

Wesley D Sacher

List of Publications by Year in descending order

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65
papers

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times ranked

2073
citing authors

#	ARTICLE	IF	CITATIONS
1	Multicore fibers with 10 and 16 single-mode cores for the visible spectrum. Optics Letters, 2022, 47, 26.	3.3	7
2	Optical phased array neural probes for beam-steering in brain tissue. Optics Letters, 2022, 47, 1073.	3.3	20
3	Power-efficient silicon nitride thermo-optic phase shifters for visible light. Optics Express, 2022, 30, 7225.	3.4	27
4	Visible Spectrum Multicore Fibers with 10 and 16 Cores. , 2021, , .		1
5	Silicon Nitride Waveguide-Integrated Silicon Photodiodes for Blue Light. , 2021, , .		2
6	Low-loss Bi-layer Edge Couplers for Blue Light. , 2021, , .		0
7	Implantable photonic neural probes for light-sheet fluorescence brain imaging. Neurophotonics, 2021, 8, 025003.	3.3	27
8	Low-loss broadband bi-layer edge couplers for visible light. Optics Express, 2021, 29, 34565.	3.4	24
9	Sidelobe-Free Beam-Steering using Optical Phased Arrays for Neural Probes. , 2021, , .		2
10	Full-field swept-source optical coherence tomography and neural tissue classification for deep brain imaging. Journal of Biophotonics, 2020, 13, e201960083.	2.3	12
11	Integrated Neurophotonics: Toward Dense Volumetric Interrogation of Brain Circuit Activity"at Depth and in Real Time. Neuron, 2020, 108, 66-92.	8.1	40
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	Nanophotonic Neural Probes for in vivo Light Sheet Imaging. , 2019, , .		1
14	Beam-Steering Nanophotonic Phased-Array Neural Probes. , 2019, , .		4
15	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
16	Multi-layer silicon nitride-on-silicon polarization-independent grating couplers. Optics Express, 2018, 26, 30623.	3.4	29
17	Multilayer silicon nitride-on-silicon photonic platforms for three-dimensional integrated photonic devices and circuits. , 2017, , .		4
18	Efficient Single-Drive Push-Pull Silicon Mach-Zehnder Modulators with U-Shaped PN Junctions for the O-Band. , 2017, , .		11

#	ARTICLE	IF	CITATIONS
19	U-shaped PN junctions for efficient silicon Mach-Zehnder and microring modulators in the O-band. Optics Express, 2017, 25, 8425.	3.4	71
20	Tri-layer silicon nitride-on-silicon photonic platform for ultra-low-loss crossings and interlayer transitions. Optics Express, 2017, 25, 30862.	3.4	71
21	Distributed backscattering in production O-band Si nanophotonic waveguides. Optics Express, 2017, 25, 23477.	3.4	7
22	Multivariable Phase Tuning Control and its Application to Wavelength Tracking in High-Order Multi-Ring Filters. , 2017, , .		3
23	Patterned photostimulation via visible-wavelength photonic probes for deep brain optogenetics. Neurophotonics, 2016, 4, 1.	3.3	66
24	Silicon photonic transmitter for polarization-encoded quantum key distribution. Optica, 2016, 3, 1274.	9.3	110
25	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platform for 3D Photonic Circuits. , 2016, , .		10
26	An O-band Polarization Splitter-Rotator in a CMOS-Integrated Silicon Photonics Platform. , 2016, , .		3
27	Distributed backscattering due to stochastic defects in production O-band Si photonic waveguides. , 2016, , .		1
28	Integrated Photonic Devices and Circuits in Multilayer Silicon Nitride-on-Silicon Platforms. , 2015, , .		6
29	Automated Calibration of High-Order Microring Filters. , 2015, , .		3
30	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platforms. , 2015, , .		1
31	Unidirectional hybrid silicon ring laser with an intracavity S-bend. Optics Express, 2015, 23, 26369.	3.4	12
32	Multilayer Silicon Nitride-on-Silicon Integrated Photonic Platforms and Devices. Journal of Lightwave Technology, 2015, 33, 901-910.	4.6	190
33	Automatic Resonance Alignment of High-Order Microring Filters. IEEE Journal of Quantum Electronics, 2015, 51, 1-11.	1.9	73
34	Hybrid Silicon Ring Laser with Unidirectional Emission. , 2015, , .		0
35	Tunable single-mode coupled-cavity laser in a standard InP photonics platform. Optics Letters, 2015, 40, 4364.	3.3	3
36	Ultra-Efficient and Broadband Dual-Level Si ₃ N ₄ -on-SOI Grating Coupler. , 2014, , .		0

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37	Dimensional variation tolerant silicon-on-insulator directional couplers. Optics Express, 2014, 22, 3145.	3.4	37
38	Adiabatically widened silicon microrings for improved variation tolerance. Optics Express, 2014, 22, 9659.	3.4	14
39	Wide bandwidth and high coupling efficiency Si ₃ N ₄ -on-SOI dual-level grating coupler. Optics Express, 2014, 22, 10938.	3.4	160
40	Polarization rotator-splitters and controllers in a Si ₃ N ₄ -on-SOI integrated photonics platform. Optics Express, 2014, 22, 11167.	3.4	80
41	Binary phase-shift keying by coupling modulation of microrings. Optics Express, 2014, 22, 20252.	3.4	13
42	Polarization rotator-splitters in standard active silicon photonics platforms. Optics Express, 2014, 22, 3777.	3.4	186
43	Integrated photonic devices and circuits in hybrid silicon platforms. , 2014, , .		0
44	Adiabatically widened silicon microring resonators with improved tolerance to wafer-scale variations. , 2014, , .		1
45	Breaking the Conventional Limitations of Microrings. , 2014, , .		1
46	Si ₃ N ₄ -on-SOI Polarization Rotator-Splitter Based on TM ₀ -TE ₁ Mode Conversion. , 2014, , .		4
47	Silicon ridge waveguide directional couplers with improved tolerance to wafer-scale variations. , 2014, , .		0
48	Dynamic models of microring resonators. , 2013, , .		0
49	Improving the dimensional tolerance of microrings with adiabatically widened bends. , 2013, , .		2
50	Coupling modulation of microrings at rates beyond the linewidth limit. Optics Express, 2013, 21, 9722.	3.4	118
51	Redesigning active and passive microring resonators. , 2013, , .		0
52	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
53	Silicon-on-Insulator Polarization Splitter-Rotator Based on TM ₀ -TE ₁ Mode Conversion in a Bi-level Taper. , 2013, , .		7
54	Coupling-modulated microrings for DPSK modulation. , 2013, , .		1

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55	28 Gb/s Silicon Microring Modulation Beyond the Linewidth Limit by Coupling Modulation. , 2012, , .		8
56	Capacitance of carrier depletion silicon-on-insulator optical modulation diodes. , 2012, , .		0
57	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		1
58	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		2
59	Controlled Coupling in Silicon Microrings for High-Speed, High Extinction Ratio, and Low-Chirp Modulation. , 2011, , .		3
60	High-speed laser modulation beyond the relaxation resonance frequency limit. Optics Express, 2010, 18, 7047.	3.4	12
61	Hydrofluoric acid flow etching of low-loss subwavelength-diameter biconical fiber tapers. Optics Express, 2010, 18, 22593.	3.4	53
62	Designing High-Speed, Low-Chirp, Low-Distortion Microring Modulators. , 2009, , .		1
63	Microring quadrature modulators. Optics Letters, 2009, 34, 3878.	3.3	22
64	Characteristics of Microring Resonators With Waveguide-Resonator Coupling Modulation. Journal of Lightwave Technology, 2009, 27, 3800-3811.	4.6	60
65	Dynamics of microring resonator modulators. Optics Express, 2008, 16, 15741.	3.4	148