Huiyun Liu

List of Publications by Year
in descending order

260	6,491	63230 40	67379 73
papers	citations	h-index	g-index

260	260	260	6162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dataâ€Driven Discovery for Robust Optimization of Semiconductor Nanowire Lasers. Laser and Photonics Reviews, 2025, 19, .	9.5	1
2	High-power, electrically-driven continuous-wave 1.55-Î¼m Si-based multi-quantum well lasers with a wide operating temperature range grown on wafer-scale InP-on-Si (100) heterogeneous substrate. Light: Science and Applications, 2024, 13, .	16.0	3
3	A novel bidirectionally operated chirped quantum-dot based semiconductor optical amplifier using a dual ground state spectrum. APL Photonics, 2024, 9, .	5.5	0
4	Effective InAsP dislocation filtering layers for InP heteroepitaxy on CMOS-standard (001) silicon. Applied Physics Letters, 2024, 125, .	3.2	1
5	Indium-flush technique for C-band InAs/InP quantum dots. APL Materials, 2024, 12, .	4.1	0
6	From past to future: on-chip laser sources for photonic integrated circuits. Light: Science and Applications, 2023, 12, .	16.0	31
7	Long-wavelength InAs/InAlGaAs quantum dot microdisk lasers on InP (001) substrate. Applied Physics Letters, 2023, 122, .	3.2	1
8	High Operating Temperature Mid-Infrared InGaAs/GaAs Submonolayer Quantum Dot Quantum Cascade Detectors on Silicon. IEEE Journal of Quantum Electronics, 2023, 59, 1-6.	2.0	4
9	Optically enhanced single- and multi-stacked 1.55 Î¼m InAs/InAlGaAs/InP quantum dots for laser applications. Journal Physics D: Applied Physics, 2023, 56, 285101.	3.1	3
10	Design and characterisation of multi-mode interference reflector lasers for integrated photonics. Journal Physics D: Applied Physics, 2023, 56, 384001.	3.1	7
11	The growth of low-threading-dislocation-density GaAs buffer layers on Si substrates. Journal Physics D: Applied Physics, 2023, 56, 405108.	3.1	5
12	Room-temperature continuous-wave topological Dirac-vortex microcavity lasers on silicon. Light: Science and Applications, 2023, 12, .	16.0	17
13	Design of high-quality reflectors for vertical IIIâ€“V nanowire lasers on Si. Nanotechnology, 2022, 33, 035202.	2.7	5
14	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.	4.1	4
15	Multi-wavelength 128 Gbit s^{âˆ’1} Î» ^{âˆ’1} PAM4 optical transmission enabled by a 100 GHz quantum dot mode-locked optical frequency comb. Journal Physics D: Applied Physics, 2022, 55, 144001.	3.1	12
16	Thermally-driven formation method for growing (quantum) dots on sidewalls of self-catalysed thin nanowires. Nanoscale Horizons, 2022, 7, 311-318.	6.6	4
17	Recent Progress of Quantum Dot Lasers Monolithically Integrated on Si Platform. Frontiers in Physics, 2022, 10, .	2.0	20
18	The role of different types of dopants in 1.3 Î¼m InAs/GaAs quantum-dot lasers. Journal Physics D: Applied Physics, 2022, 55, 215105.	3.1	11

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19	Measurement of the quantum-confined Stark effect in InAs/In(Ga)As quantum dots with p-doped quantum dot barriers. Optics Express, 2022, 30, 17730.	3.3	3
20	Long-Term Stability and Optoelectronic Performance Enhancement of InAsP Nanowires with an Ultrathin InP Passivation Layer. Nano Letters, 2022, 22, 3433-3439.	8.8	4
21	Theoretical analysis and modelling of degradation for IIIâ€“V lasers on Si. Journal Physics D: Applied Physics, 2022, 55, 404006.	3.1	9
22	A thermally erasable silicon oxide layer for molecular beam epitaxy. Journal Physics D: Applied Physics, 2022, 55, 424004.	3.1	1
23	The epitaxial growth and unique morphology of InAs quantum dots embedded in a Ge matrix. Journal Physics D: Applied Physics, 2022, 55, 494002.	3.1	3
24	Analysis of the regimes of feedback effects in quantum dot laser. Journal Physics D: Applied Physics, 2022, 55, 484003.	3.1	3
25	Refractive indices of MBE-grown AlxGa(1âˆ’<i>x</i>)As ternary alloys in the transparent wavelength region. AIP Advances, 2021, 11, .	1.3	73
26	Multifunctional two-dimensional glassy graphene devices for vis-NIR photodetection and volatile organic compound sensing. Science China Materials, 2021, 64, 1964-1976.	6.4	5
27	Defect-Free Axially Stacked GaAs/GaAsP Nanowire Quantum Dots with Strong Carrier Confinement. Nano Letters, 2021, 21, 5722-5729.	8.8	23
28	Robust Protection of IIIâ€“V Nanowires in Water Splitting by a Thin Compact TiO₂ Layer. ACS Applied Materials & Interfaces, 2021, 13, 30950-30958.	8.1	13
29	Co-Package Technology Platform for Low-Power and Low-Cost Data Centers. Applied Sciences (Switzerland), 2021, 11, 6098.	2.6	11
30	Self-Catalyzed AlGaAs Nanowires and AlGaAs/GaAs Nanowire-Quantum Dots on Si Substrates. Journal of Physical Chemistry C, 2021, 125, 14338-14347.	3.2	6
31	Influence of diameter on temperature dynamics of hot carriers in photoexcited GaAsP nanowires. Physical Review B, 2021, 104, .	3.2	2
32	Optimizing GaAs nanowire-based visible-light photodetectors. Applied Physics Letters, 2021, 119, .	3.2	8
33	Modeling of Ultrafast Waveguided Electro-Absorption Modulator at Telecommunication Wavelength (Î» = 1.55 Î¼m) Based on Intersubband Transition in an InGaAs/AlAs/AlAsSb Asymmetric Coupled Double Quantum Well Lattice-Matched to InP. IEEE Journal of Quantum Electronics, 2021, 57, 1-10.	2.0	0
34	Optoelectronic oscillator for 5G wireless networks and beyond. Journal Physics D: Applied Physics, 2021, 54, 423002.	3.1	20
35	Resonant enhancement of Raman scattering by surface phonon polaritons in GaAs nanowires. Journal Physics D: Applied Physics, 2021, 54, 475111.	3.1	3
36	Polarization properties of Raman scattering by surface phonon polaritons in GaAsP nanowires. Journal Physics D: Applied Physics, 2021, 54, 475109.	3.1	2

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37	Microcavity lasers directly grown on silicon. , 2021, 97, STu2C.6.		0
38	All-MBE grown InAs/GaAs quantum dot lasers with thin Ge buffer layer on Si substrates. Journal Physics D: Applied Physics, 2021, 54, 035103.	3.1	29
39	Monolithic IIIâ€"V quantum dot lasers on silicon. Frontiers of Nanoscience, 2021, , 353-388.	0.0	6
40	Various microcavity lasers monolithically grown on planar on-axis Si (001) substrates. , 2021, 15, 197-198.		0
41	The limits to peak modal gain in p-modulation doped indium arsenide quantum dot laser diodes. , 2021, , 1-2.		0
42	Origin of Defect Tolerance in InAs/GaAs Quantum Dot Lasers Grown on Silicon. Journal of Lightwave Technology, 2020, 38, 240-248.	4.8	53
43	Ambipolar and Robust WSe₂ Fieldâ€Effect Transistors Utilizing Selfâ€Assembled Edge Oxides. Advanced Materials Interfaces, 2020, 7, .	4.2	14
44	Checked patterned elemental distribution in AlGaAs nanowire branches <i>via</i> vaporâ€"liquidâ€"solid growth. Nanoscale, 2020, 12, 15711-15720.	5.1	1
45	Inversion Boundary Annihilation in GaAs Monolithically Grown on Onâ€Axis Silicon (001). Advanced Optical Materials, 2020, 8, .	7.1	25
46	Theoretical Study on the Effects of Dislocations in Monolithic III-V Lasers on Silicon. Journal of Lightwave Technology, 2020, 38, 4801-4807.	4.8	17
47	Heterostructure and Q-factor engineering for low-threshold and persistent nanowire lasing. Light: Science and Applications, 2020, 9, .	16.0	32
48	Droplet manipulation and horizontal growth of high-quality self-catalysed GaAsP nanowires. Nano Today, 2020, 34, 100921.	9.8	3
49	Introducing Huiyun Liu, Editor-in-Chief for Journal of Physics D: Applied Physics. Journal Physics D: Applied Physics, 2020, 53, 150201.	3.1	0
50	Continuous-wave quantum dot photonic crystal lasers grown on on-axis Si (001). Nature Communications, 2020, 11, .	14.1	74
51	Spatially Bandgap-Graded MoS2(1â^'x)Se2x Homojunctions for Self-Powered Visibleâ€"Near-Infrared Phototransistors. Nano-Micro Letters, 2020, 12, .	30.1	24
52	Self-catalyzed GaAs(P) nanowires and their application for solar cells. Journal Physics D: Applied Physics, 2020, 53, 233001.	3.1	6
53	Multiple radial phosphorus segregations in GaAsP core-shell nanowires. Nano Research, 2020, 14, 157-164.	8.5	3
54	GaAs Compounds Heteroepitaxy on Silicon for Opto and Nano Electronic Applications. , 2020, , .		1

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55	Impact of ex-situ annealing on strain and composition of MBE grown GeSn. Journal Physics D: Applied Physics, 2020, 53, 485104.	3.1	7
56	Preferred growth direction of IIIâ€“V nanowires on differently oriented Si substrates. Nanotechnology, 2020, 31, 475708.	2.7	10
57	Carrier dynamics and recombination in silicon doped InAs/GaAs quantum dot solar cells with AlAs cap layers. Semiconductor Science and Technology, 2020, 35, 115018.	2.3	5
58	A needle in a needlestack: exploiting functional inhomogeneity for optimized nanowire lasing. , 2020, , 37.		1
59	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.	6.9	19
60	Heteroepitaxial Growth of III-V Semiconductors on Silicon. Crystals, 2020, 10, 1163.	2.3	78
61	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	2.9	15
62	GaAsP nanowires containing intentional and self-forming quantum dots. , 2020, , 16.		0
63	Photonic crystal lasers grown on CMOS-compatible on-axis Si(001). , 2020, , .		0
64	Impact of dislocations in monolithic III-V lasers on silicon: a theoretical approach. , 2020, , 16.		1
65	Electrically pumped continuous-wave O-band quantum-dot superluminescent diode on silicon. Optics Letters, 2020, 45, 5468.	3.2	4
66	IIIâ€“V quantum dot lasers epitaxially grown on Si substrates. , 2019, , 17-39.		5
67	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.	2.0	16
68	Demonstration of Si based InAs/GaSb type-II superlattice p-i-n photodetector. Infrared Physics and Technology, 2019, 101, 133-137.	3.3	19
69	Recent progress in epitaxial growth of IIIâ€“V quantum-dot lasers on silicon substrate. Journal of Semiconductors, 2019, 40, 101302.	3.7	35
70	Investigation into the current loss in InAs/GaAs quantum dot solar cells with Si-doped quantum dots. Journal Physics D: Applied Physics, 2019, 52, 505108.	3.1	0
71	Preface to the Special Topic on Compound Semiconductor Materials and Devices on Si. Journal of Semiconductors, 2019, 40, 100101.	3.7	0
72	Enhanced Performance of InAsP Nanowires with Ultra-thin Passivation Layer. , 2019, 34, 1-2.		0

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73	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. ACS Nano, 2019, 13, 13492-13500.	15.4	25
74	IIIâ€“V ternary nanowires on Si substrates: growth, characterization and device applications. Journal of Semiconductors, 2019, 40, 101301.	3.7	25
75	Dynamics of Quantum Dot Lasers on Silicon. , 2019, , 1-2.		0
76	InAs/GaAs quantum dot solar cells with quantum dots in the base region. IET Optoelectronics, 2019, 13, 215-217.	1.4	9
77	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.	4.0	14
78	Toward electrically driven semiconductor nanowire lasers. Nanotechnology, 2019, 30, 192002.	2.7	31
79	Integration of III-V lasers on Si for Si photonics. Progress in Quantum Electronics, 2019, 66, 1-18.	10.8	110
80	Selective area intermixing of IIIâ€“V quantum-dot lasers grown on silicon with two wavelength lasing emissions. Semiconductor Science and Technology, 2019, 34, 085004.	2.3	4
81	Self-Formed Quantum Wires and Dots in GaAsPâ€“GaAsP Coreâ€“Shell Nanowires. Nano Letters, 2019, 19, 4158-4165.	8.8	15
82	Defect Dynamics in Self-Catalyzed IIIâ€“V Semiconductor Nanowires. Nano Letters, 2019, 19, 4574-4580.	8.8	7
83	Highly Strained IIIâ€“Vâ€“V Coaxial Nanowire Quantum Wells with Strong Carrier Confinement. ACS Nano, 2019, 13, 5931-5938.	15.4	21
84	Degradation of IIIâ€“V Quantum Dot Lasers Grown Directly on Silicon Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-6.	4.1	12
85	A metallic hot-carrier photovoltaic device. Semiconductor Science and Technology, 2019, 34, 064001.	2.3	9
86	MoS₂â€“OH Bilayer-Mediated Growth of Inch-Sized Monolayer MoS₂ on Arbitrary Substrates. Journal of the American Chemical Society, 2019, 141, 5392-5401.	15.7	102
87	Heteroepitaxy of GaP on silicon for efficient and cost-effective photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 8550-8558.	9.3	21
88	O-band InAs/GaAs quantum-dot microcavity laser on Si (001) hollow substrate by <i>in-situ</i> hybrid epitaxy. AIP Advances, 2019, 9, .	1.3	15
89	Nanowires for High-Efficiency, Low-Cost Solar Photovoltaics. Crystals, 2019, 9, 87.	2.3	70
90	Enhanced performance of ZnO nanoparticle decorated all-inorganic CsPbBr₃ quantum dot photodetectors. Journal of Materials Chemistry A, 2019, 7, 6134-6142.	9.3	72

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91	Thin Ge buffer layer on silicon for integration of III-V on silicon. Journal of Crystal Growth, 2019, 514, 109-113.	2.0	21
92	Multi-wavelength DFB laser array in InAs/GaAs quantum dot material epitaxially grown on Silicon. , 2019, , 1-1.		0
93	Growth and Fabrication of Highâ€Quality Single Nanowire Devices with Radial pâ€iâ€n Junctions. Small, 2019, 15, .	11.6	16
94	O-band InAs/GaAs quantum dot laser monolithically integrated on exact (0â€¯0â€¯1) Si substrate. Journal of Crystal Growth, 2019, 511, 56-60.	2.0	33
95	Growth mechanisms for InAs/GaAs QDs with and without Bi surfactants. Materials Research Express, 2019, 6, 015046.	2.1	5
96	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.	4.8	15
97	Optically-pumped InAs/GaAs quantum-dot microdisk lasers monolithically grown on on-axis Si (001) substrate. , 2019, , 7.		1
98	Gallium Phosphide photoanode coated with TiO₂ and CoO_x for stable photoelectrochemical water oxidation. Optics Express, 2019, 27, A364.	3.3	19
99	High performance waveguide uni-travelling carrier photodiode grown by solid source molecular beam epitaxy. Optics Express, 2019, 27, 37065.	3.3	16
100	Roadmap of 1300-nm InAs/GaAs quantum dot laser grown on silicon for silicon photonics. , 2019, , OTh1C.1.		9
101	III-V Quantum Dot Lasers Monolithically Grown on Silicon. , 2019, 41, W4E.1.		3
102	Ultra-low threshold InAs/GaAs quantum dot microdisk lasers on planar on-axis Si (001) substrates. Optica, 2019, 6, 430.	8.6	41
103	Controlling and modelling the wetting properties of III-V semiconductor surfaces using re-entrant nanostructures. Scientific Reports, 2018, 8, .	3.7	5
104	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.	6.6	8
105	Stable Defects in Semiconductor Nanowires. Nano Letters, 2018, 18, 3081-3087.	8.8	18
106	Highâ€Responsivity Photodetection by a Selfâ€Catalyzed Phaseâ€Pure pâ€GaAs Nanowire. Small, 2018, 14, .	11.6	61
107	An Investigation of the Role of Radiative and Nonradiative Recombination Processes in InAs/GaAs $_{1-x}$ Sb $_{x}$ Quantum Dot Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 487-492.	2.8	2
108	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	22

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109	High Detectivity and Transparent Fewâ€Layer MoS₂/Glassyâ€Graphene Heterostructure Photodetectors. Advanced Materials, 2018, 30, .	24.7	116
110	Elevated temperature lasing from injection microdisk lasers on silicon. Laser Physics Letters, 2018, 15, 015802.	1.4	16
111	Direct growth of InAs/GaSb type II superlattice photodiodes on silicon substrates. IET Optoelectronics, 2018, 12, 2-4.	1.4	18
112	Type-II InAs/GaAsSb Quantum Dot Solar Cells With GaAs Interlayer. IEEE Journal of Photovoltaics, 2018, 8, 741-745.	2.8	25
113	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.	4.8	37
114	Optical properties of beryllium-doped GaSb epilayers grown on GaAs substrate. Infrared Physics and Technology, 2018, 90, 115-121.	3.3	7
115	Doping of Self-Catalyzed Nanowires under the Influence of Droplets. Nano Letters, 2018, 18, 81-87.	8.8	25
116	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
117	Mid-wave InAs/GaSb Superlattice PiBN Infrared Photodetector Grown on GaAs Substrate. , 2018, , 1-3.		0
118	InAs/GaAs Quantum Dot Lasers Monolithically Integrated on Group IV Platform. , 2018, , 23.5.1-23.5.4.		2
119	Dynamic Properties of Monolithic 1.3 Î¼m InAs/GaAs Quantum Dot Lasers on Silicon. , 2018, , .		0
120	Increasing Maximum Gain in InAs Quantum Dot Lasers on GaAs and Si. , 2018, , 1-2.		0
121	The influence of direct, delta, and modulation QD Si doping on InAs/GaAs quantum dot solar cells. , 2018, , 2759-2762.		1
122	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.	1.1	8
123	IIIâ€“V quantum-dot lasers monolithically grown on silicon. Semiconductor Science and Technology, 2018, 33, 123002.	2.3	37
124	InGaN/GaN Multiple Quantum Well Photoanode Modified with Cobalt Oxide for Water Oxidation. ACS Applied Energy Materials, 2018, 1, 6417-6424.	5.4	26
125	Revealing silicon crystal defects by conductive atomic force microscope. Applied Physics Letters, 2018, 113, .	3.2	13
126	Hybrid IIIâ€“V/IV Nanowires: High-Quality Ge Shell Epitaxy on GaAs Cores. Nano Letters, 2018, 18, 6397-6403.	8.8	8

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127	Gain Switching of Monolithic 1.3 Î¼m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2018, 36, 3837-3842.	4.8	19
128	Epitaxial Growth of Fewâ€Layer Black Phosphorene Quantum Dots on Si Substrates. Advanced Materials Interfaces, 2018, 5, .	4.2	25
129	Quantum Dot Quantum Cascade Detector on Si Substrate. , 2018, , STh4I.5.		0
130	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.	2.4	4
131	TiO2 nanofiber photoelectrochemical cells loaded with sub-12Ânm AuNPs: Size dependent performance evaluation. Materials Today Energy, 2018, 9, 254-263.	5.3	26
132	13â€‰â€‰Î¼m InAs/GaAs quantum dot lasers on silicon with GaInP upper cladding layers. Photonics Research, 2018, 6, 321.	6.9	19
133	Midwave Infrared Quantum Dot Quantum Cascade Photodetector Monolithically Grown on Silicon Substrate. Journal of Lightwave Technology, 2018, 36, 4033-4038.	4.8	27
134	Monolithic quantum-dot distributed feedback laser array on silicon. Optica, 2018, 5, 528.	8.6	92
135	Theoretical Analysis of a Microring Resonator Array with High Sensitivity and Large Dynamic Range Based on a Multi-Scale Technique. Sensors, 2018, 18, 1987.	4.0	2
136	Two-colour In_{0.5}Ga_{0.5}As quantum dot infrared photodetectors on silicon. Semiconductor Science and Technology, 2018, 33, 094009.	2.3	22
137	Light-Emitting GaAs Nanowires on a Flexible Substrate. Nano Letters, 2018, 18, 4206-4213.	8.8	29
138	Low-noise 13â€‰â€‰Î¼m InAs/GaAs quantum dot laser monolithically grown on silicon. Photonics Research, 2018, 6, 1062.	6.9	41
139	Silicon-based III-V Quantum Dot Materials and Dsevices. , 2018, 5, Th1J.2.		0
140	Monolithic Integration of 1.3 Âµm III-V Quantum-Dot Lasers on Si for Si Photonics. , 2018, , SW4I.1.		0
141	O-band InAs Quantum Dot Light Sources Monolithically Grown on Si. , 2018, 41, W1F.2.		0
142	Resonant scattering probes for terahertz near-field microscopy. , 2018, , 72.		0
143	Dark Current Analysis of Mid-Wave Quantum Dots-in-a-Well Photodetectors Monolithically Grown on Silicon Substrate. , 2018, , 1-2.		0
144	Integrating Sphere Microscopy for Direct Absorption Measurements of Single Nanostructures. ACS Nano, 2017, 11, 1412-1418.	15.4	35

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145	Integrating III-V quantum dot lasers on silicon substrates for silicon photonics. Proceedings of SPIE, 2017, 10108, 101081A.	0.0	0
146	Influence of droplet size on the growth of high-quality self-catalyzed GaAsP nanowires. Proceedings of SPIE, 2017, 10114, 101140K.	0.0	0
147	GaAsP nanowires and nanowire devices grown on silicon substrates. Proceedings of SPIE, 2017, 10111, 101110X.	0.0	3
148	2.5-Âµm InGaAs photodiodes grown on GaAs substrates by interfacial misfit array technique. Infrared Physics and Technology, 2017, 81, 320-324.	3.3	13
149	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.	4.1	27
150	Silicon-Based Single Quantum Dot Emission in the Telecoms C-Band. ACS Photonics, 2017, 4, 1740-1746.	7.0	11
151	Ten-Fold Enhancement of InAs Nanowire Photoluminescence Emission with an InP Passivation Layer. Nano Letters, 2017, 17, 3629-3633.	8.8	19
152	Nonradiative Step Facets in Semiconductor Nanowires. Nano Letters, 2017, 17, 2454-2459.	8.8	17
153	Influence of Si doping on InAs/GaAs quantum dot solar cells with AlAs cap layers. Proceedings of SPIE, 2017, 10099, 100990H.	0.0	0
154	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.	3.1	5
155	InGaAs and GaAs quantum dot solar cells grown by droplet epitaxy. Solar Energy Materials and Solar Cells, 2017, 161, 377-381.	6.2	40
156	Site-controlled fabrication of silicon nanotips by indentation-induced selective etching. Applied Surface Science, 2017, 425, 227-232.	6.6	11
157	Impact of the growth temperature on the performance of 1.70-eV Al0.22Ga0.78As solar cells grown by MBE. Journal of Crystal Growth, 2017, 475, 322-327.	2.0	2
158	Growth of Pure Zinc-Blende GaAs(P) Coreâ€"Shell Nanowires with Highly Regular Morphology. Nano Letters, 2017, 17, 4946-4950.	8.8	22
159	Novel Concepts for High-Efficiency Lightweight Space Solar Cells. E3S Web of Conferences, 2017, 16, 03007.	0.6	9
160	Sub-monolayer quantum dot quantum cascade mid-infrared photodetector. Applied Physics Letters, 2017, 111, .	3.2	27
161	Si-Doped InAs/GaAs Quantum Dot Solar Cell with Alas Cap Layers. E3S Web of Conferences, 2017, 16, 16001.	0.6	2
162	III-IV quantum dot lasers epitaxially grown on Si. , 2017, 40, 1-2.		2

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163	Resonant scattering probes in the terahertz range. , 2017, , 1-3.		0
164	Electrically pumped continuous-wave 13 Âµm InAs/GaAs quantum dot lasers monolithically grown on on-axis Si (001) substrates. Optics Express, 2017, 25, 4632.	3.3	105
165	Resonant terahertz probes for near-field scattering microscopy. Optics Express, 2017, 25, 27874.	3.3	15
166	Monolithic Integration of III-V Quantum Dot Lasers on Silicon for Silicon Photonics. , 2017, , Su1K.4.		0
167	High-performance InAs/GaAs quantum-dot laser didoes monolithically grown on silicon for silicon photonics. , 2017, , 1-1.		0
168	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.	3.2	40
169	MBE growth of 1.7eV Al0.2Ga0.8As and 1.42eV GaAs solar cells on Si using dislocations filters: an alternative pathway toward III-V/ Si solar cells architectures. , 2017, 9743, 3370-3375.		1
170	Ultra-smooth glassy graphene thin films for flexible transparent circuits. Science Advances, 2016, 2, .	11.3	65
171	Long lifetime quantum-dot laser monolithically grown on silicon. , 2016, 19, 147-148.		1
172	Bias-free and compact mode-matched excitation of THz coaxial waveguides. , 2016, , 1-2.		2
173	Generation of radially-polarized terahertz pulses for coupling into coaxial waveguides. Scientific Reports, 2016, 6, .	3.7	16
174	Humidity effects on tribochemical removal of GaAs surfaces. Applied Physics Express, 2016, 9, 066703.	2.2	15
175	Deep-etched III-V lasers grown directly on silicon substrates. , 2016, , 536-537.		0
176	1.7eV Al_{0.2}Ga_{0.8}As solar cells epitaxially grown on silicon by SSMBE using a superlattice and dislocation filters. Proceedings of SPIE, 2016, 9743, 974310.	0.0	5
177	Optoelectronic characterization of carrier extraction in a hot carrier photovoltaic cell structure. Journal of Optics (United Kingdom), 2016, 18, 074003.	2.8	15
178	Analysing radiative and non-radiative recombination in InAs QDs on Si for integrated laser applications. Proceedings of SPIE, 2016, 9758, 975809.	0.0	0
179	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.	4.1	69
180	Metamorphic IIIâ€“V semiconductor lasers grown on silicon. MRS Bulletin, 2016, 41, 218-223.	4.4	46

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181	Monolithically Integrated InAs/GaAs Quantum Dot Mid-Infrared Photodetectors on Silicon Substrates. ACS Photonics, 2016, 3, 749-753.	7.0	71
182	Growth of high-quality self-catalyzed core-shell GaAsP nanowires on Si substrates. Proceedings of SPIE, 2016, 9758, 97580E.	0.0	0
183	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.	2.5	9
184	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.	6.2	84
185	Modelling and measurement of the absolute level of power radiated by antenna integrated THz UTC photodiodes. Optics Express, 2016, 24, 11793.	3.3	26
186	Silicon-based III-V quantum dot devices for silicon photonics. , 2016, , 118-119.		0
187	Temperature-Dependent Photoluminescence Characteristics of InAs/GaAs Quantum Dots Directly Grown on Si Substrates. Chinese Physics Letters, 2016, 33, 044207.	4.1	4
188	InAs/GaAs quantum-dot light emitters monolithically grown on Si substrate. Proceedings of SPIE, 2016, 9758, 975803.	0.0	0
189	Si-Doped InAs/GaAs Quantum-Dot Solar Cell With AlAs Cap Layers. IEEE Journal of Photovoltaics, 2016, 6, 906-911.	2.8	17
190	Simulation study of GaAsP/Si tandem cells including the impact of threading dislocations on the luminescent coupling between the cells. Proceedings of SPIE, 2016, 9743, 97431B.	0.0	0
191	Defect-Free Self-Catalyzed GaAs/GaAsP Nanowire Quantum Dots Grown on Silicon Substrate. Nano Letters, 2016, 16, 504-511.	8.8	41
192	Simulation study of GaAsP/Si tandem solar cells. Solar Energy Materials and Solar Cells, 2016, 145, 206-216.	6.2	28
193	Orthogonal enhanced linear discriminant analysis for face recognition. IET Biometrics, 2016, 5, 100-110.	2.1	2
194	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.	3.3	24
195	Accurate equivalent circuit model for millimetre-wave UTC photodiodes. Optics Express, 2016, 24, 4698.	3.3	34
196	Electrically pumped continuous-wave IIIâ€"V quantum dot lasers on silicon. Nature Photonics, 2016, 10, 307-311.	21.1	721
197	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.	2.0	14
198	Influence of Droplet Size on the Growth of Self-Catalyzed Ternary GaAsP Nanowires. Nano Letters, 2016, 16, 1237-1243.	8.8	54

#	Article	IF	Citations
199	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
200	InAs/InGaP quantum dot solar cells with an AlGaAs interlayer. Solar Energy Materials and Solar Cells, 2016, 144, 96-101.	6.2	22
201	InAs/GaAs quantum dot lasers monolithically grown on silicon for silicon photonics. , 2016, 5, ITu3A.2.		0
202	Silicon-based III-V quantum-dot lasers for silicon photonics. , 2016, 5, ATh2F.1.		0
203	Optimisation of 1.3-Î¼m InAs/GaAs Quantum-Dot Lasers Monolithically Grown on Si Substrates. Journal of Physics: Conference Series, 2015, 619, 012011.	0.4	1
204	Dislocation filters in GaAs on Si. Semiconductor Science and Technology, 2015, 30, 114004.	2.3	42
205	Long-Wavelength InAs/GaAs Quantum-Dot Light Emitting Sources Monolithically Grown on Si Substrate. Photonics, 2015, 2, 646-658.	1.9	9
206	Optimisation of the dislocation filter layers in 1.3â€Î¼m InAs/GaAs quantumâ€dot lasers monolithically grown on Si substrates. IET Optoelectronics, 2015, 9, 61-64.	1.4	23
207	Development of Indium Phosphide MEMS for tunable optical buffering. , 2015, , 1-4.		0
208	Design and fabrication of indium phosphide air-bridge waveguides with MEMS functionality. Proceedings of SPIE, 2015, 9517, 95170A.	0.0	0
209	Microwave Photonics: Present Status and Future Outlook (Plenary Paper). , 2015, , 1-6.		2
210	Continuous-wave emission of IIIâ€“V quantum dot lasers grown directly on Si substrates. , 2015, , 595-596.		0
211	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	2.8	54
212	Tunable optical buffer based on III-V MEMS design. , 2015, , .		0
213	Effect of rapid thermal annealing on InAs/GaAs quantum dot solar cells. IET Optoelectronics, 2015, 9, 65-68.	1.4	15
214	Polarity-Driven Quasi-3-Fold Composition Symmetry of Self-Catalyzed IIIâ€“Vâ€“V Ternary Coreâ€“Shell Nanowires. Nano Letters, 2015, 15, 3128-3133.	8.8	39
215	Optical characterisation of catalyst free GaAsP and GaAsP core-shell nanowires grown directly on Si substrates by MBE. Proceedings of SPIE, 2015, , .	0.0	0
216	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.	4.1	7

#	Article	IF	Citations
217	Efficiency of GaInAs thermophotovoltaic cells: the effects of incident radiation, light trapping and recombinations. Optics Express, 2015, 23, A1208.	3.3	16
218	IIIâ€“V nanowires and nanowire optoelectronic devices. Journal Physics D: Applied Physics, 2015, 48, 463001.	3.1	137
219	Quantum dot optoelectronic devices: lasers, photodetectors and solar cells. Journal Physics D: Applied Physics, 2015, 48, 363001.	3.1	171
220	Quantum dot lasers on silicon substrate for silicon photonic integration and their prospect. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 204209.	0.6	7
221	Quantum Dot Lasers on Silicon by Direct Epitaxial Growth. , 2015, 4, FTh4B.3.		0
222	Electrically Pumped 1.3-Âµm InAs/GaAs Quantum Dot Laser Monolithically Grown on Si Substrate Lasing up to 111Â°C. , 2015, 19, SW3F.1.		1
223	InAs/GaAsSb quantum dot solar cells. Optics Express, 2014, 22, A679.	3.3	47
224	13-Î¼m InAs/GaAs quantum-dot lasers monolithically grown on Si substrates using InAlAs/GaAs dislocation filter layers. Optics Express, 2014, 22, 11528.	3.3	128
225	InAs/GaAs quantum-dot superluminescent diodes monolithically grown on a Ge substrate. Optics Express, 2014, 22, 23242.	3.3	14
226	Bandgap optimized III–V (GaAsP) nanowire on silicon tandem solar cell, device and data. , 2014, , 1041-1044.		5
227	Design and fabrication of InP free-standing optical waveguides for MEMS. , 2014, , 181-182.		1
228	Submonolayer InGaAs/GaAs quantum dot solar cells. Solar Energy Materials and Solar Cells, 2014, 126, 83-87.	6.2	46
229	Voltage recovery in charged InAs/GaAs quantum dot solar cells. Nano Energy, 2014, 6, 159-166.	16.3	62
230	Electrically pumped continuousâ€wave 1.3â€Âµm InAs/GaAs quantum dot lasers monolithically grown on Si substrates. IET Optoelectronics, 2014, 8, 20-24.	1.4	19
231	InAs/GaAs Quantum-Dot Superluminescent Light-Emitting Diode Monolithically Grown on a Si Substrate. ACS Photonics, 2014, 1, 638-642.	7.0	70
232	Mobility Enhancement by Sb-mediated Minimisation of Stacking Fault Density in InAs Nanowires Grown on Silicon. Nano Letters, 2014, 14, 1643-1650.	8.8	81
233	Wafer-Scale Fabrication of Self-Catalyzed 1.7 eV GaAsP Coreâ€“Shell Nanowire Photocathode on Silicon Substrates. Nano Letters, 2014, 14, 2013-2018.	8.8	61
234	Self-Catalyzed Ternary Coreâ€“Shell GaAsP Nanowire Arrays Grown on Patterned Si Substrates by Molecular Beam Epitaxy. Nano Letters, 2014, 14, 4542-4547.	8.8	47

#	Article	IF	Citations
235	Self-Catalyzed GaAsP Nanowires Grown on Silicon Substrates by Solid-Source Molecular Beam Epitaxy. Nano Letters, 2013, 13, 3897-3902.	8.8	77
236	Evaluation of InAs quantum dots on Si as optical modulator. Semiconductor Science and Technology, 2013, 28, 094002.	2.3	5
237	Long-wavelength III-V quantum-dot lasers monolithically grown on Si substrates. , 2013, , 333-335.		0
238	Surface-passivated GaAsP single-nanowire solar cells exceeding 10% efficiency grown on silicon. Nature Communications, 2013, 4, .	14.1	190
239	Semiconductor IIIâ€"V lasers monolithically grown on Si substrates. Semiconductor Science and Technology, 2013, 28, 015027.	2.3	23
240	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.	4.1	95
241	GaAsP single nanowire solar cells grown on silicon exhibiting large Voc increase at multiple suns. , 2013, , .		1
242	InAs/GaAs quantum-dot lasers and detectors on silicon substrates for silicon photonics. , 2013, , 474-475.		2
243	IIIâ€"V Quantum-Dot Materials and Devices Monolithically Grown on Si Substrates. Springer Series in Materials Science, 2013, , 357-380.	0.0	2
244	IIIâ€"V quantum-dot laser growth on silicon and germanium. , 2013, 4, OM3K.1.		0
245	High-efficient solar cells with III-V nanostructures. , 2013, 78, RM1D.1.		0
246	1300 nm Wavelength InAs Quantum Dot Photodetector Grown on Silicon. Optics Express, 2012, 20, 10446.	3.3	31
247	InGaAsP-based uni-travelling carrier photodiode structure grown by solid source molecular beam epitaxy. Optics Express, 2012, 20, 19279.	3.3	14
248	Continuous-wave InAs/GaAs quantum-dot laser diodes monolithically grown on Si substrate with low threshold current densities. Optics Express, 2012, 20, 22181.	3.3	155
249	InAs/GaAs quantum-dot lasers monolithically grown on Si substrate. , 2012, , 882-883.		0
250	Silicon-based long-wavelength III–V quantum-dot lasers. , 2012, , 88-91.		2
251	13-Î¼m InAs/GaAs quantum-dot lasers monolithically grown on Si substrates. Optics Express, 2011, 19, 11381.	3.3	241
252	Long-wavelength InAs/GaAs quantum-dot laser diode monolithically grown on Ge substrate. Nature Photonics, 2011, 5, 416-419.	21.1	342

#	Article	IF	Citations
253	1.3-um InAs/GaAs quantum-dot lasers monolithically grown on Ge substrate. , 2011, , 240-242.		0
254	Exciton distribution on single-walled carbon nanotube. European Physical Journal B, 2010, 74, 499-506.	1.6	4
255	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.	4.1	15
256	High Power, Very Low Noise, C.W. Operation of 1.32Î¼m Quantum-Dot Fabry-Perot Laser Diodes. , 2006, , .		3
257	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, , .		4
258	Quantum Conductance in Single-Walled Carbon Nanotube Quantum Dots. Defect and Diffusion Forum, 2004, 226-228, 1-10.	0.6	0
259	Size effect of quantum conductance in single-walled carbon nanotube quantum dots. European Physical Journal B, 2003, 36, 411-418.	1.6	13
260	Dynamics of viscous fingers in Hele-Shaw cells of liquid crystals Theory and experiment. Liquid Crystals, 1989, 5, 1813-1826.	2.4	16