. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14129-35	16.4	768
238	Platinum nanoparticle shape effects on benzene hydrogenation selectivity. <i>Nano Letters</i> , 2007 , 7, 3097-101	11.5	747
237	Solution-Phase Synthesis of Cesium Lead Halide Perovskite Nanowires. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9230-3	16.4	727
236	Photochemical sensing of NO(2) with SnO(2) nanoribbon nanosensors at room temperature. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 2405-8	16.4	716
235	Silicon Vertically Integrated Nanowire Field Effect Transistors. <i>Nano Letters</i> , 2006 , 6, 973-977	11.5	663
234	25th anniversary article: semiconductor nanowires--synthesis, characterization, and applications. <i>Advanced Materials</i> , 2014 , 26, 2137-84	24	649
233	Semiconductor nanowire: what's next?. <i>Nano Letters</i> , 2010 , 10, 1529-36	11.5	643
232	Polyhedral silver nanocrystals with distinct scattering signatures. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 4597-601	16.4	639
231	Solution-grown zinc oxide nanowires. <i>Inorganic Chemistry</i> , 2006 , 45, 7535-43	5.1	591
230	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
229	Morphological control of catalytically active platinum nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7824-8	16.4	572

228	Giant piezoresistance effect in silicon nanowires. <i>Nature Nanotechnology</i> , 2006 , 1, 42-6	28.7	562
227	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
226	Self-photosensitization of nonphotosynthetic bacteria for solar-to-chemical production. <i>Science</i> , 2016 , 351, 74-7	33.3	542
225	Anisotropic etching of silver nanoparticles for plasmonic structures capable of single-particle SERS. <i>Journal of the American Chemical Society</i> , 2010 , 132, 268-74	16.4	537
224	Tunable plasmonic lattices of silver nanocrystals. <i>Nature Nanotechnology</i> , 2007 , 2, 435-40	28.7	534
223	Dendritic nanowire ultraviolet laser array. <i>Journal of the American Chemical Society</i> , 2003 , 125, 4728-9	16.4	533
222	Langmuir-Blodgett nanorod assembly. <i>Journal of the American Chemical Society</i> , 2001 , 123, 4360-1	16.4	531
221	ZnO nanowire transistors. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 9-14	3.4	527
220	Complete composition tunability of InGaN nanowires using a combinatorial approach. <i>Nature Materials</i> , 2007 , 6, 951-6	27	525
219	High density n-Si/n-TiO ₂ core/shell nanowire arrays with enhanced photoactivity. <i>Nano Letters</i> , 2009 , 9, 410-5	11.5	512
218	Sub-two nanometer single crystal Au nanowires. <i>Nano Letters</i> , 2008 , 8, 2041-4	11.5	497
217	Catalyst electro-redeposition controls morphology and oxidation state for selective carbon dioxide reduction. <i>Nature Catalysis</i> , 2018 , 1, 103-110	36.5	479
216	Pt nanocrystals: shape control and Langmuir-Blodgett monolayer formation. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 188-93	3.4	478
215	Self-assembly of uniform polyhedral silver nanocrystals into densest packings and exotic superlattices. <i>Nature Materials</i> , 2011 , 11, 131-7	27	464
214	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
213	Solution-processed core-shell nanowires for efficient photovoltaic cells. <i>Nature Nanotechnology</i> , 2011 , 6, 568-72	28.7	456
212	A fully integrated nanosystem of semiconductor nanowires for direct solar water splitting. <i>Nano Letters</i> , 2013 , 13, 2989-92	11.5	453
211	Interfacing silicon nanowires with mammalian cells. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7228-9	16.4	453

210	Hydrothermal growth of mesoporous SBA-15 silica in the presence of PVP-stabilized Pt nanoparticles: synthesis, characterization, and catalytic properties. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3027-37	16.4	453
209	Tunable nanowire nonlinear optical probe. <i>Nature</i> , 2007 , 447, 1098-101	50.4	448
208	Bismuth nanotubes: a rational low-temperature synthetic route. <i>Journal of the American Chemical Society</i> , 2001 , 123, 9904-5	16.4	445
207	Artificial photosynthesis for sustainable fuel and chemical production. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 3259-66	16.4	444
206	Designing materials for electrochemical carbon dioxide recycling. <i>Nature Catalysis</i> , 2019 , 2, 648-658	36.5	442
205	Sub-10 nm platinum nanocrystals with size and shape control: catalytic study for ethylene and pyrrole hydrogenation. <i>Journal of the American Chemical Society</i> , 2009 , 131, 5816-22	16.4	440
204	Thermochromic halide perovskite solar cells. <i>Nature Materials</i> , 2018 , 17, 261-267	27	436
203	Crystallographic alignment of high-density gallium nitride nanowire arrays. <i>Nature Materials</i> , 2004 , 3, 524-8	27	412
202	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
201	Nanocrystal bilayer for tandem catalysis. <i>Nature Chemistry</i> , 2011 , 3, 372-6	17.6	398
200	Langmuir-Blodgett of nanocrystals and nanowires. <i>Accounts of Chemical Research</i> , 2008 , 41, 1662-73	24.3	393
199	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
198	Single Nanowire Lasers. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 11387-11390	3.4	388
197	Nanowire photonics. <i>Materials Today</i> , 2006 , 9, 36-45	21.8	376
196	Oligo- and polythiophene/ZnO hybrid nanowire solar cells. <i>Nano Letters</i> , 2010 , 10, 334-40	11.5	370
195	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
194	Metalorganic Chemical Vapor Deposition Route to GaN Nanowires with Triangular Cross Sections. <i>Nano Letters</i> , 2003 , 3, 1063-1066	11.5	341
193	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

- 192 Very High Frequency Silicon Nanowire Electromechanical Resonators. *Nano Letters*, **2007**, 7, 1953-1959 11.5 328
- 191 Synthesis of Composition Tunable and Highly Luminescent Cesium Lead Halide Nanowires through Anion-Exchange Reactions. *Journal of the American Chemical Society*, **2016**, 138, 7236-9 16.4 327
- 190 Optical trapping and integration of semiconductor nanowire assemblies in water. *Nature Materials*, **2006**, 5, 97-101 27 323
- 189 Nanowire-based all-oxide solar cells. *Journal of the American Chemical Society*, **2009**, 131, 3756-61 16.4 321
- 188 Thermal conductivity of Si/SiGe superlattice nanowires. *Applied Physics Letters*, **2003**, 83, 3186-3188 3.4 317
- 187 Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted CsPbBr Nanocrystals. *Journal of the American Chemical Society*, **2017**, 139, 5309-5312 16.4 301
- 186 Growth and Anion Exchange Conversion of CH₃NH₃PbX₃ Nanorod Arrays for Light-Emitting Diodes. *Nano Letters*, **2015**, 15, 5519-24 11.5 296
- 185 Large-scale synthesis of transition-metal-doped TiO₂ nanowires with controllable overpotential. *Journal of the American Chemical Society*, **2013**, 135, 9995-8 16.4 289
- 184 Thermal conductance of thin silicon nanowires. *Physical Review Letters*, **2008**, 101, 105501 7.4 289
- 183 Encapsulation of Perovskite Nanocrystals into Macroscale Polymer Matrices: Enhanced Stability and Polarization. *ACS Applied Materials & Interfaces*, **2016**, 8, 35523-35533 9.5 288
- 182 Room-temperature formation of hollow Cu(2)O nanoparticles. *Advanced Materials*, **2010**, 22, 1910-4 24 278
- 181 Semiconductor Nanowires for Artificial Photosynthesis. *Chemistry of Materials*, **2014**, 26, 415-422 9.6 277
- 180 Structure-Sensitive CO Electroreduction to Hydrocarbons on Ultrathin 5-fold Twinned Copper Nanowires. *Nano Letters*, **2017**, 17, 1312-1317 11.5 272
- 179 A Molecular Surface Functionalization Approach to Tuning Nanoparticle Electrocatalysts for Carbon Dioxide Reduction. *Journal of the American Chemical Society*, **2016**, 138, 8120-5 16.4 272
- 178 Nanowire-bacteria hybrids for unassisted solar carbon dioxide fixation to value-added chemicals. *Nano Letters*, **2015**, 15, 3634-9 11.5 269
- 177 Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO₂ to Formate. *Joule*, **2017**, 1, 794-805 27.8 263
- 176 Semiconductor nanowire lasers. *Nature Reviews Materials*, **2016**, 1, 73-3 260
- 175 Self-Organized GaN Quantum Wire UV Lasers. *Journal of Physical Chemistry B*, **2003**, 107, 8721-8725 3.4 254

174	Nanowire-based single-cell endoscopy. <i>Nature Nanotechnology</i> , 2011 , 7, 191-6	28.7	248
173	Surface and Interface Control in Nanoparticle Catalysis. <i>Chemical Reviews</i> , 2020 , 120, 1184-1249	68.1	245
172	Quantifying surface roughness effects on phonon transport in silicon nanowires. <i>Nano Letters</i> , 2012 , 12, 2475-82	11.5	244
171	Dendrimer templated synthesis of one nanometer Rh and Pt particles supported on mesoporous silica: catalytic activity for ethylene and pyrrole hydrogenation. <i>Nano Letters</i> , 2008 , 8, 2027-34	11.5	241
170	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
169	Energy and environment policy case for a global project on artificial photosynthesis. <i>Energy and Environmental Science</i> , 2013 , 6, 695	35.4	236
168	Towards systems materials engineering. <i>Nature Materials</i> , 2012 , 11, 560-3	27	232
167	Surface-enhanced Raman spectroscopy for trace arsenic detection in contaminated water. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 6456-60	16.4	222
166	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021 , 15, 10775-10981	16.7	222
165	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
164	Bacteria photosensitized by intracellular gold nanoclusters for solar fuel production. <i>Nature Nanotechnology</i> , 2018 , 13, 900-905	28.7	217
163	Highly selective synthesis of catalytically active monodisperse rhodium nanocubes. <i>Journal of the American Chemical Society</i> , 2008 , 130, 5868-9	16.4	214
162	Anisotropic phase segregation and migration of Pt in nanocrystals en route to nanoframe catalysts. <i>Nature Materials</i> , 2016 , 15, 1188-1194	27	205
161	Optical routing and sensing with nanowire assemblies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 7800-5	11.5	201
160	Interfacing nature's catalytic machinery with synthetic materials for semi-artificial photosynthesis. <i>Nature Nanotechnology</i> , 2018 , 13, 890-899	28.7	197
159	The Chemistry and Physics of Semiconductor Nanowires. <i>MRS Bulletin</i> , 2005 , 30, 85-91	3.2	196
158	Bandgap engineering in semiconductor alloy nanomaterials with widely tunable compositions. <i>Nature Reviews Materials</i> , 2017 , 2,	73.3	195
157	Si/InGa _N core/shell hierarchical nanowire arrays and their photoelectrochemical properties. <i>Nano Letters</i> , 2012 , 12, 1678-82	11.5	195

156	Ultrathin Colloidal Cesium Lead Halide Perovskite Nanowires. <i>Journal of the American Chemical Society</i> , 2016 , 138, 13155-13158	16.4	193
155	Transition-metal doped zinc oxide nanowires. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 420-3	16.4	189
154	Self-transducing silicon nanowire electromechanical systems at room temperature. <i>Nano Letters</i> , 2008 , 8, 1756-61	11.5	187
153	Shape, size, and assembly control of PbTe nanocrystals. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9864-5	16.4	186
152	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
151	Tunable Cu Enrichment Enables Designer Syngas Electrosynthesis from CO. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9359-9363	16.4	183
150	Platonic Gold Nanocrystals. <i>Angewandte Chemie</i> , 2004 , 116, 3759-3763	3.6	183
149	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
148	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
147	Vertical nanowire array-based light emitting diodes. <i>Nano Research</i> , 2008 , 1, 123-128	10	172
146	Self-organized silver nanoparticles for three-dimensional plasmonic crystals. <i>Nano Letters</i> , 2008 , 8, 4033-8	11.5	168
145	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
144	Semiconductor nanowire ring resonator laser. <i>Physical Review Letters</i> , 2006 , 96, 143903	7.4	163
143	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
142	Nanofluidic diodes based on nanotube heterojunctions. <i>Nano Letters</i> , 2009 , 9, 3820-5	11.5	153
141	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
140	Dopant profiling and surface analysis of silicon nanowires using capacitance-voltage measurements. <i>Nature Nanotechnology</i> , 2009 , 4, 311-4	28.7	145
139	Two-dimensional halide perovskite lateral epitaxial heterostructures. <i>Nature</i> , 2020 , 580, 614-620	50.4	142

138	Direct photonic-plasmonic coupling and routing in single nanowires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 21045-50	11.5	142
137	One-step patterning of aligned nanowire arrays by programmed dip coating. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 2414-7	16.4	142
136	Surfactant-free, large-scale, solution-liquid-solid growth of gallium phosphide nanowires and their use for visible-light-driven hydrogen production from water reduction. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19306-9	16.4	141
135	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
134	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
133	Electrical characteristics and chemical stability of non-oxidized, methyl-terminated silicon nanowires. <i>Journal of the American Chemical Society</i> , 2006 , 128, 8990-1	16.4	134
132	Solution-Processed Copper/Reduced-Graphene-Oxide Core/Shell Nanowire Transparent Conductors. <i>ACS Nano</i> , 2016 , 10, 2600-6	16.7	128
131	One-step Polyol Synthesis and Langmuir-Blodgett Monolayer Formation of Size-tunable Monodisperse Rhodium Nanocrystals with Catalytically Active (111) Surface Structures. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 12243-12253	3.8	128
130	Tandem Catalysis for CO Hydrogenation to C-C Hydrocarbons. <i>Nano Letters</i> , 2017 , 17, 3798-3802	11.5	124
129	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
128	Low-Temperature Wafer-Scale Production of ZnO Nanowire Arrays. <i>Angewandte Chemie</i> , 2003 , 115, 3139-3142	11.8	118
127	Polarity switching and transient responses in single nanotube nanofluidic transistors. <i>Physical Review Letters</i> , 2005 , 95, 086607	7.4	113
126	Polyhedral Silver Nanocrystals with Distinct Scattering Signatures. <i>Angewandte Chemie</i> , 2006 , 118, 4713-4717	10.7	109
125	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
124	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
123	Synthesis of metal sulfide nanomaterials via thermal decomposition of single-source precursors. <i>Journal of Materials Chemistry</i> , 2010 , 20, 6612		107
122	Directed Assembly of Nanoparticle Catalysts on Nanowire Photoelectrodes for Photoelectrochemical CO ₂ Reduction. <i>Nano Letters</i> , 2016 , 16, 5675-80	11.5	105
121	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

120	Investigation of phonon coherence and backscattering using silicon nanomeshes. <i>Nature Communications</i> , 2017 , 8, 14054	17.4	101
119	Structural, optical, and electrical properties of phase-controlled cesium lead iodide nanowires. <i>Nano Research</i> , 2017 , 10, 1107-1114	10	101
118	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
117	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
116	Atomic Resolution Imaging of Halide Perovskites. <i>Nano Letters</i> , 2016 , 16, 7530-7535	11.5	97
115	Epitaxial growth of InGa _N nanowire arrays for light emitting diodes. <i>ACS Nano</i> , 2011 , 5, 3970-6	16.7	97
114	Field-effect modulation of Seebeck coefficient in single PbSe nanowires. <i>Nano Letters</i> , 2009 , 9, 1689-93	11.5	97
113	A nanocube plasmonic sensor for molecular binding on membrane surfaces. <i>Nano Letters</i> , 2009 , 9, 2077-82	8.5	97
112	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
111	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
110	Magnetotransport in Co-doped ZnO nanowires. <i>Nano Letters</i> , 2009 , 9, 892-6	11.5	96
109	Nanowires for Photonics. <i>Chemical Reviews</i> , 2019 , 119, 9153-9169	68.1	95
108	Cu-Ag Tandem Catalysts for High-Rate CO ₂ Electrolysis toward Multicarbon. <i>Joule</i> , 2020 , 4, 1688-1699	27.8	95
107	Photosynthetic semiconductor biohybrids for solar-driven biocatalysis. <i>Nature Catalysis</i> , 2020 , 3, 245-255	36.5	94
106	Nanowire Photoelectrochemistry. <i>Chemical Reviews</i> , 2019 , 119, 9221-9259	68.1	92
105	Core-Shell CdS-Cu ₂ S Nanorod Array Solar Cells. <i>Nano Letters</i> , 2015 , 15, 4096-101	11.5	91
104	Excited-state vibrational dynamics toward the polaron in methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018 , 9, 2525	17.4	90
103	Single-nanowire photoelectrochemistry. <i>Nature Nanotechnology</i> , 2016 , 11, 609-12	28.7	88

102	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
101	Semiconductor Nanowire Array: Potential Substrates for Photocatalysis and Photovoltaics. <i>Topics in Catalysis</i> , 2002 , 19, 197-202	2.3	87
100	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
99	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
98	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
97	Rich Chemistry in Inorganic Halide Perovskite Nanostructures. <i>Advanced Materials</i> , 2018 , 30, e1802856	24	81
96	Physical Biology of the Materials-Microorganism Interface. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1978-1985	16.4	79
95	Catalytic properties of Pt cluster-decorated CeO ₂ nanostructures. <i>Nano Research</i> , 2011 , 4, 61-71	10	79
94	Membrane-protein binding measured with solution-phase plasmonic nanocube sensors. <i>Nature Methods</i> , 2012 , 9, 1189-91	21.6	78
93	Bacterial recognition of silicon nanowire arrays. <i>Nano Letters</i> , 2013 , 13, 2864-9	11.5	78
92	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
91	High quantum efficiency of band-edge emission from ZnO nanowires. <i>Nano Letters</i> , 2011 , 11, 3792-6	11.5	75
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