

Florian Merget

List of Publications by Year in descending order

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71
papers

1,329
citations

430874

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72
docs citations

72
times ranked

1502
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon Nitride External Cavity Laser With Alignment Tolerant Multi-Mode RSOA-to-PIC Interface. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	2.9	6
2	Flip-chip-integrated silicon nitride ECL at 640nm with relaxed alignment tolerances. , 2022, , .		0
3	Silicon nitride C-band grating couplers with reduced waveguide back-reflection. , 2022, , .		2
4	High-efficient spin qubit to photon interface assisted by a photonic crystal cavity. , 2022, , .		0
5	Silicon Photonics Integrated Circuits for Soliton based Long Haul Optical Communication. Journal of Lightwave Technology, 2022, , 1-1.	4.6	10
6	Sub-wavelength tunneling barrier in rib waveguide microring modulators with vanishing bending losses. Optics Letters, 2022, 47, 2626.	3.3	4
7	Laser Phase Noise in Ring Resonator Assisted Direct Detection Data Transmission. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-12.	2.9	3
8	Silicon nitride PIC-based multi-color laser engines for life science applications. Optics Express, 2021, 29, 8635.	3.4	12
9	Optically Enabled ADCs and Application to Optical Communications. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 209-221.	2.7	8
10	Experimental Demonstration of a Silicon-Photonics WDM NFT Soliton Transmitter. , 2021, , .		3
11	Glass Molded Optical Interposers for Wafer Scale Datacom Component Packaging. , 2021, , .		0
12	Silicon Photonics Integrated Circuits for Nonlinear Fourier Transform Based Transmission. , 2021, , .		2
13	Optimized hourglass-shaped resonators for efficient thermal tuning of CROW filters with reduced crosstalk. , 2021, , .		2
14	External Cavity Laser with Alignment Tolerant III-V Gain Chip to PIC Edge Coupler in Silicon Nitride. , 2021, , .		0
15	Reconfigurable Frequency-Selective Resonance Splitting in Chalcogenide Microring Resonators. ACS Photonics, 2020, 7, 499-511.	6.6	19
16	High-efficiency gate-defined quantum dot to single mode fiber interface assisted by a photonic crystal cavity. AIP Advances, 2020, 10, 115016.	1.3	2
17	Hybrid multi-chip assembly of optical communication engines by in situ 3D nano-lithography. Light: Science and Applications, 2020, 9, 71.	16.6	77
18	Polarization-diverse silicon photonics WDM receiver with a reduced number of OADMs and balanced group delays. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Power-efficient lumped-element meandered silicon Mach-Zehnder modulators. , 2020, , .		6
20	Fabrication tolerant high-speed SiP ring modulators and optical add-drop multiplexers for WDM applications. , 2020, , .		3
21	Semiconductor Laser Mode Locking Stabilization With Optical Feedback From a Silicon PIC. Journal of Lightwave Technology, 2019, 37, 3483-3494.	4.6	6
22	Miniaturized PIC multi-color laser engines for the life sciences. , 2019, , .		2
23	Broadband couplers for hybrid silicon-chalcogenide glass photonic integrated circuits. Optics Express, 2019, 27, 13781.	3.4	14
24	Theoretical investigation of a Si RRM assisted SSB-OFDM modulator operated with a semiconductor MLL. , 2019, , .		1
25	Silicon Photonics External Cavity Laser with Misalignment Tolerant Multi-mode RSOA to PIC Interface. , 2019, , .		3
26	Broadband, temperature tolerant and passively biased resonantly enhanced Mach-Zehnder modulators. , 2018, , .		2
27	Reconfigurable Microring Resonator-Based Optical Transmitter for Elastic Optical Networks. , 2018, , .		0
28	Wideband multi-stage CROW filters with relaxed fabrication tolerances. Optics Express, 2018, 26, 4723.	3.4	17
29	8-channel WDM silicon photonics transceiver with SOA and semiconductor mode-locked laser. Optics Express, 2018, 26, 25446.	3.4	26
30	High-Q inverted silica microtoroid resonators monolithically integrated into a silicon photonics platform. Optics Express, 2018, 26, 27418.	3.4	7
31	Passively biased resonantly enhanced silicon photonics modulator with high optical bandwidth. Proceedings of SPIE, 2017, , .	0.8	4
32	Silicon Photonics Transmitter with SOA and Semiconductor Mode-Locked Laser. Scientific Reports, 2017, 7, 13857.	3.3	17
33	Calibrated Link Budget of a Silicon Photonics WDM Transceiver with SOA and Semiconductor Mode-Locked Laser. Scientific Reports, 2017, 7, 12004.	3.3	7
34	Hybrid silicon photonics flip-chip laser integration with vertical self-alignment. , 2017, , .		21
35	Design of a high-speed germanium-tin absorption modulator at mid-infrared wavelengths. , 2017, , .		6
36	Co-integration of a temperature tolerant low impedance resonantly enhanced silicon photonics modulator. , 2017, , .		2

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37	High-speed resonantly enhanced silicon photonics modulator with a large operating temperature range. Optics Letters, 2017, 42, 81.	3.3	28
38	Silicon nitride photonic integrated circuits for multi-color optical engines with application in flow cytometry. , 2017, , .		4
39	8-channel 448 Gbit/s Silicon Photonic Transmitter Enabled by Photonic Wire Bonding. , 2017, , .		11
40	Packaged MZIs passively balanced by means of multimode grating couplers. , 2016, , .		2
41	High frequency electro-optic measurement of strained silicon racetrack resonators. , 2016, , .		0
42	Passively biased resonantly enhanced silicon photonics carrier depletion modulator with high optical bandwidth. , 2016, , .		0
43	Stabilization and Frequency Control of a DFB Laser With a Tunable Optical Reflector Integrated in a Silicon Photonics PIC. Journal of Lightwave Technology, 2016, 34, 5467-5473.	4.6	3
44	Time resolved electro-optic measurements in strained silicon racetrack resonators. , 2016, , .		0
45	WDM transceiver with semiconductor mode locked laser. , 2016, , .		0
46	Silicon photonics WDM transmitter with single section semiconductor mode-locked laser. Advanced Optical Technologies, 2015, 4, 119-145.	1.7	31
47	High speed WDM interconnect using silicon photonics ring modulators and mode-locked laser. , 2015, , .		3
48	High-frequency electro-optic measurement of strained silicon racetrack resonators. Optics Letters, 2015, 40, 5287.	3.3	40
49	Silicon photonics WDM interconnects based on resonant ring modulators and semiconductor mode locked laser. , 2015, , .		1
50	On the measurement of the Pockels effect in strained silicon. Optics Letters, 2015, 40, 1877.	3.3	49
51	Low V _π Silicon photonics modulators with highly linear epitaxially grown phase shifters. Optics Express, 2015, 23, 23526.	3.4	67
52	Epitaxially grown vertical junction phase shifters for improved modulation efficiency in silicon depletion-type modulators. , 2015, , .		1
53	Alignment Tolerant Couplers for Silicon Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 765-778.	2.9	17
54	Edge Couplers With Relaxed Alignment Tolerance for Pick-and-Place Hybrid Integration of III-V Lasers With SOI Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 369-379.	2.9	41

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55	Misalignment tolerant couplers for hybrid integration of semiconductor lasers with silicon photonics parallel transmitters. , 2014, , .		3
56	Advances in silicon photonics segmented electrode Mach-Zehnder modulators and peaking enhanced resonant devices. , 2014, , .		12
57	Improved Light Outcoupling from OLED by Non-Wave-Guiding Anode Designs. Materials Research Society Symposia Proceedings, 2014, 1627, 1.	0.1	1
58	Peaking in ring modulators and application to ISI reduction. , 2014, , .		0
59	Optical Peaking Enhancement in High-Speed Ring Modulators. Scientific Reports, 2014, 4, 6310.	3.3	88
60	Silicon nitride back-end optics for biosensor applications. Proceedings of SPIE, 2013, , .	0.8	0
61	Visible wavelength silicon nitride focusing grating coupler with AlCu/TiN reflector. Optics Letters, 2013, 38, 2521.	3.3	39
62	Silicon nitride CMOS-compatible platform for integrated photonics applications at visible wavelengths. Optics Express, 2013, 21, 14036.	3.4	167
63	Silicon photonics plasma-modulators with advanced transmission line design. Optics Express, 2013, 21, 19593.	3.4	34
64	Novel transmission lines for Si MZI modulators. , 2013, , .		0
65	Pockels effect based fully integrated, strained silicon electro-optic modulator. Optics Express, 2011, 19, 17212.	3.4	160
66	Influence of Si and N additions on structure and phase stability of Ge ₂ Sb ₂ Te ₅ thin films. Journal of Physics Condensed Matter, 2009, 21, 435501.	1.8	16
67	Three-dimensional simulation model of switching dynamics in phase change random access memory cells. Journal of Applied Physics, 2007, 101, 064512.	2.5	82
68	Simulation-based comparison of cell design concepts for phase change random access memory. Journal of Nanoscience and Nanotechnology, 2007, 7, 298-305.	0.9	0
69	Lateral phase change random access memory cell design for low power operation. Microsystem Technologies, 2006, 13, 169-172.	2.0	21
70	Electrical percolation characteristics of Ge ₂ Sb ₂ Te ₅ and Sn doped Ge ₂ Sb ₂ Te ₅ thin films during the amorphous to crystalline phase transition. Journal of Applied Physics, 2005, 97, 083538.	2.5	84
71	Concept of floating-dot memory transistors on silicon-on-insulator substrate. Microelectronic Engineering, 2002, 61-62, 497-503.	2.4	27