Yinwen Cao

List of Publications by Year
in descending order

89 papers	2,704 citations	331259 21 h-index	182168 51 g-index
89 all docs	89 docs citations	89 times ranked	2354 citing authors

#	Article	IF	Citations
1	High-capacity millimetre-wave communications with orbital angular momentum multiplexing. Nature Communications, 2014, 5, 4876.	5.8	972
2	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.	1.6	216
3	Orbital Angular Momentum-based Space Division Multiplexing for High-capacity Underwater Optical Communications. Scientific Reports, 2016, 6, 33306.	1.6	156
4	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.	6.1	130
5	Crosstalk mitigation in a free-space orbital angular momentum multiplexed communication link using 4×4 MIMO equalization. Optics Letters, 2014, 39, 4360.	1.7	116
6	Phase correction for a distorted orbital angular momentum beam using a Zernike polynomials-based stochastic-parallel-gradient-descent algorithm. Optics Letters, 2015, 40, 1197.	1.7	101
7	Atmospheric turbulence mitigation in an OAM-based MIMO free-space optical link using spatial diversity combined with MIMO equalization. Optics Letters, 2016, 41, 2406.	1.7	77
8	All-Optical Signal Processing Techniques for Flexible Networks. Journal of Lightwave Technology, 2019, 37, 21-35.	2.7	71
9	Free-space optical communications using orbital-angular-momentum multiplexing combined with MIMO-based spatial multiplexing. Optics Letters, 2015, 40, 4210.	1.7	69
10	Experimental demonstration of 20 Gbit/s data encoding and 2 ns channel hopping using orbital angular momentum modes. Optics Letters, 2015, 40, 5810.	1.7	59
11	Frequency Estimation for Optical Coherent MPSK System Without Removing Modulated Data Phase. IEEE Photonics Technology Letters, 2010, 22, 691-693.	1.3	50
12	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.	1.7	37
13	Orthogonally polarized frequency comb generation from a Kerr comb via cross-phase modulation. Optics Letters, 2019, 44, 1472.	1.7	32
14	Spatial light structuring using a combination of multiple orthogonal orbital angular momentum beams with complex coefficients. Optics Letters, 2017, 42, 991.	1.7	31
15	A Simplified Feedforward Carrier Recovery Algorithm for Coherent Optical QAM System. Journal of Lightwave Technology, 2011, 29, 801-807.	2.7	29
16	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.	2.7	24
17	Photon Acceleration Using a Time-Varying Epsilon-near-Zero Metasurface. ACS Photonics, 2021, 8, 716-720.	3.2	24
18	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.	2.7	23

#	Article	IF	Citations
19	Digital optical processing of optical communications: towards an Optical Turing Machine. Nanophotonics, 2017, 6, 507-530.	2.9	22
20	Spatially multiplexed orbital-angular-momentum-encoded single photon and classical channels in a free-space optical communication link. Optics Letters, 2017, 42, 4881.	1.7	22
21	Pilot-tone-based self-homodyne detection using optical nonlinear wave mixing. Optics Letters, 2017, 42, 1840.	1.7	21
22	Dependence of a microresonator Kerr frequency comb on the pump linewidth. Optics Letters, 2017, 42, 779.	1.7	21
23	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.	2.8	21
24	Demonstration of Tunable Steering and Multiplexing of Two 28â€‰GHz Data Carrying Orbital Angular Momentum Beams Using Antenna Array. Scientific Reports, 2016, 6, 37078.	1.6	20
25	Demonstration of a 10â€‰â€‰Mbit/s quantum communication link by encoding data on two Laguerreâ€"Gaussian modes with different radial indices. Optics Letters, 2018, 43, 5639.	1.7	18
26	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
27	Dual-pump generation of high-coherence primary Kerr combs with multiple sub-lines. Optics Letters, 2017, 42, 595.	1.7	17
28	Optical channel de-aggregation of quadrature-phase-shift-keying and eight-phase-shift-keying data using mapping onto constellation axes. Optics Letters, 2015, 40, 4899.	1.7	16
29	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.	2.7	15
30	Optical Nyquist channel generation using a comb-based tunable optical tapped-delay-line. Optics Letters, 2014, 39, 6585.	1.7	14
31	Pump-linewidth-tolerant wavelength multicasting using soliton Kerr frequency combs. Optics Letters, 2017, 42, 3177.	1.7	14
32	Phase noise mitigation of QPSK signal utilizing phase-locked multiplexing of signal harmonics and amplitude saturation. Optics Letters, 2015, 40, 3328.	1.7	13
33	Demonstration of optical multicasting using Kerr frequency comb lines. Optics Letters, 2016, 41, 3876.	1.7	13
34	Phase-sensitive QPSK channel phase quantization by amplifying the fourth-harmonic idler using counter-propagating Brillouin amplification. Optics Communications, 2018, 423, 48-52.	1.0	13
35	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.	1.7	13
36	Scalable and reconfigurable optical tapped-delay-line for multichannel equalization and correlation using nonlinear wave mixing and a Kerr frequency comb. Optics Letters, 2018, 43, 5563.	1.7	13

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37	Modified frequency and phase estimation for M-QAM optical coherent detection. , 2010, , .		12
38	Reconfigurable optical generation of nine Nyquist WDM channels with sinc-shaped temporal pulse trains using a single microresonator-based Kerr frequency comb. Optics Letters, 2019, 44, 1852.	1.7	11
39	Orbital-Angular-Momentum Mode (De)Multiplexer: A Single Optical Element for MIMO-based and non-MIMO-based Multimode Fiber Systems. , 2014, , .		10
40	Tunable insertion of multiple lines into a Kerr frequency comb using electro-optical modulators. Optics Letters, 2017, 42, 3765.	1.7	10
41	80Ã—224 Gb/s Unrepeated Transmission over 240 km of Large-Aeff Pure Silica Core Fibre without Remote Optical Pre-amplifier. , 2011, , .		10
42	Experimental demonstration of phase-sensitive regeneration of a binary phase-shift keying channel without a phase-locked loop using Brillouin amplification. Optics Letters, 2016, 41, 5434.	1.7	10
43	Demonstration of OAM-based MIMO FSO link using spatial diversity and MIMO equalization for turbulence mitigation. , 2016, , .		10
44	Experimental demonstration of tunable de-aggregation from 16-QAM to 4-PAM for two wavelength multiplexed channels using wave mixing in a single nonlinear element to map constellation onto axes. Optics Communications, 2019, 451, 74-79.	1.0	9
45	4 Gbit/s Underwater Optical Transmission Using OAM Multiplexing and Directly Modulated Green Laser. , 2016, , .		9
46	Reconfigurable optical inter-channel interference mitigation for spectrally overlapped QPSK signals using nonlinear wave mixing in cascaded PPLN waveguides. Optics Letters, 2016, 41, 3233.	1.7	8
47	Effects of erbium-doped fiber amplifier induced pump noise on soliton Kerr frequency combs for 64-quadrature amplitude modulation transmission. Optics Letters, 2018, 43, 2495.	1.7	8
48	Tunable radio frequency photonics filter using a comb-based optical tapped delay line with an optical nonlinear multiplexer. Optics Letters, 2015, 40, 3284.	1.7	7
49	Frequency estimation for optical coherent M-QAM system without removing modulated data phase. Optics Communications, 2012, 285, 3692-3696.	1.0	6
50	Effect of a breather soliton in Kerr frequency combs on optical communication systems. Optics Letters, 2016, 41, 1764.	1.7	6
51	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.	2.7	6
52	Demonstration of wavelength tunable optical modulation format conversion from 20 and 30 Gbit/s QPSK to PAM4 using nonlinear wave mixing. Optics Communications, 2020, 459, 124871.	1.0	6
53	Higher-order QAM data transmission using a high-coherence hybrid Si/IIIâ€"V semiconductor laser. Optics Letters, 2020, 45, 1499.	1.7	6
54	Tunable Homodyne Detection of an Incoming QPSK Data Signal Using Two Fixed Pump Lasers. Journal of Lightwave Technology, 2015, 33, 1344-1350.	2.7	5

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55	WDM Amplification of One Pump HNLF Based Phase Sensitive Amplifier with Static Pump Phase Tuning. , 2019, , .		5
56	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
57	Superimposition and Detection of Frequency Modulated Tone for Light Path Tracing Employing Digital Signal Processing and Optical Filter. , 2012, , .		4
58	Optical channel de-aggregator of 30-Gbaud QPSK and 20-Gbaud 8-PSK data using mapping onto constellation axes. , 2014, , .		3
59	Demonstration of Adaptive Optics Compensation for Emulated Atmospheric Turbulence in a Two-Orbital-Angular-Momentum Encoded Free-Space Quantum Link at 10 Mbits/s. , 2018, , .		3
60	Flexible spectrum sharing of two asynchronous phase-shift keying signals using power division multiplexing. Optics Letters, 2020, 45, 1176.	1.7	3
61	Experimental demonstration of tunable homodyne detection of WDM and dual-polarization PSK channels by automatically locking the channels to a local pump laser using nonlinear mixing. Optics Letters, 2016, 41, 2680.	1.7	2
62	Demonstration of Kramers-Kronig Detection of Four 20-Gbaud 16-QAM Channels after 50-km Transmission Using Kerr Combs to Perform Shared Phase Estimation. , 2019, , .		2
63	A candidate approach for optical in-network computation. , 2016, , .		1
64	All optical signal level swapping and multilevel amplitude noise mitigation based on different regions of optical parametric amplification. Optics Letters, 2016, 41, 677.	1.7	1
65	Raman-assisted phase sensitive amplifier using a fiber Bragg grating-based tunable phase shifter. Optics Letters, 2018, 43, 3949.	1.7	1
66	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.	1.0	1
67	CMA Equalization for a 2 Gb/s Orbital Angular Momentum Multiplexed Optical Underwater Link through Thermally Induced Refractive Index Inhomogeneity. , 2016, , .		1
68	Experimental Demonstration of a 10-Mbit/s Quantum Link using Data Encoding on Orthogonal Laguerre-Gaussian Modes. , 2018, , .		1
69	Experimental utilization of repeated spatial-mode shifting for achieving discrete delays in a free-space recirculating loop. Optics Letters, 2018, 43, 5395.	1.7	1
70	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.	2.8	1
71	Kramersâ€"Kronig detection of four 20â€‰â€‰Gbaud 16-QAM channels using Kerr combs for a shared phase estimation. Optics Letters, 2020, 45, 1794.	1.7	1
72	Experimental Investigation of Training Sequence for Adaptive Equalizer Initialization in DP-16QAM System. , 2013, , .		0

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73	Experiment Turbulence Compensation of 50-Gbaud/s Orbital-Angular-Momentum QPSK Signals Using Intensity-only based SPGD Algorithm. , 2014, , .		0
74	Method for Bi-directional Conversion between Fundamental Gaussian Beams and Spatially Polarized Beams using a Spatial Light Modulator. , 2014, , .		0
75	Impact of breather soliton in Kerr combs on the performance of communication systems. , 2015, , .		0
76	Free-space optical communications using encoding of data on different orbital-angular-momentum modes. Proceedings of SPIE, 2016, , .	0.8	0
77	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
78	PSA Design, Counting Longitudinal Chromatic Dispersion Fluctuation in Highly Nonlinear Fiber. , 2018, , .		0
79	Mechanism and Quantitative Modeling of PMD-Induced Reductions of XPM Polarization Crosstalk and Phase Noise. , 2012, , .		0
80	Experimental Demonstration of Using Multi-Layer-Overlay Technique for Increasing Spectral Efficiency to 1.18 bits/s/Hz in a 3 Gbit/s Signal over 4-km Multimode Fiber. , 2015, , .		0
81	Enhanced Spectral Efficiency of 2.36 bits/s/Hz using Multiple Layer Overlay Modulation for QPSK over a 14-km Single Mode Fiber Link. , 2015, , .		0
82	Experimental Demonstration of Localized Energy Density Gain using Coherent Superposition of Multiple Structured Orbital-Angular-Momentum Modes. , 2016, , .		0
83	Wavelength and Pump Power Characterization of Low-phase-noise Kerr Frequency Comb Lines. , 2016, , .		0
84	Experimental Generation of High-Coherence Sub-Prime Comb Lines with Multiple Sub-Lines in a Kerr Frequency Comb using Dual Pumps. , 2016, , .		0
85	Experimental Demonstration of 7-fold Multicasting of a 20-Gbaud QPSK Signal using Kerr Frequency Combs. , 2016, , .		0
86	Simultaneous all-optical phase noise mitigation and automatically locked homodyne reception of an incoming QPSK data signal. Optics Letters, 2016, 41, 4779.	1.7	0
87	Optical signal processing using coherent optical frequency combs. , 2018, , .		0
88	Performance enhancement of an optical high-order QAM channel by adding correlated data to robust neighboring BPSK or QPSK channels. Optics Letters, 2018, 43, 5697.	1.7	0
89	Tunable optical single-sideband generation for OOK and PAM4 data channels using an optical frequency comb and nonlinear wave-mixing. Optics Letters, 2020, 45, 6294.	1.7	0