Eslam El-Fiky

List of Publications by Year
in descending order

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61 papers	1,359 citations	304743 22 h-index	361022 35 g-index
61 all docs	61 docs citations	61 times ranked	1273 citing authors

#	Article	IF	Citations
1	Optimization of thermo-optic phase-shifter design and mitigation of thermal crosstalk on the SOI platform. Optics Express, 2019, 27, 10456.	3.4	131
2	DSP-free â€˜coherent-liteâ€™ transceiver for next generation single wavelength optical intra-datacenter interconnects. Optics Express, 2018, 26, 8890.	3.4	99
3	Experimental parametric study of 128 Gb/s PAM-4 transmission system using a multi-electrode silicon photonic Mach Zehnder modulator. Optics Express, 2017, 25, 13252.	3.4	78
4	Polarization Beam Splitter Based on MMI Coupler With SWG Birefringence Engineering on SOI. IEEE Photonics Technology Letters, 2018, 30, 403-406.	2.5	71
5	Compact Broadband Polarization Beam Splitter Based on Multimode Interference Coupler With Internal Photonic Crystal for the SOI Platform. Journal of Lightwave Technology, 2019, 37, 1231-1240.	4.6	70
6	A Silicon Photonic PAM-4 Modulator Based on Dual-Parallel Machâ€“Zehnder Interferometers. IEEE Photonics Journal, 2016, 8, 1-10.	2.0	51
7	Compact high-performance adiabatic 3-dB coupler enabled by subwavelength grating slot in the silicon-on-insulator platform. Optics Express, 2018, 26, 29873.	3.4	48
8	Silicon Photonic Machâ€“Zehnder Modulator Architectures for on Chip PAM-4 Signal Generation. Journal of Lightwave Technology, 2019, 37, 2989-2999.	4.6	42
9	168-Gb/s Single Carrier PAM4 Transmission for Intra-Data Center Optical Interconnects. IEEE Photonics Technology Letters, 2017, 29, 314-317.	2.5	40
10	Single-Lane 145 Gbit/s IM/DD Transmission With Faster-Than-Nyquist PAM4 Signaling. IEEE Photonics Technology Letters, 2018, 30, 1238-1241.	2.5	40
11	High-speed low-chirp PAM-4 transmission based on push-pull silicon photonic microring modulators. Optics Express, 2017, 25, 13222.	3.4	37
12	Single wavelength 480 Gb/s direct detection over 80km SSMF enabled by Stokes vector Kramers Kronig transceiver. Optics Express, 2017, 25, 33534.	3.4	37
13	Self-homodyne system for next generation intra-datacenter optical interconnects. Optics Express, 2017, 25, 27834.	3.4	35
14	Intensity directed equalizer for the mitigation of DML chirp induced distortion in dispersion-unmanaged C-band PAM transmission. Optics Express, 2017, 25, 28123.	3.4	35
15	Ultra-Broadband and Compact Two-Mode Multiplexer Based on Subwavelength-Grating-Slot-Assisted Adiabatic Coupler for the Silicon-on-Insulator Platform. Journal of Lightwave Technology, 2019, 37, 5790-5800.	4.6	33
16	Polarization-Independent Mode-Evolution-Based Coupler for the Silicon-on-Insulator Platform. IEEE Photonics Journal, 2018, 10, 1-10.	2.0	32
17	CMOS-compatible multi-band plasmonic TE-pass polarizer. Optics Express, 2018, 26, 30292.	3.4	32
18	Adiabatic Coupler With Design-Intended Splitting Ratio. Journal of Lightwave Technology, 2019, 37, 6147-6155.	4.6	31

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19	400 Gb/s O-band silicon photonic transmitter for intra-datacenter optical interconnects. Optics Express, 2019, 27, 10258.	3.4	30
20	Net 220 Gbps/Î» IM/DD Transmssion in O-Band and C-Band With Silicon Photonic Traveling-Wave MZM. Journal of Lightwave Technology, 2021, 39, 4270-4278.	4.6	24
21	First demonstration of a 400 Gb/s 4Î» CWDM TOSA for datacenter optical interconnects. Optics Express, 2018, 26, 19742.	3.4	23
22	A CMOS Compatible Ultracompact Silicon Photonic Optical Add-Drop Multiplexer with Misaligned Sidewall Bragg Gratings. IEEE Photonics Journal, 2017, 9, 1-10.	2.0	22
23	Silicon Photonic Ring-Assisted MZI for 50 Gb/s DAC-Less and DSP-Free PAM-4 Transmission. IEEE Photonics Technology Letters, 2017, 29, 1046-1049.	2.5	21
24	240 Gbit/s Silicon Photonic Mach-Zehnder Modulator Enabled by Two 2.3-Vpp Drivers. Journal of Lightwave Technology, 2020, , 1-1.	4.6	20
25	Compact single-etched sub-wavelength grating couplers for O-band application. Optics Express, 2017, 25, 30582.	3.4	18
26	Transversely coupled Fabryâ€“Perot resonators with Bragg grating reflectors. Optics Letters, 2018, 43, 13.	3.3	18
27	180 Gb/s single carrier single polarization 16-QAM transmission using an O-band silicon photonic IQM. Optics Express, 2019, 27, 14447.	3.4	17
28	Broadband 1310/1550â€‰â€‰nm wavelength demultiplexer based on a multimode interference coupler with tapered internal photonic crystal for the silicon-on-insulator platform. Optics Letters, 2019, 44, 1770.	3.3	17
29	200 Gb/s transmission using a dual-polarization O-Band silicon photonic intensity modulator for Stokes vector direct detection applications. Optics Express, 2017, 25, 30336.	3.4	16
30	100 Gb/s PAM4 transmission system for datacenter interconnects using a SiP ME-MZM based DAC-less transmitter and a VSB self-coherent receiver. Optics Express, 2018, 26, 23969.	3.4	16
31	Modulator material impact on chirp, DSP, and performance in coherent digital links: comparison of the lithium niobate, indium phosphide, and silicon platforms. Optics Express, 2018, 26, 22471.	3.4	14
32	DSP-Free 25-Gbit/s PAM-4 Transmission Using 10G Transmitter and Coherent Amplification. IEEE Photonics Technology Letters, 2018, 30, 1547-1550.	2.5	14
33	Integrated polarisation handling devices. IET Optoelectronics, 2020, 14, 109-119.	3.3	13
34	100 Gb/s/$lambda$ Duo-Binary PAM-4 Transmission Using 25G Components Achieving 50 km Reach. IEEE Photonics Technology Letters, 2020, 32, 138-141.	2.5	13
35	Experimental study of performance enhanced IM/DD transmissions combining 4D Trellis coded modulation with precoding. Optics Express, 2018, 26, 32522.	3.4	12
36	Silicon-based optical links using novel direct detection, coherent detection and dual polarization methods for new generation transport architectures. Optics Communications, 2019, 450, 48-60.	2.1	11

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37	An 80 Gb/s Silicon Photonic Modulator Based on the Principle of Overlapped Resonances. IEEE Photonics Journal, 2017, 9, 1-11.	2.0	9
38	25 and 50 Gb/s/${{lambda}}$ PAM-4 Transmission Over 43 and 21 km Using a Simplified Coherent Receiver on SOI. IEEE Photonics Technology Letters, 2019, 31, 799-802.	2.5	9
39	Polarization Independent Adiabatic 3-dB Coupler for Silicon-on-Insulator. , 2017, , .		8
40	Compact, Angled Polarization Splitter: Characterization of Broadband Performance and Fabrication Tolerance. IEEE Photonics Journal, 2018, , 1-1.	2.0	7
41	Integration of periodic, subâ€wavelength structures in siliconâ€onâ€insulator photonic device design. IET Optoelectronics, 2020, 14, 125-135.	3.3	7
42	Silicon Photonic Single-Segment IQ Modulator for Net 1 Tbps/Î» Transmission Using All-Electronic Equalization. Journal of Lightwave Technology, 2023, 41, 1192-1199.	4.6	7
43	Silicon photonic dual-drive MIM based 56 Gb/s DAC-less and DSP-free PAM-4 transmission. Optics Express, 2018, 26, 5395.	3.4	6
44	Novel polarization beam splitter based on p-i-n structure for an indium phosphide platform. , 2017, , .		5
45	Dual Parallel Multielectrode Traveling Wave Machâ€“Zehnder Modulator for 200 Gb/s Intra-datacenter Optical Interconnects. IEEE Photonics Journal, 2019, 11, 1-9.	2.0	5
46	Experimental Demonstration of 600 Gb/s Net Rate PAM4 Transmissions over 2 km and 10 km with a 4-Î» CWDM TOSA. Journal of Lightwave Technology, 2020, , 1-1.	4.6	5
47	Demonstration of 108 Gb/s Duo-Binary PAM-8 Transmission and the Probabilistic Modeling of DB-PAM-M BER. IEEE Photonics Journal, 2021, 13, 1-14.	2.0	5
48	Adiabatic Coupler With Nonlinearly Tapered Mode-Evolution Region. IEEE Photonics Technology Letters, 2021, 33, 840-843.	2.5	5
49	Ultra-broadband Compact Adiabatic Coupler in Silicon-on-Insulator for Joint Operation in the C- and O-Bands. , 2018, , .		4
50	Analysis and Experimental Study of a Silicon Photonic Single MRM-Assisted MZI PAM-4 Modulator. IEEE Photonics Journal, 2017, 9, 1-7.	2.0	3
51	Wavelength-Interleaved 4D-PAM4-TCM in a 4-Î» Ã— 100 Gb/s CWDM System. IEEE Photonics Technology Letters, 2020, 32, 755-758.	2.5	3
52	Ultra-Broadband and Compact Asymmetrical Beam Splitter Enabled by Angled Sub-Wavelength Grating MMI. , 2018, , .		3
53	High extinction ratio and broadband O-band polarization splitter and rotator on silicon-on-insulator. , 2019, , .		3
54	C-Band and O-Band Silicon Photonic Based Low-Power Variable Optical Attenuators. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	1

#	Article	IF	Citations
55	Systematic Performance Comparison of (Duobinary)-PAM-2,4 Signaling under Light and Strong Opto-Electronic Bandwidth Conditions. Photonics, 2021, 8, 81.	2.0	1
56	56 Gb/s DAC-less and DSP-free PAM-4 Using A Silicon Photonic Dual-drive Michelson Interferometric Modulator. , 2018, , .		1
57	CMOS-Compatible and Temperature Insensitive C-Band Wavelength (De-)multiplexer. IEEE Photonics Technology Letters, 2022, 34, 769-772.	2.5	1
58	O-band sub-wavelength grating coupler. , 2017, , .		0
59	Broadband sub-wavelength grating coupler for O-band application. , 2017, , .		0
60	Nonlinearly Tapered 3-dB Adiabatic Coupler. , 2020, , .		0
61	23-dB average isolation using a silicon photonic Mach-Zehnder modulator. Optics Express, 2020, 28, 26056.	3.4	0