Yunyan Zhang

List of Publications by Year
in descending order

53 papers	1,224 citations	361045 20 h-index	377514 34 g-index
53 all docs	53 docs citations	53 times ranked	1564 citing authors

#	Article	IF	Citations
1	Design of high-quality reflectors for vertical IIIâ€“V nanowire lasers on Si. Nanotechnology, 2022, 33, 035202.	1.3	3
2	Thermally-driven formation method for growing (quantum) dots on sidewalls of self-catalysed thin nanowires. Nanoscale Horizons, 2022, 7, 311-318.	4.1	2
3	Long-Term Stability and Optoelectronic Performance Enhancement of InAsP Nanowires with an Ultrathin InP Passivation Layer. Nano Letters, 2022, 22, 3433-3439.	4.5	3
4	Multiple radial phosphorus segregations in GaAsP core-shell nanowires. Nano Research, 2021, 14, 157-164.	5.8	3
5	Compressed sensing of large-scale local field potentials using adaptive sparsity analysis and non-convex optimization. Journal of Neural Engineering, 2021, 18, 026007.	1.8	1
6	Defect-Free Axially Stacked GaAs/GaAsP Nanowire Quantum Dots with Strong Carrier Confinement. Nano Letters, 2021, 21, 5722-5729.	4.5	14
7	Robust Protection of IIIâ€“V Nanowires in Water Splitting by a Thin Compact TiO₂ Layer. ACS Applied Materials & Interfaces, 2021, 13, 30950-30958.	4.0	12
8	Influence of diameter on temperature dynamics of hot carriers in photoexcited GaAsP nanowires. Physical Review B, 2021, 104, .	1.1	0
9	Optimizing GaAs nanowire-based visible-light photodetectors. Applied Physics Letters, 2021, 119, .	1.5	5
10	Resonant enhancement of Raman scattering by surface phonon polaritons in GaAs nanowires. Journal Physics D: Applied Physics, 2021, 54, 475111.	1.3	1
11	Polarization properties of Raman scattering by surface phonon polaritons in GaAsP nanowires. Journal Physics D: Applied Physics, 2021, 54, 475109.	1.3	1
12	Heterostructure and Q-factor engineering for low-threshold and persistent nanowire lasing. Light: Science and Applications, 2020, 9, 43.	7.7	26
13	Droplet manipulation and horizontal growth of high-quality self-catalysed GaAsP nanowires. Nano Today, 2020, 34, 100921.	6.2	3
14	Self-catalyzed GaAs(P) nanowires and their application for solar cells. Journal Physics D: Applied Physics, 2020, 53, 233001.	1.3	6
15	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. ACS Nano, 2019, 13, 13492-13500.	7.3	22
16	InAs/GaAs quantum dot solar cells with quantum dots in the base region. IET Optoelectronics, 2019, 13, 215-217.	1.8	9
17	Toward electrically driven semiconductor nanowire lasers. Nanotechnology, 2019, 30, 192002.	1.3	28
18	Self-Formed Quantum Wires and Dots in GaAsPâ€“GaAsP Coreâ€“Shell Nanowires. Nano Letters, 2019, 19, 4158-4165.	4.5	15

#	Article	IF	Citations
19	Defect Dynamics in Self-Catalyzed IIIâ€"V Semiconductor Nanowires. Nano Letters, 2019, 19, 4574-4580.	4.5	5
20	Highly Strained IIIâ€"Vâ€"V Coaxial Nanowire Quantum Wells with Strong Carrier Confinement. ACS Nano, 2019, 13, 5931-5938.	7.3	19
21	Passivation Mechanism of Nitrogen in ZnO under Different Oxygen Ambience. Crystals, 2019, 9, 204.	1.0	3
22	Nanowires for High-Efficiency, Low-Cost Solar Photovoltaics. Crystals, 2019, 9, 87.	1.0	59
23	Growth and Fabrication of Highâ€Quality Single Nanowire Devices with Radial pâ€iâ€n Junctions. Small, 2019, 15, 1803684.	5.2	16
24	Stable Defects in Semiconductor Nanowires. Nano Letters, 2018, 18, 3081-3087.	4.5	16
25	Highâ€Responsivity Photodetection by a Selfâ€Catalyzed Phaseâ€Pure pâ€GaAs Nanowire. Small, 2018, 14, e1704429.	5.2	54
26	Doping of Self-Catalyzed Nanowires under the Influence of Droplets. Nano Letters, 2018, 18, 81-87.	4.5	24
27	Hybrid IIIâ€"V/IV Nanowires: High-Quality Ge Shell Epitaxy on GaAs Cores. Nano Letters, 2018, 18, 6397-6403.	4.5	6
28	Light-Emitting GaAs Nanowires on a Flexible Substrate. Nano Letters, 2018, 18, 4206-4213.	4.5	26
29	Integrating Sphere Microscopy for Direct Absorption Measurements of Single Nanostructures. ACS Nano, 2017, 11, 1412-1418.	7.3	30
30	Influence of droplet size on the growth of high-quality self-catalyzed GaAsP nanowires. , 2017, , .		0
31	GaAsP nanowires and nanowire devices grown on silicon substrates. Proceedings of SPIE, 2017, , .	0.8	3
32	Ten-Fold Enhancement of InAs Nanowire Photoluminescence Emission with an InP Passivation Layer. Nano Letters, 2017, 17, 3629-3633.	4.5	19
33	Nonradiative Step Facets in Semiconductor Nanowires. Nano Letters, 2017, 17, 2454-2459.	4.5	17
34	Growth of Pure Zinc-Blende GaAs(P) Coreâ€"Shell Nanowires with Highly Regular Morphology. Nano Letters, 2017, 17, 4946-4950.	4.5	22
35	Growth of high-quality self-catalyzed core-shell GaAsP nanowires on Si substrates. Proceedings of SPIE, 2016, , .	0.8	0
36	Defect-Free Self-Catalyzed GaAs/GaAsP Nanowire Quantum Dots Grown on Silicon Substrate. Nano Letters, 2016, 16, 504-511.	4.5	42

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37	Influence of Droplet Size on the Growth of Self-Catalyzed Ternary GaAsP Nanowires. Nano Letters, 2016, 16, 1237-1243.	4.5	49
38	Polarity-Driven Quasi-3-Fold Composition Symmetry of Self-Catalyzed IIIâ€"Vâ€"V Ternary Coreâ€"Shell Nanowires. Nano Letters, 2015, 15, 3128-3133.	4.5	39
39	Optical characterisation of catalyst free GaAsP and GaAsP core-shell nanowires grown directly on Si substrates by MBE. Proceedings of SPIE, 2015, , .	0.8	0
40	IIIâ€"V nanowires and nanowire optoelectronic devices. Journal Physics D: Applied Physics, 2015, 48, 463001.	1.3	132
41	Bandgap optimized III–V (GaAsP) nanowire on silicon tandem solar cell, device and data. , 2014, , .		4
42	Wafer-Scale Fabrication of Self-Catalyzed 1.7 eV GaAsP Coreâ€"Shell Nanowire Photocathode on Silicon Substrates. Nano Letters, 2014, 14, 2013-2018.	4.5	58
43	Self-Catalyzed Ternary Coreâ€"Shell GaAsP Nanowire Arrays Grown on Patterned Si Substrates by Molecular Beam Epitaxy. Nano Letters, 2014, 14, 4542-4547.	4.5	48
44	Self-Catalyzed GaAsP Nanowires Grown on Silicon Substrates by Solid-Source Molecular Beam Epitaxy. Nano Letters, 2013, 13, 3897-3902.	4.5	75
45	Investigation of GaN-based light-emitting diodes using a p-GaN/i-InGaN short-period superlattice structure as last quantum barrier. Science China Technological Sciences, 2013, 56, 98-102.	2.0	7
46	InAs/GaAs Quantum-Dot Lasers Monolithically Grown on Si, Ge, and Ge-on-Si Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1901107-1901107.	1.9	93
47	High-efficient solar cells with III-V nanostructures. , 2013, , .		0
48	Performance enhancement of blue light-emitting diodes without an electron-blocking layer by using special designed p-type doped InGaN barriers. Optics Express, 2012, 20, A133.	1.7	22
49	Improvement of Efficiency Droop in Blue InGaN Light-Emitting Diodes With p-InGaN/GaN Superlattice Last Quantum Barrier. IEEE Photonics Technology Letters, 2012, 24, 2218-2220.	1.3	20
50	Performance Enhancement of Near-UV Light-Emitting Diodes With an InAlN/GaN Superlattice Electron-Blocking Layer. IEEE Electron Device Letters, 2012, 33, 994-996.	2.2	36
51	Advantage of dual wavelength light-emitting diodes with dip-shaped quantum wells. Science Bulletin, 2012, 57, 2562-2566.	1.7	1
52	Effect of The Number of Quantum Wells on InGaN/AlGaN LED. Chinese Journal of Luminescence, 2012, 33, 1368-1372.	0.2	0
53	Performance enhancement of blue light-emitting diodes with a special designed AlGaN/GaN superlattice electron-blocking layer. Applied Physics Letters, 2011, 99, .	1.5	125