

David J Thomson

List of Publications by Year in descending order

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40
papers

4,144
citations

361413

20
h-index

434195

31
g-index

41
all docs

41
docs citations

41
times ranked

4032
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon optical modulators. Nature Photonics, 2010, 4, 518-526.	31.4	1,942
2	50-Gb/s Silicon Optical Modulator. IEEE Photonics Technology Letters, 2012, 24, 234-236.	2.5	371
3	High contrast 40Gbit/s optical modulation in silicon. Optics Express, 2011, 19, 11507.	3.4	310
4	High-speed detection at two micrometres with monolithic silicon photodiodes. Nature Photonics, 2015, 9, 393-396.	31.4	192
5	Recent breakthroughs in carrier depletion based silicon optical modulators. Nanophotonics, 2014, 3, 229-245.	6.0	178
6	40 Gb/s silicon photonics modulator for TE and TM polarisations. Optics Express, 2011, 19, 11804.	3.4	157
7	The Emergence of Silicon Photonics as a Flexible Technology Platform. Proceedings of the IEEE, 2018, 106, 2101-2116.	21.3	156
8	Nonvolatile programmable silicon photonics using an ultralow-loss Sb ₂ Se ₃ phase change material. Science Advances, 2021, 7, .	10.3	127
9	Low Loss MMI Couplers for High Performance MZI Modulators. IEEE Photonics Technology Letters, 2010, 22, 1485-1487.	2.5	124
10	High speed silicon electro-optical modulators enhanced via slow light propagation. Optics Express, 2011, 19, 20876.	3.4	69
11	Ion 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
12	All-optical spatial light modulator for reconfigurable silicon photonic circuits. Optica, 2016, 3, 396.	9.3	47
13	Electronic-photon convergence for silicon photonics transmitters beyond 100 Gbps on off keying. Optica, 2020, 7, 1514.	9.3	47
14	All-silicon carrier accumulation modulator based on a lateral metal-oxide-semiconductor capacitor. Photonics Research, 2018, 6, 373.	7.0	44
15	Deep Learning Enabled Design of Complex Transmission Matrices for Universal Optical Components. ACS Photonics, 2021, 8, 283-295.	6.6	44
16	Dual-etch apodised grating couplers for efficient fibre-chip coupling near 1310 nm wavelength. Optics Express, 2017, 25, 17864.	3.4	41
17	Hybrid Photon-Plasmon Coupling and Ultrafast Control of Nanoantennas on a Silicon Photonic Chip. Nano Letters, 2018, 18, 610-617.	9.1	30
18	Planar surface implanted diffractive grating couplers in SOI. Optics Express, 2014, 22, 1077.	3.4	26

#	ARTICLE	IF	CITATIONS
19	Locally Erasable Couplers for Optical Device Testing in Silicon on Insulator. Journal of Lightwave Technology, 2014, 32, 2248-2253.	4.6	26
20	CORNERSTONE™s Silicon Photonics Rapid Prototyping Platforms: Current Status and Future Outlook. Applied Sciences (Switzerland), 2020, 10, 8201.	2.5	23
21	Real-time monitoring and gradient feedback enable accurate trimming of ion-implanted silicon photonic devices. Optics Express, 2018, 26, 24953.	3.4	21
22	Ultra-sharp asymmetric Fano-like resonance spectrum on Si photonic platform. Optics Express, 2019, 27, 7365.	3.4	18
23	High Bandwidth Capacitance Efficient Silicon MOS Modulator. Journal of Lightwave Technology, 2021, 39, 201-207.	4.6	17
24	Two-dimensional apodized grating coupler for polarization-independent and surface-normal optical coupling. Journal of Lightwave Technology, 2020, , 1-1.	4.6	15
25	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
26	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
27	Ion Implantation of Germanium Into Silicon for Critical Coupling Control of Racetrack Resonators. Journal of Lightwave Technology, 2020, 38, 1865-1873.	4.6	9
28	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
29	Silicon erasable waveguides and directional couplers by germanium ion implantation for configurable photonic circuits. Optics Express, 2020, 28, 17630.	3.4	8
30	A Si Optical Modulator Based on Fano-Like Resonance. IEEE Photonics Technology Letters, 2021, 33, 1209-1212.	2.5	6
31	Silicon waveguides for the 3-4 μm wavelength range. , 2011, , .		5
32	Towards High Speed and Low Power Silicon Photonic Data Links. , 2018, , .		2
33	Germanium ion implantation for trimming the coupling efficiency of silicon racetrack resonators. , 2019, , .		2
34	Ge Ion Implanted Photonic Devices and Annealing for Emerging Applications. Micromachines, 2022, 13, 291.	2.9	2
35	Germanium implanted photonic devices for post-fabrication trimming and programmable circuits. , 2018, , .		1
36	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

#	ARTICLE	IF	CITATIONS
37	Buried 3D silicon photonics spot-size convertors. , 2021, , .		1
38	High Speed Silicon Capacitor Modulators for TM Polarisation. , 2019, , .		0
39	Novel Si Photonic Waveguides and Applications to Optical Modulators. , 2019, , .		0
40	Scaling effect and optimization of SOI dual-waveguide optical trapping. , 2020, , .		0