

Zhiyong Fan

List of Publications by Year in Descending Order

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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.

215
papers

18,785
citations

73
h-index

133
g-index

232
ext. papers

21,174
ext. citations

12.1
avg, IF

6.89
L-index

#	Paper	IF	Citations
215	Large-scale planar and spherical light-emitting diodes based on arrays of perovskite quantum wires. <i>Nature Photonics</i> , 2022 , 16, 284-290	33.9	4
214	Schottky-Contacted WSe ₂ Hot-Electron Photodetectors with Fast Response and High Sensitivity. <i>ACS Photonics</i> , 2022 , 9, 132-137	6.3	4
213	Next-generation machine vision systems incorporating two-dimensional materials: Progress and perspectives. <i>Information Materials</i> , 2022 , 4,	23.1	7
212	Self-powered and wearable biosensors for healthcare. <i>Materials Today Energy</i> , 2021 , 23, 100900	7	7
211	Design of a Horizontally Aligned Perovskite Nanowire LED with Improved Light Extraction. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 1-1	2.3	0
210	Substitutionally Doped MoSe for High-Performance Electronics and Optoelectronics. <i>Small</i> , 2021 , 17, e2102855	11	3
209	Preface to the Special Issue on Flexible Energy Devices. <i>Journal of Semiconductors</i> , 2021 , 42, 100101	2.3	2
208	Recent progress of efficient flexible solar cells based on nanostructures. <i>Journal of Semiconductors</i> , 2021 , 42, 101604	2.3	2
207	Polarization-Resolved Broadband MoS ₂ /Black Phosphorus/MoS ₂ Optoelectronic Memory with Ultralong Retention Time and Ultrahigh Switching Ratio. <i>Advanced Functional Materials</i> , 2021 , 31, 2100781	15.6	10
206	Wireless Self-Powered High-Performance Integrated Nanostructured-Gas-Sensor Network for Future Smart Homes. <i>ACS Nano</i> , 2021 , 15, 7659-7667	16.7	18
205	Single electrode piezoelectric nanogenerator for intelligent passive daytime radiative cooling. <i>Nano Energy</i> , 2021 , 82, 105695	17.1	18
204	Moth eye-inspired highly efficient, robust, and neutral-colored semitransparent perovskite solar cells for building-integrated photovoltaics. <i>EcoMat</i> , 2021 , 3, e12117	9.4	8
203	Down-Scalable and Ultra-fast Memristors with Ultra-high Density Three-Dimensional Arrays of Perovskite Quantum Wires. <i>Nano Letters</i> , 2021 , 21, 5036-5044	11.5	11
202	A Wearable Nutrition Tracker. <i>Advanced Materials</i> , 2021 , 33, e2006444	24	31
201	High output achieved by sliding electrification of an electrospun nano-grating. <i>Nanoscale</i> , 2021 , 13, 17417-17427	17.7	17
200	Optically tunable ultra-fast resistive switching in lead-free methyl-ammonium bismuth iodide perovskite films. <i>Nanoscale</i> , 2021 , 13, 6184-6191	7.7	6
199	MoS ₂ Homojunctions Transistors Enabled by Dimension Tailoring Strategy. <i>Advanced Electronic Materials</i> , 2021 , 7, 2100703	6.4	2

198	Three-dimensional perovskite nanowire array-based ultrafast resistive RAM with ultralong data retention. <i>Science Advances</i> , 2021 , 7, eabg3788	14.3	5
197	Monolayer WS Lateral Homosuperlattices with Two-dimensional Periodic Localized Photoluminescence.. <i>ACS Nano</i> , 2021 ,	16.7	1
196	A biomimetic eye with a hemispherical perovskite nanowire array retina. <i>Nature</i> , 2020 , 581, 278-282	50.4	172
195	Recent Progress on Semi-transparent Perovskite Solar Cell for Building-integrated Photovoltaics. <i>Chemical Research in Chinese Universities</i> , 2020 , 36, 366-376	2.2	11
194	Light Out-Coupling Management in Perovskite LEDsWhat Can We Learn from the Past?. <i>Advanced Functional Materials</i> , 2020 , 30, 2002570	15.6	26
193	Anisotropic nanogenerator for anticounterfeiting and information encrypted transmission. <i>Nano Energy</i> , 2020 , 71, 104572	17.1	14
192	Three-Dimensional Perovskite Nanophotonic Wire Array-Based Light-Emitting Diodes with Significantly Improved Efficiency and Stability. <i>ACS Nano</i> , 2020 , 14, 1577-1585	16.7	34
191	Wireless Single-Electrode Self-Powered Piezoelectric Sensor for Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 8288-8295	9.5	31
190	Recent Progress on Interface Engineering for High-Performance, Stable Perovskites Solar Cells. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000118	4.6	21
189	Flexible Quasi-2D Perovskite/IGZO Phototransistors for Ultrasensitive and Broadband Photodetection. <i>Advanced Materials</i> , 2020 , 32, e1907527	24	54
188	Vapor phase fabrication of three-dimensional arrayed BiI ₃ nanosheets for cost-effective solar cells. <i>Information Materials</i> , 2020 , 2, 975-983	23.1	11
187	Cost-Effective and Semi-Transparent PbS Quantum Dot Solar Cells Using Copper Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 818-825	9.5	13
186	A non-toxic triboelectric nanogenerator for baby care applications. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 22745-22753	13	13
185	A nanostructured anti-biofilm surface widens the efficacy against spindle-shaped and chain-forming rod-like bacteria. <i>Nanoscale</i> , 2020 , 12, 18864-18874	7.7	10
184	Scalable All-Evaporation Fabrication of Efficient Light-Emitting Diodes with Hybrid 2DBD Perovskite Nanostructures. <i>Advanced Functional Materials</i> , 2020 , 30, 2002913	15.6	18
183	Anisotropic Triboelectric Nanogenerator Based on Ordered Electrospinning. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 46205-46211	9.5	14
182	Multifunctional Optoelectronic Device Based on an Asymmetric Active Layer Structure. <i>Advanced Functional Materials</i> , 2019 , 29, 1807894	15.6	22
181	A calibration-free self-powered sensor for vital sign monitoring and finger tap communication based on wearable triboelectric nanogenerator. <i>Nano Energy</i> , 2019 , 58, 536-542	17.1	72

180	Porous Enzymatic Membrane for Nanotextured Glucose Sweat Sensors with High Stability toward Reliable Noninvasive Health Monitoring. <i>Advanced Functional Materials</i> , 2019 , 29, 1902521	15.6	71
179	Room-Temperature Sputtered SnO as Robust Electron Transport Layer for Air-Stable and Efficient Perovskite Solar Cells on Rigid and Flexible Substrates. <i>Scientific Reports</i> , 2019 , 9, 6963	4.9	41
178	Highly efficient and stable inverted perovskite solar cells using down-shifting quantum dots as a light management layer and moisture-assisted film growth. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14753-14760	13	58
177	Multifunctional Optoelectronic Devices: Multifunctional Optoelectronic Device Based on an Asymmetric Active Layer Structure (Adv. Funct. Mater. 17/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970114	15.6	2
176	Efficient Mixed-Cation Mixed-Halide Perovskite Solar Cells by All-Vacuum Sequential Deposition Using Metal Oxide Electron Transport Layer. <i>Solar Rrl</i> , 2019 , 3, 1900050	7.1	16
175	Large-scale, adhesive-free and omnidirectional 3D nanocone anti-reflection films for high performance photovoltaics. <i>Journal of Semiconductors</i> , 2019 , 40, 042601	2.3	6
174	Increasing Photoluminescence Quantum Yield by Nanophotonic Design of Quantum-Confined Halide Perovskite Nanowire Arrays. <i>Nano Letters</i> , 2019 , 19, 2850-2857	11.5	44
173	Wearable Sweat Band for Noninvasive Levodopa Monitoring. <i>Nano Letters</i> , 2019 , 19, 6346-6351	11.5	73
172	Current progress in developing metal oxide nanoarrays-based photoanodes for photoelectrochemical water splitting. <i>Science Bulletin</i> , 2019 , 64, 1348-1380	10.6	59
171	Sliding non-contact inductive nanogenerator. <i>Nano Energy</i> , 2019 , 63, 103878	17.1	14
170	Facile and Efficient Atomic Hydrogenation Enabled Black TiO ₂ with Enhanced Photo-Electrochemical Activity via a Favorably Low-Energy-Barrier Pathway. <i>Advanced Energy Materials</i> , 2019 , 9, 1900725	21.8	13
169	A Fully Integrated and Self-Powered Smartwatch for Continuous Sweat Glucose Monitoring. <i>ACS Sensors</i> , 2019 , 4, 1925-1933	9.2	91
168	Palladium Diselenide Long-Wavelength Infrared Photodetector with High Sensitivity and Stability. <i>ACS Nano</i> , 2019 , 13, 2511-2519	16.7	144
167	Efficient metal halide perovskite light-emitting diodes with significantly improved light extraction on nanophotonic substrates. <i>Nature Communications</i> , 2019 , 10, 727	17.4	124
166	Smart gas sensor arrays powered by artificial intelligence. <i>Journal of Semiconductors</i> , 2019 , 40, 111601	2.3	21
165	High performance charge-transfer induced homojunction photodetector based on ultrathin ZnO nanosheet. <i>Applied Physics Letters</i> , 2019 , 114, 011103	3.4	15
164	Printable Fabrication of a Fully Integrated and Self-Powered Sensor System on Plastic Substrates. <i>Advanced Materials</i> , 2019 , 31, e1804285	24	102
163	Low-cost, flexible, disinfectant-free and regular-array three-dimensional nanopyramid antibacterial films for clinical applications. <i>Nanoscale</i> , 2018 , 10, 10436-10442	7.7	17

162	Recent progress on printable power supply devices and systems with nanomaterials. <i>Nano Research</i> , 2018 , 11, 3065-3087	10	49
161	Stacking-mode confined growth of 2H-MoTe ₂ /MoS ₂ bilayer heterostructures for UV-Vis-IR photodetectors. <i>Nano Energy</i> , 2018 , 49, 200-208	17.1	65
160	A self-powered flexible hybrid piezoelectric/pyroelectric nanogenerator based on non-woven nanofiber membranes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3500-3509	13	119
159	Large-Grain Tin-Rich Perovskite Films for Efficient Solar Cells via Metal Alloying Technique. <i>Advanced Materials</i> , 2018 , 30, 1705998	24	94
158	Ferroelectric Localized Field-Enhanced ZnO Nanosheet Ultraviolet Photodetector with High Sensitivity and Low Dark Current. <i>Small</i> , 2018 , 14, e1800492	11	65
157	Nanotextured Spikes of FeO/NiFeO Composite for Efficient Photoelectrochemical Oxidation of Water. <i>Langmuir</i> , 2018 , 34, 3555-3564	4	23
156	Significantly improved black phase stability of FAPbI ₃ nanowires via spatially confined vapor phase growth in nanoporous templates. <i>Nanoscale</i> , 2018 , 10, 15164-15172	7.7	39
155	Bionic Single-Electrode Electronic Skin Unit Based on Piezoelectric Nanogenerator. <i>ACS Nano</i> , 2018 , 12, 8588-8596	16.7	151
154	Surface recombination velocity of methylammonium lead bromide nanowires in anodic aluminium oxide templates. <i>Molecular Systems Design and Engineering</i> , 2018 , 3, 723-728	4.6	5
153	Ultra-Low-Power Smart Electronic Nose System Based on Three-Dimensional Tin Oxide Nanotube Arrays. <i>ACS Nano</i> , 2018 , 12, 6079-6088	16.7	57
152	Efficient and Flexible Thin Film Amorphous Silicon Solar Cells on Nanotextured Polymer Substrate Using Sol-Gel Based Nanoimprinting Method. <i>Advanced Functional Materials</i> , 2017 , 27, 1604720	15.6	38
151	High-quality organohalide lead perovskite films fabricated by layer-by-layer alternating vacuum deposition for high efficiency photovoltaics. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1520-1525	7.8	25
150	Fabrication of stable organometallic halide perovskite NWs based optoelectronic devices. <i>Science Bulletin</i> , 2017 , 62, 645-647	10.6	14
149	. <i>Journal of Microelectromechanical Systems</i> , 2017 , 26, 910-920	2.5	5
148	Scalable Indium Phosphide Thin-Film Nanophotonics Platform for Photovoltaic and Photoelectrochemical Devices. <i>ACS Nano</i> , 2017 , 11, 5113-5119	16.7	27
147	Organic Halides and Nanocone Plastic Structures Enhance the Energy Conversion Efficiency and Self-Cleaning Ability of Colloidal Quantum Dot Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9757-9765	3.8	19
146	A non-catalytic vapor growth regime for organohalide perovskite nanowires using anodic aluminum oxide templates. <i>Nanoscale</i> , 2017 , 9, 5828-5834	7.7	46
145	ZnO Quantum Dot Decorated ZnSnO Nanowire Heterojunction Photodetectors with Drastic Performance Enhancement and Flexible Ultraviolet Image Sensors. <i>ACS Nano</i> , 2017 , 11, 4067-4076	16.7	145

144	Lead-Free Perovskite Nanowire Array Photodetectors with Drastically Improved Stability in Nanoengineering Templates. <i>Nano Letters</i> , 2017 , 17, 523-530	11.5	177
143	Electric field enhanced 3D scalable low-voltage nano-spike electroporation system. <i>Sensors and Actuators A: Physical</i> , 2017 , 255, 10-20	3.9	8
142	Perovskite Nanowire Extrusion. <i>Nano Letters</i> , 2017 , 17, 6557-6563	11.5	33
141	Printable Fabrication of Nanocoral-Structured Electrodes for High-Performance Flexible and Planar Supercapacitor with Artistic Design. <i>Advanced Materials</i> , 2017 , 29, 1701736	24	100
140	Accelerating ion diffusion with unique three-dimensionally interconnected nanopores for self-membrane high-performance pseudocapacitors. <i>Nanoscale</i> , 2017 , 9, 18311-18317	7.7	9
139	Breath Level Acetone Discrimination Through Temperature Modulation of a Hierarchical ZnO Gas Sensor 2017 , 1, 1-4		11
138	Spray Pyrolysis Deposition of ZnFe ₂ O ₄ /Fe ₂ O ₃ Composite Thin Films on Hierarchical 3-D Nanospikes for Efficient Photoelectrochemical Oxidation of Water. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 18360-18368	3.8	34
137	Hybrid WSe-InO Phototransistor with Ultrahigh Detectivity by Efficient Suppression of Dark Currents. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34489-34496	9.5	37
136	All Inorganic Cesium Lead Iodide Perovskite Nanowires with Stabilized Cubic Phase at Room Temperature and Nanowire Array-Based Photodetectors. <i>Nano Letters</i> , 2017 , 17, 4951-4957	11.5	169
135	A-Site Cation Effect on Growth Thermodynamics and Photoconductive Properties in Ultrapure Lead Iodine Perovskite Monocrystalline Wires. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 25985-25994	9.5	9
134	Perovskite/organic-semiconductor heterojunctions for ultrasensitive photodetection. <i>Light: Science and Applications</i> , 2017 , 6, e17090	16.7	57
133	Enhanced Photoelectrochemical Behavior of H-TiO Nanorods Hydrogenated by Controlled and Local Rapid Thermal Annealing. <i>Nanoscale Research Letters</i> , 2017 , 12, 336	5	11
132	Broadband omnidirectional light detection in flexible and hierarchical ZnO/Si heterojunction photodiodes. <i>Nano Research</i> , 2017 , 10, 22-36	10	47
131	Chemical processing of three-dimensional graphene networks on transparent conducting electrodes for depleted-heterojunction quantum dot solar cells. <i>Chemical Communications</i> , 2016 , 52, 323-6	5.8	36
130	Fast Single-Cell Patterning for Study of Drug-Induced Phenotypic Alterations of HeLa Cells Using Time-of-Flight Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2016 , 88, 12196-12203	7.8	30
129	3D Arrays of 1024-Pixel Image Sensors based on Lead Halide Perovskite Nanowires. <i>Advanced Materials</i> , 2016 , 28, 9713-9721	24	172
128	High Mobility MoS Transistor with Low Schottky Barrier Contact by Using Atomic Thick h-BN as a Tunneling Layer. <i>Advanced Materials</i> , 2016 , 28, 8302-8308	24	282
127	A hierarchical ZnO nanostructure gas sensor for human breath-level acetone detection 2016 ,		4

126	Integrated Flexible, Waterproof, Transparent, and Self-Powered Tactile Sensing Panel. <i>ACS Nano</i> , 2016 , 10, 7696-704	16.7	64
125	Three-dimensional nanotube electrode arrays for hierarchical tubular structured high-performance pseudocapacitors. <i>Nanoscale</i> , 2016 , 8, 13280-7	7.7	20
124	Solar Energy: Progress and Design Concerns of Nanostructured Solar Energy Harvesting Devices (Small 19/2016). <i>Small</i> , 2016 , 12, 2530-2530	11	2
123	High Efficiency and Stable Perovskite Solar Cell Using ZnO/rGO QDs as an Electron Transfer Layer. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500790	4.6	121
122	Performance improvement of solution-processed CdS/CdTe solar cells with a thin compact TiO ₂ buffer layer. <i>Science Bulletin</i> , 2016 , 61, 86-91	10.6	15
121	Efficient, flexible and mechanically robust perovskite solar cells on inverted nanocone plastic substrates. <i>Nanoscale</i> , 2016 , 8, 4276-83	7.7	89
120	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7862-8	9.5	61
119	When Nanowires Meet Ultrahigh Ferroelectric Field-High-Performance Full-Depleted Nanowire Photodetectors. <i>Nano Letters</i> , 2016 , 16, 2548-55	11.5	103
118	Transparent megahertz circuits from solution-processed composite thin films. <i>Nanoscale</i> , 2016 , 8, 7978-83	7.7	2
117	A Humidity-Insensitive NO ₂ Gas Sensor With High Selectivity. <i>IEEE Electron Device Letters</i> , 2016 , 37, 92-94	4.4	13
116	Critical kinetic control of non-stoichiometric intermediate phase transformation for efficient perovskite solar cells. <i>Nanoscale</i> , 2016 , 8, 12892-9	7.7	83
115	High performance thin film solar cells on plastic substrates with nanostructure-enhanced flexibility. <i>Nano Energy</i> , 2016 , 22, 539-547	17.1	53
114	Negative magnetoresistance in Dirac semimetal Cd ₃ As ₂ . <i>Nature Communications</i> , 2016 , 7, 10301	17.4	289
113	Designing nanobowl arrays of mesoporous TiO ₂ as an alternative electron transporting layer for carbon cathode-based perovskite solar cells. <i>Nanoscale</i> , 2016 , 8, 6393-402	7.7	80
112	Particle-Film Plasmons on Periodic Silver Film over Nanosphere (AgFON): A Hybrid Plasmonic Nanoarchitecture for Surface-Enhanced Raman Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 634-42	9.5	49
111	Influence of hydration water on CH ₃ NH ₃ PbI ₃ perovskite films prepared through one-step procedure. <i>Optics Express</i> , 2016 , 24, A1431-A1443	3.3	19
110	Progress and Design Concerns of Nanostructured Solar Energy Harvesting Devices. <i>Small</i> , 2016 , 12, 2536-48	11	38
109	Fabrication of CuFeO/FeO Composite Thin Films on FTO Coated Glass and 3-D Nanospire Structures for Efficient Photoelectrochemical Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 35315-35322	9.5	50

108	Broad-band three dimensional nanocave ZnO thin film photodetectors enhanced by Au surface plasmon resonance. <i>Nanoscale</i> , 2016 , 8, 8924-30	7.7	36
107	Dual-Layer Nanostructured Flexible Thin-Film Amorphous Silicon Solar Cells with Enhanced Light Harvesting and Photoelectric Conversion Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10929-36	9.5	43
106	FLEXIBLE SOLAR CELLS 2016 , 365-409		
105	Quasi Core/Shell Lead Sulfide/Graphene Quantum Dots for Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18886-18895	3.8	45
104	Highly flexible and transferable supercapacitors with ordered three-dimensional MnO ₂ /Au/MnO ₂ nanospikes arrays. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 10199-10204	13	47
103	Hybrid zinc oxide/graphene electrodes for depleted heterojunction colloidal quantum-dot solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 24412-9	3.6	44
102	Highly Efficient Flexible Perovskite Solar Cells with Antireflection and Self-Cleaning Nanostructures. <i>ACS Nano</i> , 2015 , 9, 10287-95	16.7	274
101	A fast-response/recovery ZnO hierarchical nanostructure based gas sensor with ultra-high room-temperature output response. <i>Sensors and Actuators B: Chemical</i> , 2015 , 206, 764-771	8.5	71
100	Performance optimization of flexible a-Si:H solar cells with nanotextured plasmonic substrate by tuning the thickness of oxide spacer layer. <i>Nano Energy</i> , 2015 , 11, 78-87	17.1	29
99	Fabrication of efficient planar perovskite solar cells using a one-step chemical vapor deposition method. <i>Scientific Reports</i> , 2015 , 5, 14083	4.9	165
98	Synthesis and enhanced electrochemical catalytic performance of monolayer WS ₂ (1-x) Se _{2x} with a tunable band gap. <i>Advanced Materials</i> , 2015 , 27, 4732-8	24	173
97	Graphene, Nanotube, and NANOWIRE-Based Electronics 2015 , 413-500		
96	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. <i>ACS Nano</i> , 2015 , 9, 6478-83	16.7	57
95	A Highly Controllable Electrochemical Anodization Process to Fabricate Porous Anodic Aluminum Oxide Membranes. <i>Nanoscale Research Letters</i> , 2015 , 10, 495	5	21
94	Nanobowl optical concentrator for efficient light trapping and high-performance organic photovoltaics. <i>Science Bulletin</i> , 2015 , 60, 109-115	10.6	13
93	Physicochemical properties of hybrid graphene/lead sulfide quantum dots prepared by supercritical ethanol. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	34
92	Roll-to-roll fabrication of large scale and regular arrays of three-dimensional nanospikes for high efficiency and flexible photovoltaics. <i>Scientific Reports</i> , 2014 , 4, 4243	4.9	57
91	Scalable integration of indium zinc oxide/photosensitive-nanowire composite thin-film transistors for transparent multicolor photodetectors array. <i>Advanced Materials</i> , 2014 , 26, 2919-24	24	57

90	Three-dimensional metal/oxide nanocone arrays for high-performance electrochemical pseudocapacitors. <i>Nanoscale</i> , 2014 , 6, 3626-31	7.7	50
89	Morphology Defects Guided Pore Initiation during the Formation of Porous Anodic Alumina. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2285-91	9.5	32
88	Semiconductor Nanocrystals as Luminescent Down-Shifting Layers To Enhance the Efficiency of Thin-Film CdTe/CdS and Crystalline Si Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16393-16400	3.8	66
87	Flexible photovoltaic technologies. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 1233	7.1	87
86	Tailoring surface plasmons of high-density gold nanostar assemblies on metal films for surface-enhanced Raman spectroscopy. <i>Nanoscale</i> , 2014 , 6, 616-23	7.7	113
85	Supercapacitors: Integrated Photo-supercapacitor Based on Bi-polar TiO ₂ Nanotube Arrays with Selective One-Side Plasma-Assisted Hydrogenation (Adv. Funct. Mater. 13/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 1814-1814	15.6	6
84	Large scale, flexible and three-dimensional quasi-ordered aluminum nanospikes for thin film photovoltaics with omnidirectional light trapping and optimized electrical design. <i>Energy and Environmental Science</i> , 2014 , 7, 3611-3616	35.4	41
83	A three-dimensional hexagonal fluorine-doped tin oxide nanocone array: a superior light harvesting electrode for high performance photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , 2014 , 7, 3651-3658	35.4	97
82	High-performance hybrid phenyl-C61-butyric acid methyl ester/Cd(3)P(2) nanowire ultraviolet-visible-near infrared photodetectors. <i>ACS Nano</i> , 2014 , 8, 787-96	16.7	77
81	Light Management with Nanostructures for Optoelectronic Devices. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1479-95	6.4	127
80	Enhanced Charge Collection for Splitting of Water Enabled by an Engineered Three-Dimensional Nanospine Array. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22465-22472	3.8	13
79	Constructing optimized wire electrodes for fiber supercapacitors. <i>Nano Energy</i> , 2014 , 10, 99-107	17.1	54
78	Single InAs nanowire room-temperature near-infrared photodetectors. <i>ACS Nano</i> , 2014 , 8, 3628-35	16.7	202
77	All-printable band-edge modulated ZnO nanowire photodetectors with ultra-high detectivity. <i>Nature Communications</i> , 2014 , 5, 4007	17.4	407
76	Optical properties of metal-molybdenum disulfide hybrid nanosheets and their application for enhanced photocatalytic hydrogen evolution. <i>ACS Nano</i> , 2014 , 8, 6979-85	16.7	76
75	Integrated Photo-supercapacitor Based on Bi-polar TiO ₂ Nanotube Arrays with Selective One-Side Plasma-Assisted Hydrogenation. <i>Advanced Functional Materials</i> , 2014 , 24, 1840-1846	15.6	140
74	Efficient photoelectrochemical water splitting with ultrathin films of hematite on three-dimensional nanophotonic structures. <i>Nano Letters</i> , 2014 , 14, 2123-9	11.5	277
73	Inverted nanocone-based thin film photovoltaics with omnidirectionally enhanced performance. <i>ACS Nano</i> , 2014 , 8, 6484-90	16.7	74

72	Coupled optical and electrical modeling of thin-film amorphous silicon solar cells based on nanodent plasmonic substrates. <i>Nano Energy</i> , 2014 , 8, 141-149	17.1	23
71	Transparent, high-performance thin-film transistors with an InGaZnO/aligned-SnO ₂ -nanowire composite and their application in photodetectors. <i>Advanced Materials</i> , 2014 , 26, 7399-404	24	91
70	Low-cost, flexible, and self-cleaning 3D nanocone anti-reflection films for high-efficiency photovoltaics. <i>Advanced Materials</i> , 2014 , 26, 2805-11	24	148
69	Rational geometrical design of multi-diameter nanopillars for efficient light harvesting. <i>Nano Energy</i> , 2013 , 2, 951-957	17.1	49
68	Performance enhancement of thin-film amorphous silicon solar cells with low cost nanodent plasmonic substrates. <i>Energy and Environmental Science</i> , 2013 , 6, 2965	35.4	67
67	In situ doping control and electrical transport investigation of single and arrayed CdS nanopillars. <i>Nanoscale</i> , 2013 , 5, 7213-8	7.7	9
66	Self-gating effect induced large performance improvement of ZnO nanocomb gas sensors. <i>ACS Nano</i> , 2013 , 7, 9318-24	16.7	89
65	Transferable self-welding silver nanowire network as high performance transparent flexible electrode. <i>Nanotechnology</i> , 2013 , 24, 335202	3.4	100
64	Programmable nanoengineering templates for fabrication of three-dimensional nanophotonic structures. <i>Nanoscale Research Letters</i> , 2013 , 8, 268	5	23
63	Enhanced supercapacitance in anodic TiO ₂ nanotube films by hydrogen plasma treatment. <i>Nanotechnology</i> , 2013 , 24, 455401	3.4	105
62	One-Dimensional Nanostructures for Energy Harvesting 2013 , 237-270		3
61	Metal Oxide Nanowires: Fundamentals and Sensor Applications 2013 , 287-319		2
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