Huiyun Liu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6058790/publications.pdf

Version: 2024-02-01

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

#	Article	IF	CITATIONS
1	Design of high-quality reflectors for vertical III–V nanowire lasers on Si. Nanotechnology, 2022, 33, 035202.	2.6	3
2	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
3	Multi-wavelength 128 Gbit s ^{â^'1} λ ^{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
4	Thermally-driven formation method for growing (quantum) dots on sidewalls of self-catalysed thin nanowires. Nanoscale Horizons, 2022, 7, 311-318.	8.0	2
5	Recent Progress of Quantum Dot Lasers Monolithically Integrated on Si Platform. Frontiers in Physics, 2022, 10, .	2.1	14
6	The role of different types of dopants in 1.3 \hat{l} 4m InAs/GaAs quantum-dot lasers. Journal Physics D: Applied Physics, 2022, 55, 215105.	2.8	6
7	Long-Term Stability and Optoelectronic Performance Enhancement of InAsP Nanowires with an Ultrathin InP Passivation Layer. Nano Letters, 2022, 22, 3433-3439.	9.1	3
8	Multiple radial phosphorus segregations in GaAsP core-shell nanowires. Nano Research, 2021, 14, 157-164.	10.4	3
9	Refractive indices of MBE-grown AlxGa($1\hat{a}^{\prime}$ <i>x</i>)As ternary alloys in the transparent wavelength region. AIP Advances, 2021, 11, .	1.3	52
10	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
11	Defect-Free Axially Stacked GaAs/GaAsP Nanowire Quantum Dots with Strong Carrier Confinement. Nano Letters, 2021, 21, 5722-5729.	9.1	14
12	Robust Protection of Ill–V Nanowires in Water Splitting by a Thin Compact TiO ₂ Layer. ACS Applied Materials & Discrete Substitution (13, 30950-30958).	8.0	12
13	Co-Package Technology Platform for Low-Power and Low-Cost Data Centers. Applied Sciences (Switzerland), 2021, 11, 6098.	2.5	6
14	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
15	Influence of diameter on temperature dynamics of hot carriers in photoexcited GaAsP nanowires. Physical Review B, 2021, 104, .	3.2	0
16	Optimizing GaAs nanowire-based visible-light photodetectors. Applied Physics Letters, 2021, 119, .	3.3	5
17	Modeling of Ultrafast Waveguided Electro-Absorption Modulator at Telecommunication Wavelength (λ = 1.55 νm) 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.	1.9	0
18	Optoelectronic oscillator for 5G wireless networks and beyond. Journal Physics D: Applied Physics, 2021, 54, 423002.	2.8	12

#	Article	IF	Citations
19	Resonant enhancement of Raman scattering by surface phonon polaritons in GaAs nanowires. Journal Physics D: Applied Physics, 2021, 54, 475111.	2.8	1
20	Polarization properties of Raman scattering by surface phonon polaritons in GaAsP nanowires. Journal Physics D: Applied Physics, 2021, 54, 475109.	2.8	1
21	Microcavity lasers directly grown on silicon. , 2021, , .		O
22	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
23	Monolithic III–V quantum dot lasers on silicon. Frontiers of Nanoscience, 2021, 20, 353-388.	0.6	3
24	Various microcavity lasers monolithically grown on planar on-axis Si (001) substrates., 2021,,.		0
25	The limits to peak modal gain in p-modulation doped indium arsenide quantum dot laser diodes. , 2021, ,		0
26	Origin of Defect Tolerance in InAs/GaAs Quantum Dot Lasers Grown on Silicon. Journal of Lightwave Technology, 2020, 38, 240-248.	4.6	46
27	Ambipolar and Robust WSe 2 Fieldâ€Effect Transistors Utilizing Selfâ€Assembled Edge Oxides. Advanced Materials Interfaces, 2020, 7, 1901628.	3.7	11
28	Checked patterned elemental distribution in AlGaAs nanowire branches via vapor–liquid–solid growth. Nanoscale, 2020, 12, 15711-15720.	5.6	1
29	Inversion Boundary Annihilation in GaAs Monolithically Grown on Onâ€Axis Silicon (001). Advanced Optical Materials, 2020, 8, 2000970.	7.3	22
30	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
31	Heterostructure and Q-factor engineering for low-threshold and persistent nanowire lasing. Light: Science and Applications, 2020, 9, 43.	16.6	26
32	Droplet manipulation and horizontal growth of high-quality self-catalysed GaAsP nanowires. Nano Today, 2020, 34, 100921.	11.9	3
33	Introducing Huiyun Liu, Editor-in-Chief for Journal of Physics D: Applied Physics. Journal Physics D: Applied Physics, 2020, 53, 150201.	2.8	0
34	Continuous-wave quantum dot photonic crystal lasers grown on on-axis Si (001). Nature Communications, 2020, 11, 977.	12.8	61
35	Spatially Bandgap-Graded MoS2(1â^'x)Se2x Homojunctions for Self-Powered Visible–Near-Infrared Phototransistors. Nano-Micro Letters, 2020, 12, 26.	27.0	22
36	Self-catalyzed GaAs(P) nanowires and their application for solar cells. Journal Physics D: Applied Physics, 2020, 53, 233001.	2.8	6

#	Article	IF	CITATIONS
37	Impact of ex-situ annealing on strain and composition of MBE grown GeSn. Journal Physics D: Applied Physics, 2020, 53, 485104.	2.8	4
38	Preferred growth direction of Ill–V nanowires on differently oriented Si substrates. Nanotechnology, 2020, 31, 475708.	2.6	8
39	Carrier dynamics and recombination in silicon doped InAs/GaAs quantum dot solar cells with AlAs cap layers. Semiconductor Science and Technology, 2020, 35, 115018.	2.0	3
40	A needle in a needlestack: exploiting functional inhomogeneity for optimized nanowire lasing. , 2020, , .		1
41	Quantum dot mode-locked frequency comb with ultra-stable 25.5  GHz spacing between 20°C and 120 Photonics Research, 2020, 8, 1937.)°C. 7.0	14
42	Heteroepitaxial Growth of III-V Semiconductors on Silicon. Crystals, 2020, 10, 1163.	2.2	56
43	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	2.9	14
44	GaAsP nanowires containing intentional and self-forming quantum dots. , 2020, , .		0
45	Photonic crystal lasers grown on CMOS-compatible on-axis Si(001). , 2020, , .		0
46	Impact of dislocations in monolithic III-V lasers on silicon: a theoretical approach., 2020,,.		1
47	Electrically pumped continuous-wave O-band quantum-dot superluminescent diode on silicon. Optics Letters, 2020, 45, 5468.	3.3	4
48	III–V quantum dot lasers epitaxially grown on Si substrates. , 2019, , 17-39.		3
49	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
50	Demonstration of Si based InAs/GaSb type-II superlattice p-i-n photodetector. Infrared Physics and Technology, 2019, 101, 133-137.	2.9	17
51	Recent progress in epitaxial growth of Ill–V quantum-dot lasers on silicon substrate. Journal of Semiconductors, 2019, 40, 101302.	3.7	29
52	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.	2.8	0
53	Preface to the Special Topic on Compound Semiconductor Materials and Devices on Si. Journal of Semiconductors, 2019, 40, 100101.	3.7	O
54	Enhanced Performance of InAsP Nanowires with Ultra-thin Passivation Layer., 2019,,.		0

#	Article	IF	CITATIONS
55	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. ACS Nano, 2019, 13, 13492-13500.	14.6	22
56	III–V ternary nanowires on Si substrates: growth, characterization and device applications. Journal of Semiconductors, 2019, 40, 101301.	3.7	15
57	Dynamics of Quantum Dot Lasers on Silicon. , 2019, , .		0
58	InAs/GaAs quantum dot solar cells with quantum dots in the base region. IET Optoelectronics, 2019, 13, 215-217.	3.3	9
59	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
60	Toward electrically driven semiconductor nanowire lasers. Nanotechnology, 2019, 30, 192002.	2.6	28
61	Integration of III-V lasers on Si for Si photonics. Progress in Quantum Electronics, 2019, 66, 1-18.	7.0	86
62	Selective area intermixing of Ill–V quantum-dot lasers grown on silicon with two wavelength lasing emissions. Semiconductor Science and Technology, 2019, 34, 085004.	2.0	4
63	Self-Formed Quantum Wires and Dots in GaAsP–GaAsP Core–Shell Nanowires. Nano Letters, 2019, 19, 4158-4165.	9.1	15
64	Defect Dynamics in Self-Catalyzed III–V Semiconductor Nanowires. Nano Letters, 2019, 19, 4574-4580.	9.1	5
65	Highly Strained Ill–V–V Coaxial Nanowire Quantum Wells with Strong Carrier Confinement. ACS Nano, 2019, 13, 5931-5938.	14.6	19
66	Degradation of Ill–V Quantum Dot Lasers Grown Directly on Silicon Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-6.	2.9	10
67	A metallic hot-carrier photovoltaic device. Semiconductor Science and Technology, 2019, 34, 064001.	2.0	8
68	MoS ₂ –OH Bilayer-Mediated Growth of Inch-Sized Monolayer MoS ₂ on Arbitrary Substrates. Journal of the American Chemical Society, 2019, 141, 5392-5401.	13.7	87
69	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
70	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
71	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
72	Nanowires for High-Efficiency, Low-Cost Solar Photovoltaics. Crystals, 2019, 9, 87.	2.2	59

#	Article	IF	Citations
73	Enhanced performance of ZnO nanoparticle decorated all-inorganic CsPbBr ₃ quantum dot photodetectors. Journal of Materials Chemistry A, 2019, 7, 6134-6142.	10.3	64
74	Thin Ge buffer layer on silicon for integration of III-V on silicon. Journal of Crystal Growth, 2019, 514, 109-113.	1.5	17
75	Effect of InAs quantum dots capped with GaAs on atomic-scale ordering in Ga0.5In0.5P. Journal of Applied Physics, 2019, 125, 053104.	2.5	2
76	Multi-wavelength DFB laser array in InAs/GaAs quantum dot material epitaxially grown on Silicon. , 2019, , .		0
77	Growth and Fabrication of Highâ€Quality Single Nanowire Devices with Radial pâ€iâ€n Junctions. Small, 2019, 15, 1803684.	10.0	16
78	O-band InAs/GaAs quantum dot laser monolithically integrated on exact (0†0†1) Si substrate. Journal of Crystal Growth, 2019, 511, 56-60.	1.5	31
79	Growth mechanisms for InAs/GaAs QDs with and without Bi surfactants. Materials Research Express, 2019, 6, 015046.	1.6	5
80	Understanding the Bandwidth Limitations in Monolithic 1.3 $\langle i \rangle \hat{l} \frac{1}{4} \langle i \rangle$ m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2019, 37, 949-955.	4.6	14
81	Optically-pumped InAs/GaAs quantum-dot microdisk lasers monolithically grown on on-axis Si (001) substrate. , 2019, , .		1
82	Gallium Phosphide photoanode coated with TiO ₂ and CoO _x for stable photoelectrochemical water oxidation. Optics Express, 2019, 27, A364.	3.4	18
83	High performance waveguide uni-travelling carrier photodiode grown by solid source molecular beam epitaxy. Optics Express, 2019, 27, 37065.	3.4	12
84	Roadmap of 1300-nm InAs/GaAs quantum dot laser grown on silicon for silicon photonics. , 2019, , .		7
85	III-V Quantum Dot Lasers Monolithically Grown on Silicon. , 2019, , .		3
86	Ultra-low threshold InAs/GaAs quantum dot microdisk lasers on planar on-axis Si (001) substrates. Optica, 2019, 6, 430.	9.3	37
87	Controlling and modelling the wetting properties of III-V semiconductor surfaces using re-entrant nanostructures. Scientific Reports, 2018, 8, 3544.	3.3	4
88	Boosting photocurrent of GalnP top-cell for current-matched Ill–V monolithic multiple-junction solar cells via plasmonic decahedral-shaped Au nanoparticles. Solar Energy, 2018, 166, 181-186.	6.1	8
89	Stable Defects in Semiconductor Nanowires. Nano Letters, 2018, 18, 3081-3087.	9.1	16
90	Highâ€Responsivity Photodetection by a Selfâ€Catalyzed Phaseâ€Pure pâ€GaAs Nanowire. Small, 2018, 14, e1704429.	10.0	54

#	Article	IF	CITATIONS
91	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.	2.5	O
92	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
93	High Detectivity and Transparent Fewâ€Layer MoS ₂ /Glassyâ€Graphene Heterostructure Photodetectors. Advanced Materials, 2018, 30, e1706561.	21.0	111
94	Elevated temperature lasing from injection microdisk lasers on silicon. Laser Physics Letters, 2018, 15, 015802.	1.4	14
95	Direct growth of InAs/GaSb type II superlattice photodiodes on silicon substrates. IET Optoelectronics, 2018, 12, 2-4.	3.3	16
96	Type-II InAs/GaAsSb Quantum Dot Solar Cells With GaAs Interlayer. IEEE Journal of Photovoltaics, 2018, 8, 741-745.	2.5	22
97	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
98	Optical properties of beryllium-doped GaSb epilayers grown on GaAs substrate. Infrared Physics and Technology, 2018, 90, 115-121.	2.9	7
99	Doping of Self-Catalyzed Nanowires under the Influence of Droplets. Nano Letters, 2018, 18, 81-87.	9.1	24
100	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
101	Mid-wave InAs/GaSb Superlattice PiBN Infrared Photodetector Grown on GaAs Substrate. , 2018, , .		0
102	InAs/GaAs Quantum Dot Lasers Monolithically Integrated on Group IV Platform. , 2018, , .		1
103	Degradation Studies of InAs / GaAs QD Lasers Grown on Si. , 2018, , .		1
104	Dynamic Properties of Monolithic 1.3 \hat{l} 4m InAs/GaAs Quantum Dot Lasers on Silicon. , 2018, , .		0
105	Increasing Maximum Gain in InAs Quantum Dot Lasers on GaAs and Si. , 2018, , .		0
106	The influence of direct, delta, and modulation QD Si doping on InAs/GaAs quantum dot solar cells. , 2018, , .		1
107	Small-Signal Modulation and Analysis of Monolithic <code><tex>\$1.3</tex></code> mu mathrm <code>{m}\$ InAs/GaAs Quantum Dot Lasers on Silicon. , 2018, , .</code>		2
108	Optimization of 1.3 <i>$\hat{A}\mu$</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

#	Article	IF	CITATIONS
109	Ill–V quantum-dot lasers monolithically grown on silicon. Semiconductor Science and Technology, 2018, 33, 123002.	2.0	35
110	InGaN/GaN Multiple Quantum Well Photoanode Modified with Cobalt Oxide for Water Oxidation. ACS Applied Energy Materials, 2018, 1, 6417-6424.	5.1	23
111	Revealing silicon crystal defects by conductive atomic force microscope. Applied Physics Letters, 2018, 113, .	3.3	13
112	Hybrid III–V/IV Nanowires: High-Quality Ge Shell Epitaxy on GaAs Cores. Nano Letters, 2018, 18, 6397-6403.	9.1	6
113	Gain Switching of Monolithic 1.3 νm InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2018, 36, 3837-3842.	4.6	20
114	Epitaxial Growth of Fewâ€Layer Black Phosphorene Quantum Dots on Si Substrates. Advanced Materials Interfaces, 2018, 5, 1801048.	3.7	20
115	Quantum Dot Quantum Cascade Detector on Si Substrate. , 2018, , .		0
116	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
117	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
118	TiO2 nanofiber photoelectrochemical cells loaded with sub-12Ânm AuNPs: Size dependent performance evaluation. Materials Today Energy, 2018, 9, 254-263.	4.7	23
119	13  μm InAs/GaAs quantum dot lasers on silicon with GaInP upper cladding layers. Photonics Research, 2018, 6, 321.	7.0	17
120	Midwave Infrared Quantum Dot Quantum Cascade Photodetector Monolithically Grown on Silicon Substrate. Journal of Lightwave Technology, 2018, 36, 4033-4038.	4.6	24
121	Monolithic quantum-dot distributed feedback laser array on silicon. Optica, 2018, 5, 528.	9.3	85
122	Theoretical Analysis of a Microring Resonator Array with High Sensitivity and Large Dynamic Range Based on a Multi-Scale Technique. Sensors, 2018, 18, 1987.	3.8	1
123	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
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	Light-Emitting GaAs Nanowires on a Flexible Substrate. Nano Letters, 2018, 18, 4206-4213.	9.1	26
126	Low-noise 13  μm InAs/GaAs quantum dot laser monolithically grown on silicon. Photonics Research, 2018, 6, 1062.	7.0	35

#	Article	IF	CITATIONS
127	Silicon-based III-V Quantum Dot Materials and Dsevices. , 2018, , .		O
128	Monolithic Integration of 1.3 $\hat{A}\mu m$ III-V Quantum-Dot Lasers on Si for Si Photonics. , 2018, , .		0
129	O-band InAs Quantum Dot Light Sources Monolithically Grown on Si. , 2018, , .		0
130	Resonant scattering probes for terahertz near-field microscopy. , 2018, , .		0
131	Dark Current Analysis of Mid-Wave Quantum Dots-in-a-Well Photodetectors Monolithically Grown on Silicon Substrate. , 2018, , .		0
132	Integrating Sphere Microscopy for Direct Absorption Measurements of Single Nanostructures. ACS Nano, 2017, 11, 1412-1418.	14.6	30
133	Integrating III-V quantum dot lasers on silicon substrates for silicon photonics. , 2017, , .		0
134	Influence of droplet size on the growth of high-quality self-catalyzed GaAsP nanowires. , 2017, , .		0
135	GaAsP nanowires and nanowire devices grown on silicon substrates. Proceedings of SPIE, 2017, , .	0.8	3
136	2.5-µm InGaAs photodiodes grown on GaAs substrates by interfacial misfit array technique. Infrared Physics and Technology, 2017, 81, 320-324.	2.9	11
137	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
138	Silicon-Based Single Quantum Dot Emission in the Telecoms C-Band. ACS Photonics, 2017, 4, 1740-1746.	6.6	10
139	Ten-Fold Enhancement of InAs Nanowire Photoluminescence Emission with an InP Passivation Layer. Nano Letters, 2017, 17, 3629-3633.	9.1	19
140	Nonradiative Step Facets in Semiconductor Nanowires. Nano Letters, 2017, 17, 2454-2459.	9.1	17
141	Solid solution strengthening in GaSb/GaAs: A mode to reduce the TD density through Be-doping. Applied Physics Letters, 2017, 110, .	3.3	13
142	Influence of Si doping on InAs/GaAs quantum dot solar cells with AlAs cap layers. , 2017, , .		0
143	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
144	Correlation between size distribution and luminescence properties of spool-shaped InAs quantum dots. Semiconductor Science and Technology, 2017, 32, 055013.	2.0	5

#	Article	IF	Citations
145	InGaAs and GaAs quantum dot solar cells grown by droplet epitaxy. Solar Energy Materials and Solar Cells, 2017, 161, 377-381.	6.2	39
146	Site-controlled fabrication of silicon nanotips by indentation-induced selective etching. Applied Surface Science, 2017, 425, 227-232.	6.1	11
147	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.	1.5	2
148	Growth of Pure Zinc-Blende GaAs(P) Core–Shell Nanowires with Highly Regular Morphology. Nano Letters, 2017, 17, 4946-4950.	9.1	22
149	Novel Concepts for High-Efficiency Lightweight Space Solar Cells. E3S Web of Conferences, 2017, 16, 03007.	0.5	9
150	Sub-monolayer quantum dot quantum cascade mid-infrared photodetector. Applied Physics Letters, 2017, 111, .	3.3	24
151	Si-Doped InAs/GaAs Quantum Dot Solar Cell with Alas Cap Layers. E3S Web of Conferences, 2017, 16, 16001.	0.5	2
152	III-IV quantum dot lasers epitaxially grown on Si. , 2017, , .		1
153	Resonant scattering probes in the terahertz range. , 2017, , .		0
154	Electrically pumped continuous-wave 13 $\hat{A}\mu m$ InAs/GaAs quantum dot lasers monolithically grown on on-axis Si (001) substrates. Optics Express, 2017, 25, 4632.	3.4	102
155	Resonant terahertz probes for near-field scattering microscopy. Optics Express, 2017, 25, 27874.	3.4	11
156	Monolithic Integration of III-V Quantum Dot Lasers on Silicon for Silicon Photonics. , 2017, , .		0
157	High-performance InAs/GaAs quantum-dot laser didoes monolithically grown on silicon for silicon photonics. , 2017, , .		0
158	Heat-sink free CW operation of injection microdisk lasers grown on Si substrate with emission wavelength beyond 13  l¼m. Optics Letters, 2017, 42, 3319.	3.3	40
159	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, , .		0
160	Ultra-smooth glassy graphene thin films for flexible transparent circuits. Science Advances, 2016, 2, e1601574.	10.3	59
161	Long lifetime quantum-dot laser monolithically grown on silicon. , 2016, , .		1
162	Bias-free and compact mode-matched excitation of THz coaxial waveguides. , 2016, , .		2

#	Article	IF	Citations
163	Accurate modelling and measurement of the impedance match between UTC photodiodes and THz antennas. , $2016, , .$		0
164	Generation of radially-polarized terahertz pulses for coupling into coaxial waveguides. Scientific Reports, 2016, 6, 38926.	3.3	12
165	Humidity effects on tribochemical removal of GaAs surfaces. Applied Physics Express, 2016, 9, 066703.	2.4	14
166	Deep-etched III-V lasers grown directly on silicon substrates. , 2016, , .		0
167	$1.7 \mathrm{eV}$ Al0.2Ga0.8As solar cells epitaxially grown on silicon by SSMBE using a superlattice and dislocation filters. , $2016,$, .		5
168	Optoelectronic characterization of carrier extraction in a hot carrier photovoltaic cell structure. Journal of Optics (United Kingdom), 2016, 18, 074003.	2.2	13
169	Analysing radiative and non-radiative recombination in InAs QDs on Si for integrated laser applications. Proceedings of SPIE, 2016 , , .	0.8	0
170	Optimizations of Defect Filter Layers for $1.3 \cdot \hat{l}^{1}/4$ m 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
171	Metamorphic Ill–V semiconductor lasers grown on silicon. MRS Bulletin, 2016, 41, 218-223.	3.5	47
172	Monolithically Integrated InAs/GaAs Quantum Dot Mid-Infrared Photodetectors on Silicon Substrates. ACS Photonics, 2016, 3, 749-753.	6.6	63
173	Growth of high-quality self-catalyzed core-shell GaAsP nanowires on Si substrates. Proceedings of SPIE, 2016, , .	0.8	0
174	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
175	Effect of interface oxides on shear properties of hot-rolled stainless steel clad plate. Materials Science & Science & Properties, Microstructure and Processing, 2016, 669, 344-349.	5.6	73
176	Modelling and measurement of the absolute level of power radiated by antenna integrated THz UTC photodiodes. Optics Express, 2016, 24, 11793.	3.4	21
177	Silicon-based III-V quantum dot devices for silicon photonics. , 2016, , .		0
178	Temperature-Dependent Photoluminescence Characteristics of InAs/GaAs Quantum Dots Directly Grown on Si Substrates. Chinese Physics Letters, 2016, 33, 044207.	3.3	4
179	InAs/GaAs quantum-dot light emitters monolithically grown on Si substrate. , 2016, , .		0
180	Si-Doped InAs/GaAs Quantum-Dot Solar Cell With AlAs Cap Layers. IEEE Journal of Photovoltaics, 2016, 6, 906-911.	2.5	16

#	Article	IF	CITATIONS
181	Simulation study of GaAsP/Si tandem cells including the impact of threading dislocations on the luminescent coupling between the cells. Proceedings of SPIE, 2016, , .	0.8	O
182	Defect-Free Self-Catalyzed GaAs/GaAsP Nanowire Quantum Dots Grown on Silicon Substrate. Nano Letters, 2016, 16, 504-511.	9.1	42
183	Simulation study of GaAsP/Si tandem solar cells. Solar Energy Materials and Solar Cells, 2016, 145, 206-216.	6.2	26
184	Orthogonal enhanced linear discriminant analysis for face recognition. IET Biometrics, 2016, 5, 100-110.	2.5	2
185	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
186	Accurate equivalent circuit model for millimetre-wave UTC photodiodes. Optics Express, 2016, 24, 4698.	3 . 4	30
187	Electrically pumped continuous-wave Ill–V quantum dot lasers on silicon. Nature Photonics, 2016, 10, 307-311.	31.4	665
188	Characterization of 6.1 à Ill–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
189	Influence of Droplet Size on the Growth of Self-Catalyzed Ternary GaAsP Nanowires. Nano Letters, 2016, 16, 1237-1243.	9.1	49
190	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
191	InAs/InGaP quantum dot solar cells with an AlGaAs interlayer. Solar Energy Materials and Solar Cells, 2016, 144, 96-101.	6.2	21
192	InAs/GaAs quantum dot lasers monolithically grown on silicon for silicon photonics. , 2016, , .		0
193	Silicon-based III-V quantum-dot lasers for silicon photonics. , 2016, , .		0
194	Optimisation of 1.3-νm InAs/GaAs Quantum-Dot Lasers Monolithically Grown on Si Substrates. Journal of Physics: Conference Series, 2015, 619, 012011.	0.4	1
195	Dislocation filters in GaAs on Si. Semiconductor Science and Technology, 2015, 30, 114004.	2.0	40
196	Long-Wavelength InAs/GaAs Quantum-Dot Light Emitting Sources Monolithically Grown on Si Substrate. Photonics, 2015, 2, 646-658.	2.0	10
197	Optimisation of the dislocation filter layers in 1.3â€Î¼m lnAs/GaAs quantumâ€dot lasers monolithically grown on Si substrates. IET Optoelectronics, 2015, 9, 61-64.	3.3	23
198	Development of Indium Phosphide MEMS for tunable optical buffering. , 2015, , .		O

#	Article	IF	CITATIONS
199	Design and fabrication of indium phosphide air-bridge waveguides with MEMS functionality. Proceedings of SPIE, 2015, , .	0.8	0
200	Microwave Photonics: Present Status and Future Outlook (Plenary Paper)., 2015,,.		2
201	Continuous-wave emission of Ill–V quantum dot lasers grown directly on Si substrates. , 2015, , .		0
202	Sb-Induced Phase Control of InAsSb Nanowires Grown by Molecular Beam Epitaxy. Nano Letters, 2015, 15, 1109-1116.	9.1	55
203	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	2.5	51
204	Tunable optical buffer based on III-V MEMS design. , 2015, , .		0
205	Effect of rapid thermal annealing on InAs/GaAs quantum dot solar cells. IET Optoelectronics, 2015, 9, 65-68.	3.3	14
206	Polarity-Driven Quasi-3-Fold Composition Symmetry of Self-Catalyzed III–V–V Ternary Core–Shell Nanowires. Nano Letters, 2015, 15, 3128-3133.	9.1	39
207	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
208	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
209	Efficiency of GalnAs thermophotovoltaic cells: the effects of incident radiation, light trapping and recombinations. Optics Express, 2015, 23, A1208.	3.4	17
210	III–V nanowires and nanowire optoelectronic devices. Journal Physics D: Applied Physics, 2015, 48, 463001.	2.8	132
211	Quantum dot optoelectronic devices: lasers, photodetectors and solar cells. Journal Physics D: Applied Physics, 2015, 48, 363001.	2.8	149
212	Quantum dot lasers on silicon substrate for silicon photonic integration and their prospect. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 204209.	0.5	7
213	Quantum Dot Lasers on Silicon by Direct Epitaxial Growth. , 2015, , .		0
214	Electrically Pumped 1.3-Âμm InAs/GaAs Quantum Dot Laser Monolithically Grown on Si Substrate Lasing up to 111°C., 2015, , .		1
215	InAs/GaAsSb quantum dot solar cells. Optics Express, 2014, 22, A679.	3.4	43
216	$1.3\& \#x00B5; m\ InAs/GaAs\ Quantum-Dot\ Laser\ Monolithically\ Grown\ on\ Si\ Substrates\ Using\ InAlAs/GaAs\ Dislocation\ Filter\ Layers.\ ,\ 2014,\ ,\ .$		2

#	Article	IF	CITATIONS
217	13-μm InAs/GaAs quantum-dot lasers monolithically grown on Si substrates using InAlAs/GaAs dislocation filter layers. Optics Express, 2014, 22, 11528.	3.4	125
218	InAs/GaAs quantum-dot superluminescent diodes monolithically grown on a Ge substrate. Optics Express, 2014, 22, 23242.	3.4	14
219	Bandgap optimized III–V (GaAsP) nanowire on silicon tandem solar cell, device and data. , 2014, , .		4
220	MEMS actuation for a continuously tunable optical buffer. , 2014, , .		1
221	Design and fabrication of InP free-standing optical waveguides for MEMS. , 2014, , .		1
222	1.3 μm InAs/GaAs quantumâ€dot laser monolithically grown on Si substrates operating over 100°C. Electronics Letters, 2014, 50, 1467-1468.	1.0	81
223	Submonolayer InGaAs/GaAs quantum dot solar cells. Solar Energy Materials and Solar Cells, 2014, 126, 83-87.	6.2	43
224	Voltage recovery in charged InAs/GaAs quantum dot solar cells. Nano Energy, 2014, 6, 159-166.	16.0	61
225	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
226	InAs/GaAs Quantum-Dot Superluminescent Light-Emitting Diode Monolithically Grown on a Si Substrate. ACS Photonics, 2014, 1, 638-642.	6.6	66
227	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
228	Design rules for dislocation filters. Journal of Applied Physics, 2014, 116, .	2.5	55
229	Wafer-Scale Fabrication of Self-Catalyzed 1.7 eV GaAsP Core–Shell Nanowire Photocathode on Silicon Substrates. Nano Letters, 2014, 14, 2013-2018.	9.1	58
230	Self-Catalyzed Ternary Core–Shell GaAsP Nanowire Arrays Grown on Patterned Si Substrates by Molecular Beam Epitaxy. Nano Letters, 2014, 14, 4542-4547.	9.1	48
231	Self-Catalyzed GaAsP Nanowires Grown on Silicon Substrates by Solid-Source Molecular Beam Epitaxy. Nano Letters, 2013, 13, 3897-3902.	9.1	75
232	Evaluation of InAs quantum dots on Si as optical modulator. Semiconductor Science and Technology, 2013, 28, 094002.	2.0	5
233	Antimony mediated growth of high-density InAs quantum dots for photovoltaic cells. Applied Physics Letters, 2013, 103, 043901.	3.3	20
234	Long-wavelength III-V quantum-dot lasers monolithically grown on Si substrates. , 2013, , .		1

#	Article	IF	Citations
235	Surface-passivated GaAsP single-nanowire solar cells exceeding 10% efficiency grown on silicon. Nature Communications, 2013, 4, 1498.	12.8	192
236	Semiconductor III–V lasers monolithically grown on Si substrates. Semiconductor Science and Technology, 2013, 28, 015027.	2.0	23
237	InAs/GaAs quantum dot solar cell with an AlAs cap layer. Applied Physics Letters, 2013, 102, .	3.3	50
238	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
239	GaAsP single nanowire solar cells grown on silicon exhibiting large Voc increase at multiple suns. , 2013, , .		1
240	InAs/GaAs quantum-dot lasers and detectors on silicon substrates for silicon photonics., 2013,,.		1
241	III–V Quantum-Dot Materials and Devices Monolithically Grown on Si Substrates. Springer Series in Materials Science, 2013, , 357-380.	0.6	2
242	Ill–V quantum-dot laser growth on silicon and germanium. , 2013, , .		0
243	High-efficient solar cells with III-V nanostructures. , 2013, , .		0
244	1300 nm Wavelength InAs Quantum Dot Photodetector Grown on Silicon. Optics Express, 2012, 20, 10446.	3.4	31
245	InGaAsP-based uni-travelling carrier photodiode structure grown by solid source molecular beam epitaxy. Optics Express, 2012, 20, 19279.	3.4	14
246	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
247	InAs/GaAs quantum-dot lasers monolithically grown on Si substrate. , 2012, , .		0
248	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
249	Silicon-based long-wavelength III–V quantum-dot lasers. , 2012, , .		2
250	InAs quantum dot photodetector operating at 1.3 µm grown on Silicon., 2012,,.		0
251	A room temperature electrically pumped 1.3-& $\#$ x00B5;m lnAs quantum dot laser monolithically grown on silicon substrates. , 2011, , .		0
252	$13-\hat{l}$ /4m InAs/GaAs quantum-dot lasers monolithically grown on Si substrates. Optics Express, 2011, 19, 11381.	3.4	236

#	Article	IF	CITATIONS
253	Long-wavelength InAs/GaAs quantum-dot laser diode monolithically grown on Ge substrate. Nature Photonics, 2011, 5, 416-419.	31.4	344
254	1.3-um InAs/GaAs quantum-dot lasers monolithically grown on Ge substrate. , 2011, , .		0
255	Exciton distribution on single-walled carbon nanotube. European Physical Journal B, 2010, 74, 499-506.	1.5	4
256	Andreev reflection and incoherent spin-polarized transport in ferromagnetic semiconductor/d-wave superconductor/ferromagnetic semiconductor tunnel junctions with $\{110\}$ interfaces. Journal of Applied Physics, 2010, 107, 093708.	2.5	0
257	Quantum Dot Superluminescent Diodes - Bandwidth Engineering and Epitaxy for High Powers. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , .	0.0	0
258	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
259	High-Power and Broad-Band Quantum Dot SLDs for Optical Coherence Tomography. , 2006, , .		0
260	High Power, Very Low Noise, C.W. Operation of $1.32\hat{l}$ 4m Quantum-Dot Fabry-Perot Laser Diodes. , 2006 , , .		2
261	High power and very low noise operation at 1.3 and $1.5\hat{l}$ /4m with quantum dot and quantum dash Fabry-Perot lasers for microwave links. , 2006, 6399, 158.		4
262	Spin-polarized transport in diluted GaMnAs/AlAs/GaMnAs ferromagnetic semiconductor tunnel junctions. Journal of Applied Physics, 2004, 96, 498-502.	2.5	32
263	Quantum Conductance in Single-Walled Carbon Nanotube Quantum Dots. Defect and Diffusion Forum, 2004, 226-228, 1-10.	0.4	0
264	Size effect of quantum conductance in single-walled carbon nanotube quantum dots. European Physical Journal B, 2003, 36, 411-418.	1.5	13
265	Dynamics of viscous fingers in Hele-Shaw cells of liquid crystals Theory and experiment. Liquid Crystals, 1989, 5, 1813-1826.	2.2	15
266	GaAs Compounds Heteroepitaxy on Silicon for Opto and Nano Electronic Applications. , 0, , .		1
267	Measurement of the quantum-confined Stark effect in InAs/In(Ga)As quantum dots with p-doped quantum dot barriers. Optics Express, 0, , .	3.4	1