Ran Ding

List of Publications by Year
in descending order

66 papers	1,999 citations	304743 22 h-index	395702 33 g-index
66 all docs	66 docs citations	66 times ranked	1933 citing authors

#	Article	IF	Citations
1	Reimagining the e_g¹ Electronic State in Oxygen Evolution Catalysis: Oxidationâ€Stateâ€Modulated Superlattices as a New Type of Heterostructure for Maximizing Catalysis. Advanced Energy Materials, 2021, 11, 2101636.	19.5	6
2	Activation of Câ€“H, Nâ€“H, and Oâ€“H Bonds via Proton-Coupled Electron Transfer to a Mn(III) Complex of Redox-Noninnocent Octaazacyclotetradecadiene, a Catenated-Nitrogen Macrocyclic Ligand. Journal of the American Chemical Society, 2019, 141, 5699-5709.	13.7	11
3	A Low-Power Hybrid-Integrated 40-Gb/s Optical Receiver in Silicon. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 589-595.	4.6	15
4	Compact and low loss 90Â° optical hybrid on a silicon-on-insulator platform. Optics Express, 2017, 25, 28957.	3.4	42
5	Complexity Scaling in Silicon Photonics. , 2017, , .		6
6	Programmable Wavelength Locking and Routing in a Silicon-Photonic Interconnection Network Implementation. , 2015, , .		9
7	Optimized silicon photonic components for high-performance interconnect systems. , 2015, , .		0
8	A low-power 40 Gb/s optical receiver in silicon. , 2015, , .		6
9	High-speed BPSK modulation using a silicon modulator. , 2015, , .		0
10	Polarization-insensitive 40Gb/s 4-WDM channels receiver on SOI platform. , 2015, , .		1
11	40-Gb/s BPSK modulation using a silicon modulator. , 2015, , .		0
12	Symmetrical polarization splitter/rotator design and application in a polarization insensitive WDM receiver. Optics Express, 2015, 23, 16052.	3.4	23
13	A 25 Gb/s, 4.4 V-Swing, AC-Coupled Ring Modulator-Based WDM Transmitter with Wavelength Stabilization in 65 nm CMOS. IEEE Journal of Solid-State Circuits, 2015, 50, 3145-3159.	5.4	80
14	Single Microring-Based <inline-formula> <tex-math notation="LaTeX">$2imes 2$ </tex-math></inline-formula> Silicon Photonic Crossbar Switches. IEEE Photonics Technology Letters, 2015, 27, 1981-1984.	2.5	31
15	22.6 A 25Gb/s 4.4V-swing AC-coupled Si-photonic microring transmitter with 2-tap asymmetric FFE and dynamic thermal tuning in 65nm CMOS. , 2015, , .		10
16	High-Speed BPSK Modulation in Silicon. IEEE Photonics Technology Letters, 2015, 27, 1329-1332.	2.5	7
17	Scalability of silicon photonic enabled optically connected memory. , 2014, , .		3
18	A 40-GHz bandwidth transimpedance amplifier with adjustable gain-peaking in 65-nm CMOS. , 2014, , .		7

#	Article	IF	Citations
19	Reuse Distance Based Circuit Replacement in Silicon Photonic Interconnection Networks for HPC. , 2014, , .		8
20	A Compact Low-Power 320-Gb/s WDM Transmitter Based on Silicon Microrings. IEEE Photonics Journal, 2014, 6, 1-8.	2.0	32
21	High-speed silicon modulators with slow-wave electrodes. , 2014, , .		1
22	Ultra-compact 320 Gb/s and 160 Gb/s WDM transmitters based on silicon microrings. , 2014, , .		23
23	Progress in silicon platforms for integrated optics. Nanophotonics, 2014, 3, 205-214.	6.0	30
24	Silicon Mod-MUX-Ring transmitter with 4 channels at 40 Gb/s. Optics Express, 2014, 22, 16431.	3.4	17
25	Silicon microring modulator for 40 Gb/s NRZ-OOK metro networks in O-band. Optics Express, 2014, 22, 28284.	3.4	22
26	Experimental demonstration of broadband Lorentz non-reciprocity in an integrable photonic architecture based on Mach-Zehnder modulators. Optics Express, 2014, 22, 17409.	3.4	22
27	Silicon Parallel Single Mode 48 Ã— 50 Gb/s Modulator and Photodetector Array. Journal of Lightwave Technology, 2014, 32, 4370-4377.	4.6	10
28	A Reconfigurable and Redundant Optically-Connected Memory System using a Silicon Photonic Switch. , 2014, , .		11
29	50 Gb/s Silicon Traveling Wave Mach-Zehnder Modulator near 1300 nm. , 2014, , .		2
30	Design and characterization of a 30-GHz bandwidth low-power silicon traveling-wave modulator. Optics Communications, 2014, 321, 124-133.	2.1	69
31	A 10-Gb/s Silicon Microring Resonator-Based BPSK Link. IEEE Photonics Technology Letters, 2014, 26, 1805-1808.	2.5	13
32	High-Speed Silicon Modulator With Slow-Wave Electrodes and Fully Independent Differential Drive. Journal of Lightwave Technology, 2014, 32, 2240-2247.	4.6	63
33	100-Gb/s NRZ optical transceiver analog front-end in 130-nm SiGe BiCMOS. , 2014, , .		3
34	40-Gb/s silicon modulators for mid-reach applications at 1550 nm. , 2014, , .		0
35	Silicon microring based modulator and filter for high speed transmitters at 1310 nm. , 2014, , .		2
36	Powerâ€efficient lowâ€noise 86ÂGHz broadband amplifier in 130Ânm SiGe BiCMOS. Electronics Letters, 2014, 50, 741-743.	1.0	8

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37	A 30 GHz silicon photonic platform. , 2013, , .		12
38	A 30 GHz silicon photonic platform: Multi-project wafer shuttles for next-generation optical systems. , 2013, , .		1
39	30GHz silicon platform for photonics system. , 2013, , .		1
40	Silicon Photonics: The Next Fabless Semiconductor Industry. IEEE Solid-State Circuits Magazine, 2013, 5, 48-58.	0.4	105
41	A 92 mW, 20 dB gain, broadband lumped SiGe amplifier with bandwidth exceeding 67 GHz. , 2013, , .		5
42	The Road to Affordable, Large-Scale Silicon Photonics. Optics and Photonics News, 2013, 24, 32.	0.5	80
43	A CMOS-compatible silicon photonic platform for high-speed integrated opto-electronics. Proceedings of SPIE, 2013, , .	0.8	14
44	Ultralow loss single layer submicron silicon waveguide crossing for SOI optical interconnect. Optics Express, 2013, 21, 29374.	3.4	190
45	Low power 50 Gb/s silicon traveling wave Mach-Zehnder modulator near 1300 nm. Optics Express, 2013, 21, 30350.	3.4	246
46	Systems and devices in a 30 GHz silicon-on-insulator platform. , 2013, , .		0
47	Broadband on-chip optical non-reciprocity using phase modulators. Optics Express, 2013, 21, 14500.	3.4	34
48	A 30 GHz silicon photonic platform. , 2013, , .		12
49	A Silicon Platform for High-Speed Photonics Systems. , 2012, , .		12
50	Bandwidth enhancement of waveguide-coupled photodetectors with inductive gain peaking. Optics Express, 2012, 20, 7101.	3.4	36
51	Ultralow drive voltage silicon traveling-wave modulator. Optics Express, 2012, 20, 12014.	3.4	204
52	Shared shuttles for integrated silicon optoelectronics. , 2012, , .		3
53	Silicon multi-project wafer platforms for optoelectronic system integration. , 2012, , .		6
54	A 25 Gb/s 400 fJ/bit silicon traveling-wave modulator. , 2012, , .		0

#	Article	IF	Citations
55	Towards a low-loss, ultra-low drive voltage silicon-polymer hybrid electro-optic modulator. , 2011, , .		1
56	Asymmetric strip-loaded slot waveguides and its applications in silicon-polymer hybrid electro-optic modulators. , 2011, , .		1
57	Sub-Volt Silicon-Organic Electro-optic Modulator With 500 MHz Bandwidth. Journal of Lightwave Technology, 2011, 29, 1112-1117.	4.6	42
58	Silicon-polymer hybrid slot waveguide â€¨ring-resonator modulator. Optics Express, 2011, 19, 3952.	3.4	114
59	Photolithographically fabricated low-loss asymmetric silicon slot waveguides. Optics Express, 2011, 19, 10950.	3.4	41
60	A high-speed silicon photonics platform. , 2011, , .		4
61	Photolithographic fabrication of slot waveguides. Proceedings of SPIE, 2011, , .	0.8	3
62	Low-loss asymmetric strip-loaded slot waveguides in silicon-on-insulator. Applied Physics Letters, 2011, 98, .	3.3	40
63	Design of high-speed ultra-low V<inf>π</inf> slot waveguide modulators. , 2010, , .		0
64	A low V<inf>π</inf>L modulator with GHz bandwidth based on an electro-optic polymer-clad silicon slot waveguide. , 2010, , .		1
65	Demonstration of a low V_Ï€L modulator with GHz bandwidth based on electro-optic â€¨polymer-clad silicon slot waveguides. Optics Express, 2010, 18, 15618.	3.4	134
66	Low-loss strip-loaded slot waveguides in â€¨Silicon-on-Insulator. Optics Express, 2010, 18, 25061.	3.4	64