David J Thomson

List of Publications by Year in descending order

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40 papers

4,144 citations

20 h-index 434195 31 g-index

41 all docs

41 docs citations

41 times ranked

4032 citing authors

#	Article	IF	CITATIONS
1	Ge Ion Implanted Photonic Devices and Annealing for Emerging Applications. Micromachines, 2022, 13, 291.	2.9	2
2	High-Speed DD Transmission Using a Silicon Receiver Co-Integrated With a 28-nm CMOS Gain-Tunable Fully-Differential TIA. Journal of Lightwave Technology, 2021, 39, 1138-1147.	4.6	10
3	High Bandwidth Capacitance Efficient Silicon MOS Modulator. Journal of Lightwave Technology, 2021, 39, 201-207.	4.6	17
4	Deep Learning Enabled Design of Complex Transmission Matrices for Universal Optical Components. ACS Photonics, 2021, 8, 283-295.	6.6	44
5	Nonvolatile programmable silicon photonics using an ultralow-loss Sb ₂ Se ₃ phase change material. Science Advances, 2021, 7, .	10.3	127
6	A Si Optical Modulator Based on Fano-Like Resonance. IEEE Photonics Technology Letters, 2021, 33, 1209-1212.	2.5	6
7	Buried 3D silicon photonics spot-size convertors. , 2021, , .		1
8	CORNERSTONE's Silicon Photonics Rapid Prototyping Platforms: Current Status and Future Outlook. Applied Sciences (Switzerland), 2020, 10, 8201.	2.5	23
9	Ion Implantation of Germanium Into Silicon for Critical Coupling Control of Racetrack Resonators. Journal of Lightwave Technology, 2020, 38, 1865-1873.	4.6	9
10	Two-dimensional apodized grating coupler for polarization-independent and surface-normal optical coupling. Journal of Lightwave Technology, 2020, , 1-1.	4.6	15
11	Silicon erasable waveguides and directional couplers by germanium ion implantation for configurable photonic circuits. Optics Express, 2020, 28, 17630.	3.4	8
12	Integration of low loss vertical slot waveguides on SOI photonic platforms for high efficiency carrier accumulation modulators. Optics Express, 2020, 28, 23143.	3.4	9
13	Electronic–photonic convergence for silicon photonics transmitters beyond 100 Gbps on–off keying. Optica, 2020, 7, 1514.	9.3	47
14	Beyond 100-Gb/s Direct-detection Transmission using an Optical Receiver Co-integrated with a 28-nm CMOS Gain-tunable Fully-differential TIA. , 2020, , .		1
15	Scaling effect and optimization of SOI dual-waveguide optical trapping. , 2020, , .		O
16	Ultra-sharp asymmetric Fano-like resonance spectrum on Si photonic platform. Optics Express, 2019, 27, 7365.	3.4	18
17	High Speed Silicon Capacitor Modulators for TM Polarisation. , 2019, , .		O
18	Germanium ion implantation for trimming the coupling efficiency of silicon racetrack resonators. , 2019, , .		2

#	Article	IF	CITATIONS
19	Novel Si Photonic Waveguides and Applications to Optical Modulators. , 2019, , .		O
20	lon Implantation in Silicon for Trimming the Operating Wavelength of Ring Resonators. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-7.	2.9	53
21	Hybrid Photon–Plasmon Coupling and Ultrafast Control of Nanoantennas on a Silicon Photonic Chip. Nano Letters, 2018, 18, 610-617.	9.1	30
22	A 40-Gb/s 4-V _{pp} Differential Modulator Driver in 90-nm CMOS. IEEE Microwave and Wireless Components Letters, 2018, 28, 73-75.	3.2	9
23	Towards High Speed and Low Power Silicon Photonic Data Links. , 2018, , .		2
24	All-silicon carrier accumulation modulator based on a lateral metal-oxide-semiconductor capacitor. Photonics Research, 2018, 6, 373.	7.0	44
25	The Emergence of Silicon Photonics as a Flexible Technology Platform. Proceedings of the IEEE, 2018, 106, 2101-2116.	21.3	156
26	Real-time monitoring and gradient feedback enable accurate trimming of ion-implanted silicon photonic devices. Optics Express, 2018, 26, 24953.	3.4	21
27	Germanium implanted photonic devices for post-fabrication trimming and programmable circuits. , 2018, , .		1
28	Dual-etch apodised grating couplers for efficient fibre-chip coupling near 1310 nm wavelength. Optics Express, 2017, 25, 17864.	3.4	41
29	All-optical spatial light modulator for reconfigurable silicon photonic circuits. Optica, 2016, 3, 396.	9.3	47
30	High-speed detection at two micrometres with monolithic silicon photodiodes. Nature Photonics, 2015, 9, 393-396.	31.4	192
31	Recent breakthroughs in carrier depletion based silicon optical modulators. Nanophotonics, 2014, 3, 229-245.	6.0	178
32	Planar surface implanted diffractive grating couplers in SOI. Optics Express, 2014, 22, 1077.	3.4	26
33	Locally Erasable Couplers for Optical Device Testing in Silicon on Insulator. Journal of Lightwave Technology, 2014, 32, 2248-2253.	4.6	26
34	50-Gb/s Silicon Optical Modulator. IEEE Photonics Technology Letters, 2012, 24, 234-236.	2.5	371
35	Silicon waveguides for the 3–4 µm wavelength range. , 2011, , .		5
36	High contrast 40Gbit/s optical modulation in silicon. Optics Express, 2011, 19, 11507.	3.4	310

#	Article	IF	CITATIONS
37	40 Gb/s silicon photonics modulator for TE and TM polarisations. Optics Express, 2011, 19, 11804.	3.4	157
38	High speed silicon electro-optical modulators enhanced via slow light propagation. Optics Express, 2011, 19, 20876.	3.4	69
39	Silicon optical modulators. Nature Photonics, 2010, 4, 518-526.	31.4	1,942
40	Low Loss MMI Couplers for High Performance MZI Modulators. IEEE Photonics Technology Letters, 2010, 22, 1485-1487.	2.5	124