Di Liang

List of Publications by Year
in descending order

51 papers	2,758 citations	304743 22 h-index	330143 37 g-index
51 all docs	51 docs citations	51 times ranked	2633 citing authors

#	Article	IF	Citations
1	Recent progress in lasers on silicon. Nature Photonics, 2010, 4, 511-517.	31.4	929
2	Hybrid Integrated Platforms for Silicon Photonics. Materials, 2010, 3, 1782-1802.	2.9	242
3	Electrically-pumped compact hybrid silicon microring lasers for optical interconnects. Optics Express, 2009, 17, 20355.	3.4	165
4	13â€‰â€‰Î¼m submilliamp threshold quantum dot micro-lasers on Si. Optica, 2017, 4, 940.	9.3	142
5	25â€‰â€‰Gbps low-voltage waveguide Siâ€“Ge avalanche photodiode. Optica, 2016, 3, 793.	9.3	114
6	A Distributed Bragg Reflector Silicon Evanescent Laser. IEEE Photonics Technology Letters, 2008, 20, 1667-1669.	2.5	108
7	Low-Temperature, Strong SiO2-SiO2 Covalent Wafer Bonding for IIIâ€“V Compound Semiconductors-to-Silicon Photonic Integrated Circuits. Journal of Electronic Materials, 2008, 37, 1552-1559.	2.2	83
8	Recent Progress in Heterogeneous III-V-on-Silicon Photonic Integration. Light Advanced Manufacturing, 2021, 2, 59.	5.1	79
9	III/V-on-Si MQW lasers by using a novel photonic integration method of regrowth on a bonding template. Light: Science and Applications, 2019, 8, 93.	16.6	68
10	Hybrid Silicon Laser Technology: A Thermal Perspective. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1490-1498.	2.9	67
11	Robust hybrid quantum dot laser for integrated silicon photonics. Optics Express, 2016, 24, 16167.	3.4	64
12	Integrated Microwave Photonic Filter on a Hybrid Silicon Platform. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 3213-3219.	4.6	61
13	High-Performance Silicon Photonics Using Heterogeneous Integration. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-15.	2.9	52
14	A Low-Voltage Si-Ge Avalanche Photodiode for High-Speed and Energy Efficient Silicon Photonic Links. Journal of Lightwave Technology, 2020, 38, 3156-3163.	4.6	42
15	Indium arsenide quantum dot waveguide photodiodes heterogeneously integrated on silicon. Optica, 2019, 6, 1277.	9.3	37
16	Teardrop Reflector-Assisted Unidirectional Hybrid Silicon Microring Lasers. IEEE Photonics Technology Letters, 2012, 24, 1988-1990.	2.5	36
17	Uniformity study of wafer-scale InP-to-silicon hybrid integration. Applied Physics A: Materials Science and Processing, 2011, 103, 213-218.	2.3	34
18	Error-Free Operation in a Hybrid-Silicon Quantum Dot Comb Laser. IEEE Photonics Technology Letters, 2018, 30, 71-74.	2.5	34

#	Article	IF	Citations
19	Widely tunable, heterogeneously integrated quantum-dot O-band lasers on silicon. Photonics Research, 2020, 8, 1551.	7.0	34
20	Large-scale and energy-efficient tensorized optical neural networks on IIIâ€“V-on-silicon MOSCAP platform. APL Photonics, 2021, 6, .	5.7	28
21	Hybrid quantum-dot microring laser on silicon. Optica, 2019, 6, 1145.	9.3	27
22	On-Chip Hybrid Silicon Quantum Dot Comb Laser with 14 Error-Free Channels. , 2018, , .		26
23	64â€‰â€‰Gb/s low-voltage waveguide SiGe avalanche photodiodes with distributed Bragg reflectors. Photonics Research, 2020, 8, 1118.	7.0	25
24	Hybrid silicon evanescent approach to optical interconnects. Applied Physics A: Materials Science and Processing, 2009, 95, 1045-1057.	2.3	24
25	High-performance quantum-dot distributed feedback laser on silicon for high-speed modulations. Optica, 2021, 8, 591.	9.3	22
26	An Energy-Efficient and Bandwidth-Scalable DWDM Heterogeneous Silicon Photonics Integration Platform. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-19.	2.9	21
27	High Responsivity Si-Ge Waveguide Avalanche Photodiodes Enhanced by Loop Reflector. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-8.	2.9	20
28	Heterogeneous silicon light sources for datacom applications. Optical Fiber Technology, 2018, 44, 43-52.	2.7	19
29	Fully-Integrated Heterogeneous DML Transmitters for High-Performance Computing. Journal of Lightwave Technology, 2020, 38, 3322-3337.	4.6	18
30	A Compact Model for Si-Ge Avalanche Photodiodes Over a Wide Range of Multiplication Gain. Journal of Lightwave Technology, 2019, 37, 3229-3235.	4.6	15
31	64 Gbps PAM4 Si-Ge Waveguide Avalanche Photodiodes With Excellent Temperature Stability. Journal of Lightwave Technology, 2020, 38, 4857-4866.	4.6	15
32	Integrated Green DWDM Photonics For Next-Gen High-Performance Computing. , 2020, , .		15
33	Ultra-power-efficient heterogeneous IIIâ€“V/Si MOSCAP (de-)interleavers for DWDM optical links. Photonics Research, 2022, 10, A22.	7.0	12
34	Design Considerations for Energy Efficient DWDM PAM4 Transceivers Employing Avalanche Photodiodes. Laser and Photonics Reviews, 2020, 14, 2000142.	8.7	11
35	High-Temperature Thermoelectric Characterization of IIIâ€“V Semiconductor Thin Films by Oxide Bonding. Journal of Electronic Materials, 2010, 39, 1125-1132.	2.2	10
36	Heterogeneous MOS microring resonators. , 2017, , .		10

#	Article	IF	Citations
37	32â€‰â€‰Gbps heterogeneously integrated quantum dot waveguide avalanche photodiodes on silicon. Optics Letters, 2021, 46, 3821.	3.3	10
38	Avalanche photodiodes on silicon photonics. Journal of Semiconductors, 2022, 43, 021301.	3.7	10
39	OSNR Sensitivity Analysis for Si-Ge Avalanche Photodiodes. IEEE Photonics Technology Letters, 2022, 34, 321-324.	2.5	6
40	Compact low-threshold hybrid silicon microring resonator lasers. , 2010, , .		5
41	Heterogeneous O-Band InAs/GaAs Quantum-Dot Optical Amplifier on Silicon. , 2021, , .		5
42	An optically-pumped silicon evanescent microring resonator laser. , 2009, , .		4
43	High Temperature Performance of Heterogeneous MOSCAP Microring Modulators. , 2021, , .		4
44	In-situ light measurement in heterogeneous gain media. , 2021, , .		2
45	Integrated Optoelectronic Devices on Silicon. Materials Research Society Symposia Proceedings, 2012, 1396, .	0.1	1
46	Loop Reflector Assisted Si-Ge Waveguide Avalanche Photodiodes. , 2021, , .		1
47	High-Speed Si/Ge Avalanche Photodiodes with Enhanced Responsivity. , 2021, , .		1
48	100 mm wafer-scale InP-based (λ=1.6 μm) epitaxial transfer for hybrid silicon evanescent lasers. , 2008, , .		0
49	Wafer bonded silicon photonics. , 2008, , .		0
50	Hybrid silicon / III-V sources for optical interconnects. , 2012, , .		0
51	An Open Silicon Photonics Ecosystem for Computercom Applications. Topics in Applied Physics, 2021, , 491-506.	0.8	0