

# Johnny C Ho

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8617683/johnny-c-ho-publications-by-year.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

219  
papers

11,413  
citations

54  
h-index

101  
g-index

238  
ext. papers

13,211  
ext. citations

10.3  
avg, IF

6.4  
L-index

#	Paper	IF	Citations
219	Few-layer bismuth selenide cathode for low-temperature quasi-solid-state aqueous zinc metal batteries.. <i>Nature Communications</i> , <b>2022</b> , 13, 752	17.4	2
218	On-wire axial perovskite heterostructures for monolithic dual-wavelength laser. <i>Nano Energy</i> , <b>2022</b> , 92, 106778	17.1	3
217	Ferroelectric P(VDF-TrFE) wrapped InGaAs nanowires for ultralow-power artificial synapses. <i>Nano Energy</i> , <b>2022</b> , 91, 106654	17.1	11
216	Deconvoluting the energy transport mechanisms in all-inorganic CsPb <sub>2</sub> Br <sub>5</sub> /CsPbBr <sub>3</sub> perovskite composite systems. <i>APL Materials</i> , <b>2022</b> , 10, 031101	5.7	1
215	NiMo@C <sub>3</sub> N <sub>5</sub> heterostructures with multiple electronic transmission channels for highly efficient hydrogen evolution from alkaline electrolytes and seawater. <i>Chemical Engineering Journal</i> , <b>2022</b> , 438, 135379	14.7	6
214	Solution-processed lead-free double perovskite microplatelets with enhanced photoresponse and thermal stability. <i>Science China Materials</i> , <b>2022</b> , 65, 1313-1319	7.1	0
213	Direct drop-casting synthesis of all-inorganic lead and lead-free halide perovskite microcrystals for high-performance photodetectors. <i>Nano Research</i> , <b>2022</b> , 15, 3621-3627	10	2
212	Luminescent concentrators enable highly efficient and broadband photodetection.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 125	16.7	0
211	Enhanced epitaxial growth of two-dimensional monolayer WS <sub>2</sub> film with large single domains. <i>Applied Materials Today</i> , <b>2021</b> , 25, 101234	6.6	0
210	NiFe-layered double hydroxides arrays for oxygen evolution reaction in fresh water and seawater. <i>Materials Today Energy</i> , <b>2021</b> , 100883	7	8
209	Vacancy Modulating Co Sn S Topological Semimetal for Aqueous Zinc-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 61, e202111826	16.4	5
208	Stable bismuth-antimony alloy cathode with a conversion-dissolution/deposition mechanism for high-performance zinc batteries. <i>Materials Today</i> , <b>2021</b> , 51, 87-87	21.8	2
207	High elasticity of CsPbBr <sub>3</sub> perovskite nanowires for flexible electronics. <i>Nano Research</i> , <b>2021</b> , 14, 4033	10	6
206	High-Performance Flexible Self-Powered Photodetectors Utilizing Spontaneous Electron and Hole Separation in Quasi-2D Halide Perovskites. <i>Small</i> , <b>2021</b> , 17, e2100442	11	8
205	Two-Step Chemical Vapor Deposition-Synthesized Lead-Free All-Inorganic CsSbBr Perovskite Microplates for Optoelectronic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 35930-35940	9.5	4
204	Toward Unusual-High Hole Mobility of p-Channel Field-Effect-Transistors. <i>Small</i> , <b>2021</b> , 17, e2102323	11	6
203	2D WS <sub>2</sub> : From Vapor Phase Synthesis to Device Applications. <i>Advanced Electronic Materials</i> , <b>2021</b> , 7, 2006688	6.8	16

202	More than physical support: The effect of nickel foam corrosion on electrocatalytic performance. <i>Applied Surface Science</i> , <b>2021</b> , 538, 147977	6.7	10
201	Photoresponse improvement of mixed-dimensional 1D-2D GaAs photodetectors by incorporating constructive interface states. <i>Nanoscale</i> , <b>2021</b> , 13, 1086-1092	7.7	35
200	Mechanism of non-catalytic chemical vapor deposition growth of all-inorganic CsPbX <sub>3</sub> (X = Br, Cl) nanowires. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 3229-3238	7.1	2
199	Quantum Artificial Synapses. <i>Advanced Quantum Technologies</i> , <b>2021</b> , 4, 2100072	4.3	1
198	A thermally robust and strongly oxidizing surface of WO <sub>3</sub> hydrate nanowires for electrical aldehyde sensing with long-term stability. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 5815-5824	13	4
197	Self-Anti-Stacking 2D Metal Phosphide Loop-Sheet Heterostructures by Edge-Topological Regulation for Highly Efficient Water Oxidation. <i>Small</i> , <b>2021</b> , 17, e2006860	11	7
196	Van der Waals PdSe <sub>2</sub> /WS <sub>2</sub> Heterostructures for Robust High-Performance Broadband Photodetection from Visible to Infrared Optical Communication Band. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2001991	8.1	15
195	Surface-Guided Formation of Amorphous Mixed-Metal Oxyhydroxides on Ultrathin MnO <sub>2</sub> Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001059	21.8	38
194	Stable Hysteresis-Free MoS <sub>2</sub> Transistors With Low-k/High-k Bilayer Gate Dielectrics. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1036-1039	4.4	2
193	High-mobility In and Ga co-doped ZnO nanowires for high-performance transistors and ultraviolet photodetectors. <i>Nanoscale</i> , <b>2020</b> , 12, 16153-16161	7.7	11
192	Enhancing Performance of a GaAs/AlGaAs/GaAs Nanowire Photodetector Based on the Two-Dimensional Electron-Hole Tube Structure. <i>Nano Letters</i> , <b>2020</b> , 20, 2654-2659	11.5	74
191	Gate Bias Stress Instability and Hysteresis Characteristics of InAs Nanowire Field-Effect Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56330-56337	9.5	10
190	Flexible Quasi-2D Perovskite/IGZO Phototransistors for Ultrasensitive and Broadband Photodetection. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907527	24	54
189	Substantially Improving Device Performance of All-Inorganic Perovskite-Based Phototransistors via Indium Tin Oxide Nanowire Incorporation. <i>Small</i> , <b>2020</b> , 16, e1905609	11	19
188	Full-Color Reflective Filters in a Large Area with a Wide-Band Tunable Absorber Deposited by One-Step Magnetron Sputtering. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 1901626	8.1	7
187	In situ electrochemical conversion of cobalt oxide@MOF-74 core-shell structure as an efficient and robust electrocatalyst for water oxidation. <i>Applied Materials Today</i> , <b>2020</b> , 21, 100820	6.6	7
186	Efficient and stable electrocatalysts for water splitting. <i>MRS Bulletin</i> , <b>2020</b> , 45, 531-538	3.2	2
185	Artificial visual systems enabled by quasi-two-dimensional electron gases in oxide superlattice nanowires. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	21

184	Bication-Mediated Quasi-2D Halide Perovskites for High-Performance Flexible Photodetectors: From Ruddlesden-Popper Type to Dion-Jacobson Type. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 39567-39577	9.5	12
183	Controllable optical emission wavelength in all-inorganic halide perovskite alloy microplates grown by two-step chemical vapor deposition. <i>Nano Research</i> , <b>2020</b> , 13, 2939-2949	10	12
182	Unusual phase-pure zinc blende and highly-crystalline As-rich InAs <sub>1-x</sub> Sbx nanowires for high-mobility transistors. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 13189-13196	7.1	3
181	Morphology and strain control of hierarchical cobalt oxide nanowire electrocatalysts via solvent effect. <i>Nano Research</i> , <b>2020</b> , 13, 3130-3136	10	7
180	The origin of gate bias stress instability and hysteresis in monolayer WS <sub>2</sub> transistors. <i>Nano Research</i> , <b>2020</b> , 13, 3278-3285	10	6
179	Flexible Near-Infrared InGaSb Nanowire Array Detectors with Ultrafast Photoconductive Response Below 20 μs. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2001201	8.1	10
178	Face-selective tungstate ions drive zinc oxide nanowire growth direction and dopant incorporation. <i>Communications Materials</i> , <b>2020</b> , 1,	6	5
177	Perovskite Core-Shell Nanowire Transistors: Interfacial Transfer Doping and Surface Passivation. <i>ACS Nano</i> , <b>2020</b> , 14, 12749-12760	16.7	10
176	Enhanced performance of near-infrared photodetectors based on InGaAs nanowires enabled by a two-step growth method. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 17025-17033	7.1	7
175	Self-Assembly of Colloidal Particles for Fabrication of Structural Color Materials toward Advanced Intelligent Systems. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 1900085	6	6
174	Utilizing a NaOH Promoter to Achieve Large Single-Domain Monolayer WS Films via Modified Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 35238-35246	9.5	11
173	Global Photocurrent Generation in Phototransistors Based on Single-Walled Carbon Nanotubes toward Highly Sensitive Infrared Detection. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900597	8.1	6
172	Two-Dimensional Cobalt Phosphate Hydroxide Nanosheets: A New Type of High-Performance Electrocatalysts with Intrinsic CoO Lattice Distortion for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 38633-38640	9.5	21
171	High-Performance Transparent Ultraviolet Photodetectors Based on InGaZnO Superlattice Nanowire Arrays. <i>ACS Nano</i> , <b>2019</b> , 13, 12042-12051	16.7	19
170	Recent advances in layered double hydroxide electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 5069-5089	13	254
169	Transparent metal-oxide nanowires and their applications in harsh electronics. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 202-217	7.1	37
168	Crystalline InGaZnO quaternary nanowires with superlattice structure for high-performance thin-film transistors. <i>Nano Research</i> , <b>2019</b> , 12, 1796-1803	10	10
167	Direct Vapor-Liquid-Solid Synthesis of All-Inorganic Perovskite Nanowires for High-Performance Electronics and Optoelectronics. <i>ACS Nano</i> , <b>2019</b> , 13, 6060-6070	16.7	63

166	Optical Properties of InGaO Nanowires Revealed by Photoacoustic Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 19260-19266	9.5	5
165	A unique sandwich structure of a CoMnP/Ni <sub>2</sub> P/NiFe electrocatalyst for highly efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12325-12332	13	38
164	Enhanced Power Conversion Efficiency in Solution-Processed Rigid CuIn(S,Se) <sub>2</sub> and Flexible Cu(In,Ga)Se <sub>2</sub> Solar Cells Utilizing Plasmonic Au-SiO <sub>2</sub> Core-Shell Nanoparticles. <i>Solar Rrl</i> , <b>2019</b> , 3, 1800343	7.1	4
163	Ultra-fast photodetectors based on high-mobility indium gallium antimonide nanowires. <i>Nature Communications</i> , <b>2019</b> , 10, 1664	17.4	39
162	Incorporation of rare earth elements with transition metalBased materials for electrocatalysis: a review for recent progress. <i>Materials Today Chemistry</i> , <b>2019</b> , 12, 266-281	6.2	46
161	Perovskite/Black Phosphorus/MoS Photogate Reversed Photodiodes with Ultrahigh Light On/Off Ratio and Fast Response. <i>ACS Nano</i> , <b>2019</b> , 13, 4804-4813	16.7	53
160	Self-Assembly of Colloidal Spheres toward Fabrication of Hierarchical and Periodic Nanostructures for Technological Applications. <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1800541	6.8	43
159	Engineering Surface Structure of Spinel Oxides via High-Valent Vanadium Doping for Remarkably Enhanced Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 33012-33021	9.5	36
158	Cerium Phosphate as a Novel Cocatalyst Promoting NiCo <sub>2</sub> O <sub>4</sub> Nanowire Arrays for Efficient and Robust Electrocatalytic Oxygen Evolution. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 5769-5776	6.1	17
157	Incorporating mixed cations in quasi-2D perovskites for high-performance and flexible photodetectors. <i>Nanoscale Horizons</i> , <b>2019</b> , 4, 1342-1352	10.8	23
156	Simple and cost effective fabrication of 3D porous core-shell Ni nanochains@NiFe layered double hydroxide nanosheet bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 21722-21729	13	68
155	Recent advances in flexible photodetectors based on 1D nanostructures. <i>Journal of Semiconductors</i> , <b>2019</b> , 40, 111602	2.3	7
154	Direct Visualization of Grain Boundaries in 2D Monolayer WS <sub>2</sub> via Induced Growth of CdS Nanoparticle Chains. <i>Small Methods</i> , <b>2019</b> , 3, 1800245	12.8	17
153	Two-dimensional perovskite materials: From synthesis to energy-related applications. <i>Materials Today Energy</i> , <b>2019</b> , 11, 61-82	7	93
152	Properties Engineering of III-V Nanowires for Electronic Application. <i>Nanostructure Science and Technology</i> , <b>2019</b> , 53-82	0.9	
151	Modulating Electrical Performances of In <sub>2</sub> O <sub>3</sub> Nanofiber Channel Thin Film Transistors via Sr Doping. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1800707	6.4	30
150	Recent advances in III-Sb nanowires: from synthesis to applications. <i>Nanotechnology</i> , <b>2019</b> , 30, 202003	3.4	19
149	Regulating the surface of nanoceria and its applications in heterogeneous catalysis. <i>Surface Science Reports</i> , <b>2018</b> , 73, 1-36	12.9	95

148	Comprehensive Understanding of the Spatial Configurations of CeO <sub>2</sub> in NiO for the Electrocatalytic Oxygen Evolution Reaction: Embedded or Surface-Loaded. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706056	15.6	99
147	High-Index Faceted Porous CoO Nanosheets with Oxygen Vacancies for Highly Efficient Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 7079-7086	9.5	117
146	Room-Temperature Red-Green-Blue Whispering-Gallery Mode Lasing and White-Light Emission from Cesium Lead Halide Perovskite (CsPbX <sub>3</sub> , X = Cl, Br, I) Microstructures. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1700993	8.1	33
145	Amine-Modulated/Engineered Interfaces of NiMo Electrocatalysts for Improved Hydrogen Evolution Reaction in Alkaline Solutions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 1728-1733	9.5	45
144	Wafer-scale synthesis of monolayer WS <sub>2</sub> for high-performance flexible photodetectors by enhanced chemical vapor deposition. <i>Nano Research</i> , <b>2018</b> , 11, 3371-3384	10	118
143	Thin-Film Transistors: ZnO Nanofiber Thin-Film Transistors with Low-Operating Voltages (Adv. Electron. Mater. 1/2018). <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1870007	6.4	
142	Enhanced performance of perovskite solar cells based on vertical TiO <sub>2</sub> nanotube arrays with full filling of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> . <i>Applied Surface Science</i> , <b>2018</b> , 451, 250-257	6.7	24
141	Controlled Growth of Heterostructured Ga/GaAs Nanowires with Sharp Schottky Barrier. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 4438-4444	3.5	4
140	Spectroscopic examination of enamel staining by coffee indicates dentin erosion by sequestration of elements. <i>Talanta</i> , <b>2018</b> , 189, 550-559	6.2	11
139	Chalcogen passivation: an in-situ method to manipulate the morphology and electrical property of GaAs nanowires. <i>Scientific Reports</i> , <b>2018</b> , 8, 6928	4.9	6
138	Novel Series of Quasi-2D Ruddlesden-Popper Perovskites Based on Short-Chained Spacer Cation for Enhanced Photodetection. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 19019-19026	9.5	58
137	Environmentally and Mechanically Stable Selenium 1D/2D Hybrid Structures for Broad-Range Photoresponse from Ultraviolet to Infrared Wavelengths. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 35477-35486	9.5	34
136	Coupling of Nickel Boride and Ni(OH) <sub>2</sub> Nanosheets with Hierarchical Interconnected Conductive Porous Structure Synergizes the Oxygen Evolution Reaction. <i>ChemCatChem</i> , <b>2018</b> , 10, 4555-4561	5.2	19
135	Towards high-mobility In <sub>2</sub> xGa <sub>2</sub> 1-xO <sub>3</sub> nanowire field-effect transistors. <i>Nano Research</i> , <b>2018</b> , 11, 5935-5945		15
134	High-Performance Near-Infrared Photodetectors Based on p-Type SnX (X = S, Se) Nanowires Grown via Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2018</b> , 12, 7239-7245	16.7	62
133	Phosphorus-Doped MoS <sub>2</sub> Nanosheets Supported on Carbon Cloths as Efficient Hydrogen-Generation Electrocatalysts. <i>ChemCatChem</i> , <b>2018</b> , 10, 1571-1577	5.2	36
132	Enhanced Negative Photoconductivity in InAs Nanowire Phototransistors Surface-Modified with Molecular Monolayers. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1701104	4.6	14
131	ZnO Nanofiber Thin-Film Transistors with Low-Operating Voltages. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1700336	6.4	24

130	High-performance enhancement-mode thin-film transistors based on Mg-doped In <sub>2</sub> O <sub>3</sub> nanofiber networks. <i>Nano Research</i> , <b>2018</b> , 11, 1227-1237	10	37
129	Layered Ternary and Quaternary Transition Metal Chalcogenide Based Catalysts for Water Splitting. <i>Catalysts</i> , <b>2018</b> , 8, 551	4	31
128	Sub-kT/q switching in InO nanowire negative capacitance field-effect transistors. <i>Nanoscale</i> , <b>2018</b> , 10, 19131-19139	7.7	6
127	Nonpolar-Oriented Wurtzite InP Nanowires with Electron Mobility Approaching the Theoretical Limit. <i>ACS Nano</i> , <b>2018</b> , 12, 10410-10418	16.7	22
126	GaAs Nanowires Grown by Catalyst Epitaxy for High Performance Photovoltaics. <i>Crystals</i> , <b>2018</b> , 8, 347	2.3	5
125	Semi-solid and solid frustrated Lewis pair catalysts. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 5541-5553	58.5	52
124	Enhanced Self-Assembly of Crystalline, Large-Area, and Periodicity-Tunable TiO Nanotube Arrays on Various Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 6265-6272	9.5	10
123	Manipulating III-V Nanowire Transistor Performance via Surface Decoration of Metal-Oxide Nanoparticles. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700260	4.6	13
122	In situ formation of highly active NiBe based oxygen-evolving electrocatalysts via simple reactive dip-coating. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11009-11015	13	54
121	Is platinum a suitable counter electrode material for electrochemical hydrogen evolution reaction?. <i>Science Bulletin</i> , <b>2017</b> , 62, 971-973	10.6	44
120	Modulating electronic structure of CoP electrocatalysts towards enhanced hydrogen evolution by Ce chemical doping in both acidic and basic media. <i>Nano Energy</i> , <b>2017</b> , 38, 290-296	17.1	142
119	Controllable III-V nanowire growth via catalyst epitaxy. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4393-4399		14
118	Complementary Metal Oxide Semiconductor-Compatible, High-Mobility, <111>-Oriented GaSb Nanowires Enabled by Vapor-Solid-Solid Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2017</b> , 11, 4237-4246	16.7	27
117	Recent developments in III-V semiconducting nanowires for high-performance photodetectors. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 630-645	7.8	49
116	Hierarchical Nanostructures: Design for Sustainable Water Splitting. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700559	21.8	192
115	Large-Scale Synthesis of Freestanding Layer-Structured PbI and MAPbI Nanosheets for High-Performance Photodetection. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702759	24	78
114	Co <sub>3</sub> O <sub>4</sub> Nanosheets with In-Plane Pores and Highly Active {112} Exposed Facets for High Performance Lithium Storage. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 19002-19009	3.8	24
113	Hierarchical Nanostructures: Hierarchical Nanostructures: Design for Sustainable Water Splitting (Adv. Energy Mater. 23/2017). <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1770135	21.8	8

112	Unraveling the Morphological Evolution and Etching Kinetics of Porous Silicon Nanowires During Metal-Assisted Chemical Etching. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 385	5	23
111	Performance Limits of the Self-Aligned Nanowire Top-Gated MoS2 Transistors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1602250	15.6	31
110	Visible to near-infrared photodetectors based on MoS2 vertical Schottky junctions. <i>Nanotechnology</i> , <b>2017</b> ,	3.4	51
109	High-Performance Ferroelectric Polymer Side-Gated CdS Nanowire Ultraviolet Photodetectors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 7690-7696	15.6	87
108	On-Nanowire Axial Heterojunction Design for High-Performance Photodetectors. <i>ACS Nano</i> , <b>2016</b> , 10, 8474-81	16.7	73
107	Side-Gated InO Nanowire Ferroelectric FETs for High-Performance Nonvolatile Memory Applications. <i>Advanced Science</i> , <b>2016</b> , 3, 1600078	13.6	34
106	Crystal Orientation Controlled Photovoltaic Properties of Multilayer GaAs Nanowire Arrays. <i>ACS Nano</i> , <b>2016</b> , 10, 6283-90	16.7	20
105	High-Sensitivity Floating-Gate Phototransistors Based on WS2 and MoS2. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 6084-6090	15.6	103
104	Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for High-Performance 2D Field Effect Transistors. <i>Advanced Materials</i> , <b>2016</b> , 28, 2062-9	24	48
103	Hierarchical NiMo-based 3D electrocatalysts for highly-efficient hydrogen evolution in alkaline conditions. <i>Nano Energy</i> , <b>2016</b> , 27, 247-254	17.1	143
102	Inverted Silicon Nanopencil Array Solar Cells with Enhanced Contact Structures. <i>Scientific Reports</i> , <b>2016</b> , 6, 34139	4.9	15
101	Diameter Dependence of Planar Defects in InP Nanowires. <i>Scientific Reports</i> , <b>2016</b> , 6, 32910	4.9	11
100	Design and fabrication of 1-D semiconductor nanomaterials for high-performance photovoltaics. <i>Science Bulletin</i> , <b>2016</b> , 61, 357-367	10.6	12
99	INTEGRATING SEMICONDUCTOR NANOWIRES FOR HIGH PERFORMANCE FLEXIBLE ELECTRONIC CIRCUITS <b>2016</b> , 117-165		
98	Growth and Photovoltaic Properties of High-Quality GaAs Nanowires Prepared by the Two-Source CVD Method. <i>Nanoscale Research Letters</i> , <b>2016</b> , 11, 191	5	9
97	Modulating the morphology and electrical properties of GaAs nanowires via catalyst stabilization by oxygen. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 5591-7	9.5	15
96	Photodetectors: High-Responsivity Graphene/InAs Nanowire Heterojunction Near-Infrared Photodetectors with Distinct Photocurrent On/Off Ratios (Small 8/2015). <i>Small</i> , <b>2015</b> , 11, 890-890	11	2
95	Modulating Electrical Properties of InAs Nanowires via Molecular Monolayers. <i>ACS Nano</i> , <b>2015</b> , 9, 7545-526.7	26.7	26



94	Hydrogen gas sensor based on metal oxide nanoparticles decorated graphene transistor. <i>Nanoscale</i> , <b>2015</b> , 7, 10078-84	7.7	135
93	Insight into the electrochemical activation of carbon-based cathodes for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 13080-13086	13	175
92	High-Performance GaAs Nanowire Solar Cells for Flexible and Transparent Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 20454-9	9.5	45
91	Approaching the Hole Mobility Limit of GaSb Nanowires. <i>ACS Nano</i> , <b>2015</b> , 9, 9268-75	16.7	54
90	Area-Selective Atomic Layer Deposition: Conformal Coating, Subnanometer Thickness Control, and Smart Positioning. <i>ACS Nano</i> , <b>2015</b> , 9, 8651-4	16.7	69
89	High-responsivity graphene/InAs nanowire heterojunction near-infrared photodetectors with distinct photocurrent on/off ratios. <i>Small</i> , <b>2015</b> , 11, 936-42	11	140
88	Floating gate memory-based monolayer MoS <sub>2</sub> transistor with metal nanocrystals embedded in the gate dielectrics. <i>Small</i> , <b>2015</b> , 11, 208-13	11	85
87	High-Performance Wrap-Gated InGaAs Nanowire Field-Effect Transistors with Sputtered Dielectrics. <i>Scientific Reports</i> , <b>2015</b> , 5, 16871	4.9	16
86	Integration of High-k Oxide on MoS <sub>2</sub> by Using Ozone Pretreatment for High-Performance MoS <sub>2</sub> Top-Gated Transistor with Thickness-Dependent Carrier Scattering Investigation. <i>Small</i> , <b>2015</b> , 11, 5932-8 <sup>11</sup>		48
85	Graphene, Nanotube, and NANOWIRE-Based Electronics <b>2015</b> , 413-500		
84	Thermoplasmonics-assisted nanoheterostructured Au-decorated CuInS <sub>2</sub> nanoparticles: Matching solar spectrum absorption and its application on selective distillation of non-polar solvent systems by thermal solar energy. <i>Nano Energy</i> , <b>2015</b> , 15, 470-478	17.1	20
83	One-Dimensional Nanomaterials for Energy Applications <b>2014</b> , 75-120		5
82	Optical Nanoscale Patterning Through Surface-Textured Polymer Films. <i>Advanced Optical Materials</i> , <b>2014</b> , 2, 855-860	8.1	13
81	Effects of nanoparticle size and cell type on high sensitivity cell detection using a localized surface plasmon resonance biosensor. <i>Biosensors and Bioelectronics</i> , <b>2014</b> , 55, 141-8	11.8	34
80	Interface engineering for high-performance top-gated MoS <sub>2</sub> field-effect transistors. <i>Advanced Materials</i> , <b>2014</b> , 26, 6255-61	24	227
79	Hierarchical silicon nanostructured arrays via metal-assisted chemical etching. <i>RSC Advances</i> , <b>2014</b> , 4, 50081-50085	3.7	10
78	Anomalous and highly efficient InAs nanowire phototransistors based on majority carrier transport at room temperature. <i>Advanced Materials</i> , <b>2014</b> , 26, 8203-9	24	133
77	Effect of Negatively Charged Impurity on Graphene Magnetic Rings. <i>Journal of the Physical Society of Japan</i> , <b>2014</b> , 83, 034007	1.5	4

76	Light Management with Nanostructures for Optoelectronic Devices. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 1479-95	6.4	127
75	Rational design of inverted nanopencil arrays for cost-effective, broadband, and omnidirectional light harvesting. <i>ACS Nano</i> , <b>2014</b> , 8, 3752-60	16.7	90
74	Mechanistic Characteristics of Metal-Assisted Chemical Etching in GaAs. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 6903-6908	3.8	22
73	Surfactant-assisted chemical vapour deposition of high-performance small-diameter GaSb nanowires. <i>Nature Communications</i> , <b>2014</b> , 5, 5249	17.4	78
72	Low-temperature growth of highly crystalline $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanowires by solid-source chemical vapor deposition. <i>Nanoscale Research Letters</i> , <b>2014</b> , 9, 347	5	11
71	Single InAs nanowire room-temperature near-infrared photodetectors. <i>ACS Nano</i> , <b>2014</b> , 8, 3628-35	16.7	202
70	Formation mechanisms for the dominant kinks with different angles in InP nanowires. <i>Nanoscale Research Letters</i> , <b>2014</b> , 9, 211	5	6
69	Selective n-type doping in graphene via the aluminium nanoparticle decoration approach. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 5417-5421	7.1	21
68	Nanowires: Anomalous and Highly Efficient InAs Nanowire Phototransistors Based on Majority Carrier Transport at Room Temperature (Adv. Mater. 48/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 8232-8232 <sup>24</sup>		8
67	III <sup>V</sup> Nanowires: Synthesis, Property Manipulations, and Device Applications. <i>Journal of Nanomaterials</i> , <b>2014</b> , 2014, 1-14	3.2	28
66	Patterning: Optical Nanoscale Patterning Through Surface-Textured Polymer Films (Advanced Optical Materials 9/2014). <i>Advanced Optical Materials</i> , <b>2014</b> , 2, 854-854	8.1	
65	Polymer-confined colloidal monolayer: a reusable soft photomask for rapid wafer-scale nanopatterning. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 20837-41	9.5	16
64	Fabrication and enhanced light-trapping properties of three-dimensional silicon nanostructures for photovoltaic applications. <i>Pure and Applied Chemistry</i> , <b>2014</b> , 86, 557-573	2.1	7
63	Surface roughness induced electron mobility degradation in InAs nanowires. <i>Nanotechnology</i> , <b>2013</b> , 24, 375202	3.4	49
62	Developing controllable anisotropic wet etching to achieve silicon nanorods, nanopencils and nanocones for efficient photon trapping. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 9942	13	63
61	Crystalline GaSb nanowires synthesized on amorphous substrates: from the formation mechanism to p-channel transistor applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 10946-52	9.5	32
60	Controllable electrical properties of metal-doped In <sub>2</sub> O <sub>3</sub> nanowires for high-performance enhancement-mode transistors. <i>ACS Nano</i> , <b>2013</b> , 7, 804-10	16.7	76
59	GaAs nanowires: from manipulation of defect formation to controllable electronic transport properties. <i>ACS Nano</i> , <b>2013</b> , 7, 9138-46	16.7	37

58	Carbon doping of InSb nanowires for high-performance p-channel field-effect-transistors. <i>Nanoscale</i> , <b>2013</b> , 5, 9671-6	7.7	29
57	Influence of catalyst choices on transport behaviors of InAs NWs for high-performance nanoscale transistors. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 2654-9	3.6	16
56	Diameter dependence of electron mobility in InGaAs nanowires. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 093112	12.4	30
55	One-Dimensional Nanostructures for Energy Harvesting <b>2013</b> , 237-270		3
54	Tunable electronic transport properties of metal-cluster-decorated III-V nanowire transistors. <i>Advanced Materials</i> , <b>2013</b> , 25, 4445-51	24	61
53	Rational design of sub-parts per million specific gas sensors array based on metal nanoparticles decorated nanowire enhancement-mode transistors. <i>Nano Letters</i> , <b>2013</b> , 13, 3287-92	11.5	117
52	Tailoring electromagnetically induced transparency for terahertz metamaterials: From diatomic to triatomic structural molecules. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 021115	3.4	63
51	Stability and Low-Frequency Noise in InAs NW Parallel-Array Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 765-767	4.4	8
50	Synthesis and characterizations of ternary InGaAs nanowires by a two-step growth method for high-performance electronic devices. <i>ACS Nano</i> , <b>2012</b> , 6, 3624-30	16.7	75
49	High-performance indium phosphide nanowires synthesized on amorphous substrates: From formation mechanism to optical and electrical transport measurements. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 10704		29
48	One-dimensional nanostructured materials for solar energy harvesting. <i>Nanomaterials and Energy</i> , <b>2012</b> , 1, 4-17	1.1	29
47	Highly formaldehyde-sensitive, transition-metal doped ZnO nanorods prepared by plasma-enhanced chemical vapor deposition. <i>Sensors and Actuators B: Chemical</i> , <b>2012</b> , 169, 74-80	8.5	107
46	Large-scale and uniform preparation of pure-phase wurtzite GaAs NWs on non-crystalline substrates. <i>Nanoscale Research Letters</i> , <b>2012</b> , 7, 632	5	11
45	Manipulated Growth of GaAs Nanowires: Controllable Crystal Quality and Growth Orientations via a Supersaturation-Controlled Engineering Process. <i>Crystal Growth and Design</i> , <b>2012</b> , 12, 6243-6249	3.5	50
44	Stoichiometric effect on electrical, optical, and structural properties of composition-tunable In(x)Ga(1-x)As nanowires. <i>ACS Nano</i> , <b>2012</b> , 6, 9320-5	16.7	36
43	Controllable p-n switching behaviors of GaAs nanowires via an interface effect. <i>ACS Nano</i> , <b>2012</b> , 6, 4428-4437	3.7	56
42	GaAs nanowire Schottky barrier photovoltaics utilizing Au <sub>2</sub> Ga alloy catalytic tips. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 013105	3.4	33
41	Facile synthesis and growth mechanism of Ni-catalyzed GaAs nanowires on non-crystalline substrates. <i>Nanotechnology</i> , <b>2011</b> , 22, 285607	3.4	47

40	Crystal phase and growth orientation dependence of GaAs nanowires on NiGa seeds via vapor-solid-solid mechanism. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 083114	3.4	22
39	Highly active and enhanced photocatalytic silicon nanowire arrays. <i>Nanoscale</i> , <b>2011</b> , 3, 3269-76	7.7	85
38	Self-assembly of one-dimensional nanomaterials for cost-effective photovoltaics. <i>International Journal of Nanoparticles</i> , <b>2011</b> , 4, 164	0.4	10
37	Kinetic growth of self-formed In <sub>2</sub> O <sub>3</sub> nanodots via phase segregation: Ni/InAs system. <i>ACS Nano</i> , <b>2011</b> , 5, 6637-42	16.7	6
36	Nanowire active-matrix circuitry for low-voltage macroscale artificial skin. <i>Nature Materials</i> , <b>2010</b> , 9, 821-7	10.7	1013
35	Nanoscale structural engineering via phase segregation: Au-Ge system. <i>Nano Letters</i> , <b>2010</b> , 10, 393-7	11.5	20
34	Patterned p-doping of InAs nanowires by gas-phase surface diffusion of Zn. <i>Nano Letters</i> , <b>2010</b> , 10, 509-13	11.5	54
33	Flexible carbon-nanofiber connectors with anisotropic adhesion properties. <i>Small</i> , <b>2010</b> , 6, 22-6	11	41
32	Hybrid core-multishell nanowire forests for electrical connector applications. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 263110	3.4	21
31	Monolayer doping and diameter-dependent electron mobility assessment of nanowires <b>2009</b> ,		3
30	Nanoscale doping of InAs via sulfur monolayers. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 072108	3.4	63
29	Wet and Dry Adhesion Properties of Self-Selective Nanowire Connectors. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3098-3102	15.6	29
28	Toward the Development of Printable Nanowire Electronics and Sensors. <i>Advanced Materials</i> , <b>2009</b> , 21, 3730-3743	24	336
27	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , <b>2009</b> , 8, 648-53	27	909
26	Wafer-scale, sub-5 nm junction formation by monolayer doping and conventional spike annealing. <i>Nano Letters</i> , <b>2009</b> , 9, 725-30	11.5	123
25	Diameter-dependent electron mobility of InAs nanowires. <i>Nano Letters</i> , <b>2009</b> , 9, 360-5	11.5	328
24	Monolayer resist for patterned contact printing of aligned nanowire arrays. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 2102-3	16.4	64
23	Controlled nanoscale doping of semiconductors via molecular monolayers. <i>Nature Materials</i> , <b>2008</b> , 7, 62-7	27	262

22	Wafer-scale assembly of highly ordered semiconductor nanowire arrays by contact printing. <i>Nano Letters</i> , <b>2008</b> , 8, 20-5	11.5	471
21	Large-scale, heterogeneous integration of nanowire arrays for image sensor circuitry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 11066-70	11.5	205
20	Formation and characterization of NiInAs/InAs nanowire heterostructures by solid source reaction. <i>Nano Letters</i> , <b>2008</b> , 8, 4528-33	11.5	56
19	Synthesis, contact printing, and device characterization of Ni-catalyzed, crystalline InAs nanowires. <i>Nano Research</i> , <b>2008</b> , 1, 32-39	10	67
18	Phosphine oxide monolayers on SiO <sub>2</sub> surfaces. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 4440-4	11.5	31
17	Generic nanomaterial positioning by carrier and stationary phase design. <i>Nano Letters</i> , <b>2007</b> , 7, 2764-8	11.5	20
16	Phase separation in In <sub>x</sub> Ga <sub>1-x</sub> N. <i>Philosophical Magazine</i> , <b>2007</b> , 87, 1983-1998	1.6	35
15	Large scale, highly ordered assembly of nanowire parallel arrays by differential roll printing. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 203104	3.4	103
14	Zincblende and wurtzite phases in InN epilayers and their respective band transitions. <i>Journal of Crystal Growth</i> , <b>2006</b> , 288, 225-229	1.6	9
13	Band transitions in wurtzite GaN and InN determined by valence electron energy loss spectroscopy. <i>Solid State Communications</i> , <b>2005</b> , 135, 340-344	1.6	45
12	Characterization of oxide precipitates in epitaxial InN by transmission electron microscopy. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 092102	3.4	12
11	Effects of stoichiometry on electrical, optical, and structural properties of indium nitride. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 093712	2.5	23
10	Effects of electron concentration on the optical absorption edge of InN. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2805-2807	3.4	210
9	The influence of structural properties on conductivity and luminescence of MBE grown InN. <i>Journal of Crystal Growth</i> , <b>2004</b> , 269, 111-118	1.6	36
8	Vacancy Modulating Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> Topological Semimetal for Aqueous Zinc-Ion Batteries. <i>Angewandte Chemie</i> ,	3.6	2
7	Superior Performance and Stability of 2D DionJacobson Halide Perovskite Photodetectors Operated under Harsh Conditions without Encapsulation. <i>Advanced Optical Materials</i> , 2101523	8.1	0
6	Crystalline all-inorganic lead-free Cs <sub>3</sub> Sb <sub>2</sub> I <sub>9</sub> perovskite microplates with ultra-fast photoconductive response and robust thermal stability. <i>Nano Research</i> , 1	10	15
5	High-performance electrically transduced hazardous gas sensors based on low-dimensional nanomaterials. <i>Nanoscale Advances</i> ,	5.1	3

4	Antimony-Rich GaAs <sub>x</sub> Sb <sub>1-x</sub> Nanowires Passivated by Organic Sulfides for High-Performance Transistors and Near-Infrared Photodetectors. <i>Advanced Optical Materials</i> ,2101289	8.1	2
3	Infrared Photodetectors Based on 2D Materials and Nanophotonics. <i>Advanced Functional Materials</i> ,2111976	13.6	14
2	Highly Efficient Full van der Waals 1D p-Te/2D n-Bi <sub>2</sub> O <sub>3</sub> /2D Se Heterodiodes with Nanoscale Ultra-Photosensitive Channels. <i>Advanced Functional Materials</i> ,2203003	15.6	3
1	Drop-Casting Halide Microcrystals Enabled by Green Glycol Solvent for High-Performance Photodetectors. <i>Advanced Photonics Research</i> ,2200041	1.9	