

Chris G H Roeloffzen

List of Publications by Year in descending order

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72
papers

3,198
citations

279798

23
h-index

289244

40
g-index

72
all docs

72
docs citations

72
times ranked

2146
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-mode-locking in a high-power hybrid silicon nitride integrated laser. Optics Letters, 2022, 47, 198.	3.3	3
2	Lossless 1 Å– 4 Silicon Photonic ROADM Based on a Monolithic Integrated Erbium Doped Waveguide Amplifier on a Si ₃ N ₄ Platform. Journal of Lightwave Technology, 2022, 40, 1718-1725.	4.6	4
3	Intra-Data Centre Flexible PAM Transmission System Using an Integrated InP-Si ₃ N ₄ Dual Laser Module. IEEE Photonics Journal, 2022, 14, 1-6.	2.0	0
4	Ultra-low power stress-based phase actuation in TriPleX photonic circuits. , 2022, , .		3
5	Wavelength & mm-Wave Flexible Converged Optical Fronthaul With a Low Noise Si-Based Integrated Dual Laser Source. Journal of Lightwave Technology, 2022, 40, 3307-3315.	4.6	2
6	A 5G Fiber Wireless 4Gb/s WDM Fronthaul for Flexible 360° Coverage in V-Band massive MIMO Small Cells. Journal of Lightwave Technology, 2021, 39, 1081-1088.	4.6	21
7	28 GBd PAM-8 transmission over a 100 nm range using an InP-Si ₃ N ₄ based integrated dual tunable laser module. Optics Express, 2021, 29, 16563.	3.4	13
8	High spectral purity microwave generation using a dual-frequency hybrid integrated semiconductor-dielectric waveguide laser. OSA Continuum, 2021, 4, 2133.	1.8	4
9	True Time Delay Optical Beamforming Network Based on Hybrid Inp-Silicon Nitride Integration. Journal of Lightwave Technology, 2021, 39, 5845-5854.	4.6	23
10	Reconfigurable Fiber Wireless IFoF Fronthaul With 60 GHz Phased Array Antenna and Silicon Photonic ROADM for 5G mmWave C-RANs. IEEE Journal on Selected Areas in Communications, 2021, 39, 2816-2826.	14.0	19
11	Experimental Demonstration of Dynamic Optical Beamforming for Beyond 5G Spatially Multiplexed Fronthaul Networks. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-16.	2.9	13
12	Widely Tunable RF Signal Generation Using an InP/Si ₃ N ₄ Hybrid Integrated Dual-Wavelength Optical Heterodyne Source. Journal of Lightwave Technology, 2021, 39, 7664-7671.	4.6	12
13	Design and Performance Estimation of a Photonic Integrated Beamforming Receiver for Scan-on-Receive Synthetic Aperture Radar. Journal of Lightwave Technology, 2021, 39, 7588-7599.	4.6	13
14	Programmable Integrated Microwave Photonic Filter using a Modulation Transformer and a Double-Injection Ring Resonator. , 2021, , .		3
15	Flexible Optical and Millimeter-Wave Analog-RoF Transmission with a Silicon-based Integrated Dual Laser Module. , 2021, , .		2
16	Flexible V-band mmWave Analog-RoF Transmission of 5G and WiGig signals using an InP-SiN Integrated Laser Module. , 2021, , .		3
17	Photonic-Based Microwave Signal Generation using and Hybrid Integrated Optical Heterodyne Source. , 2021, , .		0
18	Silicon nitride integrated mode-locked laser with widely tunable line spacing. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
19	Hybrid Integrated Semiconductor Lasers with Silicon Nitride Feedback Circuits. Photonics, 2020, 7, 4.	2.0	63
20	Towards a Scalable 5G Fronthaul: Analog Radio-over-Fiber and Space Division Multiplexing. Journal of Lightwave Technology, 2020, 38, 5412-5422.	4.6	60
21	Hybrid integrated InP-Si ₃ N ₄ diode laser with a 40-Hz intrinsic linewidth. Optics Express, 2020, 28, 21713.	3.4	87
22	High power integrated laser for microwave photonics. , 2020, , .		2
23	Analog IFoF/mmWave 5G Optical Fronthaul Architecture for Hot-Spots Using Multi-channel OFDM-Based WDM Signals. Lecture Notes in Computer Science, 2020, , 504-515.	1.3	0
24	Automatic Delay Tuning of a Novel Ring Resonator-Based Photonic Beamformer for a Transmit Phased Array Antenna. Journal of Lightwave Technology, 2019, 37, 4976-4984.	4.6	6
25	A 5G C-RAN Optical Fronthaul Architecture for Hotspot Areas Using OFDM-Based Analog IFoF Waveforms. Applied Sciences (Switzerland), 2019, 9, 4059.	2.5	24
26	Foundry Developments Toward Silicon Nitride Photonics From Visible to the Mid-Infrared. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-13.	2.9	47
27	High-Selectivity On-Chip Optical Bandpass Filter With Sub-100-MHz Flat-Top and Under-2 Shape Factor. IEEE Photonics Technology Letters, 2019, 31, 455-458.	2.5	18
28	Broadband Continuously Tuneable Delay Microwave Photonic Beamformer for Phased Array Antennas. , 2019, , .		1
29	Broadband Continuously Tuneable Delay Microwave Photonic Beamformer for Phased Array Antennas. , 2019, , .		1
30	Hybrid interconnection of InP and TriPleX photonic integrated circuits for new module functionality. , 2019, , .		5
31	High power, tunable, narrow linewidth dual gain hybrid laser. , 2019, , .		6
32	8Å–8 reconfigurable quantum photonic processor based on silicon nitride waveguides. Optics Express, 2019, 27, 26842.	3.4	70
33	Si ₃ N ₄ Reconfigurable Linear Optical Network for Quantum Information Processing. , 2019, , .		0
34	Low-Loss Si ₃ N ₄ TriPleX Optical Waveguides: Technology and Applications Overview. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-21.	2.9	243
35	Corrections to “Characterization of Hybrid InP-TriPleX Photonic Integrated Tunable Lasers Based on Silicon Nitride (Si ₃ N ₄ /SiO ₂) Microring Resonators for Optical Coherent System” IEEE Photonics Journal, 2018, 10, 1-1.	2.0	3
36	Silicon Nitride in Silicon Photonics. Proceedings of the IEEE, 2018, 106, 2209-2231.	21.3	313

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37	Characterization of Hybrid InP-TriPLeX Photonic Integrated Tunable Lasers Based on Silicon Nitride (Si) Tj ETQq1 1 0.784314 rgBT /Overd IEEE Photonics Journal, 2018, 10, 1-8.	2.0	21
38	Integrated microwave photonics for 5G. , 2018, , .		7
39	Analysis of a Multibeam Optical Beamforming Network Based on Blass Matrix Architecture. Journal of Lightwave Technology, 2018, 36, 3354-3372.	4.6	54
40	Ultra-low-power stress-based phase actuator for microwave photonics. , 2017, , .		2
41	Enhanced coverage though optical beamforming in fiber wireless networks. , 2017, , .		11
42	Optically Integrated InPâ€“Si\$_3\$N\$_4\$ Hybrid Laser. IEEE Photonics Journal, 2016, 8, 1-11.	2.0	51
43	Sub-GHz-resolution C-band Nyquist-filtering interleaver on a high-index-contrast photonic integrated circuit. Optics Express, 2016, 24, 5715.	3.4	33
44	Programmable photonic signal processor chip for radiofrequency applications. Optica, 2015, 2, 854.	9.3	311
45	Fully reconfigurable coupled ring resonator-based bandpass filter for microwave signal processing. , 2014, , .		15
46	Multiwavelength-Integrated Optical Beamformer Based on Wavelength Division Multiplexing for 2-D Phased Array Antennas. Journal of Lightwave Technology, 2014, 32, 3509-3520.	4.6	78
47	CRIT-Alternative Narrow-Passband Waveguide Filter for Microwave Photonic Signal Processors. IEEE Photonics Technology Letters, 2014, 26, 1034-1037.	2.5	14
48	Novel lowâ€“loss waveguide delay lines using Vernier ring resonators for onâ€“chip multiâ€“ microwave photonic signal processors. Laser and Photonics Reviews, 2013, 7, 994-1002.	8.7	33
49	On-chip, CMOS-compatible, hardware-compressive integrated photonic beamformer based on WDM. , 2013, , .		4
50	Ring resonator-based on-chip PM-IM convertor for high-performance microwave photonic links. , 2013, , .		4
51	Integrated microwave photonics. Laser and Photonics Reviews, 2013, 7, 506-538.	8.7	614
52	Silicon nitride microwave photonic circuits. Optics Express, 2013, 21, 22937.	3.4	268
53	Ring resonator-based on-chip modulation transformer for high-performance phase-modulated microwave photonic links. Optics Express, 2013, 21, 25999.	3.4	74
54	Waveguide filter-based on-chip differentiator for microwave photonic signal processing. , 2013, , .		2

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55	Dual-Frequency Distributed Feedback Laser With Optical Frequency Locked Loop for Stable Microwave Signal Generation. IEEE Photonics Technology Letters, 2012, 24, 1431-1433.	2.5	14
56	CMOS-compatible integrated optical delay line for broadband K<inf>u</inf>-band satellite communications. , 2012, , .		2
57	Continuously tunable photonic fractional Hilbert transformer using ring resonators for on-chip microwave photonic signal processing. , 2012, , .		1
58	Integrated microwave photonics for phase modulated systems. , 2012, , .		2
59	Low-loss and programmable integrated photonic beamformer for electronically-steered broadband phased array antennas. , 2011, , .		2
60	Arrays of surface-normal electroabsorption modulators for the generation and signal processing of microwave photonics signals. , 2011, , .		2
61	Separate carrier tuning scheme for integrated optical delay lines in photonic beamformers. , 2011, , .		9
62	On-chip CMOS compatible reconfigurable optical delay line with separate carrier tuning for microwave photonic signal processing. Optics Express, 2011, 19, 21475.	3.4	175
63	Low-loss, high-index-contrast Si ₃ N ₄ /SiO ₂ optical waveguides for optical delay lines in microwave photonics signal processing. Optics Express, 2011, 19, 23162.	3.4	136
64	Photonic integration and components development for a K<inf>u</inf>-band phased array antenna system. , 2011, , .		2
65	Smart Antennas in aerospace applications. , 2010, , .		2
66	A photonic chip based frequency discriminator for a high performance microwave photonic link. Optics Express, 2010, 18, 27359.	3.4	90
67	Performance comparison of two analog photonic links employing a pair of directly modulated lasers and a balanced photodetector. , 2009, , .		0
68	Enhanced Dynamic Range in a Directly Modulated Analog Photonic Link. IEEE Photonics Technology Letters, 2009, 21, 1810-1812.	2.5	6
69	Large-scale integrated optics using TriPLeX waveguide technology: from UV to IR. Proceedings of SPIE, 2009, , .	0.8	30
70	A broadband high dynamic range analog photonic link using push-pull directly-modulated semiconductor lasers. , 2008, , .		7
71	Design and Application of Compact and Highly Tolerant Polarization-Independent Waveguides. Journal of Lightwave Technology, 2007, 25, 1276-1283.	4.6	30
72	Control and Management Scheme in a DWDM EPON. , 2006, , .		4