

Alan E Willner

List of Publications by Year in descending order

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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	Terabit free-space data transmission employing orbital angular momentum multiplexing. Nature Photonics, 2012, 6, 488-496.	31.4	3,471
2	Terabit-Scale Orbital Angular Momentum Mode Division Multiplexing in Fibers. Science, 2013, 340, 1545-1548.	12.6	2,330
3	High-capacity millimetre-wave communications with orbital angular momentum multiplexing. Nature Communications, 2014, 5, 4876.	12.8	972
4	Roadmap on structured light. Journal of Optics (United Kingdom), 2017, 19, 013001.	2.2	888
5	All-Optical Signal Processing. Journal of Lightwave Technology, 2014, 32, 660-680.	4.6	464
6	100-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
7	4 – 20-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
8	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
9	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
10	Broadband SBS Slow Light in an Optical Fiber. Journal of Lightwave Technology, 2007, 25, 201-206.	4.6	183
11	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
12	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
13	Performance metrics and design considerations for a free-space optical orbital-angular-momentum multiplexed communication link. Optica, 2015, 2, 357.	9.3	164
14	Spectrally efficient direct-detected OFDM transmission employing an iterative estimation and cancellation technique. Optics Express, 2009, 17, 9099.	3.4	159
15	Orbital Angular Momentum-based Space Division Multiplexing for High-capacity Underwater Optical Communications. Scientific Reports, 2016, 6, 33306.	3.3	156
16	Theoretical and Experimental Investigations of Direct-Detected RF-Tone-Assisted Optical OFDM Systems. Journal of Lightwave Technology, 2009, 27, 1332-1339.	4.6	142
17	Adaptive optics compensation of multiple orbital angular momentum beams propagating through emulated atmospheric turbulence. Optics Letters, 2014, 39, 2845.	3.3	138
18	Orbital angular momentum of light for communications. Applied Physics Reviews, 2021, 8, .	11.3	137

#	ARTICLE	IF	CITATIONS
19	Experimental characterization of a 400â€‰Gbit/s orbital angular momentum multiplexed free-space optical link over 120 m. <i>Optics Letters</i> , 2016, 41, 622.	3.3	136
20	Recent advances in high-capacity free-space optical and radio-frequency communications using orbital angular momentum multiplexing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20150439.	3.4	131
21	Line-of-Sight Millimeter-Wave Communications Using Orbital Angular Momentum Multiplexing Combined With Conventional Spatial Multiplexing. <i>IEEE Transactions on Wireless Communications</i> , 2017, 16, 3151-3161.	9.2	130
22	A Different Angle on Light Communications. <i>Science</i> , 2012, 337, 655-656.	12.6	126
23	Broadband frequency translation through time refraction in an epsilon-near-zero material. <i>Nature Communications</i> , 2020, 11, 2180.	12.8	121
24	Crosstalk mitigation in a free-space orbital angular momentum multiplexed communication link using 4Ã—4 MIMO equalization. <i>Optics Letters</i> , 2014, 39, 4360.	3.3	116
25	Phase correction for a distorted orbital angular momentum beam using a Zernike polynomials-based stochastic-parallel-gradient-descent algorithm. <i>Optics Letters</i> , 2015, 40, 1197.	3.3	101
26	Sorting Photons by Radial Quantum Number. <i>Physical Review Letters</i> , 2017, 119, 263602.	7.8	97
27	Experimental demonstration of a 200-Gbit/s free-space optical link by multiplexing Laguerreâ€“Gaussian beams with different radial indices. <i>Optics Letters</i> , 2016, 41, 3447.	3.3	85
28	Silicon-Based Microring Resonator Modulators for Intensity Modulation. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 149-158.	2.9	84
29	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. <i>Scientific Reports</i> , 2017, 7, 17427.	3.3	81
30	Fiber coupler for generating orbital angular momentum modes. <i>Optics Letters</i> , 2011, 36, 4269.	3.3	77
31	Atmospheric turbulence mitigation in an OAM-based MIMO free-space optical link using spatial diversity combined with MIMO equalization. <i>Optics Letters</i> , 2016, 41, 2406.	3.3	77
32	Atmospheric turbulence compensation in orbital angular momentum communications: Advances and perspectives. <i>Optics Communications</i> , 2018, 408, 68-81.	2.1	77
33	All-Optical Signal Processing Techniques for Flexible Networks. <i>Journal of Lightwave Technology</i> , 2019, 37, 21-35.	4.6	71
34	Underwater optical communications using orbital angular momentum-based spatial division multiplexing. <i>Optics Communications</i> , 2018, 408, 21-25.	2.1	70
35	Free-space optical communications using orbital-angular-momentum multiplexing combined with MIMO-based spatial multiplexing. <i>Optics Letters</i> , 2015, 40, 4210.	3.3	69
36	Optically Efficient Nonlinear Signal Processing. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011, 17, 320-332.	2.9	66

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37	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
38	All-Optical Signal Processing for UltraHigh Speed Optical Systems and Networks. Journal of Lightwave Technology, 2012, 30, 3760-3770.	4.6	61
39	Experimental demonstration of 20 Gbit/s data encoding and 2 channels channel hopping using orbital angular momentum modes. Optics Letters, 2015, 40, 5810.	3.3	59
40	SBS-Based Fiber Optical Sensing Using Frequency-Domain Simultaneous Tone Interrogation. Journal of Lightwave Technology, 2011, 29, 1729-1735.	4.6	58
41	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
42	400-Gbit/s QPSK free-space optical communication link based on four-fold multiplexing of Hermite-Gaussian or Laguerre-Gaussian modes by varying both modal indices. Optics Letters, 2018, 43, 3889.	3.3	55
43	Fiber-Based Slow-Light Technologies. Journal of Lightwave Technology, 2008, 26, 3752-3762.	4.6	54
44	Fiber structure to convert a Gaussian beam to higher-order optical orbital angular momentum modes. Optics Letters, 2012, 37, 3294.	3.3	53
45	N-dimensional 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
46	Perspectives on advances in high-capacity, free-space communications using multiplexing of orbital-angular-momentum beams. APL Photonics, 2021, 6, .	5.7	53
47	44-ns Continuously Tunable Dispersionless Optical Delay Element Using a PPLN Waveguide With Two-Pump Configuration, DCF, and a Dispersion Compensator. IEEE Photonics Technology Letters, 2007, 19, 861-863.	2.5	51
48	Communication with a twist. IEEE Spectrum, 2016, 53, 34-39.	0.7	48
49	Independent and Simultaneous Monitoring of Chromatic and Polarization-Mode Dispersion in OOK and DPSK Transmission. IEEE Photonics Technology Letters, 2007, 19, 3-5.	2.5	46
50	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
51	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
52	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
53	Multipath Effects in Millimetre-Wave Wireless Communication using Orbital Angular Momentum Multiplexing. Scientific Reports, 2016, 6, 33482.	3.3	37
54	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

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55	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
56	Vector-mode multiplexing brings an additional approach for capacity growth in optical fibers. Light: Science and Applications, 2018, 7, 18002-18002.	16.6	36
57	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
58	A Single Slow-Light Element for Independent Delay Control and Synchronization on Multiple Gb/s Data Channels. IEEE Photonics Technology Letters, 2007, 19, 1081-1083.	2.5	34
59	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
60	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
61	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
62	Using all transverse degrees of freedom in quantum communications based on a generic mode sorter. Optics Express, 2019, 27, 10383.	3.4	33
63	Hermite-Gaussian mode sorter. Optics Letters, 2018, 43, 5263.	3.3	33
64	Power loss mitigation of orbital-angular-momentum-multiplexed free-space optical links using nonzero radial index Laguerre-Gaussian beams. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1.	2.1	32
65	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
66	Low loss hollow-core waveguide on a silicon substrate. Nanophotonics, 2012, 1, 23-29.	6.0	31
67	Spatial light structuring using a combination of multiple orthogonal orbital angular momentum beams with complex coefficients. Optics Letters, 2017, 42, 991.	3.3	31
68	Digital Modulation of Coherently-Coupled 1×1 Vertical-Cavity Surface-Emitting Laser Arrays. IEEE Photonics Technology Letters, 2019, 31, 173-176.	2.5	30
69	Adiabatic Frequency Conversion Using a Time-Varying Epsilon-Near-Zero Metasurface. Nano Letters, 2021, 21, 5907-5913.	9.1	30
70	32-Gbit/s 60-GHz millimeter-wave wireless communication using orbital angular momentum and polarization multiplexing. , 2016, , .		29
71	High-Speed Correlation and Equalization Using a Continuously Tunable All-Optical Tapped Delay Line. IEEE Photonics Journal, 2012, 4, 1220-1235.	2.0	28
72	Orbital-angular-momentum-multiplexed free-space optical communication link using transmitter lenses. Applied Optics, 2016, 55, 2098.	2.1	27

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73	High-fidelity spatial mode transmission through a 1-km-long multimode fiber via vectorial time reversal. <i>Nature Communications</i> , 2021, 12, 1866.	12.8	27
74	Dynamic spatiotemporal beams that combine two independent and controllable orbital-angular-momenta using multiple optical-frequency-comb lines. <i>Nature Communications</i> , 2020, 11, 4099.	12.8	25
75	Pattern Dependence of Data Distortion in Slow-Light Elements. <i>Journal of Lightwave Technology</i> , 2007, 25, 1754-1760.	4.6	24
76	Reconfigurable Channel Slicing and Stitching for an Optical Signal to Enable Fragmented Bandwidth Allocation Using Nonlinear Wave Mixing and an Optical Frequency Comb. <i>Journal of Lightwave Technology</i> , 2018, 36, 440-446.	4.6	24
77	Photon Acceleration Using a Time-Varying Epsilon-near-Zero Metasurface. <i>ACS Photonics</i> , 2021, 8, 716-720.	6.6	24
78	Experimental Demonstration of a Coherently Modulated and Directly Detected Optical OFDM System Using an RF-Tone Insertion. , 2008, , .		23
79	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. <i>Journal of Lightwave Technology</i> , 2020, 38, 359-365.	4.6	23
80	A dual-channel 60 GHz communications link using patch antenna arrays to generate data-carrying orbital-angular-momentum beams. , 2016, , .		22
81	Spatially multiplexed orbital-angular-momentum-encoded single photon and classical channels in a free-space optical communication link. <i>Optics Letters</i> , 2017, 42, 4881.	3.3	22
82	Optical Signal Processing Aided by Optical Frequency Combs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021, 27, 1-16.	2.9	22
83	Modal coupling and crosstalk due to turbulence and divergence on free space THz links using multiple orbital angular momentum beams. <i>Scientific Reports</i> , 2021, 11, 2110.	3.3	21
84	Correction of Phase Distortion of an OAM Mode using GS Algorithm based Phase Retrieval. , 2012, , .		21
85	Performance of real-time adaptive optics compensation in a turbulent channel with high-dimensional spatial-mode encoding. <i>Optics Express</i> , 2020, 28, 15376.	3.4	21
86	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. <i>Research</i> , 2019, 2019, 8326701.	5.7	21
87	Demonstration of Tunable Steering and Multiplexing of Two 28â€‰GHz Data Carrying Orbital Angular Momentum Beams Using Antenna Array. <i>Scientific Reports</i> , 2016, 6, 37078.	3.3	20
88	ANN-Based Optical Performance Monitoring of QPSK Signals Using Parameters Derived From Balanced-Detected Asynchronous Diagrams. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 248-250.	2.5	19
89	Experimental measurements of multipath-induced intra- and inter-channel crosstalk effects in a millimeter-wave communications link using orbital-angular-momentum multiplexing. , 2015, , .		18
90	All mirrors are not created equal. <i>Nature Photonics</i> , 2007, 1, 87-88.	31.4	17

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91	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
92	Experimental demonstration of 16-Gbit/s millimeter-wave communications link using thin metamaterial plates to generate data-carrying orbital-angular-momentum beams. , 2015, , .		17
93	OFDM over mm-Wave OAM Channels in a Multipath Environment with Intersymbol Interference. , 2016, , .		17
94	Experimental Demonstration of 340 km SSMF Transmission Using a Virtual Single Sideband OFDM Signal that Employs Carrier Suppressed and Iterative Detection Techniques. , 2008, , .		16
95	25.6-bit/s/Hz spectral efficiency using 16-QAM signals over pol-muxed multiple orbital-angular-momentum modes. , 2011, , .		16
96	Extending the Dynamic Range of Sweep-Free Brillouin Optical Time-Domain Analyzer. Journal of Lightwave Technology, 2015, 33, 2978-2985.	4.6	16
97	Invited Article: Division and multiplication of the state order for data-carrying orbital angular momentum beams. APL Photonics, 2016, 1, .	5.7	16
98	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
99	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
100	Multimode Communications Using Orbital Angular Momentum. , 2013, , 569-615.		15
101	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
102	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
103	Simultaneous and Independent Monitoring of OSNR, Chromatic and Polarization Mode Dispersion for NRZ-OOK, DPSK and Duobinary. , 2007, , .		14
104	Silicon microring-based signal modulation for chip-scale optical interconnection. Applied Physics A: Materials Science and Processing, 2009, 95, 1089-1100.	2.3	14
105	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
106	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
107	Tunable generation and angular steering of a millimeter-wave orbital-angular-momentum beam using differential time delays in a circular antenna array. , 2016, , .		14
108	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

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109	Advanced Techniques to Increase the Number of Users and Bit Rate in OCDMA Networks. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1403-1414.	2.9	13
110	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
111	Multiprobe Time Reversal for High-Fidelity Vortex-Mode-Division Multiplexing Over a Turbulent Free-Space Link. Physical Review Applied, 2021, 15, .	3.8	13
112	Demonstration of using two aperture pairs combined with multiple-mode receivers and MIMO signal processing for enhanced tolerance to turbulence and misalignment in a 10-Gbit/s QPSK FSO link. Optics Letters, 2020, 45, 3042.	3.3	13
113	Experimental Demonstration of Reduced Complexity 43-Gb/s RZ-DQPSK Rate-Tunable Receiver. IEEE Photonics Technology Letters, 2008, 20, 1166-1168.	2.5	12
114	Multi-channel 100-Gbit/s DQPSK data exchange using bidirectional degenerate four-wave mixing. Optics Express, 2011, 19, 3332.	3.4	12
115	Experimental Demonstration of Dynamic Bandwidth Allocation Using a MEMS-Actuated Bandwidth-Tunable Microdisk Resonator Filter. IEEE Photonics Technology Letters, 2007, 19, 1508-1510.	2.5	11
116	Multichannel SBS Slow Light Using Spectrally Sliced Incoherent Pumping. Journal of Lightwave Technology, 2008, 26, 3763-3769.	4.6	11
117	Demonstration of 8-mode 32-Gbit/s millimeter-wave free-space communication link using 4 orbital-angular-momentum modes on 2 polarizations. , 2014, , .		11
118	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 Laguerre-Gaussian modes. Optics Letters, 2020, 45, 6310.	3.3	11
119	Direct-detected polarization division multiplexed OFDM systems with self-polarization diversity. , 2008, , .		10
120	Orthogonal tributary channel exchange of 160-Gbit/s pol-muxed DPSK signal. Optics Express, 2010, 18, 16995.	3.4	10
121	Demonstration of 12.8-bit/s/Hz Spectral Efficiency using 16-QAM Signals over Multiple Orbital-Angular-Momentum Modes. , 2011, , .		10
122	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
123	Directionally Resolved Measurement and Modeling of THz Band Propagation Channels. IEEE Open Journal of Antennas and Propagation, 2022, 3, 663-686.	3.7	9
124	10-Gbit/s tributary channel exchange of 160-Gbit/s signals using periodically poled lithium niobate. Optics Letters, 2011, 36, 630.	3.3	8
125	Experimental demonstration of a dual-channel E-band communication link using commercial impulse radios with orbital angular momentum multiplexing. , 2017, , .		8
126	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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127	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
128	Self-Coherent Decision-Feedback-Directed 40-Gb/s DQPSK Receiver. IEEE Photonics Technology Letters, 2007, 19, 828-830.	2.5	7
129	Adjustable Chirp Injection-Locked 1.55- μ m VCSELs for Enhanced Chromatic Dispersion Compensation at 10-Gbit/s. , 2008, , .		7
130	Using Orbital Angular Momentum Modes for Optical Transmission. , 2014, , .		7
131	Simultaneous turbulence mitigation and channel demultiplexing using a single multi-plane light converter for a free-space optical link with two 100-Gbit/s OAM channels. Optics Communications, 2021, 501, 127359.	2.1	7
132	Space division multiplexing in a basis of vector modes. , 2014, , .		6
133	Performance metrics and design parameters for an FSO communications link based on multiplexing of multiple orbital-angular-momentum beams. , 2014, , .		6
134	Light, the universe and everything – 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308.	1.3	6
135	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
136	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
137	Simultaneous turbulence mitigation and channel demultiplexing for two 100-Gbit/s orbital-angular-momentum multiplexed beams by adaptive wavefront shaping and diffusing. Optics Letters, 2020, 45, 702.	3.3	6
138	SOA-Assisted Data-Polarization-Insensitive Wavelength Conversion in a PPLN Waveguide. Journal of Lightwave Technology, 2008, 26, 1690-1695.	4.6	5
139	Review of Robust Data Exchange Using Optical Nonlinearities. International Journal of Optics, 2012, 2012, 1-25.	1.4	5
140	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
141	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
142	Localization from the unique intensity gradient of an orbital-angular-momentum beam. Optics Letters, 2017, 42, 395.	3.3	5
143	CTH01-5: A Novel Optical CDMA Modulation Scheme: Code Cycle Modulation. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	4
144	40-GHz CSRZ Optical Pulse Generation Using a 10-GHz Mach-Zehnder Modulator and a 25-ps Delay Line Interferometer. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	4

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145	Polarization-Based 43 Gb/s RZ-DQPSK Receiver Design Employing a Single Delay-Line Interferometer. , 2007, , .		4
146	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
147	Experimental demonstration of 1600 km SSMF transmission of a generalized direct detection optical virtual SSB-OFDM system. , 2008, , .		4
148	Generating spectral-efficient duobinary data format from silicon ring resonator modulators. , 2008, , .		4
149	Training of neural networks to perform optical performance monitoring of a combination of accumulated signal nonlinearity, CD, PMD, and OSNR. , 2008, , .		4
150	Experimental Synchronization Monitoring of I/Q Data and Pulse-Carving Temporal Misalignment for a Serial-Type 80-Gbit/s RZ-DQPSK Transmitter. , 2008, , .		4
151	Reconfigurable Multifunctional Operation Using Optical Injection-Locked Vertical-Cavity Surface-Emitting Lasers. Journal of Lightwave Technology, 2009, 27, 2958-2963.	4.6	4
152	Spatial-Mode Multicasting of a Single 100-Gbit/s Orbital Angular Momentum (OAM) Mode onto Multiple OAM Modes. , 2012, , .		4
153	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
154	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
155	Protocols to eliminate tuning penalties for packet-switched WDM star networks with large tuning latency. Journal of High Speed Networks, 1997, 6, 15-31.	0.8	3
156	Multi-format Continuously Variable Bitrate DPSK/OOK Demodulating Receiver Design. , 2006, , .		3
157	Variable Bit Rate Optical CDMA Networks Using Multiple Pulse Position Modulation. , 2007, , .		3
158	Optical pseudo-random bit sequence generator using a dual-drive Mach-Zehnder modulator as a linear feedback shift register. , 2008, , .		3
159	Optical performance monitoring to enable robust and reconfigurable optical high-capacity networks. , 2009, , .		3
160	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
161	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
162	Demonstration of OAM Mode Distortions Monitoring using Interference-Based Phase Reconstruction. , 2012, , .		3

#	ARTICLE	IF	CITATIONS
163	Analysis of Gaussian Optical Receivers. Journal of Lightwave Technology, 2013, 31, 2687-2693.	4.6	3
164	Broadband low chromatic dispersion and supercontinuum generation in a step-index fiber and an OAM-supporting vortex fiber with a submicron slot. , 2013, , .		3
165	Optical channel de-aggregator of 30-Gbaud QPSK and 20-Gbaud 8-PSK data using mapping onto constellation axes. , 2014, , .		3
166	Special Issue on Novel Insights into Orbital Angular Momentum Beams: From Fundamentals, Devices to Applications. Applied Sciences (Switzerland), 2019, 9, 2600.	2.5	3
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168	Data inversion and adjustable chirp in 10-Gbps directly-modulated injection-locked 1.55-µm VCSELs. , 2008, , .		3
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