Huiyun Liu

List of Publications by Year
in descending order

267 papers	6,267 citations	71102 41 h-index	88630 70 g-index
267 all docs	267 docs citations	267 times ranked	5245 citing authors

#	Article	IF	Citations
1	Electrically pumped continuous-wave IIIâ€“V quantum dot lasers on silicon. Nature Photonics, 2016, 10, 307-311.	31.4	665
2	Long-wavelength InAs/GaAs quantum-dot laser diode monolithically grown on Ge substrate. Nature Photonics, 2011, 5, 416-419.	31.4	344
3	13-Î¼m InAs/GaAs quantum-dot lasers monolithically grown on Si substrates. Optics Express, 2011, 19, 11381.	3.4	236
4	Surface-passivated GaAsP single-nanowire solar cells exceeding 10% efficiency grown on silicon. Nature Communications, 2013, 4, 1498.	12.8	192
5	Continuous-wave InAs/GaAs quantum-dot laser diodes monolithically grown on Si substrate with low threshold current densities. Optics Express, 2012, 20, 22181.	3.4	153
6	Quantum dot optoelectronic devices: lasers, photodetectors and solar cells. Journal Physics D: Applied Physics, 2015, 48, 363001.	2.8	149
7	IIIâ€“V nanowires and nanowire optoelectronic devices. Journal Physics D: Applied Physics, 2015, 48, 463001.	2.8	132
8	13-Î¼m InAs/GaAs quantum-dot lasers monolithically grown on Si substrates using InAlAs/GaAs dislocation filter layers. Optics Express, 2014, 22, 11528.	3.4	125
9	High Detectivity and Transparent Fewâ€Layer MoS₂/Glassyâ€Graphene Heterostructure Photodetectors. Advanced Materials, 2018, 30, e1706561.	21.0	111
10	Electrically pumped continuous-wave 13 Âµm InAs/GaAs quantum dot lasers monolithically grown on on-axis Si (001) substrates. Optics Express, 2017, 25, 4632.	3.4	102
11	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.	2.9	93
12	MoS₂â€“OH Bilayer-Mediated Growth of Inch-Sized Monolayer MoS₂ on Arbitrary Substrates. Journal of the American Chemical Society, 2019, 141, 5392-5401.	13.7	87
13	Integration of III-V lasers on Si for Si photonics. Progress in Quantum Electronics, 2019, 66, 1-18.	7.0	86
14	Monolithic quantum-dot distributed feedback laser array on silicon. Optica, 2018, 5, 528.	9.3	85
15	Mobility Enhancement by Sb-mediated Minimisation of Stacking Fault Density in InAs Nanowires Grown on Silicon. Nano Letters, 2014, 14, 1643-1650.	9.1	82
16	1.3 Î¼m InAs/GaAs quantumâ€dot laser monolithically grown on Si substrates operating over 100Â°C. Electronics Letters, 2014, 50, 1467-1468.	1.0	81
17	Self-Catalyzed GaAsP Nanowires Grown on Silicon Substrates by Solid-Source Molecular Beam Epitaxy. Nano Letters, 2013, 13, 3897-3902.	9.1	75
18	Effect of interface oxides on shear properties of hot-rolled stainless steel clad plate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 344-349.	5.6	73

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19	Optimizations of Defect Filter Layers for 1.3-Î¼m InAs/GaAs Quantum-Dot Lasers Monolithically Grown on Si Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 50-56.	2.9	69
20	InAs/GaAs Quantum-Dot Superluminescent Light-Emitting Diode Monolithically Grown on a Si Substrate. ACS Photonics, 2014, 1, 638-642.	6.6	66
21	Enhanced performance of ZnO nanoparticle decorated all-inorganic CsPbBr₃ quantum dot photodetectors. Journal of Materials Chemistry A, 2019, 7, 6134-6142.	10.3	64
22	Monolithically Integrated InAs/GaAs Quantum Dot Mid-Infrared Photodetectors on Silicon Substrates. ACS Photonics, 2016, 3, 749-753.	6.6	63
23	Voltage recovery in charged InAs/GaAs quantum dot solar cells. Nano Energy, 2014, 6, 159-166.	16.0	61
24	Continuous-wave quantum dot photonic crystal lasers grown on on-axis Si (001). Nature Communications, 2020, 11, 977.	12.8	61
25	Ultra-smooth glassy graphene thin films for flexible transparent circuits. Science Advances, 2016, 2, e1601574.	10.3	59
26	Nanowires for High-Efficiency, Low-Cost Solar Photovoltaics. Crystals, 2019, 9, 87.	2.2	59
27	Wafer-Scale Fabrication of Self-Catalyzed 1.7 eV GaAsP Coreâ€“Shell Nanowire Photocathode on Silicon Substrates. Nano Letters, 2014, 14, 2013-2018.	9.1	58
28	Heteroepitaxial Growth of III-V Semiconductors on Silicon. Crystals, 2020, 10, 1163.	2.2	56
29	Design rules for dislocation filters. Journal of Applied Physics, 2014, 116, .	2.5	55
30	Sb-Induced Phase Control of InAsSb Nanowires Grown by Molecular Beam Epitaxy. Nano Letters, 2015, 15, 1109-1116.	9.1	55
31	Highâ€Responsivity Photodetection by a Selfâ€Catalyzed Phaseâ€Pure pâ€GaAs Nanowire. Small, 2018, 14, e1704429.	10.0	54
32	Refractive indices of MBE-grown AlxGa(1âˆ’<i>x</i>)As ternary alloys in the transparent wavelength region. AIP Advances, 2021, 11, .	1.3	52
33	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	2.5	51
34	InAs/GaAs quantum dot solar cell with an AlAs cap layer. Applied Physics Letters, 2013, 102, .	3.3	50
35	Influence of Droplet Size on the Growth of Self-Catalyzed Ternary GaAsP Nanowires. Nano Letters, 2016, 16, 1237-1243.	9.1	49
36	Self-Catalyzed Ternary Coreâ€“Shell GaAsP Nanowire Arrays Grown on Patterned Si Substrates by Molecular Beam Epitaxy. Nano Letters, 2014, 14, 4542-4547.	9.1	48

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37	Metamorphic IIIâ€"V semiconductor lasers grown on silicon. MRS Bulletin, 2016, 41, 218-223.	3.5	47
38	Origin of Defect Tolerance in InAs/GaAs Quantum Dot Lasers Grown on Silicon. Journal of Lightwave Technology, 2020, 38, 240-248.	4.6	46
39	InAs/GaAsSb quantum dot solar cells. Optics Express, 2014, 22, A679.	3.4	43
40	Submonolayer InGaAs/GaAs quantum dot solar cells. Solar Energy Materials and Solar Cells, 2014, 126, 83-87.	6.2	43
41	Defect-Free Self-Catalyzed GaAs/GaAsP Nanowire Quantum Dots Grown on Silicon Substrate. Nano Letters, 2016, 16, 504-511.	9.1	42
42	Dislocation filters in GaAs on Si. Semiconductor Science and Technology, 2015, 30, 114004.	2.0	40
43	Heat-sink free CW operation of injection microdisk lasers grown on Si substrate with emission wavelength beyond 13â€‰â€‰Î¼m. Optics Letters, 2017, 42, 3319.	3.3	40
44	Polarity-Driven Quasi-3-Fold Composition Symmetry of Self-Catalyzed IIIâ€"Vâ€"V Ternary Coreâ€"Shell Nanowires. Nano Letters, 2015, 15, 3128-3133.	9.1	39
45	InGaAs and GaAs quantum dot solar cells grown by droplet epitaxy. Solar Energy Materials and Solar Cells, 2017, 161, 377-381.	6.2	39
46	Ultra-low threshold InAs/GaAs quantum dot microdisk lasers on planar on-axis Si (001) substrates. Optica, 2019, 6, 430.	9.3	37
47	Demonstration of InAs/InGaAs/GaAs Quantum Dots-in-a-Well Mid-Wave Infrared Photodetectors Grown on Silicon Substrate. Journal of Lightwave Technology, 2018, 36, 2572-2581.	4.6	36
48	IIIâ€"V quantum-dot lasers monolithically grown on silicon. Semiconductor Science and Technology, 2018, 33, 123002.	2.0	35
49	Low-noise 13â€‰â€‰Î¼m InAs/GaAs quantum dot laser monolithically grown on silicon. Photonics Research, 2018, 6, 1062.	7.0	35
50	The effect of growth temperature of GaAs nucleation layer on InAs/GaAs quantum dots monolithically grown on Ge substrates. Applied Physics Letters, 2012, 100, .	3.3	34
51	Spin-polarized transport in diluted GaMnAs/AlAs/GaMnAs ferromagnetic semiconductor tunnel junctions. Journal of Applied Physics, 2004, 96, 498-502.	2.5	32
52	1300 nm Wavelength InAs Quantum Dot Photodetector Grown on Silicon. Optics Express, 2012, 20, 10446.	3.4	31
53	O-band InAs/GaAs quantum dot laser monolithically integrated on exact (0â€¯0â€¯1) Si substrate. Journal of Crystal Growth, 2019, 511, 56-60.	1.5	31
54	Accurate equivalent circuit model for millimetre-wave UTC photodiodes. Optics Express, 2016, 24, 4698.	3.4	30

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55	Integrating Sphere Microscopy for Direct Absorption Measurements of Single Nanostructures. ACS Nano, 2017, 11, 1412-1418.	14.6	30
56	Recent progress in epitaxial growth of IIIâ€“V quantum-dot lasers on silicon substrate. Journal of Semiconductors, 2019, 40, 101302.	3.7	29
57	Monolithically Integrated Electrically Pumped Continuous-Wave III-V Quantum Dot Light Sources on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-10.	2.9	28
58	Toward electrically driven semiconductor nanowire lasers. Nanotechnology, 2019, 30, 192002.	2.6	28
59	Simulation study of GaAsP/Si tandem solar cells. Solar Energy Materials and Solar Cells, 2016, 145, 206-216.	6.2	26
60	In situ annealing enhancement of the optical properties and laser device performance of InAs quantum dots grown on Si substrates. Optics Express, 2016, 24, 6196.	3.4	26
61	Light-Emitting GaAs Nanowires on a Flexible Substrate. Nano Letters, 2018, 18, 4206-4213.	9.1	26
62	Heterostructure and Q-factor engineering for low-threshold and persistent nanowire lasing. Light: Science and Applications, 2020, 9, 43.	16.6	26
63	Sub-monolayer quantum dot quantum cascade mid-infrared photodetector. Applied Physics Letters, 2017, 111, .	3.3	24
64	Doping of Self-Catalyzed Nanowires under the Influence of Droplets. Nano Letters, 2018, 18, 81-87.	9.1	24
65	Midwave Infrared Quantum Dot Quantum Cascade Photodetector Monolithically Grown on Silicon Substrate. Journal of Lightwave Technology, 2018, 36, 4033-4038.	4.6	24
66	Semiconductor IIIâ€“V lasers monolithically grown on Si substrates. Semiconductor Science and Technology, 2013, 28, 015027.	2.0	23
67	Optimisation of the dislocation filter layers in 1.3â€μm InAs/GaAs quantumâ€dot lasers monolithically grown on Si substrates. IET Optoelectronics, 2015, 9, 61-64.	3.3	23
68	Investigation of InAs/GaAs 1â^'x Sb x quantum dots for applications in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 94-100.	6.2	23
69	InGaN/GaN Multiple Quantum Well Photoanode Modified with Cobalt Oxide for Water Oxidation. ACS Applied Energy Materials, 2018, 1, 6417-6424.	5.1	23
70	TiO2 nanofiber photoelectrochemical cells loaded with sub-12Ânm AuNPs: Size dependent performance evaluation. Materials Today Energy, 2018, 9, 254-263.	4.7	23
71	All-MBE grown InAs/GaAs quantum dot lasers with thin Ge buffer layer on Si substrates. Journal Physics D: Applied Physics, 2021, 54, 035103.	2.8	23
72	Growth of Pure Zinc-Blende GaAs(P) Coreâ€“Shell Nanowires with Highly Regular Morphology. Nano Letters, 2017, 17, 4946-4950.	9.1	22

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73	Type-II InAs/GaAsSb Quantum Dot Solar Cells With GaAs Interlayer. IEEE Journal of Photovoltaics, 2018, 8, 741-745.	2.5	22
74	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. ACS Nano, 2019, 13, 13492-13500.	14.6	22
75	Inversion Boundary Annihilation in GaAs Monolithically Grown on Onâ€Axis Silicon (001). Advanced Optical Materials, 2020, 8, 2000970.	7.3	22
76	Spatially Bandgap-Graded MoS2(1âˆ’x)Se2x Homojunctions for Self-Powered Visibleâ€“Near-Infrared Phototransistors. Nano-Micro Letters, 2020, 12, 26.	27.0	22
77	Modelling and measurement of the absolute level of power radiated by antenna integrated THz UTC photodiodes. Optics Express, 2016, 24, 11793.	3.4	21
78	InAs/InGaP quantum dot solar cells with an AlGaAs interlayer. Solar Energy Materials and Solar Cells, 2016, 144, 96-101.	6.2	21
79	Two-colour In_{0.5}Ga_{0.5}As quantum dot infrared photodetectors on silicon. Semiconductor Science and Technology, 2018, 33, 094009.	2.0	21
80	Antimony mediated growth of high-density InAs quantum dots for photovoltaic cells. Applied Physics Letters, 2013, 103, 043901.	3.3	20
81	Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off. Solar Energy Materials and Solar Cells, 2018, 181, 83-92.	6.2	20
82	Gain Switching of Monolithic 1.3 Î¼m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2018, 36, 3837-3842.	4.6	20
83	Epitaxial Growth of Fewâ€Layer Black Phosphorene Quantum Dots on Si Substrates. Advanced Materials Interfaces, 2018, 5, 1801048.	3.7	20
84	Electrically pumped continuousâ€wave 1.3â€Âµm InAs/GaAs quantum dot lasers monolithically grown on Si substrates. IET Optoelectronics, 2014, 8, 20-24.	3.3	19
85	Ten-Fold Enhancement of InAs Nanowire Photoluminescence Emission with an InP Passivation Layer. Nano Letters, 2017, 17, 3629-3633.	9.1	19
86	Highly Strained IIIâ€“Vâ€“V Coaxial Nanowire Quantum Wells with Strong Carrier Confinement. ACS Nano, 2019, 13, 5931-5938.	14.6	19
87	Heteroepitaxy of GaP on silicon for efficient and cost-effective photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 8550-8558.	10.3	19
88	Gallium Phosphide photoanode coated with TiO₂ and CoO_x for stable photoelectrochemical water oxidation. Optics Express, 2019, 27, A364.	3.4	18
89	Efficiency of GaInAs thermophotovoltaic cells: the effects of incident radiation, light trapping and recombinations. Optics Express, 2015, 23, A1208.	3.4	17
90	Nonradiative Step Facets in Semiconductor Nanowires. Nano Letters, 2017, 17, 2454-2459.	9.1	17

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91	13â€‰â€‰Î¼m InAs/GaAs quantum dot lasers on silicon with GaInP upper cladding layers. Photonics Research, 2018, 6, 321.	7.0	17
92	Demonstration of Si based InAs/GaSb type-II superlattice p-i-n photodetector. Infrared Physics and Technology, 2019, 101, 133-137.	2.9	17
93	Thin Ge buffer layer on silicon for integration of III-V on silicon. Journal of Crystal Growth, 2019, 514, 109-113.	1.5	17
94	Si-Doped InAs/GaAs Quantum-Dot Solar Cell With AlAs Cap Layers. IEEE Journal of Photovoltaics, 2016, 6, 906-911.	2.5	16
95	Stable Defects in Semiconductor Nanowires. Nano Letters, 2018, 18, 3081-3087.	9.1	16
96	Direct growth of InAs/GaSb type II superlattice photodiodes on silicon substrates. IET Optoelectronics, 2018, 12, 2-4.	3.3	16
97	Growth and Fabrication of Highâ€Quality Single Nanowire Devices with Radial pâ€iâ€n Junctions. Small, 2019, 15, 1803684.	10.0	16
98	Dynamics of viscous fingers in Hele-Shaw cells of liquid crystals Theory and experiment. Liquid Crystals, 1989, 5, 1813-1826.	2.2	15
99	High-Power and Broadband Quantum Dot Superluminescent Diodes Centered at 1250 nm for Optical Coherence Tomography. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1267-1272.	2.9	15
100	IIIâ€“V ternary nanowires on Si substrates: growth, characterization and device applications. Journal of Semiconductors, 2019, 40, 101301.	3.7	15
101	Self-Formed Quantum Wires and Dots in GaAsPâ€“GaAsP Coreâ€“Shell Nanowires. Nano Letters, 2019, 19, 4158-4165.	9.1	15
102	Theoretical Study on the Effects of Dislocations in Monolithic III-V Lasers on Silicon. Journal of Lightwave Technology, 2020, 38, 4801-4807.	4.6	15
103	InGaAsP-based uni-travelling carrier photodiode structure grown by solid source molecular beam epitaxy. Optics Express, 2012, 20, 19279.	3.4	14
104	InAs/GaAs quantum-dot superluminescent diodes monolithically grown on a Ge substrate. Optics Express, 2014, 22, 23242.	3.4	14
105	Effect of rapid thermal annealing on InAs/GaAs quantum dot solar cells. IET Optoelectronics, 2015, 9, 65-68.	3.3	14
106	Humidity effects on tribochemical removal of GaAs surfaces. Applied Physics Express, 2016, 9, 066703.	2.4	14
107	Characterization of 6.1 Ã… IIIâ€“V materials grown on GaAs and Si: A comparison of GaSb/GaAs epitaxy and GaSb/AlSb/Si epitaxy. Journal of Crystal Growth, 2016, 435, 56-61.	1.5	14
108	Elevated temperature lasing from injection microdisk lasers on silicon. Laser Physics Letters, 2018, 15, 015802.	1.4	14

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109	Bright prospect of using alcohol-soluble Nb2O5 as anode buffer layer for efficient polymer solar cells based on fullerene and non-fullerene acceptors. Organic Electronics, 2018, 52, 323-328.	2.6	14
110	Stabilization of GaAs photoanodes by <i>in situ</i> deposition of nickel-borate surface catalysts as hole trapping sites. Sustainable Energy and Fuels, 2019, 3, 814-822.	4.9	14
111	O-band InAs/GaAs quantum-dot microcavity laser on Si (001) hollow substrate by in-situ hybrid epitaxy. AIP Advances, 2019, 9, 015331.	1.3	14
112	Understanding the Bandwidth Limitations in Monolithic 1.3 <i>Î¼</i>m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2019, 37, 949-955.	4.6	14
113	Defect-Free Axially Stacked GaAs/GaAsP Nanowire Quantum Dots with Strong Carrier Confinement. Nano Letters, 2021, 21, 5722-5729.	9.1	14
114	Quantum dot mode-locked frequency comb with ultra-stable 25.5â€‰â€‰GHz spacing between 20Â°C and 120Â°C. Photonics Research, 2020, 8, 1937.	7.0	14
115	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	2.9	14
116	Recent Progress of Quantum Dot Lasers Monolithically Integrated on Si Platform. Frontiers in Physics, 2022, 10, .	2.1	14
117	Size effect of quantum conductance in single-walled carbon nanotube quantum dots. European Physical Journal B, 2003, 36, 411-418.	1.5	13
118	Optoelectronic characterization of carrier extraction in a hot carrier photovoltaic cell structure. Journal of Optics (United Kingdom), 2016, 18, 074003.	2.2	13
119	Solid solution strengthening in GaSb/GaAs: A mode to reduce the TD density through Be-doping. Applied Physics Letters, 2017, 110, .	3.3	13
120	Revealing silicon crystal defects by conductive atomic force microscope. Applied Physics Letters, 2018, 113, .	3.3	13
121	Physics-Based Modeling and Experimental Study of Si-Doped InAs/GaAs Quantum Dot Solar Cells. International Journal of Photoenergy, 2018, 2018, 1-10.	2.5	13
122	Mid-Wave Infrared InAs/GaSb Type-II Superlattice Photodetector With n-B-p Design Grown on GaAs Substrate. IEEE Journal of Quantum Electronics, 2019, 55, 1-5.	1.9	13
123	Generation of radially-polarized terahertz pulses for coupling into coaxial waveguides. Scientific Reports, 2016, 6, 38926.	3.3	12
124	Effect of rapid thermal annealing on threading dislocation density in III-V epilayers monolithically grown on silicon. Journal of Applied Physics, 2018, 123, .	2.5	12
125	Robust Protection of IIIâ€“V Nanowires in Water Splitting by a Thin Compact TiO₂ Layer. ACS Applied Materials & Interfaces, 2021, 13, 30950-30958.	8.0	12
126	Optoelectronic oscillator for 5G wireless networks and beyond. Journal Physics D: Applied Physics, 2021, 54, 423002.	2.8	12

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127	High performance waveguide uni-travelling carrier photodiode grown by solid source molecular beam epitaxy. Optics Express, 2019, 27, 37065.	3.4	12
128	2.5-Âµm InGaAs photodiodes grown on GaAs substrates by interfacial misfit array technique. Infrared Physics and Technology, 2017, 81, 320-324.	2.9	11
129	Site-controlled fabrication of silicon nanotips by indentation-induced selective etching. Applied Surface Science, 2017, 425, 227-232.	6.1	11
130	Resonant terahertz probes for near-field scattering microscopy. Optics Express, 2017, 25, 27874.	3.4	11
131	Ambipolar and Robust WSe 2 Fieldâ€Effect Transistors Utilizing Selfâ€Assembled Edge Oxides. Advanced Materials Interfaces, 2020, 7, 1901628.	3.7	11
132	Long-Wavelength InAs/GaAs Quantum-Dot Light Emitting Sources Monolithically Grown on Si Substrate. Photonics, 2015, 2, 646-658.	2.0	10
133	Silicon-Based Single Quantum Dot Emission in the Telecoms C-Band. ACS Photonics, 2017, 4, 1740-1746.	6.6	10
134	Degradation of IIIâ€“V Quantum Dot Lasers Grown Directly on Silicon Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-6.	2.9	10
135	Al0.2Ga0.8As Solar Cells Monolithically Grown on Si and GaAs by MBE for III-V/Si Tandem Dual-junction Applications. Energy Procedia, 2016, 92, 661-668.	1.8	9
136	Novel Concepts for High-Efficiency Lightweight Space Solar Cells. E3S Web of Conferences, 2017, 16, 03007.	0.5	9
137	InAs/GaAs quantum dot solar cells with quantum dots in the base region. IET Optoelectronics, 2019, 13, 215-217.	3.3	9
138	Boosting photocurrent of GaInP top-cell for current-matched IIIâ€“V monolithic multiple-junction solar cells via plasmonic decahedral-shaped Au nanoparticles. Solar Energy, 2018, 166, 181-186.	6.1	8
139	A metallic hot-carrier photovoltaic device. Semiconductor Science and Technology, 2019, 34, 064001.	2.0	8
140	Preferred growth direction of IIIâ€“V nanowires on differently oriented Si substrates. Nanotechnology, 2020, 31, 475708.	2.6	8
141	Multi-wavelength 128 Gbit s^{â˜'1} Î» ^{â˜'1} PAM4 optical transmission enabled by a 100 GHz quantum dot mode-locked optical frequency comb. Journal Physics D: Applied Physics, 2022, 55, 144001.	2.8	8
142	Design and Fabrication of Suspended Indium Phosphide Waveguides for MEMS-Actuated Optical Buffering. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 240-246.	2.9	7
143	Optical properties of beryllium-doped GaSb epilayers grown on GaAs substrate. Infrared Physics and Technology, 2018, 90, 115-121.	2.9	7
144	Roadmap of 1300-nm InAs/GaAs quantum dot laser grown on silicon for silicon photonics. , 2019, , .		7

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145	Quantum dot lasers on silicon substrate for silicon photonic integration and their prospect. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 204209.	0.5	7
146	Hybrid IIIâ€“V/IV Nanowires: High-Quality Ge Shell Epitaxy on GaAs Cores. Nano Letters, 2018, 18, 6397-6403.	9.1	6
147	Self-catalyzed GaAs(P) nanowires and their application for solar cells. Journal Physics D: Applied Physics, 2020, 53, 233001.	2.8	6
148	Co-Package Technology Platform for Low-Power and Low-Cost Data Centers. Applied Sciences (Switzerland), 2021, 11, 6098.	2.5	6
149	The role of different types of dopants in 1.3 Î¼m InAs/GaAs quantum-dot lasers. Journal Physics D: Applied Physics, 2022, 55, 215105.	2.8	6
150	Evaluation of InAs quantum dots on Si as optical modulator. Semiconductor Science and Technology, 2013, 28, 094002.	2.0	5
151	1.7eV Al0.2Ga0.8As solar cells epitaxially grown on silicon by SSMBE using a superlattice and dislocation filters. , 2016, , .		5
152	Influence of built-in charge on photogeneration and recombination processes in InAs/GaAs quantum dot solar cells. Journal Physics D: Applied Physics, 2017, 50, 165101.	2.8	5
153	Correlation between size distribution and luminescence properties of spool-shaped InAs quantum dots. Semiconductor Science and Technology, 2017, 32, 055013.	2.0	5
154	Optimization of 1.3 <i>Âµ</i>m InAs/GaAs quantum dot lasers epitaxially grown on silicon: taking the optical loss of metamorphic epilayers into account. Laser Physics, 2018, 28, 126206.	1.2	5
155	Defect Dynamics in Self-Catalyzed IIIâ€“V Semiconductor Nanowires. Nano Letters, 2019, 19, 4574-4580.	9.1	5
156	The effect of post-growth rapid thermal annealing on InAs/InGaAs dot-in-a-well structure monolithically grown on Si. Journal of Applied Physics, 2019, 125, 135301.	2.5	5
157	Growth mechanisms for InAs/GaAs QDs with and without Bi surfactants. Materials Research Express, 2019, 6, 015046.	1.6	5
158	Multifunctional two-dimensional glassy graphene devices for vis-NIR photodetection and volatile organic compound sensing. Science China Materials, 2021, 64, 1964-1976.	6.3	5
159	Self-Catalyzed AlGaAs Nanowires and AlGaAs/GaAs Nanowire-Quantum Dots on Si Substrates. Journal of Physical Chemistry C, 2021, 125, 14338-14347.	3.1	5
160	Optimizing GaAs nanowire-based visible-light photodetectors. Applied Physics Letters, 2021, 119, .	3.3	5
161	High power and very low noise operation at 1.3 and 1.5 Î¼m with quantum dot and quantum dash Fabry-Perot lasers for microwave links. , 2006, 6399, 158.		4
162	Exciton distribution on single-walled carbon nanotube. European Physical Journal B, 2010, 74, 499-506.	1.5	4

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163	Bandgap optimized III–V (GaAsP) nanowire on silicon tandem solar cell, device and data. , 2014, , .		4
164	Temperature-Dependent Photoluminescence Characteristics of InAs/GaAs Quantum Dots Directly Grown on Si Substrates. Chinese Physics Letters, 2016, 33, 044207.	3.3	4
165	Controlling and modelling the wetting properties of III-V semiconductor surfaces using re-entrant nanostructures. Scientific Reports, 2018, 8, 3544.	3.3	4
166	GaSb and GaSb/AlSb Superlattice Buffer Layers for High-Quality Photodiodes Grown on Commercial GaAs and Si Substrates. Journal of Electronic Materials, 2018, 47, 5083-5086.	2.2	4
167	Selective area intermixing of IIIâ€"V quantum-dot lasers grown on silicon with two wavelength lasing emissions. Semiconductor Science and Technology, 2019, 34, 085004.	2.0	4
168	Impact of ex-situ annealing on strain and composition of MBE grown GeSn. Journal Physics D: Applied Physics, 2020, 53, 485104.	2.8	4
169	Electrically pumped continuous-wave O-band quantum-dot superluminescent diode on silicon. Optics Letters, 2020, 45, 5468.	3.3	4
170	Single-Mode Photonic Crystal Nanobeam Lasers Monolithically Grown on Si for Dense Integration. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-6.	2.9	4
171	GaAsP nanowires and nanowire devices grown on silicon substrates. Proceedings of SPIE, 2017, , .	0.8	3
172	IIIâ€"V quantum dot lasers epitaxially grown on Si substrates. , 2019, , 17-39.		3
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