

Wesley D Sacher

List of Publications by Year in descending order

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65
papers

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331670

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67
all docs

67
docs citations

67
times ranked

2073
citing authors

#	ARTICLE	IF	CITATIONS
1	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platforms and Devices. Journal of Lightwave Technology, 2015, 33, 901-910.	4.6	190
2	Polarization rotator-splitters in standard active silicon photonics platforms. Optics Express, 2014, 22, 3777.	3.4	186
3	Wide bandwidth and high coupling efficiency Si ₃ N ₄ -on-SOI dual-level grating coupler. Optics Express, 2014, 22, 10938.	3.4	160
4	Dynamics of microring resonator modulators. Optics Express, 2008, 16, 15741.	3.4	148
5	Coupling modulation of microrings at rates beyond the linewidth limit. Optics Express, 2013, 21, 9722.	3.4	118
6	Silicon photonic transmitter for polarization-encoded quantum key distribution. Optica, 2016, 3, 1274.	9.3	110
7	Monolithically Integrated Multilayer Silicon Nitride-on-Silicon Waveguide Platforms for 3-D Photonic Circuits and Devices. Proceedings of the IEEE, 2018, 106, 2232-2245.	21.3	87
8	Polarization rotator-splitters and controllers in a Si ₃ N ₄ -on-SOI integrated photonics platform. Optics Express, 2014, 22, 11167.	3.4	80
9	Automatic Resonance Alignment of High-Order Microring Filters. IEEE Journal of Quantum Electronics, 2015, 51, 1-11.	1.9	73
10	U-shaped PN junctions for efficient silicon Mach-Zehnder and microring modulators in the O-band. Optics Express, 2017, 25, 8425.	3.4	71
11	Tri-layer silicon nitride-on-silicon photonic platform for ultra-low-loss crossings and interlayer transitions. Optics Express, 2017, 25, 30862.	3.4	71
12	Visible-light silicon nitride waveguide devices and implantable neurophotonic probes on thinned 200 mm silicon wafers. Optics Express, 2019, 27, 37400.	3.4	69
13	Patterned photostimulation via visible-wavelength photonic probes for deep brain optogenetics. Neurophotonics, 2016, 4, 1.	3.3	66
14	Characteristics of Microring Resonators With Waveguide-Resonator Coupling Modulation. Journal of Lightwave Technology, 2009, 27, 3800-3811.	4.6	60
15	Hydrofluoric acid flow etching of low-loss subwavelength-diameter biconical fiber tapers. Optics Express, 2010, 18, 22593.	3.4	53
16	Integrated Neurophotonics: Toward Dense Volumetric Interrogation of Brain Circuit Activity at Depth and in Real Time. Neuron, 2020, 108, 66-92.	8.1	40
17	Dimensional variation tolerant silicon-on-insulator directional couplers. Optics Express, 2014, 22, 3145.	3.4	37
18	Multi-layer silicon nitride-on-silicon polarization-independent grating couplers. Optics Express, 2018, 26, 30623.	3.4	29

#	ARTICLE	IF	CITATIONS
19	Implantable photonic neural probes for light-sheet fluorescence brain imaging. Neurophotonics, 2021, 8, 025003.	3.3	27
20	Power-efficient silicon nitride thermo-optic phase shifters for visible light. Optics Express, 2022, 30, 7225.	3.4	27
21	Low-loss broadband bi-layer edge couplers for visible light. Optics Express, 2021, 29, 34565.	3.4	24
22	Analytical Model and Fringing-Field Parasitics of Carrier-Depletion Silicon-on-Insulator Optical Modulation Diodes. IEEE Photonics Journal, 2013, 5, 2200211-2200211.	2.0	23
23	Microring quadrature modulators. Optics Letters, 2009, 34, 3878.	3.3	22
24	Optical phased array neural probes for beam-steering in brain tissue. Optics Letters, 2022, 47, 1073.	3.3	20
25	Adiabatically widened silicon microrings for improved variation tolerance. Optics Express, 2014, 22, 9659.	3.4	14
26	Binary phase-shift keying by coupling modulation of microrings. Optics Express, 2014, 22, 20252.	3.4	13
27	High-speed laser modulation beyond the relaxation resonance frequency limit. Optics Express, 2010, 18, 7047.	3.4	12
28	Unidirectional hybrid silicon ring laser with an intracavity S-bend. Optics Express, 2015, 23, 26369.	3.4	12
29	Full-field swept-source optical coherence tomography and neural tissue classification for deep brain imaging. Journal of Biophotonics, 2020, 13, e201960083.	2.3	12
30	Efficient Single-Drive Push-Pull Silicon Mach-Zehnder Modulators with U-Shaped PN Junctions for the O-Band. , 2017, , .		11
31	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platform for 3D Photonic Circuits. , 2016, , .		10
32	28 Gb/s Silicon Microring Modulation Beyond the Linewidth Limit by Coupling Modulation. , 2012, , .		8
33	Silicon-on-Insulator Polarization Splitter-Rotator Based on TMO-TE1 Mode Conversion in a Bi-level Taper. , 2013, , .		7
34	Distributed backscattering in production O-band Si nanophotonic waveguides. Optics Express, 2017, 25, 23477.	3.4	7
35	Multicore fibers with 10 and 16 single-mode cores for the visible spectrum. Optics Letters, 2022, 47, 26.	3.3	7
36	Integrated Photonic Devices and Circuits in Multilayer Silicon Nitride-on-Silicon Platforms. , 2015, , .		6

#	ARTICLE	IF	CITATIONS
37	Multilayer silicon nitride-on-silicon photonic platforms for three-dimensional integrated photonic devices and circuits. , 2017, , .		4
38	Si3N4-on-SOI Polarization Rotator-Splitter Based on TM0-TE1 Mode Conversion. , 2014, , .		4
39	Beam-Steering Nanophotonic Phased-Array Neural Probes. , 2019, , .		4
40	Automated Calibration of High-Order Microring Filters. , 2015, , .		3
41	Tunable single-mode coupled-cavity laser in a standard InP photonics platform. Optics Letters, 2015, 40, 4364.	3.3	3
42	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		3
43	An O-band Polarization Splitter-Rotator in a CMOS-Integrated Silicon Photonics Platform. , 2016, , .		3
44	Multivariable Phase Tuning Control and its Application to Wavelength Tracking in High-Order Multi-Ring Filters. , 2017, , .		3
45	Improving the dimensional tolerance of microrings with adiabatically widened bends. , 2013, , .		2
46	Silicon Nitride Waveguide-Integrated Silicon Photodiodes for Blue Light. , 2021, , .		2
47	Sidelobe-Free Beam-Steering using Optical Phased Arrays for Neural Probes. , 2021, , .		2
48	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		2
49	Designing High-Speed, Low-Chirp, Low-Distortion Microring Modulators. , 2009, , .		1
50	Adiabatically widened silicon microring resonators with improved tolerance to wafer-scale variations. , 2014, , .		1
51	Breaking the Conventional Limitations of Microrings. , 2014, , .		1
52	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platforms. , 2015, , .		1
53	Visible Spectrum Multicore Fibers with 10 and 16 Cores. , 2021, , .		1
54	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		1

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55	Coupling-modulated microrings for DPSK modulation. , 2013, , .		1
56	Distributed backscattering due to stochastic defects in production O-band Si photonic waveguides. , 2016, , .		1
57	Nanophotonic Neural Probes for in vivo Light Sheet Imaging. , 2019, , .		1
58	Capacitance of carrier depletion silicon-on-insulator optical modulation diodes. , 2012, , .		0
59	Dynamic models of microring resonators. , 2013, , .		0
60	Redesigning active and passive microring resonators. , 2013, , .		0
61	Ultra-Efficient and Broadband Dual-Level Si ₃ N ₄ -on-SOI Grating Coupler. , 2014, , .		0
62	Integrated photonic devices and circuits in hybrid silicon platforms. , 2014, , .		0
63	Hybrid Silicon Ring Laser with Unidirectional Emission. , 2015, , .		0
64	Low-loss Bi-layer Edge Couplers for Blue Light. , 2021, , .		0
65	Silicon ridge waveguide directional couplers with improved tolerance to wafer-scale variations. , 2014, , .		0