

# Peicheng Liao

## List of Publications by Year in descending order

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54  
papers

1,196  
citations

394421

19  
h-index

395702

33  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental characterization of a 400â€‰Gbit/s orbital angular momentum multiplexed free-space optical link over 120 m. Optics Letters, 2016, 41, 622.	3.3	136
2	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
3	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
4	All-Optical Signal Processing Techniques for Flexible Networks. Journal of Lightwave Technology, 2019, 37, 21-35.	4.6	71
5	Free-space optical communications using orbital-angular-momentum multiplexing combined with MIMO-based spatial multiplexing. Optics Letters, 2015, 40, 4210.	3.3	69
6	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
7	Experimental demonstration of 20â€‰Gbit/s data encoding and 2â€‰ns channel hopping using orbital angular momentum modes. Optics Letters, 2015, 40, 5810.	3.3	59
8	Multipath Effects in Millimetre-Wave Wireless Communication using Orbital Angular Momentum Multiplexing. Scientific Reports, 2016, 6, 33482.	3.3	37
9	Mitigation for turbulence effects in a 40-Cbit/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
10	Ultra-flat dispersion in an integrated waveguide with five and six zero-dispersion wavelengths for mid-infrared photonics. Photonics Research, 2019, 7, 1279.	7.0	33
11	Orthogonally polarized frequency comb generation from a Kerr comb via cross-phase modulation. Optics Letters, 2019, 44, 1472.	3.3	32
12	Spatial light structuring using a combination of multiple orthogonal orbital angular momentum beams with complex coefficients. Optics Letters, 2017, 42, 991.	3.3	31
13	Digital Modulation of Coherently-Coupled $2 \times 1$ Vertical-Cavity Surface-Emitting Laser Arrays. IEEE Photonics Technology Letters, 2019, 31, 173-176.	2.5	30
14	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
15	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
16	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
17	Pilot-tone-based self-homodyne detection using optical nonlinear wave mixing. Optics Letters, 2017, 42, 1840.	3.3	21
18	Dependence of a microresonator Kerr frequency comb on the pump linewidth. Optics Letters, 2017, 42, 779.	3.3	21

#	ARTICLE	IF	CITATIONS
19	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
20	Experimental measurements of multipath-induced intra- and inter-channel crosstalk effects in a millimeter-wave communications link using orbital-angular-momentum multiplexing. , 2015, , .		18
21	Dual-pump generation of high-coherence primary Kerr combs with multiple sub-lines. Optics Letters, 2017, 42, 595.	3.3	17
22	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
23	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
24	Pump-linewidth-tolerant wavelength multicasting using soliton Kerr frequency combs. Optics Letters, 2017, 42, 3177.	3.3	14
25	Demonstration of optical multicasting using Kerr frequency comb lines. Optics Letters, 2016, 41, 3876.	3.3	13
26	Phase-sensitive QPSK channel phase quantization by amplifying the fourth-harmonic idler using counter-propagating Brillouin amplification. Optics Communications, 2018, 423, 48-52.	2.1	13
27	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.	3.3	13
28	High-Speed Coherent Optical Communication With Isolator-Free Heterogeneous Si/III-V Lasers. Journal of Lightwave Technology, 2020, 38, 6584-6590.	4.6	11
29	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.	3.3	11
30	Tunable insertion of multiple lines into a Kerr frequency comb using electro-optical modulators. Optics Letters, 2017, 42, 3765.	3.3	10
31	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.	3.3	10
32	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.	2.1	9
33	Reconfigurable optical inter-channel interference mitigation for spectrally overlapped QPSK signals using nonlinear wave mixing in cascaded PPLN waveguides. Optics Letters, 2016, 41, 3233.	3.3	8
34	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.	3.3	8
35	16-QAM probabilistic constellation shaping by adaptively modifying the distribution of transmitted symbols based on errors at the receiver. Optics Letters, 2020, 45, 5283.	3.3	7
36	Effect of a breather soliton in Kerr frequency combs on optical communication systems. Optics Letters, 2016, 41, 1764.	3.3	6

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37	Limited-size aperture effects in an orbital-angular-momentum-multiplexed free-space optical data link between a ground station and a retro-reflecting UAV. <i>Optics Communications</i> , 2019, 450, 241-245.	2.1	6
38	Optical Mitigation of Interchannel Crosstalk for Multiple Spectrally Overlapped 20-GBd QPSK/16-QAM WDM Channels Using Nonlinear Wave Mixing. <i>Journal of Lightwave Technology</i> , 2019, 37, 548-554.	4.6	6
39	Demonstration of wavelength tunable optical modulation format conversion from 20 and 30 Gbit/s QPSK to PAM4 using nonlinear wave mixing. <i>Optics Communications</i> , 2020, 459, 124871.	2.1	6
40	Higher-order QAM data transmission using a high-coherence hybrid Si/III-V semiconductor laser. <i>Optics Letters</i> , 2020, 45, 1499.	3.3	6
41	Gain Effect on Scalable Energy-Proportional SOA-Based Optical Space Switches. <i>IEEE Photonics Technology Letters</i> , 2014, 26, 1683-1686.	2.5	5
42	Ultradense Silicon Photonic Interface for Optical Interconnection. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 725-728.	2.5	5
43	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
44	Low-Cost Dispersion-Tuned Active Harmonic Mode-Locked Laser With a 3-cm Coherence Length. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 399-405.	2.9	3
45	Using a Hybrid Si/III-V Semiconductor Laser to Carry 16- and 64-QAM Data Signals over an 80-km Distance. , 2019, , .		3
46	Flexible spectrum sharing of two asynchronous phase-shift keying signals using power division multiplexing. <i>Optics Letters</i> , 2020, 45, 1176.	3.3	3
47	Experimental Demonstration of an Optical Second-Order Volterra Nonlinear Filter using Wave Mixing and Delays to Equalize a 20-Gbaud 4-APSK Channel. , 2020, , .		3
48	Dispersion-Tuned Harmonically Mode-Locked Fiber Laser. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 1916-1919.	2.5	2
49	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. <i>Optics Letters</i> , 2016, 41, 2680.	3.3	2
50	Continuous delay tunability using a combination of three types of fiber Bragg gratings, wavelength conversion, and wavelength multicasting with a frequency comb. <i>Optics Communications</i> , 2020, 464, 125431.	2.1	1
51	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, 1-10.	5.7	1
52	Kramers-Kronig detection of four 20-Gbaud 16-QAM channels using Kerr combs for a shared phase estimation. <i>Optics Letters</i> , 2020, 45, 1794.	3.3	1
53	Impact of breather soliton in Kerr combs on the performance of communication systems. , 2015, , .		0
54	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