Jochen SchrÃ¶der

List of Publications by Year
in descending order

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106	1,990	218381	264894
papers	citations	26 h-index	42 g-index

106	106	106	1833
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Power Efficient Communications Employing Phase Sensitive Pre-Amplified Receiver. IEEE Photonics Technology Letters, 2022, 34, 3-6.	1.3	3
2	Model-Based End-to-End Learning for WDM Systems With Transceiver Hardware Impairments. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-14.	1.9	9
3	Spectral Interferometry with Frequency Combs. Micromachines, 2022, 13, 614.	1.4	2
4	Periodicity-Enabled Size Reduction of Symbol Based Predistortion for High-Order QAM. Journal of Lightwave Technology, 2022, 40, 6168-6178.	2.7	7
5	Elliptical-Core Highly Nonlinear Few-Mode Fiber Based OXC for WDM-MDM Networks. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-11.	1.9	6
6	High Spectral Efficiency Coherent Superchannel Transmission With Soliton Microcombs. Journal of Lightwave Technology, 2021, 39, 4367-4373.	2.7	34
7	Experimental Demonstration of 8-Dimensional Voronoi Constellations with 65,536 and 16,777,216 Symbols. , 2021, , .		2
8	Characterisation of a Coupled-Core Fiber Using Dual-Comb Swept-Wavelength Interferometry. , 2021, , .		3
9	Symbol-Based Supervised Learning Predistortion for Compensating Transmitter Nonlinearity. , 2021, , .		3
10	Phase-coherent lightwave communications with frequency combs. Nature Communications, 2020, 11, 201.	5.8	73
11	One photon-per-bit receiver using near-noiseless phase-sensitive amplification. Light: Science and Applications, 2020, 9, 153.	7.7	33
12	Joint Superchannel Digital Signal Processing for Effective Inter-Channel Interference Cancellation. Journal of Lightwave Technology, 2020, 38, 5676-5684.	2.7	13
13	Performance Monitoring for Live Systems with Soft FEC and Multilevel Modulation. Journal of Lightwave Technology, 2020, , 1-1.	2.7	4
14	One photon per bit communication for free-space optical links. , 2020, , .		0
15	Look-up Table based Pre-distortion for Transmitters Employing High-Spectral-Efficiency Modulation Formats. , 2020, , .		9
16	Multi-Channel Comb Modulation in Single Waveguide Structures. , 2020, , .		0
17	Dual-Comb Swept Wavelength Interferometry. , 2020, , .		3
18	Multi-Channel Equalization for Comb-Based Systems. , 2020, , .		1

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19	Required and Received SNRs in Coded Modulation. , 2020, , .		0
20	Laser Frequency Combs for Coherent Optical Communications. Journal of Lightwave Technology, 2019, 37, 1663-1670.	2.7	96
21	Roadmap on all-optical processing. Journal of Optics (United Kingdom), 2019, 21, 063001.	1.0	128
22	Experimental Investigation of Link Impairments in Pilot Tone Aided Superchannel Transmission. IEEE Photonics Technology Letters, 2019, 31, 459-462.	1.3	2
23	Dielectric Broadband Metasurfaces for Fiber Modeâ€Multiplexed Communications. Advanced Optical Materials, 2019, 7, 1801679.	3.6	20
24	Phase Noise Characterization and EEPN of a Full C-Band Tunable Laser in Coherent Optical Systems. IEEE Photonics Technology Letters, 2019, 31, 1991-1994.	1.3	0
25	12 b/s/Hz Spectral Efficiency Over the C-band Based on Comb-Based Superchannels. Journal of Lightwave Technology, 2019, 37, 411-417.	2.7	13
26	Record-sensitivity Gb/s receiver for free-space applications based on phase-sensitive amplification. , 2019, , .		5
27	Superchannel engineering of microcombs for optical communications. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2013.	0.9	19
28	Overhead-optimization of pilot-based digital signal processing for flexible high spectral efficiency transmission. Optics Express, 2019, 27, 24654.	1.7	47
29	Design, fabrication, and characterization of a highly nonlinear few-mode fiber. Photonics Research, 2019, 7, 1354.	3.4	14
30	Frequency Comb Based High-Spectral Efficiency Transmission. , 2019, , .		0
31	High Spectral Efficiency PM-128QAM Comb-Based Superchannel Transmission Enabled by a Single Shared Optical Pilot Tone. Journal of Lightwave Technology, 2018, 36, 1318-1325.	2.7	36
32	10 Tb/s PM-64QAM Self-Homodyne Comb-Based Superchannel Transmission With 4% Shared Pilot Tone Overhead. Journal of Lightwave Technology, 2018, 36, 3176-3184.	2.7	41
33	High-Spectral-Efficiency Mode-Multiplexed Transmission Over Graded-Index Multimode Fiber. , 2018, , .		59
34	Frequency Comb-Based WDM Transmission Systems Enabling Joint Signal Processing. Applied Sciences (Switzerland), 2018, 8, 718.	1.3	56
35	Comparison of principal modes and spatial eigenmodes in multimode optical fibre. Laser and Photonics Reviews, 2017, 11, 1600259.	4.4	20
36	Phase-Sensitive Amplification in Silicon and Chalcogenide Waveguides. , 2016, , .		0

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37	Polarization-resolved cross-correlated (C^2) imaging of a photonic bandgap fiber. Optics Express, 2016, 24, 27785.	1.7	6
38	Principal modes in 50Î¼m graded-index multimode fiber. , 2016, , .		0
39	Multipass Performance of a Chip-Enhanced WSS for Nyquist-WDM Sub-Band Switching. Journal of Lightwave Technology, 2016, 34, 1824-1830.	2.7	18
40	Complete spatiotemporal characterization and optical transfer matrix inversion of a 420 mode fiber. Optics Letters, 2016, 41, 5580.	1.7	34
41	Principal modes in multimode fibre: Modes with minimal mode dispersion. , 2016, , .		0
42	Non-degenerate two-photon absorption in silicon waveguides: analytical and experimental study. Optics Express, 2015, 23, 17101.	1.7	23
43	Spectrum-Sliced Microwave-Photonic Filter Based on Fourier Transform of Modified Optical Spectrum. IEEE Photonics Technology Letters, 2015, 27, 1422-1425.	1.3	8
44	LCoS-based devices for MDM. , 2015, , .		4
45	Observation of Eisenbudâ€“Wignerâ€“Smith states as principal modes in multimode fibre. Nature Photonics, 2015, 9, 751-757.	15.6	133
46	Cross Nonlinear Absorption in Silicon Waveguides. , 2015, , .		0
47	6 port 3Ã—3 Wavelength Selective Cross-Connect by Software-Only Reprogramming of a 1xN Wavelength Selective Switch. , 2015, , .		3
48	Non-degenerate Two-photon Absorption in Silicon Waveguides. , 2015, , .		0
49	Applications of spatial light modulators for mode-division multiplexing. , 2014, , .		1
50	Reconfigurable spatially-diverse optical vector network analyzer. Optics Express, 2014, 22, 2706.	1.7	27
51	Flexible all-optical frequency allocation of OFDM subcarriers. Optics Express, 2014, 22, 1045.	1.7	22
52	1x11 few-mode fiber wavelength selective switch using photonic lanterns. Optics Express, 2014, 22, 2216.	1.7	46
53	Reconfigurable linear combination of phase-and-amplitude coded optical signals. Optics Express, 2014, 22, 2609.	1.7	2
54	Pump-degenerate phase-sensitive amplification in chalcogenide waveguides. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 780.	0.9	19

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55	Mode Transfer Matrix of Multimode Fibers. , 2014, , .		0
56	Spatial light modulators for space-division multiplexing. , 2014, , .		0
57	First demonstration of principal modes in a multimode fibre. , 2014, , .		10
58	All-Optical OFDM With Cyclic Prefix Insertion Using Flexible Wavelength Selective Switch Optical Processing. Journal of Lightwave Technology, 2014, 32, 752-759.	2.7	32
59	Integrated optical auto-correlator based on third-harmonic generation in a silicon photonic crystal waveguide. Nature Communications, 2014, 5, 3246.	5.8	79
60	110x110 optical mode transfer matrix inversion. Optics Express, 2014, 22, 96.	1.7	120
61	Phase-sensitive amplification in silicon photonic crystal waveguides. Optics Letters, 2014, 39, 363.	1.7	46
62	Applications of LCoS-Based Programmable Optical Processors. , 2014, , .		7
63	Wavelength selective switching and pulse-shaping for mode-division multiplexing using LCOS-technology. , 2014, , .		0
64	Mode multiplexing, characterization and processing using a Spatial Light Modulator. , 2013, , .		1
65	Mode multiplexed single-photon and classical channels in a few-mode fiber. Optics Express, 2013, 21, 28794.	1.7	33
66	Automatic DGD and GVD compensation at 640ÂGb/s based on scalar radio-frequency spectrum measurement. Applied Optics, 2013, 52, 1919.	0.9	0
67	An optical FPGA: Reconfigurable simultaneous multi-output spectral pulse-shaping for linear optical processing. Optics Express, 2013, 21, 690.	1.7	50
68	Phase-sensitive amplification of light in a Ï‡^(3) photonic chip using a dispersion engineered chalcogenide ridge waveguide. Optics Express, 2013, 21, 7926.	1.7	41
69	All-optical hash code generation and verification for low latency communications. Optics Express, 2013, 21, 23873.	1.7	3
70	Flexible All-Optical OFDM using WSSs. , 2013, , .		1
71	Flexible All-Optical OFDM using WSSs. , 2013, , .		5
72	On-chip all optical error detection for ultra-low latency communications. , 2013, , .		0

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73	Breaking the Tbit/s Barrier: Higher Bandwidth Optical Processing. Optics and Photonics News, 2012, 23, 32.	0.4	1
74	Multi-order, automatic dispersion compensation for 1.28 Terabaud signals. , 2012, , .		0
75	LCOS based waveshaper technology for optical signal processing and performance monitoring. , 2012, , .		2
76	Photonic-Chip-Based Ultrafast Waveform Analysis and Optical Performance Monitoring. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 834-846.	1.9	3
77	Emulation of modulated data channels in optical networks using a programmable optical processor. , 2011, , .		0
78	OSNR Monitoring of a 1.28 Tbaud Signal by Interferometry Inside a Wavelength-Selective Switch. Journal of Lightwave Technology, 2011, 29, 1542-1546.	2.7	9
79	Silicon-Chip-Based Real-Time Dispersion Monitoring for 640 Gbit/s DPSK Signals. Journal of Lightwave Technology, 2011, 29, 1790-1796.	2.7	44
80	Photonic chip-based all-optical XOR gate for 40 and 160â€‰Gbit/s DPSK signals. Optics Letters, 2011, 36, 710.	1.7	43
81	Chromatic dispersion compensation of an OCT system with a programmable spectral filter. , 2011, , .		1
82	Phase and amplitude optimization in an optical coherence tomography system using a programmable spectral filter. , 2011, , .		0
83	Tunable, repetition rate selective, passive mode-locked fibre laser with repetition rates up to 640 GHz. Proceedings of SPIE, 2010, , .	0.8	0
84	Automatic higher-order dispersion measurement and compensation of a 1.28 Tbaud signal. , 2010, , .		0
85	Simultaneous multi-channel OSNR monitoring at 40 Gb/s OOK and DPSK using a wavelength selective switch. , 2010, , .		0
86	Aberration-free ultra-fast optical oscilloscope using a four-wave mixing based time-lens. Optics Communications, 2010, 283, 2611-2614.	1.0	13
87	Photonic chip based all-optical logic gate for 40 Gbit/s and 160 Gbit/s DPSK signals. , 2010, , .		0
88	Silicon chip based instantaneous dispersion monitoring for a 640 Gbit/s DPSK signal. , 2010, , .		0
89	Multi-Impairment Monitoring at 320 Gb/s Based on Cross-Phase Modulation Radio-Frequency Spectrum Analyzer. IEEE Photonics Technology Letters, 2010, 22, 428-430.	1.3	19
90	Simultaneous multi-channel OSNR monitoring with a wavelength selective switch. Optics Express, 2010, 18, 22299.	1.7	13

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91	Automatic dispersion compensation for 128Tb/s OTDM signal transmission using photonic-chip-based dispersion monitoring. Optics Express, 2010, 18, 25415.	1.7	14
92	Interplay of four-wave mixing processes with a mixed coherent-incoherent pump. Optics Express, 2010, 18, 25833.	1.7	5
93	Photonic Chip-Based Simultaneous Multi-Impairment Monitoring for Phase-Modulated Optical Signals. Journal of Lightwave Technology, 2010, , .	2.7	4
94	Wavelength and repetition rate tunable mode-locked laser at up to 640 GHz using reconfigurable wavelength selective switch. , 2009, , .		0
95	Repetition-rate-selective, wavelength-tunable mode-locked laser at up to 640 GHz. Optics Letters, 2009, 34, 3902.	1.7	60
96	Observation of high-contrast, fast intensity noise of a continuous wave Raman fiber laser. Optics Express, 2009, 17, 16444.	1.7	15
97	Dynamics of an ultrahigh-repetition-rate passively mode-locked Raman fiber laser. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1178.	0.9	55
98	Noise-characterization of an ultra-fast Raman fiber laser. , 2008, , .		0
99	Characterization of a passively mode-locked Raman fiber laser. , 2008, , .		0
100	Passively mode-locked Raman fiber laser with 100 GHz repetition rate. Optics Letters, 2006, 31, 3489.	1.7	71
101	<title>Dynamic instability of counterpropagating self-trapped beams in photorefractive media</title>. , 2006, , .		2
102	Ultra-high repetition-rate passively mode-locked Raman fiber laser. , 2006, , .		0
103	Dynamic instability of self-induced bidirectional waveguides in photorefractive media. Optics Letters, 2005, 30, 750.	1.7	13
104	Counterpropagating dipole-mode vector soliton. Optics Letters, 2005, 30, 1042.	1.7	9
105	Optical control of arrays of photorefractive screening solitons. Optics Letters, 2003, 28, 438.	1.7	58
106	Photonic applications of spatial photorefractive solitons - soliton lattices, bidirectional waveguides and waveguide couplers. , 2003, , .		1