Alan E Willner

List of Publications by Year
in descending order

202 papers	15,105 citations	47006 47 h-index	18647 119 g-index
203 all docs	203 docs citations	203 times ranked	7350 citing authors

#	Article	IF	Citations
1	Demonstration of Recovering Orbital-Angular-Momentum Multiplexed Channels Using a Tunable, Broadband Pixel-Array-Based Photonic-Integrated-Circuit Receiver. Journal of Lightwave Technology, 2022, 40, 1346-1352.	4.6	4
2	Demonstration of Turbulence Resiliency in a Mode-, Polarization-, and Wavelength-Multiplexed Free-Space Optical Link Using Pilot-Assisted Optoelectronic Beam Mixing. Journal of Lightwave Technology, 2022, 40, 588-596.	4.6	14
3	Experimental Demonstration of a 100-Gbit/s 16-QAM Free-Space Optical Link Using a Structured Optical â€œBottle Beamâ€•to Circumvent Obstructions. Journal of Lightwave Technology, 2022, 40, 3277-3284.	4.6	2
4	Demonstration of Turbulence Resilient Self-Coherent Free-Space Optical Communications Using a Pilot Tone and an Array of Smaller Photodiodes for Bandwidth Enhancement. , 2022, , .		2
5	Directionally Resolved Measurement and Modeling of THz Band Propagation Channels. IEEE Open Journal of Antennas and Propagation, 2022, 3, 663-686.	3.7	9
6	Increasing system tolerance to turbulence in a 100-Gbit/s QPSK free-space optical link using both mode and space diversity. Optics Communications, 2021, 480, 126488.	2.1	13
7	Modal coupling and crosstalk due to turbulence and divergence on free space THz links using multiple orbital angular momentum beams. Scientific Reports, 2021, 11, 2110.	3.3	21
8	Photon Acceleration Using a Time-Varying Epsilon-near-Zero Metasurface. ACS Photonics, 2021, 8, 716-720.	6.6	24
9	High-fidelity spatial mode transmission through a 1-km-long multimode fiber via vectorial time reversal. Nature Communications, 2021, 12, 1866.	12.8	27
10	Perspectives on advances in high-capacity, free-space communications using multiplexing of orbital-angular-momentum beams. APL Photonics, 2021, 6, .	5.7	53
11	Optical Signal Processing Aided by Optical Frequency Combs. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-16.	2.9	22
12	Multiprobe Time Reversal for High-Fidelity Vortex-Mode-Division Multiplexing Over a Turbulent Free-Space Link. Physical Review Applied, 2021, 15, .	3.8	13
13	Adiabatic Frequency Conversion Using a Time-Varying Epsilon-Near-Zero Metasurface. Nano Letters, 2021, 21, 5907-5913.	9.1	30
14	Turbulence-resilient pilot-assisted self-coherent free-space optical communications using automatic optoelectronic mixing of many modes. Nature Photonics, 2021, 15, 743-750.	31.4	45
15	Simultaneous turbulence mitigation and channel demultiplexing using a single multi-plane light convertor for a free-space optical link with two 100-Gbit/s OAM channels. Optics Communications, 2021, 501, 127359.	2.1	7
16	Orbital angular momentum of light for communications. Applied Physics Reviews, 2021, 8, .	11.3	137
17	Experimental Generation of OAM +1 and +3 Spatiotemporal Beams with a Time-Dependent Beam Radius of ~0.24-to-~0.68 mm Using a Coherent Combination of Multiple Frequencies Each Containing Multiple LG Modes. , 2021, , .		0
18	Experimental Mitigation of Atmospheric Turbulence Effect Using Pre-Signal Combining for Uni- and Bi-Directional Free-Space Optical Links With Two 100-Gbit/s OAM-Multiplexed Channels. Journal of Lightwave Technology, 2020, 38, 82-89.	4.6	33

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19	Demonstration of Tunable Optical Aggregation of QPSK to 16-QAM Over Optically Generated Nyquist Pulse Trains Using Nonlinear Wave Mixing and a Kerr Frequency Comb. Journal of Lightwave Technology, 2020, 38, 359-365.	4.6	23
20	Dynamic spatiotemporal beams that combine two independent and controllable orbital-angular-momenta using multiple optical-frequency-comb lines. Nature Communications, 2020, 11, 4099.	12.8	25
21	Continuous delay tunability using a combination of three types of fiber Bragg gratings, wavelength conversion, and wavelength multicasting with a frequency comb. Optics Communications, 2020, 464, 125431.	2.1	1
22	Broadband frequency translation through time refraction in an epsilon-near-zero material. Nature Communications, 2020, 11, 2180.	12.8	121
23	Experimental Demonstration of Crosstalk Reduction to Achieve Turbulence-Resilient Multiple-OAM-Beam Free-Space Optical Communications using Pilot Tones to Mix Beams at the Receiver. , 2020, , .		5
24	Vectorial Phase Conjugation for High-Fidelity Mode Transmission Through Multimode Fiber. , 2020, , .		3
25	Performance of real-time adaptive optics compensation in a turbulent channel with high-dimensional spatial-mode encoding. Optics Express, 2020, 28, 15376.	3.4	21
26	Simultaneous turbulence mitigation and channel demultiplexing for two 100â€‰â€‰Gbit/s orbital-angular-momentum multiplexed beams by adaptive wavefront shaping and diffusing. Optics Letters, 2020, 45, 702.	3.3	6
27	Demonstration of using two aperture pairs combined with multiple-mode receivers and MIMO signal processing for enhanced tolerance to turbulence and misalignment in a 10â€‰â€‰Gbit/s QPSK FSO link. Optics Letters, 2020, 45, 3042.	3.3	13
28	Utilizing adaptive optics to mitigate intra-modal-group power coupling of graded-index few-mode fiber in a 200-Gbit/s mode-division-multiplexed link. Optics Letters, 2020, 45, 3577.	3.3	10
29	Utilizing phase delays of an integrated pixel-array structure to generate orbital-angular-momentum beams with tunable orders and a broad bandwidth. Optics Letters, 2020, 45, 4144.	3.3	8
30	Experimental mitigation of the effects of the limited size aperture or misalignment by singular-value-decomposition-based beam orthogonalization in a free-space optical link using Laguerreâ€"Gaussian modes. Optics Letters, 2020, 45, 6310.	3.3	11
31	Perspective on using multiple orbital-angular-momentum beams for enhanced capacity in free-space optical communication links. Nanophotonics, 2020, 10, 225-233.	6.0	36
32	Special Issue on Novel Insights into Orbital Angular Momentum Beams: From Fundamentals, Devices to Applications. Applied Sciences (Switzerland), 2019, 9, 2600.	2.5	3
33	Demonstration of Multiple Kerr-Frequency-Comb Generation Using Different Lines From Another Kerr Comb Located Up To 50 km Away. Journal of Lightwave Technology, 2019, 37, 579-584.	4.6	15
34	Limited-size aperture effects in an orbital-angular-momentum-multiplexed free-space optical data link between a ground station and a retro-reflecting UAV. Optics Communications, 2019, 450, 241-245.	2.1	6
35	Switchable detector array scheme to reduce the effect of single-photon detectorâ€™s deadtime in a multi-bit/photon quantum link. Optics Communications, 2019, 441, 132-137.	2.1	0
36	"Hiding" a Low-Intensity 50-Gbit/s QPSK Free-Space Optical Beam That Co-Axially Propagates on the Same Wavelength with a High-Intensity 50-Gbit/s QPSK Optical Beam using Orthogonal Mode Multiplexing. , 2019, , .		0

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37	Digital Modulation of Coherently-Coupled <inline-formula> <tex-math notation="LaTeX">$2imes1$ </tex-math> </inline-formula> Vertical-Cavity Surface-Emitting Laser Arrays. IEEE Photonics Technology Letters, 2019, 31, 173-176.	2.5	30
38	Optical Mitigation of Interchannel Crosstalk for Multiple Spectrally Overlapped 20-GBd QPSK/16-QAM WDM Channels Using Nonlinear Wave Mixing. Journal of Lightwave Technology, 2019, 37, 548-554.	4.6	6
39	All-Optical Signal Processing Techniques for Flexible Networks. Journal of Lightwave Technology, 2019, 37, 21-35.	4.6	71
40	Generating a Twisted Spatiotemporal Wave Packet Using Coherent Superposition of Structured Beams with Different Frequencies. , 2019, , .		1
41	Using all transverse degrees of freedom in quantum communications based on a generic mode sorter. Optics Express, 2019, 27, 10383.	3.4	33
42	Coherent optical wireless communication link employing orbital angular momentum multiplexing in a ballistic and diffusive scattering medium. Optics Letters, 2019, 44, 691.	3.3	15
43	Mitigation for turbulence effects in a 40-Gbit/s orbital-angular-momentum-multiplexed free-space optical link between a ground station and a retro-reflecting UAV using MIMO equalization. Optics Letters, 2019, 44, 5181.	3.3	37
44	Single-End Adaptive Optics Compensation for Emulated Turbulence in a Bi-Directional 10-Mbit/s per Channel Free-Space Quantum Communication Link Using Orbital-Angular-Momentum Encoding. Research, 2019, 2019, 8326701.	5.7	21
45	Single-End Adaptive Optics Compensation for Emulated Turbulence in a Bi-Directional 10-Mbit/s per Channel Free-Space Quantum Communication Link Using Orbital-Angular-Momentum Encoding. Research, 2019, 2019, 1-10.	5.7	1
46	Vector-mode multiplexing brings an additional approach for capacity growth in optical fibers. Light: Science and Applications, 2018, 7, 18002-18002.	16.6	36
47	Light, the universe and everything â€“ 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308.	1.3	6
48	Reconfigurable Channel Slicing and Stitching for an Optical Signal to Enable Fragmented Bandwidth Allocation Using Nonlinear Wave Mixing and an Optical Frequency Comb. Journal of Lightwave Technology, 2018, 36, 440-446.	4.6	24
49	Atmospheric turbulence compensation in orbital angular momentum communications: Advances and perspectives. Optics Communications, 2018, 408, 68-81.	2.1	77
50	Underwater optical communications using orbital angular momentum-based spatial division multiplexing. Optics Communications, 2018, 408, 21-25.	2.1	70
51	Scalable and Reconfigurable Optical Tap-Delay-Line for Multichannel Equalization and Correlation of 20-Gbaud QPSK Signals using Nonlinear Wave Mixing and a Microresonator Kerr Frequency Comb. , 2018, , .		0
52	PSA Design, Counting Longitudinal Chromatic Dispersion Fluctuation in Highly Nonlinear Fiber. , 2018, , .		0
53	MIMO Equalization to Mitigate Turbulence in a 2-Channel 40-Gbit/s QPSK Free-Space Optical 100-m Round-Trip Orbital-Angular-Momentum-Multiplexed Link Between a Ground Station and a Retro-Reflecting UAV. , 2018, , .		4
54	Experimental demonstration of beaconless beam displacement tracking for an orbital angular momentum multiplexed free-space optical link. Optics Letters, 2018, 43, 2392.	3.3	8

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55	400-Gbit/s QPSK free-space optical communication link based on four-fold multiplexing of Hermiteâ€"Gaussian or Laguerreâ€"Gaussian modes by varying both modal indices. Optics Letters, 2018, 43, 3889.	3.3	55
56	Hermiteâ€"Gaussian mode sorter. Optics Letters, 2018, 43, 5263.	3.3	33
57	Recent advances in high-capacity free-space optical and radio-frequency communications using orbital angular momentum multiplexing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20150439.	3.4	131
58	Experimental demonstration of a dual-channel E-band communication link using commercial impulse radios with orbital angular momentum multiplexing. , 2017, , .		8
59	Line-of-Sight Millimeter-Wave Communications Using Orbital Angular Momentum Multiplexing Combined With Conventional Spatial Multiplexing. IEEE Transactions on Wireless Communications, 2017, 16, 3151-3161.	9.2	130
60	High-Capacity Free-Space Optical Communications Between a Ground Transmitter and a Ground Receiver via a UAV Using Multiplexing of Multiple Orbital-Angular-Momentum Beams. Scientific Reports, 2017, 7, 17427.	3.3	81
61	Roadmap on structured light. Journal of Optics (United Kingdom), 2017, 19, 013001.	2.2	888
62	Sorting Photons by Radial Quantum Number. Physical Review Letters, 2017, 119, 263602.	7.8	97
63	Spatially multiplexed orbital-angular-momentum-encoded single photon and classical channels in a free-space optical communication link. Optics Letters, 2017, 42, 4881.	3.3	22
64	Power loss mitigation of orbital-angular-momentum-multiplexed free-space optical links using nonzero radial index Laguerreâ€"Gaussian beams. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1.	2.1	32
65	Spatial light structuring using a combination of multiple orthogonal orbital angular momentum beams with complex coefficients. Optics Letters, 2017, 42, 991.	3.3	31
66	Localization from the unique intensity gradient of an orbital-angular-momentum beam. Optics Letters, 2017, 42, 395.	3.3	5
67	Orbital Angular Momentum-based Space Division Multiplexing for High-capacity Underwater Optical Communications. Scientific Reports, 2016, 6, 33306.	3.3	156
68	OFDM over mm-Wave OAM Channels in a Multipath Environment with Intersymbol Interference. , 2016, , .		17
69	Mode-Division-Multiplexing of Multiple Bessel-Gaussian Beams Carrying Orbital-Angular-Momentum for Obstruction-Tolerant Free-Space Optical and Millimetre-Wave Communication Links. Scientific Reports, 2016, 6, 22082.	3.3	63
70	Multipath Effects in Millimetre-Wave Wireless Communication using Orbital Angular Momentum Multiplexing. Scientific Reports, 2016, 6, 33482.	3.3	37
71	Invited Article: Division and multiplication of the state order for data-carrying orbital angular momentum beams. APL Photonics, 2016, 1, .	5.7	16
72	Demonstration of Tunable Steering and Multiplexing of Two 28â€‰GHz Data Carrying Orbital Angular Momentum Beams Using Antenna Array. Scientific Reports, 2016, 6, 37078.	3.3	20

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73	Atmospheric turbulence mitigation in an OAM-based MIMO free-space optical link using spatial diversity combined with MIMO equalization. Optics Letters, 2016, 41, 2406.	3.3	77
74	32-Gbit/s 60-GHz millimeter-wave wireless communication using orbital angular momentum and polarization multiplexing. , 2016, , .		29
75	Communication with a twist. IEEE Spectrum, 2016, 53, 34-39.	0.7	48
76	Tunable generation and angular steering of a millimeter-wave orbital-angular-momentum beam using differential time delays in a circular antenna array. , 2016, , .		14
77	Experimental demonstration of a 200-Gbit/s free-space optical link by multiplexing Laguerreâ€"Gaussian beams with different radial indices. Optics Letters, 2016, 41, 3447.	3.3	85
78	A dual-channel 60 GHz communications link using patch antenna arrays to generate data-carrying orbital-angular-momentum beams. , 2016, , .		22
79	Experimental characterization of a 400â€‰â€‰Gbit/s orbital angular momentum multiplexed free-space optical link over 120 m. Optics Letters, 2016, 41, 622.	3.3	136
80	Orbital-angular-momentum-multiplexed free-space optical communication link using transmitter lenses. Applied Optics, 2016, 55, 2098.	2.1	27
81	Mode division multiplexing using an orbital angular momentum mode sorter and MIMO-DSP over a graded-index few-mode optical fibre. Scientific Reports, 2015, 5, 14931.	3.3	216
82	Dividing and multiplying the mode order for orbital-angular-momentum beams. , 2015, , .		2
83	Experimental measurements of multipath-induced intra- and inter-channel crosstalk effects in a millimeter-wave communications link using orbital-angular-momentum multiplexing. , 2015, , .		18
84	Tunable Homodyne Detection of an Incoming QPSK Data Signal Using Two Fixed Pump Lasers. Journal of Lightwave Technology, 2015, 33, 1344-1350.	4.6	5
85	Exploiting the unique intensity gradient of an orbital-angular-momentum beam for accurate receiver alignment monitoring in a free-space communication link. , 2015, , .		0
86	Impact of breather soliton in Kerr combs on the performance of communication systems. , 2015, , .		0
87	Experimental demonstration of 20â€‰â€‰Gbit/s data encoding and 2â€‰â€‰ns channel hopping using orbital angular momentum modes. Optics Letters, 2015, 40, 5810.	3.3	59
88	4 Ã— 20â€‰â€‰Gbit/s mode division multiplexing over free space using vector modes and a q-plate mode (de)multiplexer. Optics Letters, 2015, 40, 1980.	3.3	372
89	Phase correction for a distorted orbital angular momentum beam using a Zernike polynomials-based stochastic-parallel-gradient-descent algorithm. Optics Letters, 2015, 40, 1197.	3.3	101
90	Performance metrics and design considerations for a free-space optical orbital-angular-momentumâ€"multiplexed communication link. Optica, 2015, 2, 357.	9.3	164

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91	Turbulence compensation of an orbital angular momentum and polarization-multiplexed link using a data-carrying beacon on a separate wavelength. Optics Letters, 2015, 40, 2249.	3.3	46
92	Extending the Dynamic Range of Sweep-Free Brillouin Optical Time-Domain Analyzer. Journal of Lightwave Technology, 2015, 33, 2978-2985.	4.6	16
93	Experimental demonstration of 16-Gbit/s millimeter-wave communications link using thin metamaterial plates to generate data-carrying orbital-angular-momentum beams. , 2015, , .		17
94	Free-space optical communications using orbital-angular-momentum multiplexing combined with MIMO-based spatial multiplexing. Optics Letters, 2015, 40, 4210.	3.3	69
95	Experimental demonstration of 16 Gbit/s millimeter-wave communications using MIMO processing of 2 OAM modes on each of two transmitter/receiver antenna apertures. , 2014, , .		17
96	100â€‰â€‰Tbit/s free-space data link enabled by three-dimensional multiplexing of orbital angular momentum, polarization, and wavelength. Optics Letters, 2014, 39, 197.	3.3	443
97	Space division multiplexing in a basis of vector modes. , 2014, , .		6
98	Performance metrics and design parameters for an FSO communications link based on multiplexing of multiple orbital-angular-momentum beams. , 2014, , .		6
99	Using Orbital Angular Momentum Modes for Optical Transmission. , 2014, , .		7
100	Optical channel de-aggregator of 30-Gbaud QPSK and 20-Gbaud 8-PSK data using mapping onto constellation axes. , 2014, , .		3
101	Adaptive-optics-based simultaneous pre- and post-turbulence compensation of multiple orbital-angular-momentum beams in a bidirectional free-space optical link. Optica, 2014, 1, 376.	9.3	177
102	Crosstalk mitigation in a free-space orbital angular momentum multiplexed communication link using 4Ã—4 MIMO equalization. Optics Letters, 2014, 39, 4360.	3.3	116
103	Demonstration of 8-mode 32-Gbit/s millimeter-wave free-space communication link using 4 orbital-angular-momentum modes on 2 polarizations. , 2014, , .		11
104	High-capacity millimetre-wave communications with orbital angular momentum multiplexing. Nature Communications, 2014, 5, 4876.	12.8	972
105	N-dimentional multiplexing link with 1.036-Pbit/s transmission capacity and 112.6-bit/s/Hz spectral efficiency using OFDM-8QAM signals over 368 WDM pol-muxed 26 OAM modes. , 2014, , .		53
106	All-Optical Signal Processing. Journal of Lightwave Technology, 2014, 32, 660-680.	4.6	464
107	Adaptive optics compensation of multiple orbital angular momentum beams propagating through emulated atmospheric turbulence. Optics Letters, 2014, 39, 2845.	3.3	138
108	Multimode Communications Using Orbital Angular Momentum. , 2013, , 569-615.		15

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109	Terabit-Scale Orbital Angular Momentum Mode Division Multiplexing in Fibers. Science, 2013, 340, 1545-1548.	12.6	2,330
110	Analysis of aperture size for partially receiving and de-multiplexing 100-Gbit/s optical orbital angular momentum channels over free-space link. , 2013, , .		1
111	Analysis of Gaussian Optical Receivers. Journal of Lightwave Technology, 2013, 31, 2687-2693.	4.6	3
112	Broadband low chromatic dispersion and supercontinuum generation in a step-index fiber and an OAM-supporting vortex fiber with a submicron slot. , 2013, , .		3
113	Increasing the spectral bandwidth of optical frequency comb generation in a microring resonator using dispersion tailoring slotted waveguide. , 2013, , .		1
114	Atmospheric turbulence effects on the performance of a free space optical link employing orbital angular momentum multiplexing. Optics Letters, 2013, 38, 4062.	3.3	233
115	Introduction to the Issue on Optical Modulatorsâ€"Technologies and Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 3-5.	2.9	14
116	Low loss hollow-core waveguide on a silicon substrate. Nanophotonics, 2012, 1, 23-29.	6.0	31
117	Fiber structure to convert a Gaussian beam to higher-order optical orbital angular momentum modes. Optics Letters, 2012, 37, 3294.	3.3	53
118	High-Purity Generation and Power-Efficient Multiplexing of Optical Orbital Angular Momentum (OAM) Modes in a Ring Fiber for Spatial-Division Multiplexing Systems. , 2012, , .		3
119	Efficient generation and multiplexing of optical orbital angular momentum modes in a ring fiber by using multiple coherent inputs. Optics Letters, 2012, 37, 3645.	3.3	58
120	Demonstration of OAM Mode Distortions Monitoring using Interference-Based Phase Reconstruction. , 2012, , .		3
121	Spatial-Mode Multicasting of a Single 100-Gbit/s Orbital Angular Momentum (OAM) Mode onto Multiple OAM Modes. , 2012, , .		4
122	640 Gb/s All-Optical Regenerator Based on a Periodically Poled Lithium Niobate Waveguide. Journal of Lightwave Technology, 2012, 30, 1829-1834.	4.6	36
123	High-Speed Correlation and Equalization Using a Continuously Tunable All-Optical Tapped Delay Line. IEEE Photonics Journal, 2012, 4, 1220-1235.	2.0	28
124	All-Optical Signal Processing for UltraHigh Speed Optical Systems and Networks. Journal of Lightwave Technology, 2012, 30, 3760-3770.	4.6	61
125	On-Chip Octave-Spanning Supercontinuum in Nanostructured Silicon Waveguides Using Ultralow Pulse Energy. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1799-1806.	2.9	33
126	Review of Robust Data Exchange Using Optical Nonlinearities. International Journal of Optics, 2012, 2012, 1-25.	1.4	5

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127	A Different Angle on Light Communications. Science, 2012, 337, 655-656.	12.6	126
128	Terabit free-space data transmission employing orbital angular momentum multiplexing. Nature Photonics, 2012, 6, 488-496.	31.4	3,471
129	Silicon-on-Nitride Waveguide With Ultralow Dispersion Over an Octave-Spanning Mid-Infrared Wavelength Range. IEEE Photonics Journal, 2012, 4, 126-132.	2.0	34
130	Photonic 640-Gb/s Reconfigurable OTDM Addâ€"Drop Multiplexer Based on Pump Depletion in a Single PPLN Waveguide. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 709-716.	2.9	15
131	Correction of Phase Distortion of an OAM Mode using GS Algorithm based Phase Retrieval. , 2012, , .		21
132	Tapped delay-line matched filtering using a high-contrast grating hollow-core waveguide. , 2011, , .		0
133	ANN-Based Optical Performance Monitoring of QPSK Signals Using Parameters Derived From Balanced-Detected Asynchronous Diagrams. IEEE Photonics Technology Letters, 2011, 23, 248-250.	2.5	19
134	SBS-Based Fiber Optical Sensing Using Frequency-Domain Simultaneous Tone Interrogation. Journal of Lightwave Technology, 2011, 29, 1729-1735.	4.6	58
135	Multi-channel 100-Gbit/s DQPSK data exchange using bidirectional degenerate four-wave mixing. Optics Express, 2011, 19, 3332.	3.4	12
136	10â€‰Gbit/s tributary channel exchange of 160â€‰Gbit/ssignals using periodically poled lithium niobate. Optics Letters, 2011, 36, 630.	3.3	8
137	Fiber coupler for generating orbital angular momentum modes. Optics Letters, 2011, 36, 4269.	3.3	77
138	Optically Efficient Nonlinear Signal Processing. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 320-332.	2.9	66
139	Demonstration of 12.8-bit/s/Hz Spectral Efficiency using 16-QAM Signals over Multiple Orbital-Angular-Momentum Modes. , 2011, , .		10
140	25.6-bit/s/Hz spectral efficiency using 16-QAM signals over pol-muxed multiple orbital-angular-momentum modes. , 2011, , .		16
141	Silicon-Based Microring Resonator Modulators for Intensity Modulation. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 149-158.	2.9	84
142	High-Speed Optical WDM-to-TDM Conversion Using Fiber Nonlinearities. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1441-1447.	2.9	14
143	Reconfigurable 40-Gbit/s tributary selection from a 640-Gbit/s signal using NOLM-based cascaded demultiplexing. , 2010, , .		0
144	Demonstration of 100-Gbit/s DQPSK data exchange between two different wavelength channels using parametric depletion in a highly nonlinear fiber. , 2010, , .		2

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145	Photonic Generation of Ultra-Wideband Signals via Pulse Compression in a Highly Nonlinear Fiber. IEEE Photonics Technology Letters, 2010, 22, 239-241.	2.5	15
146	Orthogonal tributary channel exchange of 160-Gbit/s pol-muxed DPSK signal. Optics Express, 2010, 18, 16995.	3.4	10
147	640Gb/s all-optical regeneration in a PPLN waveguide. , 2010, , .		2
148	Sensitivity bound for optically-preamplified direct-detected OFDM systems using spectrally matched filters. , 2009, , .		0
149	Silicon microring-based signal modulation for chip-scale optical interconnection. Applied Physics A: Materials Science and Processing, 2009, 95, 1089-1100.	2.3	14
150	Optical performance monitoring to enable robust and reconfigurable optical high-capacity networks. , 2009, , .		3
151	160 Gb/s Time-Domain Channel Extraction/Insertion and All-Optical Logic Operations Exploiting a Single PPLN Waveguide. Journal of Lightwave Technology, 2009, 27, 4221-4227.	4.6	40
152	Spectrally Efficient Direct-Detected OFDM Transmission Incorporating a Tunable Frequency Gap and an Iterative Detection Techniques. Journal of Lightwave Technology, 2009, 27, 5723-5735.	4.6	176
153	Spectrally efficient direct-detected OFDM transmission employing an iterative estimation and cancellation technique. Optics Express, 2009, 17, 9099.	3.4	159
154	Theoretical and Experimental Investigations of Direct-Detected RF-Tone-Assisted Optical OFDM Systems. Journal of Lightwave Technology, 2009, 27, 1332-1339.	4.6	142
155	Estimation of the Bit Error Rate for Direct-Detected OFDM Signals With Optically Preamplified Receivers. Journal of Lightwave Technology, 2009, 27, 1340-1346.	4.6	31
156	Reconfigurable Multifunctional Operation Using Optical Injection-Locked Vertical-Cavity Surface-Emitting Lasers. Journal of Lightwave Technology, 2009, 27, 2958-2963.	4.6	4
157	Ultimate Sensitivity for Optically Preamplified Direct-Detected OFDM Systems Using Spectrally Matched Optical Filters. IEEE Photonics Technology Letters, 2009, 21, 1764-1766.	2.5	3
158	Controllable optical demultiplexing using continuously tunable optical parametric delay at 160-Gbit/s with <0.1 ps resolution. , 2009, , .		1
159	Synchronization Monitoring of I/Q Data and Pulse Carving Misalignment for a Parallel-Type RZ-DQPSK Transmitter by Measuring RF Clock Tone/Low Frequency Power. IEEE Photonics Technology Letters, 2008, 20, 2138-2140.	2.5	4
160	Experimental Demonstration of Reduced Complexity 43-Gb/s RZ-DQPSK Rate-Tunable Receiver. IEEE Photonics Technology Letters, 2008, 20, 1166-1168.	2.5	12
161	SOA-Assisted Data-Polarization-Insensitive Wavelength Conversion in a PPLN Waveguide. Journal of Lightwave Technology, 2008, 26, 1690-1695.	4.6	5
162	Fiber-Based Slow-Light Technologies. Journal of Lightwave Technology, 2008, 26, 3752-3762.	4.6	54

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163	Multichannel SBS Slow Light Using Spectrally Sliced Incoherent Pumping. Journal of Lightwave Technology, 2008, 26, 3763-3769.	4.6	11
164	Experimental demonstration of 1600 km SSMF transmission of a generalized direct detection optical virtual SSB-OFDM system. , 2008, , .		4
165	DPSK Data Quality Dependencies in Microring-Based Transmitter and Receiver. , 2008, , .		0
166	Experimental demonstration of compensating the I/Q imbalance and bias deviation of the Mach-Zehnder modulator for an RF-tone assisted optical OFDM system. , 2008, , .		2
167	Direct-detected polarization division multiplexed OFDM systems with self-polarization diversity. , 2008, , .		10
168	Off-line monitoring of OSNR/CD/PMD degradation effects using neural-network-based training sequences. , 2008, , .		1
169	Generation of high-modulation-index RF analog signals using a silicon microring resonator. , 2008, , .		0
170	Generating spectral-efficient duobinary data format from silicon ring resonator modulators. , 2008, , .		4
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