

Zhiyong Fan

List of Publications by Year in descending order

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226
papers

23,309
citations

5896

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8396

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232
all docs

232
docs citations

232
times ranked

26044
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , 2009, 8, 648-653.	27.5	997
2	ZnO nanowire field-effect transistor and oxygen sensing property. <i>Applied Physics Letters</i> , 2004, 85, 5923-5925.	3.3	766
3	Recent advances in synthesis, physical properties and applications of conducting polymer nanotubes and nanofibers. <i>Progress in Polymer Science</i> , 2011, 36, 1415-1442.	24.7	763
4	Zinc Oxide Nanostructures: Synthesis and Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 1561-1573.	0.9	675
5	Wafer-Scale Assembly of Highly Ordered Semiconductor Nanowire Arrays by Contact Printing. <i>Nano Letters</i> , 2008, 8, 20-25.	9.1	542
6	Quasi-one-dimensional metal oxide materials—Synthesis, properties and applications. <i>Materials Science and Engineering Reports</i> , 2006, 52, 49-91.	31.8	526
7	All-printable band-edge modulated ZnO nanowire photodetectors with ultra-high detectivity. <i>Nature Communications</i> , 2014, 5, 4007.	12.8	494
8	Gate-refreshable nanowire chemical sensors. <i>Applied Physics Letters</i> , 2005, 86, 123510.	3.3	412
9	High Mobility MoS ₂ Transistor with Low Schottky Barrier Contact by Using Atomic Thick h-BN as a Tunneling Layer. <i>Advanced Materials</i> , 2016, 28, 8302-8308.	21.0	398
10	A biomimetic eye with a hemispherical perovskite nanowire array retina. <i>Nature</i> , 2020, 581, 278-282.	27.8	392
11	Negative magnetoresistance in Dirac semimetal Cd ₃ As ₂ . <i>Nature Communications</i> , 2016, 7, 10301.	12.8	376
12	Toward the Development of Printable Nanowire Electronics and Sensors. <i>Advanced Materials</i> , 2009, 21, 3730-3743.	21.0	363
13	Diameter-Dependent Electron Mobility of InAs Nanowires. <i>Nano Letters</i> , 2009, 9, 360-365.	9.1	353
14	Silver Nanodisks: Synthesis, Characterization, and Self-Assembly. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10777-10781.	2.6	340
15	ZnO Nanowires Synthesized by Vapor Trapping CVD Method. <i>Chemistry of Materials</i> , 2004, 16, 5133-5137.	6.7	340
16	Highly Efficient Flexible Perovskite Solar Cells with Antireflection and Self-Cleaning Nanostructures. <i>ACS Nano</i> , 2015, 9, 10287-10295.	14.6	335
17	Photoluminescence and polarized photodetection of single ZnO nanowires. <i>Applied Physics Letters</i> , 2004, 85, 6128-6130.	3.3	330
18	Controlled nanoscale doping of semiconductors via molecular monolayers. <i>Nature Materials</i> , 2008, 7, 62-67.	27.5	311

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19	Efficient Photoelectrochemical Water Splitting with Ultrathin films of Hematite on Three-Dimensional Nanophotonic Structures. <i>Nano Letters</i> , 2014, 14, 2123-2129.	9.1	307
20	Recent advances in large-scale assembly of semiconducting inorganic nanowires and nanofibers for electronics, sensors and photovoltaics. <i>Chemical Society Reviews</i> , 2012, 41, 4560.	38.1	282
21	Nanomaterials and nanostructures for efficient light absorption and photovoltaics. <i>Nano Energy</i> , 2012, 1, 57-72.	16.0	270
22	Ordered Arrays of Dual-Diameter Nanopillars for Maximized Optical Absorption. <i>Nano Letters</i> , 2010, 10, 3823-3827.	9.1	269
23	Single InAs Nanowire Room-Temperature Near-Infrared Photodetectors. <i>ACS Nano</i> , 2014, 8, 3628-3635.	14.6	238
24	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, 11066-11070.	7.1	233
25	Lead-Free Perovskite Nanowire Array Photodetectors with Drastically Improved Stability in Nanoengineering Templates. <i>Nano Letters</i> , 2017, 17, 523-530.	9.1	232
26	3D Arrays of 1024- μm^2 Pixel Image Sensors based on Lead Halide Perovskite Nanowires. <i>Advanced Materials</i> , 2016, 28, 9713-9721.	21.0	228
27	Bionic Single-Electrode Electronic Skin Unit Based on Piezoelectric Nanogenerator. <i>ACS Nano</i> , 2018, 12, 8588-8596.	14.6	226
28	High-performance ZnO nanowire field effect transistors. <i>Applied Physics Letters</i> , 2006, 89, 133113.	3.3	223
29	Challenges and prospects of nanopillar-based solar cells. <i>Nano Research</i> , 2009, 2, 829.	10.4	223
30	Synthesis and Enhanced Electrochemical Catalytic Performance of Monolayer WS_2 with a Tunable Band Gap. <i>Advanced Materials</i> , 2015, 27, 4732-4738.	21.0	214
31	Recent advances in solar cells based on one-dimensional nanostructure arrays. <i>Nanoscale</i> , 2012, 4, 2783.	5.6	211
32	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.	9.1	210
33	Large-Scale Integration of Semiconductor Nanowires for High-Performance Flexible Electronics. <i>ACS Nano</i> , 2012, 6, 1888-1900.	14.6	202
34	Fabrication of efficient planar perovskite solar cells using a one-step chemical vapor deposition method. <i>Scientific Reports</i> , 2015, 5, 14083.	3.3	200
35	Palladium Diselenide Long-Wavelength Infrared Photodetector with High Sensitivity and Stability. <i>ACS Nano</i> , 2019, 13, 2511-2519.	14.6	198
36	ZnO Quantum Dot Decorated Zn_2SnO_4 Nanowire Heterojunction Photodetectors with Drastic Performance Enhancement and Flexible Ultraviolet Image Sensors. <i>ACS Nano</i> , 2017, 11, 4067-4076.	14.6	190

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37	A Fully Integrated and Self-Powered Smartwatch for Continuous Sweat Glucose Monitoring. ACS Sensors, 2019, 4, 1925-1933.	7.8	184
38	Efficient metal halide perovskite light-emitting diodes with significantly improved light extraction on nanophotonic substrates. Nature Communications, 2019, 10, 727.	12.8	179
39	Low Temperature Growth of Boron Nitride Nanotubes on Substrates. Nano Letters, 2005, 5, 2528-2532.	9.1	176
40	Low-Cost, Flexible, and Self-Cleaning 3D Nanocone Anti-Reflection Films for High-Efficiency Photovoltaics. Advanced Materials, 2014, 26, 2805-2811.	21.0	170
41	Efficient Photon Capturing with Ordered Three-Dimensional Nanowell Arrays. Nano Letters, 2012, 12, 3682-3689.	9.1	168
42	Integrated Photo-supercapacitor Based on Bipolar TiO ₂ Nanotube Arrays with Selective One-Side Plasma-Assisted Hydrogenation. Advanced Functional Materials, 2014, 24, 1840-1846.	14.9	163
43	A self-powered flexible hybrid piezoelectric-pyroelectric nanogenerator based on non-woven nanofiber membranes. Journal of Materials Chemistry A, 2018, 6, 3500-3509.	10.3	161
44	Printable Fabrication of a Fully Integrated and Self-Powered Sensor System on Plastic Substrates. Advanced Materials, 2019, 31, e1804285.	21.0	148
45	Light Management with Nanostructures for Optoelectronic Devices. Journal of Physical Chemistry Letters, 2014, 5, 1479-1495.	4.6	147
46	High Efficiency and Stable Perovskite Solar Cell Using ZnO/rGO QDs as an Electron Transfer Layer. Advanced Materials Interfaces, 2016, 3, 1500790.	3.7	143
47	Nanopillar photovoltaics: Materials, processes, and devices. Nano Energy, 2012, 1, 132-144.	16.0	142
48	When Nanowires Meet Ultrahigh Ferroelectric Field-High-Performance Full-Depleted Nanowire Photodetectors. Nano Letters, 2016, 16, 2548-2555.	9.1	135
49	Tailoring surface plasmons of high-density gold nanostar assemblies on metal films for surface-enhanced Raman spectroscopy. Nanoscale, 2014, 6, 616-623.	5.6	131
50	Electrical properties of ZnO nanowire field effect transistors characterized with scanning probes. Applied Physics Letters, 2005, 86, 032111.	3.3	129
51	Enhanced supercapacitance in anodic TiO ₂ nanotube films by hydrogen plasma treatment. Nanotechnology, 2013, 24, 455401.	2.6	127
52	Printable Fabrication of Nanocoral-Structured Electrodes for High-Performance Flexible and Planar Supercapacitor with Artistic Design. Advanced Materials, 2017, 29, 1701736.	21.0	125
53	Palladium/silicon nanowire Schottky barrier-based hydrogen sensors. Sensors and Actuators B: Chemical, 2010, 145, 232-238.	7.8	124
54	Wearable Sweat Band for Noninvasive Levodopa Monitoring. Nano Letters, 2019, 19, 6346-6351.	9.1	121

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55	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.	16.0	121
56	Porous Enzymatic Membrane for Nanotextured Glucose Sweat Sensors with High Stability toward Reliable Noninvasive Health Monitoring. <i>Advanced Functional Materials</i> , 2019, 29, 1902521.	14.9	120
57	$\text{In}^2\text{-Ga}_2\text{O}_3$ nanowires: Synthesis, characterization, and p-channel field-effect transistor. <i>Applied Physics Letters</i> , 2005, 87, 222102.	3.3	118
58	Large scale, highly ordered assembly of nanowire parallel arrays by differential roll printing. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	117
59	Transferable self-welding silver nanowire network as high performance transparent flexible electrode. <i>Nanotechnology</i> , 2013, 24, 335202.	2.6	116
60	Large-Grain Tin-Rich Perovskite Films for Efficient Solar Cells via Metal Alloying Technique. <i>Advanced Materials</i> , 2018, 30, 1705998.	21.0	116
61	Controlled p- and n-type doping of Fe_2O_3 nanobelt field effect transistors. <i>Applied Physics Letters</i> , 2005, 87, 013113.	3.3	114
62	Electrical and photoconductive properties of vertical ZnO nanowires in high density arrays. <i>Applied Physics Letters</i> , 2006, 89, 213110.	3.3	114
63	Efficient Light Absorption with Integrated Nanopillar/Nanowell Arrays for Three-Dimensional Thin-Film Photovoltaic Applications. <i>ACS Nano</i> , 2013, 7, 2725-2732.	14.6	106
64	Flexible photovoltaic technologies. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1233.	5.5	106
65	Parallel Array InAs Nanowire Transistors for Mechanically Bendable, Ultrahigh Frequency Electronics. <i>ACS Nano</i> , 2010, 4, 5855-5860.	14.6	105
66	Self-Gating Effect Induced Large Performance Improvement of ZnO Nanocomb Gas Sensors. <i>ACS Nano</i> , 2013, 7, 9318-9324.	14.6	104
67	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, 7399-7404.	21.0	104
68	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.	30.8	103
69	Current progress in developing metal oxide nanoarrays-based photoanodes for photoelectrochemical water splitting. <i>Science Bulletin</i> , 2019, 64, 1348-1380.	9.0	101
70	Efficient, flexible and mechanically robust perovskite solar cells on inverted nanocone plastic substrates. <i>Nanoscale</i> , 2016, 8, 4276-4283.	5.6	99
71	Critical kinetic control of non-stoichiometric intermediate phase transformation for efficient perovskite solar cells. <i>Nanoscale</i> , 2016, 8, 12892-12899.	5.6	98
72	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.	16.0	96

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73	Synthesis of Magnesium Borate (Mg ₂ B ₂ O ₅) Nanowires by Chemical Vapor Deposition Method. <i>Chemistry of Materials</i> , 2004, 16, 2512-2514.	6.7	92
74	Optical Properties of Metal-Molybdenum Disulfide Hybrid Nanosheets and Their Application for Enhanced Photocatalytic Hydrogen Evolution. <i>ACS Nano</i> , 2014, 8, 6979-6985.	14.6	92
75	Wireless Self-Powered High-Performance Integrated Nanostructured-Gas-Sensor Network for Future Smart Homes. <i>ACS Nano</i> , 2021, 15, 7659-7667.	14.6	90
76	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, 6393-6402.	5.6	89
77	Ultra-Low-Power Smart Electronic Nose System Based on Three-Dimensional Tin Oxide Nanotube Arrays. <i>ACS Nano</i> , 2018, 12, 6079-6088.	14.6	88
78	Flexible Quasi-2D Perovskite/IGZO Phototransistors for Ultrasensitive and Broadband Photodetection. <i>Advanced Materials</i> , 2020, 32, e1907527.	21.0	88
79	Ferroelectric Localized Field-Enhanced ZnO Nanosheet Ultraviolet Photodetector with High Sensitivity and Low Dark Current. <i>Small</i> , 2018, 14, e1800492.	10.0	85
80	Rational Design of Amorphous Indium Zinc Oxide/Carbon Nanotube Hybrid Film for Unique Performance Transistors. <i>Nano Letters</i> , 2012, 12, 3596-3601.	9.1	83
81	Integrated Flexible, Waterproof, Transparent, and Self-Powered Tactile Sensing Panel. <i>ACS Nano</i> , 2016, 10, 7696-7704.	14.6	83
82	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.	3.1	82
83	High-Performance Hybrid Phenyl-C ₆₁ -Butyric Acid Methyl Ester/Cd ₃ P ₂ Nanowire Ultraviolet-Visible-Near Infrared Photodetectors. <i>ACS Nano</i> , 2014, 8, 787-796.	14.6	82
84	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.	7.8	82
85	Chemical sensing with ZnO nanowire field-effect transistor. <i>IEEE Nanotechnology Magazine</i> , 2006, 5, 393-396.	2.0	80
86	Inverted Nanocone-Based Thin Film Photovoltaics with Omnidirectionally Enhanced Performance. <i>ACS Nano</i> , 2014, 8, 6484-6490.	14.6	80
87	Design constraints and guidelines for CdS/CdTe nanopillar based photovoltaics. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	78
88	Performance enhancement of thin-film amorphous silicon solar cells with low cost nanodent plasmonic substrates. <i>Energy and Environmental Science</i> , 2013, 6, 2965.	30.8	77
89	Strong Light Absorption of Self-Organized 3-D Nanospike Arrays for Photovoltaic Applications. <i>ACS Nano</i> , 2011, 5, 9291-9298.	14.6	76
90	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 7862-7868.	8.0	76

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91	Efficient photon management with nanostructures for photovoltaics. <i>Nanoscale</i> , 2013, 5, 6627.	5.6	75
92	Perovskite/organic-semiconductor heterojunctions for ultrasensitive photodetection. <i>Light: Science and Applications</i> , 2017, 6, e17090-e17090.	16.6	73
93	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. <i>ACS Nano</i> , 2015, 9, 6478-6483.	14.6	72
94	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.	3.3	71
95	Synthesis, contact printing, and device characterization of Ni-catalyzed, crystalline InAs nanowires. <i>Nano Research</i> , 2008, 1, 32-39.	10.4	70
96	Monolayer Resist for Patterned Contact Printing of Aligned Nanowire Arrays. <i>Journal of the American Chemical Society</i> , 2009, 131, 2102-2103.	13.7	70
97	Wireless Single-Electrode Self-Powered Piezoelectric Sensor for Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8288-8295.	8.0	70
98	A Wearable Nutrition Tracker. <i>Advanced Materials</i> , 2021, 33, e2006444.	21.0	70
99	Black Ge Based on Crystalline/Amorphous Core/Shell Nanoneedle Arrays. <i>Nano Letters</i> , 2010, 10, 520-523.	9.1	68
100	Fabrication of $\text{CuFe}_2\text{O}_4/\text{Fe}_2\text{O}_3$ Composite Thin Films on FTO Coated Glass and 3-D Nanospine Structures for Efficient Photoelectrochemical Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 35315-35322.	8.0	67
101	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.	10.3	67
102	Increasing Photoluminescence Quantum Yield by Nanophotonic Design of Quantum-Confined Halide Perovskite Nanowire Arrays. <i>Nano Letters</i> , 2019, 19, 2850-2857.	9.1	67
103	High performance thin film solar cells on plastic substrates with nanostructure-enhanced flexibility. <i>Nano Energy</i> , 2016, 22, 539-547.	16.0	66
104	Broadband omnidirectional light detection in flexible and hierarchical ZnO/Si heterojunction photodiodes. <i>Nano Research</i> , 2017, 10, 22-36.	10.4	66
105	Single electrode piezoelectric nanogenerator for intelligent passive daytime radiative cooling. <i>Nano Energy</i> , 2021, 82, 105695.	16.0	64
106	Scalable Integration of Indium Zinc Oxide/Photosensitive Nanowire Composite Thin Film Transistors for Transparent Multicolor Photodetectors Array. <i>Advanced Materials</i> , 2014, 26, 2919-2924.	21.0	62
107	Formation and Characterization of $\text{Ni}_x\text{InAs}/\text{InAs}$ Nanowire Heterostructures by Solid Source Reaction. <i>Nano Letters</i> , 2008, 8, 4528-4533.	9.1	61
108	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.	5.6	61

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109	Recent progress on printable power supply devices and systems with nanomaterials. Nano Research, 2018, 11, 3065-3087.	10.4	60
110	Constructing optimized wire electrodes for fiber supercapacitors. Nano Energy, 2014, 10, 99-107.	16.0	59
111	Smart gas sensor arrays powered by artificial intelligence. Journal of Semiconductors, 2019, 40, 111601.	3.7	59
112	Next-generation machine vision systems incorporating two-dimensional materials: Progress and perspectives. Informa Mater, 2022, 4, .	17.3	58
113	Patterned p-Doping of InAs Nanowires by Gas-Phase Surface Diffusion of Zn. Nano Letters, 2010, 10, 509-513.	9.1	57
114	Rational geometrical design of multi-diameter nanopillars for efficient light harvesting. Nano Energy, 2013, 2, 951-957.	16.0	57
115	Three-dimensional metal/oxide nanocone arrays for high-performance electrochemical pseudocapacitors. Nanoscale, 2014, 6, 3626-3631.	5.6	57
116	Dual-Layer Nanostructured Flexible Thin-Film Amorphous Silicon Solar Cells with Enhanced Light Harvesting and Photoelectric Conversion Efficiency. ACS Applied Materials & Interfaces, 2016, 8, 10929-10936.	8.0	57
117	Room-Temperature Sputtered SnO ₂ as Robust Electron Transport Layer for Air-Stable and Efficient Perovskite Solar Cells on Rigid and Flexible Substrates. Scientific Reports, 2019, 9, 6963.	3.3	57
118	Three-Dimensional Perovskite Nanophotonic Wire Array-Based Light-Emitting Diodes with Significantly Improved Efficiency and Stability. ACS Nano, 2020, 14, 1577-1585.	14.6	57
119	Particle-in-Film Plasmons on Periodic Silver Film over Nanosphere (AgFON): A Hybrid Plasmonic Nanoarchitecture for Surface-Enhanced Raman Spectroscopy. ACS Applied Materials & Interfaces, 2016, 8, 634-642.	8.0	56
120	Large-scale planar and spherical light-emitting diodes based on arrays of perovskite quantum wires. Nature Photonics, 2022, 16, 284-290.	31.4	56
121	Structures and Electrical Properties of Ag-Tetracyanoquinodimethane Organometallic Nanowires. IEEE Nanotechnology Magazine, 2005, 4, 238-241.	2.0	53
122	Highly flexible and transferable supercapacitors with ordered three-dimensional MnO ₂ /Au/MnO ₂ nanospire arrays. Journal of Materials Chemistry A, 2015, 3, 10199-10204.	10.3	53
123	Efficient and Flexible Thin Film Amorphous Silicon Solar Cells on Nanotextured Polymer Substrate Using Sol-gel Based Nanoimprinting Method. Advanced Functional Materials, 2017, 27, 1604720.	14.9	53
124	A non-catalytic vapor growth regime for organohalide perovskite nanowires using anodic aluminum oxide templates. Nanoscale, 2017, 9, 5828-5834.	5.6	53
125	Down-Scalable and Ultra-fast Memristors with Ultra-high Density Three-Dimensional Arrays of Perovskite Quantum Wires. Nano Letters, 2021, 21, 5036-5044.	9.1	53
126	Light Out-Coupling Management in Perovskite LEDs—What Can We Learn from the Past?. Advanced Functional Materials, 2020, 30, 2002570.	14.9	52

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127	Fabrication of one dimensional superfine polymer fibers by double-spinning. Journal of Materials Chemistry, 2011, 21, 13159.	6.7	51
128	Quasi Core/Shell Lead Sulfide/Graphene Quantum Dots for Bulk Heterojunction Solar Cells. Journal of Physical Chemistry C, 2015, 119, 18886-18895.	3.1	50
129	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. Journal of Physical Chemistry C, 2017, 121, 18360-18368.	3.1	48
130	Hybrid WSe ₂ /In ₂ O ₃ Phototransistor with Ultrahigh Detectivity by Efficient Suppression of Dark Currents. ACS Applied Materials & Interfaces, 2017, 9, 34489-34496.	8.0	47
131	Anisotropic Triboelectric Nanogenerator Based on Ordered Electrospinning. ACS Applied Materials & Interfaces, 2020, 12, 46205-46211.	8.0	47
132	Progress and Design Concerns of Nanostructured Solar Energy Harvesting Devices. Small, 2016, 12, 2536-2548.	10.0	46
133	Hybrid zinc oxide/graphene electrodes for depleted heterojunction colloidal quantum-dot solar cells. Physical Chemistry Chemical Physics, 2015, 17, 24412-24419.	2.8	45
134	Fast Single-Cell Patterning for Study of Drug-Induced Phenotypic Alterations of HeLa Cells Using Time-of-Flight Secondary Ion Mass Spectrometry. Analytical Chemistry, 2016, 88, 12196-12203.	6.5	44
135	Large scale, flexible and three-dimensional quasi-ordered aluminum nanospikes for thin film photovoltaics with omnidirectional light trapping and optimized electrical design. Energy and Environmental Science, 2014, 7, 3611-3616.	30.8	43
136	Broad-band three dimensional nanocave ZnO thin film photodetectors enhanced by Au surface plasmon resonance. Nanoscale, 2016, 8, 8924-8930.	5.6	43
137	Perovskite Nanowire Extrusion. Nano Letters, 2017, 17, 6557-6563.	9.1	42
138	Chemical processing of three-dimensional graphene networks on transparent conducting electrodes for depleted-heterojunction quantum dot solar cells. Chemical Communications, 2016, 52, 323-326.	4.1	40
139	Scalable All-Evaporation Fabrication of Efficient Light-Emitting Diodes with Hybrid 2D-3D Perovskite Nanostructures. Advanced Functional Materials, 2020, 30, 2002913.	14.9	40
140	Self-powered and wearable biosensors for healthcare. Materials Today Energy, 2022, 23, 100900.	4.7	39
141	Phosphine Oxide Monolayers on SiO ₂ Surfaces. Angewandte Chemie - International Edition, 2008, 47, 4440-4442.	13.8	37
142	Solar cells on curtains. Nature Materials, 2008, 7, 835-836.	27.5	37
143	Preparation and electrical/optical bistable property of potassium tetracyanoquinodimethane thin films. Thin Solid Films, 2003, 436, 259-263.	1.8	36
144	A non-toxic triboelectric nanogenerator for baby care applications. Journal of Materials Chemistry A, 2020, 8, 22745-22753.	10.3	36

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145	Physicochemical properties of hybrid graphene-lead sulfide quantum dots prepared by supercritical ethanol. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	35
146	Morphology Defects Guided Pore Initiation during the Formation of Porous Anodic Alumina. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2285-2291.	8.0	34
147	A Highly Controllable Electrochemical Anodization Process to Fabricate Porous Anodic Aluminum Oxide Membranes. <i>Nanoscale Research Letters</i> , 2015, 10, 495.	5.7	34
148	Recent Progress on Interface Engineering for High-Performance, Stable Perovskites Solar Cells. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000118.	3.7	34
149	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.	5.9	33
150	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.	14.9	33
151	Halide-exchanged perovskite photodetectors for wearable visible-blind ultraviolet monitoring. <i>Nano Energy</i> , 2022, 100, 107516.	16.0	33
152	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.	16.0	31
153	Nanotextured Spikes of Fe ₂ O ₃ /NiFe ₂ O ₄ Composite for Efficient Photoelectrochemical Oxidation of Water. <i>Langmuir</i> , 2018, 34, 3555-3564.	3.5	31
154	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.	5.8	31
155	Scalable Indium Phosphide Thin-Film Nanophotonics Platform for Photovoltaic and Photoelectrochemical Devices. <i>ACS Nano</i> , 2017, 11, 5113-5119.	14.6	30
156	Multifunctional Optoelectronic Device Based on an Asymmetric Active Layer Structure. <i>Advanced Functional Materials</i> , 2019, 29, 1807894.	14.9	30
157	Shape-Controlled Synthesis of Single-Crystalline Nanopillar Arrays by Template-Assisted Vapor-Liquid-Solid Process. <i>Journal of the American Chemical Society</i> , 2010, 132, 13972-13974.	13.7	29
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