Jiangbo Zhu

List of Publications by Year in descending order

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		3	394421	3	395702
80	2,193		19		33
papers	citations		h-index		g-index
80	80		80		1970
all docs	docs citations		times ranked		citing authors

#	Article	IF	CITATIONS
1	Integrated Compact Optical Vortex Beam Emitters. Science, 2012, 338, 363-366.	12.6	773
2	Fast electrical switching of orbital angular momentum modes using ultra-compact integrated vortex emitters. Nature Communications, 2014, 5, 4856.	12.8	149
3	Spiral Transformation for High-Resolution and Efficient Sorting of Optical Vortex Modes. Physical Review Letters, 2018, 120, 193904.	7.8	143
4	18  km low-crosstalk OAM + WDM transmission with 224 individual channels enabled by a ring with large high-order mode group separation. Optics Letters, 2018, 43, 1890.	g-core fibe	er 111
5	Orbital angular momentum vertical-cavity surface-emitting lasers. Optica, 2015, 2, 547.	9.3	108
6	Scalable mode division multiplexed transmission over a 10-km ring-core fiber using high-order orbital angular momentum modes. Optics Express, 2018, 26, 594.	3.4	99
7	Compact and high-performance vortex mode sorter for multi-dimensional multiplexed fiber communication systems. Optica, 2020, 7, 254.	9.3	95
8	Spin-orbit interaction of light induced by transverse spin angular momentum engineering. Nature Communications, 2018, 9, 926.	12.8	92
9	Orbital angular momentum mode-demultiplexing scheme with partial angular receiving aperture. Optics Express, 2015, 23, 12251.	3.4	57
10	Generation of coherent and frequency-lock multi-carriers using cascaded phase modulators and recirculating frequency shifter for Tb/s optical communication. Optics Express, 2011, 19, 12891.	3.4	54
11	Orbital-angular-momentum mode-group multiplexed transmission over a graded-index ring-core fiber based on receive diversity and maximal ratio combining. Optics Express, 2018, 26, 4243.	3.4	52
12	Theoretical model for angular grating-based integrated optical vortex beam emitters. Optics Letters, 2013, 38, 1343.	3.3	49
13	Stable Optical Frequency-Locked Multicarriers Generation by Double Recirculating Frequency Shifter Loops for Tb/s Communication. Journal of Lightwave Technology, 2012, 30, 3938-3945.	4.6	37
14	Spin and orbital angular momentum and their conversion in cylindrical vector vortices. Optics Letters, 2014, 39, 4435.	3.3	37
15	Mode Division Multiplexing Based on Ring Core Optical Fibers. IEEE Journal of Quantum Electronics, 2018, 54, 1-18.	1.9	32
16	A Novel Return-to-Zero FSK Format for 40-Gb/s Transmission System Applications. Journal of Lightwave Technology, 2010, 28, 1770-1782.	4.6	31
17	On-chip switchable radially and azimuthally polarized vortex beam generation. Optics Letters, 2018, 43, 1263.	3.3	28
18	The use of KnockOut serum replacement (KSR) in three dimensional rat testicular cells co-culture model: An improved male reproductive toxicity testing system. Food and Chemical Toxicology, 2017, 106, 487-495.	3.6	26

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19	Ultra-dense perfect optical orbital angular momentum multiplexed holography. Optics Express, 2021, 29, 28452.	3.4	26
20	Sorting full angular momentum states with Pancharatnam-Berry metasurfaces based on spiral transformation. Optics Express, 2020, 28, 16342.	3.4	23
21	80-Channel WDM-MDM Transmission over 50-km Ring-Core Fiber Using a Compact OAM DEMUX and Modular $4\tilde{A}-4$ MIMO Equalization. , 2019 , , .		16
22	Integrated optical vortex beam receivers. Optics Express, 2016, 24, 28529.	3.4	14
23	Tunable Orbital Angular Momentum Converter Based on Integrated Multiplexers. Journal of Lightwave Technology, 2021, 39, 91-97.	4.6	13
24	4 OAM x 4 WDM Optical Switching Based on an Innovative Integrated Tunable OAM Multiplexer. , 2018, , .		12
25	First Demonstration of Orbital Angular Momentum (OAM) Distributed Raman Amplifier over 18-km OAM Fiber with Data-Carrying OAM Multiplexing and Wavelength-Division Multiplexing. , 2018, , .		10
26	Pattern manipulation via on-chip phase modulation between orbital angular momentum beams. Applied Physics Letters, 2015, 107, 051102.	3.3	9
27	10 OAM × 16 Wavelengths Two-Layer Switch Based on an Integrated Mode Multiplexer for 19.2ÂTb/s Data Traffic. Journal of Lightwave Technology, 2021, 39, 3217-3224.	4.6	9
28	Characterizing a $14\hat{a} \in \tilde{A} - \hat{a} \in \tilde{A} = 14$ OAM mode transfer matrix of a ring-core fiber based on quadrature phase-sh interference. Optics Letters, 2017, 42, 1257.	ift $_{3.3}$	9
29	Excitation of high order orbital angular momentum modes in ultra-short chiral long period fiber gratings. Optics Express, 2021, 29, 39384.	3.4	9
30	Accurate Mode-Coupling Characterization of Low-Crosstalk Ring-Core Fibers Using Integral Calculation Based Swept-Wavelength Interferometry Measurement. Journal of Lightwave Technology, 2021, 39, 6479-6486.	4.6	8
31	High purity optical vortex generation in a fiber Bragg grating inscribed by a femtosecond laser. Optics Letters, 2020, 45, 6679.	3.3	8
32	Companding transform for PAPR reduction in coherent optical OFDM system. , 2012, , .		7
33	High-Precise Fractional Orbital Angular Momentum Probing With a Fiber Grating Tip. Journal of Lightwave Technology, 2021, 39, 1867-1872.	4.6	7
34	A modulation scheme for 100Gb/s modified minimum-shift keying format based on imbalanced bias in IQ components. Optical Fiber Technology, 2011, 17, 601-607.	2.7	6
35	3.36-Tbit/s OAM and Wavelength Multiplexed Transmission over an Inverse-Parabolic Graded Index Fiber. , 2017, , .		6
36	Manipulating optical vortices using integrated photonics. Frontiers of Optoelectronics, 2016 , 9 , $194-205$.	3.7	5

#	Article	IF	Citations
37	Direct generation of orbital angular momentum beams by integrating all-dielectric metasurface to vertical-cavity surface-emitting laser. , 2017 , , .		3
38	Low-Loss Ring-Core Fiber Supporting 4 Mode Groups., 2019,,.		3
39	19.2Tb/s Optical Switch Based on an Integrated OAM Multiplexer. , 2018, , .		2
40	MIMO-free WDM-MDM transmission over 100-KM single-span ring-core fibre. , 2019, , .		2
41	Generation of Flat and Stable Multi-carriers based on Only Integrated IQ Modulator and its Implementation for 112Gb/s PM-QPSK Transmitter., 2012 ,,.		2
42	Frequency estimation for optical coherent MSK system. Proceedings of SPIE, 2010, , .	0.8	1
43	Novel orthogonal modulation format DRZ-FSK/DPSK for high-speed long-haul optical communication. Chinese Optics Letters, 2010, 8, 852-855.	2.9	1
44	A coaxially integrated photonic orbital angular momentum beam multiplexer. , 2016, , .		1
45	Cascaded metasurface structures. , 2017, , .		1
46	Scalable Orbital Angular Momentum Mode-Division-Multiplexed Transmission over 10-km Graded-Index Ring-Core Fiber. , 2017, , .		1
47	The Orbital Angular Momentum of Light for Next Generation Optical Switches. , 2018, , .		1
48	$360 \hat{A}^o$ on Chip Optical Beam Steering Based on Superposition of Planar Spiral Orbital Angular Momentum Waves. , 2019, , .		1
49	On-chip Electrical Modulation of Phase Shift between Optical Vortices with Opposite Topological Charge. , 2014, , .		1
50	Coupled Mode Analysis of Angular Grating-Based Optical Vortex Beam Emitters. , 2014, , .		1
51	Integrated Optical Vortex Vertical-Cavity Surface-Emitting Lasers. , 2015, , .		1
52	Monolithic integrated optical vortex sorter based on cascaded metasurface structures., 2017,,.		1
53	Coherent detection of 40-Gb/s optical minimum-shift keying modulation. Proceedings of SPIE, 2010, , .	0.8	0
54	The theoretical and numerical models of the novel and fast tunable semiconductor ring laser. , 2010, , .		0

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55	Coherent detection of 40-Gb/s optical minimum-shift keying modulation., 2010,,.		O
56	InP-based micro-disc lasers using non-concentric hole as mode control and light extraction mechanism. , 2010, , .		0
57	A flexible bandwidth scheduling scheme based on three dimensional divisions multiplexing of MSK-OFDM for passive optical network. , 2010, , .		0
58	Frequency estimation for optical coherent MSK system. , 2010, , .		0
59	The theoretical and numerical models of the novel and fast tunable semiconductor ring laser. , 2010, , .		0
60	High spectral quality defect-coupled 1550nm micro-disc lasers. , 2010, , .		0
61	Compensation of quadrature imbalance in an optical coherent OQPSK receiver in presence of frequency offset. Frontiers of Optoelectronics in China, 2011, 4, 288-291.	0.2	0
62	Slow-light optical buffers based on a ring resonator and an OFDM transmitter., 2012,,.		0
63	A numerical study of UTC-PD structures with berylium as the p-dopant. , 2013, , .		O
64	A flat and stable multi-carriers generation scheme based on one integrated IQ modulator and its implementation for 112Gb/s PM-QPSK transmitter. Optics Communications, 2013, 291, 173-178.	2.1	0
65	A scheme to expand the delay-bandwidth product in the resonator-based delay lines by optical OFDM technique. Optics Communications, 2013, 305, 240-246.	2.1	0
66	Measuring the angular emission of optical vortex beams from integrated devices. , 2014, , .		0
67	Actively reconfigurable compact vortex beam emitters. , 2014, , .		O
68	Strategies and resources of mode-division-multiplexed optical fibre transmission based on LP and orbital angular momentum modes. , 2017 , , .		0
69	Tunable Orbital Angular Momentum (OAM) Conversion on 100Gb/s Real Data Traffic by Exploiting Concentric Waveguide Emitters., 2017,,.		O
70	Orbital angular momentum assisted spin-directional coupling. , 2017, , .		0
71	The Orbital Angular Momentum of Light for Ultra-High Capacity Data Centers. , 2018, , .		0
72	Mode-Dependent Characterization of Rayleigh Backscattering in Ring-Core Fibers. , 2021, , .		0

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73	Frequency estimation for optical coherent MSK system. , 2010, , .		O
74	Fast Switching of Optical Vortex Beam Mode Orders Generated Using a Fully Integrated SOI Device. , 2014, , .		0
75	Characterizing a $10 ilde{A}$ — 10 OAM propagation matrix of few-mode fiber by a dual-interference pattern method. , 2016 , , .		O
76	Random Degenerate-Mode-Mixing Independent OAM Mode-Group (De) multiplexing over a Graded-Index Ring-Core Fiber. , 2017 , , .		0
77	Generation of vectorial vortex beams with switchable radial and azimuthal polarizations., 2017,,.		O
78	Scalable Mode Division Multiplexing using Orbital Angular Momentum Mode Groups in Ring Core Fibres. , 2017, , .		0
79	High-resolution and compact vortex mode sorters based on a spiral transformation. , 2018, , .		O
80	A compact mode sorter for demultiplexing vortex light beams. , 2019, , .		0