

# Kei May Lau

## List of Publications by Year in descending order

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240  
papers

5,384  
citations

71061

41  
h-index

128225

60  
g-index

240  
all docs

240  
docs citations

240  
times ranked

3472  
citing authors

#	ARTICLE	IF	CITATIONS
1	13 $\mu\text{m}$ submilliamp threshold quantum dot micro-lasers on Si. <i>Optica</i> , 2017, 4, 940.	4.8	142
2	Growing antiphase-domain-free GaAs thin films out of highly ordered planar nanowire arrays on exact (001) silicon. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	135
3	1-kV Sputtered p-NiO/n-Ga <sub>2</sub> O <sub>3</sub> Heterojunction Diodes With an Ultra-Low Leakage Current Below $1\sim\mu\text{A}/\text{cm}^2$ . <i>IEEE Electron Device Letters</i> , 2020, 41, 449-452.	2.2	129
4	GaN-based LED micro-displays for wearable applications. <i>Microelectronic Engineering</i> , 2015, 148, 98-103.	1.1	114
5	High-Temperature Operation of AlGaIn/GaN HEMTs Direct-Coupled FET Logic (DCFL) Integrated Circuits. <i>IEEE Electron Device Letters</i> , 2007, 28, 328-331.	2.2	108
6	Epitaxial growth of highly mismatched III-V materials on (001) silicon for electronics and optoelectronics. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2017, 63, 105-120.	1.8	108
7	Electrically pumped continuous wave quantum dot lasers epitaxially grown on patterned, on-axis (001) Si. <i>Optics Express</i> , 2017, 25, 3927.	1.7	103
8	Optically pumped 13 $\mu\text{m}$ room-temperature InAs quantum-dot micro-disk lasers directly grown on (001) silicon. <i>Optics Letters</i> , 2016, 41, 1664.	1.7	101
9	Monolithic LED Microdisplay on Active Matrix Substrate Using Flip-Chip Technology. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2009, 15, 1298-1302.	1.9	90
10	Normally Off AlGaIn/GaN Low-Density Drain HEMT (LDD-HEMT) With Enhanced Breakdown Voltage and Reduced Current Collapse. <i>IEEE Electron Device Letters</i> , 2007, 28, 189-191.	2.2	89
11	Fully Vertical GaN p-i-n Diodes Using GaN-on-Si Epilayers. <i>IEEE Electron Device Letters</i> , 2016, 37, 636-639.	2.2	86
12	Monolithic Integration of AlGaIn/GaN HEMT on LED by MOCVD. <i>IEEE Electron Device Letters</i> , 2014, 35, 330-332.	2.2	82
13	360 PPI Flip-Chip Mounted Active Matrix Addressable Light Emitting Diode on Silicon (LEDoS) Micro-Displays. <i>Journal of Display Technology</i> , 2013, 9, 678-682.	1.3	81
14	Investigation of <i>In Situ</i> SiN as Gate Dielectric and Surface Passivation for GaN MISHEMTs. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 832-839.	1.6	80
15	Monolithically integrated InAs/InGaAs quantum dot photodetectors on silicon substrates. <i>Optics Express</i> , 2017, 25, 27715.	1.7	71
16	A Novel BLU-Free Full-Color LED Projector Using LED on Silicon Micro-Displays. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 2267-2270.	1.3	70
17	High-performance III-nitride blue LEDs grown and fabricated on patterned Si substrates. <i>Journal of Crystal Growth</i> , 2007, 298, 725-730.	0.7	66
18	Active Matrix Monolithic LED Micro-Display Using GaN-on-Si Epilayers. <i>IEEE Photonics Technology Letters</i> , 2019, 31, 865-868.	1.3	66

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19	Dual wavelength InGaN/GaN multi-quantum well LEDs grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2004, 272, 333-340.	0.7	62
20	GaN-based blue light-emitting diodes grown and fabricated on patterned sapphire substrates by metalorganic vapor-phase epitaxy. Journal of Crystal Growth, 2004, 272, 327-332.	0.7	62
21	Sub-wavelength InAs quantum dot micro-disk lasers epitaxially grown on exact Si (001) substrates. Applied Physics Letters, 2016, 108, .	1.5	58
22	Study of Interface Traps in AlGaIn/GaN MISHEMTs Using LPCVD SiN <sub>x</sub> as Gate Dielectric. IEEE Transactions on Electron Devices, 2017, 64, 824-831.	1.6	58
23	Continuous-Wave Optically Pumped 1.55 $\mu$ m InAs/InAlGaAs Quantum Dot Microdisk Lasers Epitaxially Grown on Silicon. ACS Photonics, 2017, 4, 204-210.	3.2	56
24	Fully-integrated active matrix programmable UV and blue micro-LED display system-on-panel (SoP). Journal of the Society for Information Display, 2017, 25, 240-248.	0.8	56
25	Low-Leakage-Current AlN/GaN MOSFETs Using $\text{Al}_2\text{O}_3$ for Increased 2DEG. IEEE Electron Device Letters, 2012, 33, 212-214.	2.2	55
26	Design and Characterization of Active Matrix LED Microdisplays With Embedded Visible Light Communication Transmitter. Journal of Lightwave Technology, 2016, 34, 3449-3457.	2.7	55
27	O-band electrically injected quantum dot micro-ring lasers on on-axis (001) GaP/Si and V-groove Si. Optics Express, 2017, 25, 26853.	1.7	53
28	Bufferless 1.5 $\mu$ m III-V lasers grown on Si-photonics 220 nm silicon-on-insulator platforms. Optica, 2020, 7, 148.	4.8	53
29	1.55 $\mu$ m room-temperature lasing from subwavelength quantum-dot microdisks directly grown on (001) Si. Applied Physics Letters, 2017, 110, .	1.5	50
30	Enhancement-Mode GaN MOS-HEMTs With Recess-Free Barrier Engineering and High- $\kappa$ ZrO <sub>2</sub> Gate Dielectric. IEEE Electron Device Letters, 2018, 39, 405-408.	2.2	50
31	1.5 $\mu$ m quantum-dot diode lasers directly grown on CMOS-standard (001) silicon. Applied Physics Letters, 2018, 113, .	1.5	50
32	High-Voltage p-GaN HEMTs With OFF-State Blocking Capability After Gate Breakdown. IEEE Electron Device Letters, 2019, 40, 530-533.	2.2	50
33	Low Dark Current High Gain InAs Quantum Dot Avalanche Photodiodes Monolithically Grown on Si. ACS Photonics, 2020, 7, 528-533.	3.2	49
34	1700 Pixels Per Inch (PPI) Passive-Matrix Micro-LED Display Powered by ASIC. , 2014, , .		47
35	Full-Color Pixelated-Addressable Light Emitting Diode on Transparent Substrate (LEDoTS) Micro-Displays by CoB. Journal of Display Technology, 2016, 12, 742-746.	1.3	47
36	Active matrix monolithic micro-LED full-color micro-display. Journal of the Society for Information Display, 2021, 29, 47-56.	0.8	47

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37	A monolithic InP/SOI platform for integrated photonics. <i>Light: Science and Applications</i> , 2021, 10, 200.	7.7	47
38	Investigation of Photon-Generated Leakage Current for High-Performance Active Matrix Micro-LED Displays. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 4832-4838.	1.6	46
39	Metal-interconnection-free integration of InGaN/GaN light emitting diodes with AlGaIn/GaN high electron mobility transistors. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	45
40	Fully- and Quasi-Vertical GaN-on-Si p-i-n Diodes: High Performance and Comprehensive Comparison. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 809-815.	1.6	45
41	Telecom InP/InGaAs nanolaser array directly grown on (001) silicon-on-insulator. <i>Optics Letters</i> , 2019, 44, 767.	1.7	45
42	Voltage-Controlled GaN HEMT-LED Devices as Fast-Switching and Dimmable Light Emitters. <i>IEEE Electron Device Letters</i> , 2018, 39, 224-227.	2.2	42
43	Monolithic integration of III-nitride voltage-controlled light emitters with dual-wavelength photodiodes by selective-area epitaxy. <i>Optics Letters</i> , 2018, 43, 3401.	1.7	42
44	Room-temperature InP/InGaAs nano-ridge lasers grown on Si and emitting at telecom bands. <i>Optica</i> , 2018, 5, 918.	4.8	40
45	1.55- $\mu$ m electrically pumped continuous wave lasing of quantum dash lasers grown on silicon. <i>Optics Express</i> , 2020, 28, 18172.	1.7	40
46	InAs/GaAs quantum dots on GaAs-on-V-grooved-Si substrate with high optical quality in the 1.3- $\mu$ m band. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	39
47	Low-Leakage High-Breakdown Laterally Integrated HEMT-LED via n-GaN Electrode. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 1130-1133.	1.3	39
48	High gain and high ultraviolet/visible rejection ratio photodetectors using p-GaN/AlGaIn/GaN heterostructures grown on Si. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	39
49	1300 V Normally-OFF p-GaN Gate HEMTs on Si With High ON-State Drain Current. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 653-657.	1.6	39
50	Performance improvement of GaN-based light-emitting diodes grown on patterned Si substrate transferred to copper. <i>Optics Express</i> , 2011, 19, A956.	1.7	38
51	Selective epitaxial growth of monolithically integrated GaN-based light emitting diodes with AlGaIn/GaN driving transistors. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	37
52	13- $\mu$ m InAs quantum-dot micro-disk lasers on V-groove patterned and unpatterned (001) silicon. <i>Optics Express</i> , 2016, 24, 21038.	1.7	37
53	Defect Characterization of InAs/InGaAs Quantum Dot p-i-n Photodetector Grown on GaAs-on-V-Grooved-Si Substrate. <i>ACS Photonics</i> , 2019, 6, 1100-1105.	3.2	37
54	Room-temperature electrically-pumped 15- $\mu$ m InGaAs/InAlGaAs laser monolithically grown on on-axis (001) Si. <i>Optics Express</i> , 2018, 26, 14514.	1.7	35

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55	1.55- $\mu$ m Lasers Epitaxially Grown on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-11.	1.9	35
56	High-Speed Normal-Incidence p-i-n InGaAs Photodetectors Grown on Silicon Substrates by MOCVD. IEEE Photonics Technology Letters, 2012, 24, 237-239.	1.3	34
57	Vertical $\text{InGa}_{2/3}\text{O}_{3/3}$ Schottky Barrier Diodes with Enhanced Breakdown Voltage and High Switching Performance. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900497.	0.8	34
58	848 ppi high-brightness active-matrix micro-LED micro-display using GaN-on-Si epi-wafers towards mass production. Optics Express, 2021, 29, 10580.	1.7	34
59	A low phase-noise X-band MMIC VCO using high-linearity and low-noise composite-channel $\text{Al}_{0.3}\text{Ga}_{0.7}\text{N}/\text{Al}_{0.05}\text{Ga}_{0.95}\text{N}/\text{GaN}$ HEMTs. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 23-29.	2.9	33
60	High-Speed InGaAs Photodetectors by Selective-Area MOCVD Toward Optoelectronic Integrated Circuits. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 36-42.	1.9	33
61	Growing InGaAs quasi-quantum wires inside semi-rhombic shaped planar InP nanowires on exact (001) silicon. Applied Physics Letters, 2016, 108, 242105.	1.5	33
62	High-performance III-V photodetectors on a monolithic InP/SOI platform. Optica, 2021, 8, 1204.	4.8	33
63	Temperature characteristics of epitaxially grown InAs quantum dot micro-disk lasers on silicon for on-chip light sources. Applied Physics Letters, 2016, 109, .	1.5	31
64	Self-organized InAs/InAlGaAs quantum dots as dislocation filters for InP films on (001) Si. Journal of Crystal Growth, 2017, 464, 28-32.	0.7	31
65	Breakdown Ruggedness of Quasi-Vertical GaN-Based p-i-n Diodes on Si Substrates. IEEE Electron Device Letters, 2016, 37, 1158-1161.	2.2	30
66	Material and Device Characteristics of Metamorphic $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ MOSHEMTs Grown on GaAs and Si Substrates by MOCVD. IEEE Transactions on Electron Devices, 2013, 60, 4112-4118.	1.6	29
67	Off-state leakage current reduction in AlGaIn/GaN high electron mobility transistors by combining surface treatment and post-gate annealing. Semiconductor Science and Technology, 2016, 31, 055019.	1.0	29
68	Low Threshold Quantum Dot Lasers Directly Grown on Unpatterned Quasi-Nominal (001) Si. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-9.	1.9	29
69	Active Matrix Programmable Monolithic Light Emitting Diodes on Silicon (LEDoS) Displays. Digest of Technical Papers SID International Symposium, 2011, 42, 1215-1218.	0.1	28
70	Monolithic integration of enhancement-mode vertical driving transistor on a standard InGaIn/GaN light emitting diode structure. Applied Physics Letters, 2016, 109, .	1.5	28
71	III-V lasers selectively grown on (001) silicon. Journal of Applied Physics, 2020, 128, .	1.1	28
72	30-nm Inverted $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ MOSHEMTs on Si Substrate Grown by MOCVD With Regrown Source/Drain. IEEE Electron Device Letters, 2012, 33, 1384-1386.	2.2	27

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73	InGaAs/InP quantum wires grown on silicon with adjustable emission wavelength at telecom bands. Nanotechnology, 2018, 29, 225601.	1.3	27
74	High-Performance Inverted $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ MOSHEMTs on a GaAs Substrate With Regrown Source/Drain by MOCVD. IEEE Electron Device Letters, 2012, 33, 1246-1248.	2.2	26
75	Selective lateral epitaxy of dislocation-free InP on silicon-on-insulator. Applied Physics Letters, 2019, 114, 192105.	1.5	26
76	Metamorphic AlInAs/GaInAs HEMTs on GaAs Substrates by MOCVD. IEEE Electron Device Letters, 2008, 29, 561-564.	2.2	25
77	DC and RF Performance of Gate-Last AlN/GaN MOSHEMTs on Si With Regrown Source/Drain. IEEE Transactions on Electron Devices, 2013, 60, 3019-3024.	1.6	25
78	Selectively Grown III-V Lasers for Integrated Si-Photonics. Journal of Lightwave Technology, 2021, 39, 940-948.	2.7	25
79	Electrically pumped 15 $\mu\text{m}$ InP-based quantum dot microring lasers directly grown on (001) Si. Optics Letters, 2019, 44, 4566.	1.7	25
80	Transfer of GaN-Based Light-Emitting Diodes From Silicon Growth Substrate to Copper. IEEE Electron Device Letters, 2010, 31, 132-134.	2.2	24
81	Defect reduction in epitaxial InP on nanostructured Si (001) substrates with position-controlled seed arrays. Journal of Crystal Growth, 2014, 405, 81-86.	0.7	24
82	155 $\mu\text{m}$ band low-threshold, continuous-wave lasing from InAs/InAlGaAs quantum dot microdisks. Optics Letters, 2017, 42, 679.	1.7	24
83	Epitaxial growth of high quality InP on Si substrates: The role of InAs/InP quantum dots as effective dislocation filters. Journal of Applied Physics, 2018, 123, .	1.1	24
84	Monolithic integration of ultraviolet light emitting diodes and photodetectors on a p-GaN/AlGaIn/GaN/Si platform. Optics Express, 2021, 29, 8358.	1.7	24
85	Performance Enhancements of Flip-Chip Light-Emitting Diodes With High-Density n-Type Point-Contacts. IEEE Electron Device Letters, 2014, 35, 1049-1051.	2.2	23
86	Epitaxial growth of GaSb on V-grooved Si (001) substrates with an ultrathin GaAs stress relaxing layer. Applied Physics Letters, 2017, 111, .	1.5	23
87	Continuous-wave lasing from InP/InGaAs nanoridges at telecommunication wavelengths. Applied Physics Letters, 2017, 111, 212101.	1.5	23
88	GaAs Solar Cells on Nanopatterned Si Substrates. IEEE Journal of Photovoltaics, 2018, 8, 1635-1640.	1.5	23
89	Low-Threshold Epitaxially Grown 1.3- $\mu\text{m}$ InAs Quantum Dot Lasers on Patterned (001) Si. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-7.	1.9	23
90	Fabrication and Characterization of Gate-Last Self-Aligned AlN/GaN MISHEMTs With $\text{In}_x\text{Ga}_{1-x}\text{N}$ Gate Dielectric. IEEE Transactions on Electron Devices, 2015, 62, 1862-1869.	1.6	22

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91	GaAs-InGaAs-GaAs Fin-Array Tunnel Diodes on (001) Si Substrates With Room-Temperature Peak-to-Valley Current Ratio of 5.4. IEEE Electron Device Letters, 2016, 37, 24-27.	2.2	22
92	High-Performance AlGaIn/GaN/Si Power MOSHEMTs With ZrO <sub>2</sub> Gate Dielectric. IEEE Transactions on Electron Devices, 2018, 65, 5337-5342.	1.6	22
93	Self-Powered Fast-Response X-Ray Detectors Based on Vertical GaN p-n Diodes. IEEE Electron Device Letters, 2019, 40, 1044-1047.	2.2	22
94	Low-efficiency-droop InGaN quantum dot light-emitting diodes operating in the "green gap". Photonics Research, 2020, 8, 750.	3.4	21
95	High-Performance Green and Yellow LEDs Grown on $\text{SiO}_2$ Nanorod Patterned GaN/Si Templates. IEEE Electron Device Letters, 2013, 34, 903-905.	2.2	20
96	Micrometer-scale InP selectively grown on SOI for fully integrated Si-photonics. Applied Physics Letters, 2020, 117, .	1.5	20
97	Highly ordered horizontal indium gallium arsenide/indium phosphide multi-quantum-well in wire structure on (001) silicon substrates. Journal of Applied Physics, 2016, 120, .	1.1	19
98	Leakage Current Reduction in $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ Schottky Barrier Diodes by $\text{CF}_4$ Plasma Treatment. IEEE Electron Device Letters, 2020, 41, 1312-1315.	2.2	19
99	Monolithic full-color microdisplay using patterned quantum dot photoresist on dual-wavelength LED epilayers. Journal of the Society for Information Display, 2021, 29, 157-165.	0.8	19
100	InGaN-based light-emitting diodes grown and fabricated on nanopatterned Si substrates. Applied Physics Letters, 2010, 96, .	1.5	18
101	A GaN-Based Lamb-Wave Oscillator on Silicon for High-Temperature Integrated Sensors. IEEE Microwave and Wireless Components Letters, 2013, 23, 318-320.	2.0	18
102	High Performance Monolithically Integrated GaN Driving VMOSFET on LED. IEEE Electron Device Letters, 2017, 38, 752-755.	2.2	18
103	Bufferless III-V photodetectors directly grown on (001) silicon-on-insulators. Optics Letters, 2020, 45, 1754.	1.7	18
104	Surface acoustic wave device on AlGaIn-GaN heterostructure using two-dimensional electron gas interdigital transducers. Applied Physics Letters, 2007, 90, 213506.	1.5	17
105	Investigation of Forward Voltage Uniformity in Monolithic Light-Emitting Diode Arrays. IEEE Photonics Technology Letters, 2013, 25, 1290-1293.	1.3	17
106	Vertical LEDs on Rigid and Flexible Substrates Using GaN-on-Si Epilayers and Au-Free Bonding. IEEE Transactions on Electron Devices, 2016, 63, 1587-1593.	1.6	17
107	Enhanced optical properties of InAs/InAlGaAs/InP quantum dots grown by metal-organic chemical vapor deposition using a double-cap technique. Journal of Crystal Growth, 2016, 433, 19-23.	0.7	17
108	GaN-Based $\text{S}_0$ -Wave Sensors on Silicon for Chemical and Biological Sensing in Liquid Environments. IEEE Sensors Journal, 2013, 13, 1245-1251.	2.4	16

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109	60.4: A Novel Full-Color 3LED Projection System using $\lambda$ -E Light Emitting Diodes on Silicon (LEDoS) Micro-displays. Digest of Technical Papers SID International Symposium, 2013, 44, 838-841.	0.1	16
110	Comparison of growth structures for continuous-wave electrically pumped 1.55- $\mu$ m quantum dash lasers grown on (001) Si. Photonics Research, 2020, 8, 1888.	3.4	16
111	Fabrication of 150-nm T-Gate Metamorphic AlInAs/GaInAs HEMTs on GaAs Substrates by MOCVD. IEEE Electron Device Letters, 2011, 32, 1224-1226.	2.2	15
112	Switching performance of quasi-vertical GaN-based p-i-n diodes on Si. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600817.	0.8	15
113	Integration of enhancement and depletion-mode AlGaIn/GaN MIS-HFETs by fluoride-based plasma treatment. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2023-2027.	0.8	14
114	Parametric study of high-performance 155- $\mu$ m InAs quantum dot microdisk lasers on Si. Optics Express, 2017, 25, 31281.	1.7	14
115	Room temperature III-V nanolasers with distributed Bragg reflectors epitaxially grown on (001) silicon-on-insulators. Photonics Research, 2019, 7, 1081.	3.4	14
116	MOVPE growth of in situ SiNx/AlN/GaN MISHEMTs with low leakage current and high on/off current ratio. Journal of Crystal Growth, 2015, 414, 237-242.	0.7	13
117	A Novel Si-GaN Monolithic Integration Technology for a High-Voltage Cascoded Diode. IEEE Electron Device Letters, 2017, 38, 501-504.	2.2	13
118	An Auto-Zero-Voltage-Switching Quasi-Resonant LED Driver With GaN FETs and Fully Integrated LED Shunt Protectors. IEEE Journal of Solid-State Circuits, 2018, 53, 913-923.	3.5	13
119	A Novel 700 V Monolithically Integrated Si-GaN Cascoded Field Effect Transistor. IEEE Electron Device Letters, 2018, 39, 394-396.	2.2	13
120	Comparison of the AlN and GaN crystalline quality on 2-inch silicon substrate via two growth methods. Journal of Crystal Growth, 2020, 535, 125545.	0.7	13
121	Fabrication of 100-nm Metamorphic AlInAs/GaInAs HEMTs Grown on Si Substrates by MOCVD. IEEE Electron Device Letters, 2012, 33, 498-500.	2.2	12
122	In situ SiNx gate dielectric by MOCVD for low-leakage-current ultra-thin barrier AlN/GaN MISHEMTs on Si. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 775-778.	0.8	11
123	Exciton aggregation induced photoluminescence enhancement of monolayer WS <sub>2</sub> . Applied Physics Letters, 2019, 114, .	1.5	11
124	Telecom InP-based quantum dash photodetectors grown on Si. Applied Physics Letters, 2021, 118, .	1.5	11
125	AlInAs/GaInAs mHEMTs on silicon substrates grown By MOCVD. , 2008, , .		10
126	Effects of hydrogen implantation damage on the performance of InP/InGaAs/InP p-i-n photodiodes transferred on silicon. Applied Physics Letters, 2009, 94, 012101.	1.5	10



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127	25 <sup>th</sup> Distinguished Student Paper: Fully-Integrated Active Matrix Programmable UV and Blue Micro-LED Display System-on-Panel (SoP). Digest of Technical Papers SID International Symposium, 2017, 48, 357-361.	0.1	10
128	Fully-integrated AMLED micro display system with a hybrid voltage regulator. , 2017, , .		10
129	C and L band room-temperature continuous-wave InP-based microdisk lasers grown on silicon. Optics Letters, 2021, 46, 2836.	1.7	10
130	Monolithic Thin Film Red LED Active-Matrix Micro-Display by Flip-Chip Technology. IEEE Photonics Technology Letters, 2021, 33, 603-606.	1.3	10
131	Enhancing ON- and OFF-State Performance of Quasi-Vertical GaN Trench MOSFETs on Sapphire With Reduced Interface Charges and a Thick Bottom Dielectric. IEEE Electron Device Letters, 2022, 43, 346-349.	2.2	10
132	Telecom InGaAs/InP Quantum Well Lasers Laterally Grown on Silicon-on-Insulator. Journal of Lightwave Technology, 2022, 40, 5631-5635.	2.7	10
133	Light extraction enhancement from GaN-based thin-film LEDs grown on silicon after substrate removal using HNA solution. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2171-2173.	0.8	9
134	A low substrate loss, monolithically integrated power inductor for compact LED drivers. , 2015, , .		9
135	InAs nano-ridges and thin films grown on (001) silicon substrates. Journal of Applied Physics, 2020, 128, .	1.1	9
136	GaSb-based laser diodes grown on MOCVD GaAs-on-Si templates. Optics Express, 2021, 29, 11268.	1.7	9
137	Full-color micro-display by heterogeneous integration of InGaN blue/green dual-wavelength and AlGaInP red LEDs. Optics Express, 2022, 30, 23499.	1.7	9
138	High-efficiency blue and green LEDs grown on Si with 5 micrometer thick GaN buffer. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 730-733.	0.8	8
139	Coalescence of planar GaAs nanowires into strain-free three-dimensional crystals on exact (001) silicon. Journal of Crystal Growth, 2016, 454, 19-24.	0.7	8
140	Fin-Array Tunneling Trigger With Tunable Hysteresis on (001) Silicon Substrate. IEEE Electron Device Letters, 2017, 38, 556-559.	2.2	8
141	Multi-heterojunction InAs/GaSb nano-ridges directly grown on (001) Si. Nanotechnology, 2020, 31, 345707.	1.3	8
142	MOCVD growth of InP-based $1.3 \times 10^{14}$ cm <sup>-3</sup> quantum dash lasers on (001) Si. Applied Physics Letters, 2020, 116, .	1.5	8
143	Thin-barrier heterostructures enabled normally-OFF GaN high electron mobility transistors. Semiconductor Science and Technology, 2021, 36, 034001.	1.0	8
144	1.9-GHz low noise amplifier using high-linearity and low-noise composite-channel HEMTs. Microwave and Optical Technology Letters, 2007, 49, 1360-1362.	0.9	7

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145	30nm enhancement-mode In <sub>0.53</sub> Ga <sub>0.47</sub> As MOSFETs on Si substrates grown by MOCVD exhibiting high transconductance and low on-resistance. , 2012, , .		7
146	Improved breakdown characteristics of monolithically integrated III-nitride HEMT-LED devices using carbon doping. Journal of Crystal Growth, 2015, 414, 243-247.	0.7	7
147	Optimization of a Common Buffer Platform for Monolithic Integration of InGaN/GaN Light-Emitting Diodes and AlGaIn/GaN High-Electron-Mobility Transistors. Journal of Electronic Materials, 2016, 45, 2092-2101.	1.0	7
148	Off-state drain leakage reduction by post metallization annealing for Al <sub>2</sub> O <sub>3</sub> /GaN/AlGaIn/GaN MOSHEMTs on Si. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 868-872.	0.8	7
149	Tristate Memory Cells Using Double-Peaked Fin-Array III-V Tunnel Diodes Monolithically Grown on (001) Silicon Substrates. IEEE Transactions on Electron Devices, 2017, 64, 4078-4083.	1.6	7
150	Ultra-low threshold green InGaN quantum dot microdisk lasers grown on silicon. Applied Physics Letters, 2020, 117, .	1.5	7
151	Forward Conduction Instability of Quasi-Vertical GaN p-i-n Diodes on Si Substrates. IEEE Transactions on Electron Devices, 2020, 67, 3992-3998.	1.6	7
152	GaN Single Nanowire p-i-n Diode for High-Temperature Operations. ACS Applied Electronic Materials, 2020, 2, 719-724.	2.0	7
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