Xin Yan

List of Publications by Year
in descending order

72 papers	883 citations	516710 16 h-index	580821 25 g-index
72 all docs	72 docs citations	72 times ranked	1003 citing authors

#	Article	IF	Citations
1	A graphene/single GaAs nanowire Schottky junction photovoltaic device. Nanoscale, 2018, 10, 9212-9217.	5.6	63
2	A monolayer graphene/GaAs nanowire array Schottky junction self-powered photodetector. Applied Physics Letters, 2016, 109, .	3.3	57
3	Plasmon-Enhanced Light Absorption in GaAs Nanowire Array Solar Cells. Nanoscale Research Letters, 2015, 10, 436.	5.7	43
4	A single crystalline InP nanowire photodetector. Applied Physics Letters, 2016, 109, .	3.3	38
5	Formation Mechanism and Optical Properties of InAs Quantum Dots on the Surface of GaAs Nanowires. Nano Letters, 2012, 12, 1851-1856.	9.1	36
6	A Hybrid Model for Central Bank Digital Currency Based on Blockchain. IEEE Access, 2021, 9, 53589-53601.	4.2	35
7	Growth of InAs Quantum Dots on GaAs Nanowires by Metal Organic Chemical Vapor Deposition. Nano Letters, 2011, 11, 3941-3945.	9.1	33
8	Enhanced photovoltaic performance of an inclined nanowire array solar cell. Optics Express, 2015, 23, A1603.	3.4	27
9	Extremely Low-Threshold Current Density InGaAs/AlGaAs Quantum-Well Lasers on Silicon. Journal of Lightwave Technology, 2015, 33, 3163-3169.	4.6	25
10	Growth and photoluminescence of InxGa1â^'xAs quantum dots on the surface of GaAs nanowires by metal organic chemical vapor deposition. Applied Physics Letters, 2012, 101, .	3.3	23
11	Fabrication and optical properties of GaAs/InGaAs/GaAs nanowire coreâ€"multishell quantum well heterostructures. Nanoscale, 2015, 7, 1110-1115.	5.6	23
12	Broadband second harmonic generation in GaAs nanowires by femtosecond laser sources. Applied Physics Letters, 2013, 103, 143110.	3.3	22
13	Anomalous photoconductive behavior of a single InAs nanowire photodetector. Applied Physics Letters, 2015, 107, .	3.3	22
14	Photovoltaic Performance of Pin Junction Nanocone Array Solar Cells with Enhanced Effective Optical Absorption. Nanoscale Research Letters, 2018, 13, 306.	5.7	22
15	A Blockchain-Based Trusted Edge Platform in Edge Computing Environment. Sensors, 2021, 21, 2126.	3.8	19
16	A grapheneâ€based tunable negative refractive index metamaterial and its application in dynamic beamâ€tilting terahertz antenna. Microwave and Optical Technology Letters, 2019, 61, 2766-2772.	1.4	18
17	Self-catalyzed growth of pure zinc blende âŸ¨110âŸ© InP nanowires. Applied Physics Letters, 2015, 107, .	3.3	16
18	Dual-Frequency Polarized Reconfigurable Terahertz Antenna Based on Graphene Metasurface and TOPAS. Micromachines, 2021, 12, 1088.	2.9	16

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19	Axially connected nanowire core-shell p-n junctions: a composite structure for high-efficiency solar cells. Nanoscale Research Letters, 2015, 10, 22.	5.7	15
20	Analysis of Critical Dimensions for Nanowire Core-Multishell Heterostructures. Nanoscale Research Letters, 2015, 10, 389.	5.7	15
21	Controllable photoresponse behavior in a single InAs nanowire phototransistor. Applied Physics Letters, 2017, 111, .	3.3	15
22	Absorption-Enhanced Ultra-Thin Solar Cells Based on Horizontally Aligned pâ€“iâ€“n Nanowire Arrays. Nanomaterials, 2020, 10, 1111.	4.1	15
23	A dual-tunable ultra-broadband terahertz absorber based on graphene and strontium titanate. Results in Physics, 2021, 31, 105039.	4.1	14
24	Low-threshold room-temperature AlGaAs/GaAs nanowire/single-quantum-well heterostructure laser. Applied Physics Letters, 2017, 110, .	3.3	13
25	Optimization of GaAs Nanowire Pin Junction Array Solar Cells by Using AlGaAs/GaAs Heterojunctions. Nanoscale Research Letters, 2018, 13, 126.	5.7	13
26	Ultrahigh Purcell factor in low-threshold nanolaser based on asymmetric hybrid plasmonic cavity. Scientific Reports, 2016, 6, 33063.	3.3	12
27	A High-Efficiency Si Nanowire Array/Perovskite Hybrid Solar Cell. Nanoscale Research Letters, 2017, 12, 14.	5.7	12
28	Self-catalyzed Growth of InAs Nanowires on InP Substrate. Nanoscale Research Letters, 2017, 12, 34.	5.7	12
29	Near-infrared hybrid plasmonic multiple quantum well nanowire lasers. Optics Express, 2017, 25, 9358.	3.4	12
30	Plasmon-Induced Transparency in an Asymmetric Bowtie Structure. Nanoscale Research Letters, 2019, 14, 246.	5.7	12
31	A Fast Point Cloud Segmentation Algorithm Based on Region Growth. , 2019, , .		12
32	Grapheneâ€based dualâ€band antenna in the millimeterâ€wave band. Microwave and Optical Technology Letters, 2018, 60, 3014-3019.	1.4	10
33	Realization of Stranskiâ€“Krastanow InAs quantum dots on nanowire-based InGaAs nanoshells. Journal of Materials Chemistry C, 2013, 1, 7914.	5.5	9
34	Photovoltaic Performance of a Nanowire/Quantum Dot Hybrid Nanostructure Array Solar Cell. Nanoscale Research Letters, 2018, 13, 62.	5.7	9
35	Enhanced photovoltaic performance of nanowire array solar cells with multiple diameters. Optics Express, 2018, 26, A974.	3.4	9
36	Performance Enhancement of Ultra-Thin Nanowire Array Solar Cells by Bottom Reflectivity Engineering. Nanomaterials, 2020, 10, 184.	4.1	9

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37	A grapheneâ€based tunable miniaturizedâ€element frequency selective surface in terahertz band and its application in highâ€isolation multipleâ€input multipleâ€output system. Microwave and Optical Technology Letters, 2019, 61, 2789-2794.	1.4	8
38	Enhancement of Single-Photon Emission Rate from InGaAs/GaAs Quantum-Dot/Nanowire Heterostructure by Wire-Groove Nanocavity. Nanomaterials, 2019, 9, 671.	4.1	8
39	Switchable and Dual-Tunable Multilayered Terahertz Absorber Based on Patterned Graphene and Vanadium Dioxide. Micromachines, 2021, 12, 619.	2.9	8
40	Observation of enhanced spontaneous and stimulated emission of GaAs/AlGaAs nanowire via the Purcell effect. AIP Advances, 2015, 5, 087148.	1.3	7
41	Dual-Tunable Broadband Terahertz Absorber Based on a Hybrid Graphene-Dirac Semimetal Structure. Micromachines, 2020, 11, 1096.	2.9	7
42	Analysis of Terahertz Wave on Increasing Radar Cross Section of 3D Conductive Model. Electronics (Switzerland), 2021, 10, 74.	3.1	7
43	Growth of Zinc Blende GaAs/AlGaAs Radial Heterostructure Nanowires by a Two-Temperature Process. Chinese Physics Letters, 2011, 28, 036101.	3.3	6
44	Enhanced performance of graphene/GaAs nanowire photoelectric conversion devices by improving the Schottky barrier height. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 051202.	1.2	6
45	Study of the Polarization Effect in InAs Quantum Dots/GaAs Nanowires. Journal of Physical Chemistry C, 2019, 123, 4228-4234.	3.1	6
46	Analysis of critical dimensions for axial double heterostructure nanowires. Journal of Applied Physics, 2012, 112, .	2.5	5
47	Analysis of dark current considering trap-assisted tunneling mechanism for InGaAs PIN photodetectors. Optical and Quantum Electronics, 2017, 49, 1.	3.3	5
48	Modulating photoelectric performance of graphene/gallium arsenide nanowire photodetectors by applying gate voltage. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	1.2	5
49	Study of Charge Distributions and Electrical Properties in GaAs/AlGaAs Single Quantum Well/Nanowire Heterostructures. Journal of Physical Chemistry C, 2019, 123, 26888-26894.	3.1	5
50	A Low-Threshold Miniaturized Plasmonic Nanowire Laser with High-Reflectivity Metal Mirrors. Nanomaterials, 2020, 10, 1928.	4.1	5
51	Miniaturized GaAs Nanowire Laser with a Metal Grating Reflector. Nanomaterials, 2020, 10, 680.	4.1	5
52	An artificial optoelectronic synapse based on an InAs nanowire phototransistor with negative photoresponse. Optical and Quantum Electronics, 2021, 53, 1.	3.3	5
53	Morphological and temperature-dependent optical properties of InAs quantum dots on GaAs nanowires with different InAs coverage. Applied Physics Letters, 2013, 103, .	3.3	4
54	High-Performance Laterally Oriented Nanowire Solar Cells with Ag Gratings. Nanomaterials, 2021, 11, 2807.	4.1	4

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55	Controllable growth and optical properties of InP and InP/InAs nanostructures on the sidewalls of GaAs nanowires. Journal of Applied Physics, 2014, 116, 214304.	2.5	3
56	Fabrication and optical properties of multishell InAs quantum dots on GaAs nanowires. Journal of Applied Physics, 2015, 117, 054301.	2.5	3
57	Design and Simulation of Low-Threshold Miniaturized Single-Mode Nanowire Lasers Combined with a Photonic Crystal Microcavity and Asymmetric Distributed-Bragg-Reflector Mirrors. Nanomaterials, 2020, 10, 2344.	4.1	3
58	Growth and characterization of InAs quantum dots on InP nanowires with zinc blende structure. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	1.2	2
59	Fabrication and optical properties of typeâ€II InP/InAs nanowire/quantumâ€dot heterostructures. Physica Status Solidi - Rapid Research Letters, 2016, 10, 168-171.	2.4	2
60	A high-responsivity subwavelength GaAs nanowire photodetector with a dipole antenna. , 2018, , .		2
61	Channel Plasmon Nanowire Lasers with V-Groove Cavities. Nanoscale Research Letters, 2018, 13, 227.	5.7	2
62	Study of nanometer-scale structures and electrostatic properties of InAs quantum dots decorating GaAs/AlAs core/shell nanowires. Nanotechnology, 2020, 31, 245701.	2.6	2
63	Contrallable Synaptic Behavior in Photonic Neuromorphic Transistor. , 2018, , .		1
64	Study on Secure Communication of Internet of Vehicles Based on Identity-Based Cryptograph. , 2021, , .		1
65	Realization of vertical GaAs/InAs nanowire heterostructures on Si substrate. , 2011, , .		0
66	A Multi-Diameter GaAs Nano wire Array Solar Cell with Axial p-i-n Junctions. , 2018, , .		0
67	Enhanced efficiency of graphene/GaAs nanowire solar cell by chemical doping. , 2018, , .		0
68	A room-temperature near-infrared nanowire/quantum-well laser. , 2018, , .		0
69	Single-Photon Emission by the Plasmon-Induced Transparency Effect in Coupled Plasmonic Resonators. Photonics, 2021, 8, 188.	2.0	0
70	Plasmon-enhanced photoresponse of deep-subwavelength GaAs NW photodetector. Optoelectronics Letters, 2021, 17, 385-389.	0.8	0
71	Enhancement of single-photon emission rate by plasmon induced transparency in metal-insulator-metal waveguides. , 2021, , .		0
72	Enhanced Reflection of GaAs Nanowire Laser Using Short-Period, Symmetric Double Metal Grating Reflectors. Nanomaterials, 2022, 12, 1482.	4.1	0