

Sebastian Randel

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

4,242
citations

186265

28
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276875

41
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61
all docs

61
docs citations

61
times ranked

3252
citing authors

#	ARTICLE	IF	CITATIONS
1	Mode-Division Multiplexing Over 96 km of Few-Mode Fiber Using Coherent 6 \times 6 MIMO Processing. <i>Journal of Lightwave Technology</i> , 2012, 30, 521-531.	4.6	914
2	6 \times 56-Gb/s mode-division multiplexed transmission over 33-km few-mode fiber enabled by 6 \times 6 MIMO equalization. <i>Optics Express</i> , 2011, 19, 16697.	3.4	490
3	Broadband Information Broadcasting Using LED-Based Interior Lighting. <i>Journal of Lightwave Technology</i> , 2008, 26, 3883-3892.	4.6	433
4	PAM-DMT for Intensity-Modulated and Direct-Detection Optical Communication Systems. <i>IEEE Photonics Technology Letters</i> , 2009, 21, 1749-1751.	2.5	200
5	Hybrid integration of silicon photonics circuits and InP lasers by photonic wire bonding. <i>Optica</i> , 2018, 5, 876.	9.3	159
6	Advanced Modulation Schemes for Short-Range Optical Communications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1280-1289.	2.9	146
7	Ultra-high electro-optic activity demonstrated in a silicon-organic hybrid modulator. <i>Optica</i> , 2018, 5, 739.	9.3	131
8	Spectrally Efficient Compatible Single-Sideband Modulation for OFDM Transmission With Direct Detection. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 670-672.	2.5	121
9	Impact of LED Nonlinearity on Discrete Multitone Modulation. <i>Journal of Optical Communications and Networking</i> , 2009, 1, 439.	4.8	96
10	All-Electronic 100-GHz Bandwidth Digital-to-Analog Converter Generating PAM Signals up to 190 GBaud. <i>Journal of Lightwave Technology</i> , 2017, 35, 411-417.	4.6	83
11	Silicon-Organic Hybrid (SOH) Mach-Zehnder Modulators for 100 Gbit/s on-off Keying. <i>Scientific Reports</i> , 2018, 8, 2598.	3.3	81
12	Plastic optical fiber technology for reliable home networking: overview and results of the EU project pof-all. <i>IEEE Communications Magazine</i> , 2009, 47, 58-68.	6.1	79
13	Wireless THz link with optoelectronic transmitter and receiver. <i>Optica</i> , 2019, 6, 1063.	9.3	79
14	Hybrid multi-chip assembly of optical communication engines by in situ 3D nano-lithography. <i>Light: Science and Applications</i> , 2020, 9, 71.	16.6	77
15	100 GBd Intensity Modulation and Direct Detection With an InP-Based Monolithic DFB Laser Mach-Zehnder Modulator. <i>Journal of Lightwave Technology</i> , 2018, 36, 97-102.	4.6	75
16	100-Gb/s discrete-multitone transmission over 80-km SSMF using single-sideband modulation with novel interference-cancellation scheme. , 2015, , .		72
17	High Symbol Rate Coherent Optical Transmission Systems: 80 and 107 Gbaud. <i>Journal of Lightwave Technology</i> , 2014, 32, 824-831.	4.6	70
18	High-speed transmission over multimode fiber using discrete multitone modulation [Invited]. <i>Journal of Optical Networking</i> , 2008, 7, 183.	2.5	69

#	ARTICLE	IF	CITATIONS
19	Characterization of Space-Division Multiplexing Systems using a Swept-Wavelength Interferometer. , 2013, , .		61
20	Single-VCSEL 100-Gb/s Short-Reach System Using Discrete Multi-Tone Modulation and Direct Detection. , 2015, , .		53
21	Fiber nonlinearity mitigation of WDM-PDM QPSK/16-QAM signals using fiber-optic parametric amplifiers based multiple optical phase conjugations. Optics Express, 2017, 25, 1618.	3.4	49
22	100GbE: QPSK versus OFDM. Optical Fiber Technology, 2009, 15, 407-413.	2.7	48
23	Silicon-organic hybrid (SOH) Mach-Zehnder modulators for 100 GBd PAM4 signaling with sub-1â€dB phase-shifter loss. Optics Express, 2020, 28, 24693.	3.4	47
24	Hybrid electro-optic modulator combining silicon photonic slot waveguides with high-k radio-frequency slotlines. Optica, 2021, 8, 511.	9.3	41
25	Silicon-organic hybrid (SOH) modulators for intensity-modulation / direct-detection links with line rates of up to 120 Gbit/s. Optics Express, 2017, 25, 23784.	3.4	40
26	Coherent WDM transmission using quantum-dash mode-locked laser diodes as multi-wavelength source and local oscillator. Optics Express, 2019, 27, 31164.	3.4	35
27	Performance of chip-scale optical frequency comb generators in coherent WDM communications. Optics Express, 2020, 28, 12897.	3.4	35
28	Parametric Amplification, Wavelength Conversion, and Phase Conjugation of a 2.048-Tbit/s WDM PDM 16-QAM Signal. Journal of Lightwave Technology, 2015, 33, 1286-1291.	4.6	34
29	Demonstration of long-term thermally stable silicon-organic hybrid modulators at 85 Â°C. Optics Express, 2018, 26, 27955.	3.4	32
30	Comb-based WDM transmission at 10 Tbit/s using a DC-driven quantum-dash mode-locked laser diode. Optics Express, 2019, 27, 31110.	3.4	30
31	Complexity Analysis of the Kramersâ€Kronig Receiver. Journal of Lightwave Technology, 2019, 37, 4295-4307.	4.6	29
32	Optical OFDM, a hype or is it for real?. , 2008, , .		26
33	Photonic-integrated circuits with non-planar topologies realized by 3D-printed waveguide overpasses. Optics Express, 2019, 27, 17402.	3.4	23
34	Transmission of 80-GBd 16-QAM over 300 km and Kramers-Kronig Reception Using a Low-Complexity FIR Hilbert Filter Approximation. , 2018, , .		22
35	Mode-dependent loss, gain, and noise in MIMO-SDM systems. , 2014, , .		21
36	The influence of the dispersion map in coherent optical OFDM transmission systems. , 2008, , .		20

#	ARTICLE	IF	CITATIONS
37	Adaptive MIMO Signal Processing for Mode-division Multiplexing. , 2012, , .		20
38	110-m THz Wireless Transmission at 100 Gbit/s Using a Kramers-Kronig Schottky Barrier Diode Receiver. , 2018, , .		20
39	Hybrid external-cavity lasers (ECL) using photonic wire bonds as coupling elements. Scientific Reports, 2021, 11, 16426.	3.3	19
40	DSP Enabled Optical Detection Techniques for PON. Journal of Lightwave Technology, 2020, 38, 684-695.	4.6	18
41	32QAM WDM transmission at 12 Tbit/s using a quantum-dash mode-locked laser diode (QD-MLLD) with external-cavity feedback. Optics Express, 2020, 28, 23594.	3.4	18
42	Verified equivalent-circuit model for slot-waveguide modulators. Optics Express, 2020, 28, 12951.	3.4	17
43	All-ETDM 80-Gbaud (640-Gb/s) PDM 16-QAM Generation and Coherent Detection. IEEE Photonics Technology Letters, 2012, 24, 1328-1330.	2.5	14
44	On the Use of Delay-Decorrelated I/Q Test Sequences for QPSK and QAM Signals. IEEE Photonics Technology Letters, 2012, 24, 1000-1002.	2.5	14
45	Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. Optics Express, 2018, 26, 34580.	3.4	12
46	Spatial Multiplexing Using Multiple-Input Multiple-Output Signal Processing. , 2013, , 433-490.		11
47	Optical Arbitrary Waveform Measurement (OAWM) Using Silicon Photonic Slicing Filters. Journal of Lightwave Technology, 2022, 40, 1705-1717.	4.6	11
48	SOH Mach-Zehnder Modulators for 100 GBd PAM4 Signaling With Sub-1 dB Phase-Shifter Loss. , 2020, , .		10
49	Analysis of electronic dispersion compensation for step-index polymer optical fibre by use of an advanced simulation model. European Transactions on Telecommunications, 2007, 18, 881-886.	1.2	6
50	Spectrally efficient polymer optical fiber transmission. Proceedings of SPIE, 2011, , .	0.8	5
51	Space-division multiplexed transmission over few-mode- and coupled-core fiber based on coherent MIMO digital signal processing. , 2012, , .		5
52	Ultra-fast optical ranging using quantum-dash mode-locked laser diodes. Scientific Reports, 2022, 12, 1076.	3.3	5
53	Digital Signal Processing in Spatially Multiplexed Coherent Communications. , 2012, , .		4
54	Crosstalk Tolerance of Spatially Multiplexed MIMO Systems. , 2012, , .		4

#	ARTICLE	IF	CITATIONS
55	Colorless Coherent TDM-PON Based on a Frequency-Comb Laser. Journal of Lightwave Technology, 2022, 40, 4287-4299.	4.6	4
56	InP/Silicon Hybrid External-Cavity Lasers (ECL) Using Photonic Wirebonds as Coupling Elements. , 2020, , .		2
57	Advances in polymer optical fiber transmission. , 2010, , .		1
58	A New Approach to Nonuniform Sampling of Bounded Atmospheric Turbulence Spectra. , 2020, , .		1
59	Gigabit Ethernet transmission over polymer optical fiber. , 2010, , .		0
60	Slice-Less Optical Arbitrary Waveform Measurement (OAWM) in a Bandwidth of More Than 600 GHz. , 2022, , .		0