

Johnny C Ho

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219
papers

11,413
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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	Nanowire active-matrix circuitry for low-voltage macroscale artificial skin. <i>Nature Materials</i> , 2010 , 9, 821-67	27	1013
218	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , 2009 , 8, 648-53	27	909
217	Wafer-scale assembly of highly ordered semiconductor nanowire arrays by contact printing. <i>Nano Letters</i> , 2008 , 8, 20-5	11.5	471
216	Toward the Development of Printable Nanowire Electronics and Sensors. <i>Advanced Materials</i> , 2009 , 21, 3730-3743	24	336
215	Diameter-dependent electron mobility of InAs nanowires. <i>Nano Letters</i> , 2009 , 9, 360-5	11.5	328
214	Controlled nanoscale doping of semiconductors via molecular monolayers. <i>Nature Materials</i> , 2008 , 7, 62-7	27	262
213	Recent advances in layered double hydroxide electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5069-5089	13	254
212	Interface engineering for high-performance top-gated MoS ₂ field-effect transistors. <i>Advanced Materials</i> , 2014 , 26, 6255-61	24	227
211	Effects of electron concentration on the optical absorption edge of InN. <i>Applied Physics Letters</i> , 2004 , 84, 2805-2807	3.4	210
210	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> , 2008 , 105, 11066-70	11.5	205
209	Single InAs nanowire room-temperature near-infrared photodetectors. <i>ACS Nano</i> , 2014 , 8, 3628-35	16.7	202
208	Hierarchical Nanostructures: Design for Sustainable Water Splitting. <i>Advanced Energy Materials</i> , 2017 , 7, 1700559	21.8	192
207	Insight into the electrochemical activation of carbon-based cathodes for hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 13080-13086	13	175
206	Hierarchical NiMo-based 3D electrocatalysts for highly-efficient hydrogen evolution in alkaline conditions. <i>Nano Energy</i> , 2016 , 27, 247-254	17.1	143
205	Modulating electronic structure of CoP electrocatalysts towards enhanced hydrogen evolution by Ce chemical doping in both acidic and basic media. <i>Nano Energy</i> , 2017 , 38, 290-296	17.1	142
204	High-responsivity graphene/InAs nanowire heterojunction near-infrared photodetectors with distinct photocurrent on/off ratios. <i>Small</i> , 2015 , 11, 936-42	11	140
203	Hydrogen gas sensor based on metal oxide nanoparticles decorated graphene transistor. <i>Nanoscale</i> , 2015 , 7, 10078-84	7.7	135

202	Anomalous and highly efficient InAs nanowire phototransistors based on majority carrier transport at room temperature. <i>Advanced Materials</i> , 2014 , 26, 8203-9	24	133
201	Light Management with Nanostructures for Optoelectronic Devices. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1479-95	6.4	127
200	Wafer-scale, sub-5 nm junction formation by monolayer doping and conventional spike annealing. <i>Nano Letters</i> , 2009 , 9, 725-30	11.5	123
199	Wafer-scale synthesis of monolayer WS ₂ for high-performance flexible photodetectors by enhanced chemical vapor deposition. <i>Nano Research</i> , 2018 , 11, 3371-3384	10	118
198	High-Index Faceted Porous CoO Nanosheets with Oxygen Vacancies for Highly Efficient Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 7079-7086	9.5	117
197	Rational design of sub-parts per million specific gas sensors array based on metal nanoparticles decorated nanowire enhancement-mode transistors. <i>Nano Letters</i> , 2013 , 13, 3287-92	11.5	117
196	Highly formaldehyde-sensitive, transition-metal doped ZnO nanorods prepared by plasma-enhanced chemical vapor deposition. <i>Sensors and Actuators B: Chemical</i> , 2012 , 169, 74-80	8.5	107
195	Large scale, highly ordered assembly of nanowire parallel arrays by differential roll printing. <i>Applied Physics Letters</i> , 2007 , 91, 203104	3.4	103
194	High-Sensitivity Floating-Gate Phototransistors Based on WS ₂ and MoS ₂ . <i>Advanced Functional Materials</i> , 2016 , 26, 6084-6090	15.6	103
193	Comprehensive Understanding of the Spatial Configurations of CeO ₂ in NiO for the Electrocatalytic Oxygen Evolution Reaction: Embedded or Surface-Loaded. <i>Advanced Functional Materials</i> , 2018 , 28, 1706056	15.6	99
192	Regulating the surface of nanocerium and its applications in heterogeneous catalysis. <i>Surface Science Reports</i> , 2018 , 73, 1-36	12.9	95
191	Two-dimensional perovskite materials: From synthesis to energy-related applications. <i>Materials Today Energy</i> , 2019 , 11, 61-82	7	93
190	Rational design of inverted nanopencil arrays for cost-effective, broadband, and omnidirectional light harvesting. <i>ACS Nano</i> , 2014 , 8, 3752-60	16.7	90
189	High-Performance Ferroelectric Polymer Side-Gated CdS Nanowire Ultraviolet Photodetectors. <i>Advanced Functional Materials</i> , 2016 , 26, 7690-7696	15.6	87
188	Floating gate memory-based monolayer MoS ₂ transistor with metal nanocrystals embedded in the gate dielectrics. <i>Small</i> , 2015 , 11, 208-13	11	85
187	Highly active and enhanced photocatalytic silicon nanowire arrays. <i>Nanoscale</i> , 2011 , 3, 3269-76	7.7	85
186	Surfactant-assisted chemical vapour deposition of high-performance small-diameter GaSb nanowires. <i>Nature Communications</i> , 2014 , 5, 5249	17.4	78
185	Large-Scale Synthesis of Freestanding Layer-Structured PbI ₂ and MAPbI ₃ Nanosheets for High-Performance Photodetection. <i>Advanced Materials</i> , 2017 , 29, 1702759	24	78

184	Controllable electrical properties of metal-doped In ₂ O ₃ nanowires for high-performance enhancement-mode transistors. <i>ACS Nano</i> , 2013 , 7, 804-10	16.7	76
183	Synthesis and characterizations of ternary InGaAs nanowires by a two-step growth method for high-performance electronic devices. <i>ACS Nano</i> , 2012 , 6, 3624-30	16.7	75
182	Enhancing Performance of a GaAs/AlGaAs/GaAs Nanowire Photodetector Based on the Two-Dimensional Electron-Hole Tube Structure. <i>Nano Letters</i> , 2020 , 20, 2654-2659	11.5	74
181	On-Nanowire Axial Heterojunction Design for High-Performance Photodetectors. <i>ACS Nano</i> , 2016 , 10, 8474-81	16.7	73
180	Area-Selective Atomic Layer Deposition: Conformal Coating, Subnanometer Thickness Control, and Smart Positioning. <i>ACS Nano</i> , 2015 , 9, 8651-4	16.7	69
179	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> , 2019 , 7, 21722-21729	13	68
178	Synthesis, contact printing, and device characterization of Ni-catalyzed, crystalline InAs nanowires. <i>Nano Research</i> , 2008 , 1, 32-39	10	67
177	Monolayer resist for patterned contact printing of aligned nanowire arrays. <i>Journal of the American Chemical Society</i> , 2009 , 131, 2102-3	16.4	64
176	Direct Vapor-Liquid-Solid Synthesis of All-Inorganic Perovskite Nanowires for High-Performance Electronics and Optoelectronics. <i>ACS Nano</i> , 2019 , 13, 6060-6070	16.7	63
175	Developing controllable anisotropic wet etching to achieve silicon nanorods, nanopencils and nanocones for efficient photon trapping. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9942	13	63
174	Tailoring electromagnetically induced transparency for terahertz metamaterials: From diatomic to triatomic structural molecules. <i>Applied Physics Letters</i> , 2013 , 103, 021115	3.4	63
173	Nanoscale doping of InAs via sulfur monolayers. <i>Applied Physics Letters</i> , 2009 , 95, 072108	3.4	63
172	High-Performance Near-Infrared Photodetectors Based on p-Type SnX (X = S, Se) Nanowires Grown via Chemical Vapor Deposition. <i>ACS Nano</i> , 2018 , 12, 7239-7245	16.7	62
171	Tunable electronic transport properties of metal-cluster-decorated III-V nanowire transistors. <i>Advanced Materials</i> , 2013 , 25, 4445-51	24	61
170	Novel Series of Quasi-2D Ruddlesden-Popper Perovskites Based on Short-Chained Spacer Cation for Enhanced Photodetection. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 19019-19026	9.5	58
169	Controllable p-n switching behaviors of GaAs nanowires via an interface effect. <i>ACS Nano</i> , 2012 , 6, 4428-4437	16.7	56
168	Formation and characterization of NixInAs/InAs nanowire heterostructures by solid source reaction. <i>Nano Letters</i> , 2008 , 8, 4528-33	11.5	56
167	In situ formation of highly active NiFe based oxygen-evolving electrocatalysts via simple reactive dip-coating. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11009-11015	13	54

166	Approaching the Hole Mobility Limit of GaSb Nanowires. <i>ACS Nano</i> , 2015 , 9, 9268-75	16.7	54
165	Patterned p-doping of InAs nanowires by gas-phase surface diffusion of Zn. <i>Nano Letters</i> , 2010 , 10, 509-13.5	13.5	54
164	Flexible Quasi-2D Perovskite/IGZO Phototransistors for Ultrasensitive and Broadband Photodetection. <i>Advanced Materials</i> , 2020 , 32, e1907527	24	54
163	Perovskite/Black Phosphorus/MoS Photogate Reversed Photodiodes with Ultrahigh Light On/Off Ratio and Fast Response. <i>ACS Nano</i> , 2019 , 13, 4804-4813	16.7	53
162	Semi-solid and solid frustrated Lewis pair catalysts. <i>Chemical Society Reviews</i> , 2018 , 47, 5541-5553	58.5	52
161	Visible to near-infrared photodetectors based on MoS ₂ vertical Schottky junctions. <i>Nanotechnology</i> , 2017 ,	3.4	51
160	Manipulated Growth of GaAs Nanowires: Controllable Crystal Quality and Growth Orientations via a Supersaturation-Controlled Engineering Process. <i>Crystal Growth and Design</i> , 2012 , 12, 6243-6249	3.5	50
159	Recent developments in III-V semiconducting nanowires for high-performance photodetectors. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 630-645	7.8	49
158	Surface roughness induced electron mobility degradation in InAs nanowires. <i>Nanotechnology</i> , 2013 , 24, 375202	3.4	49
157	Integration of High-k Oxide on MoS ₂ by Using Ozone Pretreatment for High-Performance MoS ₂ Top-Gated Transistor with Thickness-Dependent Carrier Scattering Investigation. <i>Small</i> , 2015 , 11, 5932-8 ¹¹	8 ¹¹	48
156	Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for High-Performance 2D Field Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 2062-9	24	48
155	Facile synthesis and growth mechanism of Ni-catalyzed GaAs nanowires on non-crystalline substrates. <i>Nanotechnology</i> , 2011 , 22, 285607	3.4	47
154	Incorporation of rare earth elements with transition metalBased materials for electrocatalysis: a review for recent progress. <i>Materials Today Chemistry</i> , 2019 , 12, 266-281	6.2	46
153	High-Performance GaAs Nanowire Solar Cells for Flexible and Transparent Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 20454-9	9.5	45
152	Amine-Modulated/Engineered Interfaces of NiMo Electrocatalysts for Improved Hydrogen Evolution Reaction in Alkaline Solutions. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1728-1733	9.5	45
151	Band transitions in wurtzite GaN and InN determined by valence electron energy loss spectroscopy. <i>Solid State Communications</i> , 2005 , 135, 340-344	1.6	45
150	Is platinum a suitable counter electrode material for electrochemical hydrogen evolution reaction?. <i>Science Bulletin</i> , 2017 , 62, 971-973	10.6	44
149	Self-Assembly of Colloidal Spheres toward Fabrication of Hierarchical and Periodic Nanostructures for Technological Applications. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800541	6.8	43

148	Flexible carbon-nanofiber connectors with anisotropic adhesion properties. <i>Small</i> , 2010 , 6, 22-6	11	41
147	Ultra-fast photodetectors based on high-mobility indium gallium antimonide nanowires. <i>Nature Communications</i> , 2019 , 10, 1664	17.4	39
146	A unique sandwich structure of a CoMnP/Ni ₂ P/NiFe electrocatalyst for highly efficient overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12325-12332	13	38
145	Surface-Guided Formation of Amorphous Mixed-Metal Oxyhydroxides on Ultrathin MnO ₂ Nanosheet Arrays for Efficient Electrocatalytic Oxygen Evolution. <i>Advanced Energy Materials</i> , 2020 , 10, 2001059	21.8	38
144	Transparent metal-oxide nanowires and their applications in harsh electronics. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 202-217	7.1	37
143	GaAs nanowires: from manipulation of defect formation to controllable electronic transport properties. <i>ACS Nano</i> , 2013 , 7, 9138-46	16.7	37
142	High-performance enhancement-mode thin-film transistors based on Mg-doped In ₂ O ₃ nanofiber networks. <i>Nano Research</i> , 2018 , 11, 1227-1237	10	37
141	Engineering Surface Structure of Spinel Oxides via High-Valent Vanadium Doping for Remarkably Enhanced Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 33012-33021	9.5	36
140	Stoichiometric effect on electrical, optical, and structural properties of composition-tunable In(x)Ga(1-x)As nanowires. <i>ACS Nano</i> , 2012 , 6, 9320-5	16.7	36
139	The influence of structural properties on conductivity and luminescence of MBE grown InN. <i>Journal of Crystal Growth</i> , 2004 , 269, 111-118	1.6	36
138	Phosphorus-Doped MoS ₂ Nanosheets Supported on Carbon Cloths as Efficient Hydrogen-Generation Electrocatalysts. <i>ChemCatChem</i> , 2018 , 10, 1571-1577	5.2	36
137	Phase separation in In _x Ga _{1-x} N. <i>Philosophical Magazine</i> , 2007 , 87, 1983-1998	1.6	35
136	Photoresponse improvement of mixed-dimensional 1D-2D GaAs photodetectors by incorporating constructive interface states. <i>Nanoscale</i> , 2021 , 13, 1086-1092	7.7	35
135	Side-Gated InO Nanowire Ferroelectric FETs for High-Performance Nonvolatile Memory Applications. <i>Advanced Science</i> , 2016 , 3, 1600078	13.6	34
134	Environmentally and Mechanically Stable Selenium 1D/2D Hybrid Structures for Broad-Range Photoresponse from Ultraviolet to Infrared Wavelengths. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 35477-35486	9.5	34
133	Effects of nanoparticle size and cell type on high sensitivity cell detection using a localized surface plasmon resonance biosensor. <i>Biosensors and Bioelectronics</i> , 2014 , 55, 141-8	11.8	34
132	Room-Temperature Red-Green-Blue Whispering-Gallery Mode Lasing and White-Light Emission from Cesium Lead Halide Perovskite (CsPbX ₃ , X = Cl, Br, I) Microstructures. <i>Advanced Optical Materials</i> , 2018 , 6, 1700993	8.1	33
131	GaAs nanowire Schottky barrier photovoltaics utilizing Au ₂ Al alloy catalytic tips. <i>Applied Physics Letters</i> , 2012 , 101, 013105	3.4	33

130	Crystalline GaSb nanowires synthesized on amorphous substrates: from the formation mechanism to p-channel transistor applications. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 10946-52	9.5	32
129	Performance Limits of the Self-Aligned Nanowire Top-Gated MoS ₂ Transistors. <i>Advanced Functional Materials</i> , 2017 , 27, 1602250	15.6	31
128	Phosphine oxide monolayers on SiO ₂ surfaces. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4440-4	10.4	31
127	Layered Ternary and Quaternary Transition Metal Chalcogenide Based Catalysts for Water Splitting. <i>Catalysts</i> , 2018 , 8, 551	4	31
126	Diameter dependence of electron mobility in InGaAs nanowires. <i>Applied Physics Letters</i> , 2013 , 102, 093112	11.4	30
125	Modulating Electrical Performances of In ₂ O ₃ Nanofiber Channel Thin Film Transistors via Sr Doping. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800707	6.4	30
124	Carbon doping of InSb nanowires for high-performance p-channel field-effect-transistors. <i>Nanoscale</i> , 2013 , 5, 9671-6	7.7	29
123	High-performance indium phosphide nanowires synthesized on amorphous substrates: from formation mechanism to optical and electrical transport measurements. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10704		29
122	One-dimensional nanostructured materials for solar energy harvesting. <i>Nanomaterials and Energy</i> , 2012 , 1, 4-17	1.1	29
121	Wet and Dry Adhesion Properties of Self-Selective Nanowire Connectors. <i>Advanced Functional Materials</i> , 2009 , 19, 3098-3102	15.6	29
120	III-V Nanowires: Synthesis, Property Manipulations, and Device Applications. <i>Journal of Nanomaterials</i> , 2014 , 2014, 1-14	3.2	28
119	Complementary Metal Oxide Semiconductor-Compatible, High-Mobility, <111>-Oriented GaSb Nanowires Enabled by Vapor-Solid-Solid Chemical Vapor Deposition. <i>ACS Nano</i> , 2017 , 11, 4237-4246	16.7	27
118	Modulating Electrical Properties of InAs Nanowires via Molecular Monolayers. <i>ACS Nano</i> , 2015 , 9, 7545-52	16.7	26
117	Enhanced performance of perovskite solar cells based on vertical TiO ₂ nanotube arrays with full filling of CH ₃ NH ₃ PbI ₃ . <i>Applied Surface Science</i> , 2018 , 451, 250-257	6.7	24
116	Co ₃ O ₄ Nanosheets with In-Plane Pores and Highly Active {112} Exposed Facets for High Performance Lithium Storage. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 19002-19009	3.8	24
115	ZnO Nanofiber Thin-Film Transistors with Low-Operating Voltages. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700336	6.4	24
114	Incorporating mixed cations in quasi-2D perovskites for high-performance and flexible photodetectors. <i>Nanoscale Horizons</i> , 2019 , 4, 1342-1352	10.8	23
113	Unraveling the Morphological Evolution and Etching Kinetics of Porous Silicon Nanowires During Metal-Assisted Chemical Etching. <i>Nanoscale Research Letters</i> , 2017 , 12, 385	5	23

112	Effects of stoichiometry on electrical, optical, and structural properties of indium nitride. <i>Journal of Applied Physics</i> , 2005 , 98, 093712	2.5	23
111	Mechanistic Characteristics of Metal-Assisted Chemical Etching in GaAs. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 6903-6908	3.8	22
110	Crystal phase and growth orientation dependence of GaAs nanowires on Ni ₂ Ga seeds via vapor-solid-solid mechanism. <i>Applied Physics Letters</i> , 2011 , 99, 083114	3.4	22
109	Nonpolar-Oriented Wurtzite InP Nanowires with Electron Mobility Approaching the Theoretical Limit. <i>ACS Nano</i> , 2018 , 12, 10410-10418	16.7	22
108	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 & Interfaces</i> , 2019 , 11, 38633-38640	9.5	21
107	Selective n-type doping in graphene via the aluminium nanoparticle decoration approach. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 5417-5421	7.1	21
106	Hybrid core-multishell nanowire forests for electrical connector applications. <i>Applied Physics Letters</i> , 2009 , 94, 263110	3.4	21
105	Artificial visual systems enabled by quasi-two-dimensional electron gases in oxide superlattice nanowires. <i>Science Advances</i> , 2020 , 6,	14.3	21
104	Crystal Orientation Controlled Photovoltaic Properties of Multilayer GaAs Nanowire Arrays. <i>ACS Nano</i> , 2016 , 10, 6283-90	16.7	20
103	Thermoplasmonics-assisted nanoheterostructured Au-decorated CuInS ₂ nanoparticles: Matching solar spectrum absorption and its application on selective distillation of non-polar solvent systems by thermal solar energy. <i>Nano Energy</i> , 2015 , 15, 470-478	17.1	20
102	Nanoscale structural engineering via phase segregation: Au-Ge system. <i>Nano Letters</i> , 2010 , 10, 393-7	11.5	20
101	Generic nanomaterial positioning by carrier and stationary phase design. <i>Nano Letters</i> , 2007 , 7, 2764-8	11.5	20
100	High-Performance Transparent Ultraviolet Photodetectors Based on InGaZnO Superlattice Nanowire Arrays. <i>ACS Nano</i> , 2019 , 13, 12042-12051	16.7	19
99	Coupling of Nickel Boride and Ni(OH) ₂ Nanosheets with Hierarchical Interconnected Conductive Porous Structure Synergizes the Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2018 , 10, 4555-4561	5.2	19
98	Substantially Improving Device Performance of All-Inorganic Perovskite-Based Phototransistors via Indium Tin Oxide Nanowire Incorporation. <i>Small</i> , 2020 , 16, e1905609	11	19
97	Recent advances in III-Sb nanowires: from synthesis to applications. <i>Nanotechnology</i> , 2019 , 30, 202003	3.4	19
96	Cerium Phosphate as a Novel Cocatalyst Promoting NiCo ₂ O ₄ Nanowire Arrays for Efficient and Robust Electrocatalytic Oxygen Evolution. <i>ACS Applied Energy Materials</i> , 2019 , 2, 5769-5776	6.1	17
95	Direct Visualization of Grain Boundaries in 2D Monolayer WS ₂ via Induced Growth of CdS Nanoparticle Chains. <i>Small Methods</i> , 2019 , 3, 1800245	12.8	17

94	Influence of catalyst choices on transport behaviors of InAs NWs for high-performance nanoscale transistors. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2654-9	3.6	16
93	High-Performance Wrap-Gated InGaAs Nanowire Field-Effect Transistors with Sputtered Dielectrics. <i>Scientific Reports</i> , 2015 , 5, 16871	4.9	16
92	Polymer-confined colloidal monolayer: a reusable soft photomask for rapid wafer-scale nanopatterning. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 20837-41	9.5	16
91	2D WS ₂ : From Vapor Phase Synthesis to Device Applications. <i>Advanced Electronic Materials</i> , 2021 , 7, 2006688	10.6	16
90	Modulating the morphology and electrical properties of GaAs nanowires via catalyst stabilization by oxygen. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 5591-7	9.5	15
89	Towards high-mobility In ₂ Ga ₂ O ₃ nanowire field-effect transistors. <i>Nano Research</i> , 2018 , 11, 5935-5945	10.4	15
88	Crystalline all-inorganic lead-free Cs ₃ Sb ₂ I ₉ perovskite microplates with ultra-fast photoconductive response and robust thermal stability. <i>Nano Research</i> , 2018 , 11, 5946-5954	10	15
87	Inverted Silicon Nanopencil Array Solar Cells with Enhanced Contact Structures. <i>Scientific Reports</i> , 2016 , 6, 34139	4.9	15
86	Van der Waals PdSe ₂ /WS ₂ Heterostructures for Robust High-Performance Broadband Photodetection from Visible to Infrared Optical Communication Band. <i>Advanced Optical Materials</i> , 2021 , 9, 2001991	8.1	15
85	Controllable III-V nanowire growth via catalyst epitaxy. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 4393-4399	9.9	14
84	Enhanced Negative Photoconductivity in InAs Nanowire Phototransistors Surface-Modified with Molecular Monolayers. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701104	4.6	14
83	Infrared Photodetectors Based on 2D Materials and Nanophotonics. <i>Advanced Functional Materials</i> , 2018 , 28, 170370	11.7	14
82	Manipulating III-V Nanowire Transistor Performance via Surface Decoration of Metal-Oxide Nanoparticles. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700260	4.6	13
81	Optical Nanoscale Patterning Through Surface-Textured Polymer Films. <i>Advanced Optical Materials</i> , 2014 , 2, 855-860	8.1	13
80	Characterization of oxide precipitates in epitaxial InN by transmission electron microscopy. <i>Applied Physics Letters</i> , 2005 , 87, 092102	3.4	12
79	Bication-Mediated Quasi-2D Halide Perovskites for High-Performance Flexible Photodetectors: From Ruddlesden-Popper Type to Dion-Jacobson Type. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 39567-39577	9.5	12
78	Controllable optical emission wavelength in all-inorganic halide perovskite alloy microplates grown by two-step chemical vapor deposition. <i>Nano Research</i> , 2020 , 13, 2939-2949	10	12
77	Design and fabrication of 1-D semiconductor nanomaterials for high-performance photovoltaics. <i>Science Bulletin</i> , 2016 , 61, 357-367	10.6	12

76	Utilizing a NaOH Promoter to Achieve Large Single-Domain Monolayer WS Films via Modified Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35238-35246	9.5	11
75	High-mobility In and Ga co-doped ZnO nanowires for high-performance transistors and ultraviolet photodetectors. <i>Nanoscale</i> , 2020 , 12, 16153-16161	7.7	11
74	Spectroscopic examination of enamel staining by coffee indicates dentin erosion by sequestration of elements. <i>Talanta</i> , 2018 , 189, 550-559	6.2	11
73	Low-temperature growth of highly crystalline Ga ₂ O ₃ nanowires by solid-source chemical vapor deposition. <i>Nanoscale Research Letters</i> , 2014 , 9, 347	5	11
72	Large-scale and uniform preparation of pure-phase wurtzite GaAs NWs on non-crystalline substrates. <i>Nanoscale Research Letters</i> , 2012 , 7, 632	5	11
71	Ferroelectric P(VDF-TrFE) wrapped InGaAs nanowires for ultralow-power artificial synapses. <i>Nano Energy</i> , 2022 , 91, 106654	17.1	11
70	Diameter Dependence of Planar Defects in InP Nanowires. <i>Scientific Reports</i> , 2016 , 6, 32910	4.9	11
69	Enhanced Self-Assembly of Crystalline, Large-Area, and Periodicity-Tunable TiO Nanotube Arrays on Various Substrates. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 6265-6272	9.5	10
68	Crystalline InGaZnO quaternary nanowires with superlattice structure for high-performance thin-film transistors. <i>Nano Research</i> , 2019 , 12, 1796-1803	10	10
67	Hierarchical silicon nanostructured arrays via metal-assisted chemical etching. <i>RSC Advances</i> , 2014 , 4, 50081-50085	3.7	10
66	Self-assembly of one-dimensional nanomaterials for cost-effective photovoltaics. <i>International Journal of Nanoparticles</i> , 2011 , 4, 164	0.4	10
65	Gate Bias Stress Instability and Hysteresis Characteristics of InAs Nanowire Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 56330-56337	9.5	10
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