Yongxiong Ren

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6363448/publications.pdf

Version: 2024-02-01

50 papers	8,419 citations	430874 18 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	4696 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	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
5	Mode Properties and Propagation Effects of Optical Orbital Angular Momentum (OAM) Modes in a Ring Fiber. IEEE Photonics Journal, 2012, 4, 535-543.	2.0	180
6	Orbital Angular Momentum-based Space Division Multiplexing for High-capacity Underwater Optical Communications. Scientific Reports, 2016, 6, 33306.	3.3	156
7	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
8	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
9	Octave-spanning supercontinuum generation of vortices in an As_2S_3 ring photonic crystal fiber. Optics Letters, 2012, 37, 1889.	3.3	111
10	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
11	Using a complex optical orbital-angular-momentum spectrum to measure object parameters. Optics Letters, 2017, 42, 4482.	3.3	81
12	Free-space optical communications using orbital-angular-momentum multiplexing combined with MIMO-based spatial multiplexing. Optics Letters, 2015, 40, 4210.	3.3	69
13	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
14	Perspectives on advances in high-capacity, free-space communications using multiplexing of orbital-angular-momentum beams. APL Photonics, 2021, 6, .	5.7	53
15	Multipath Effects in Millimetre-Wave Wireless Communication using Orbital Angular Momentum Multiplexing. Scientific Reports, 2016, 6, 33482.	3.3	37
16	32-Gbit/s 60-GHz millimeter-wave wireless communication using orbital angular momentum and polarization multiplexing. , 2016, , .		29
17	Air-Core Ring Fiber With >1000 Radially Fundamental OAM Modes Across O, E, S, C, and L Bands. IEEE Access, 2020, 8, 68280-68287.	4.2	23
18	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

#	Article	IF	Citations
19	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
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	1.6-Octave Coherent OAM Supercontinuum Generation in As₂S₃ Photonic Crystal Fiber. IEEE Access, 2020, 8, 168177-168185.	4.2	18
22	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
23	Experimental demonstration of 16-Gbit/s millimeter-wave communications link using thin metamaterial plates to generate data-carrying orbital-angular-momentum beams. , 2015, , .		17
24	OFDM over mm-Wave OAM Channels in a Multipath Environment with Intersymbol Interference. , 2016, , .		17
25	Invited Article: Division and multiplication of the state order for data-carrying orbital angular momentum beams. APL Photonics, 2016, 1, .	5.7	16
26	Eye Diagram Measurement-Based Joint Modulation Format, OSNR, ROF, and Skew Monitoring of Coherent Channel Using Deep Learning. Journal of Lightwave Technology, 2019, 37, 5907-5913.	4.6	16
27	Beyond Two-Octave Coherent OAM Supercontinuum Generation in Air-Core As₂S₃ Ring Fiber. IEEE Access, 2020, 8, 96543-96549.	4.2	16
28	Two-Octave Supercontinuum Generation of High-Order OAM Modes in Air-Core Asâ„‚Sâ€“*f* Ring Fiber. IEEE Access, 2020, 8, 114135-114142.	4.2	15
29	Three-Octave Supercontinuum Generation Using SiO₂ Cladded Si₃N₄ Slot Waveguide With All-Normal Dispersion. Journal of Lightwave Technology, 2020, 38, 3431-3438.	4.6	14
30	Highly dispersive coupled ring-core fiber for orbital angular momentum modes. Applied Physics Letters, 2020, 117, .	3.3	13
31	Demonstration of 8-mode 32-Gbit/s millimeter-wave free-space communication link using 4 orbital-angular-momentum modes on 2 polarizations. , 2014, , .		11
32	Hollow Ring-Core Photonic Crystal Fiber With >500 OAM Modes Over 360-nm Communications Bandwidth. IEEE Access, 2021, 9, 66999-67005.	4.2	9
33	Non-zero dispersion-shifted ring fiber for the orbital angular momentum mode. Optics Express, 2021, 29, 25428.	3.4	8
34	Multi-Ring-Air-Core Fiber Supporting Numerous Radially Fundamental OAM Modes. Journal of Lightwave Technology, 2022, 40, 4420-4428.	4.6	8
35	Performance metrics and design parameters for an FSO communications link based on multiplexing of multiple orbital-angular-momentum beams. , 2014, , .		6
36	Polarization Beam Splitter Based on Si3N4/SiO2 Horizontal Slot Waveguides for On-Chip High-Power Applications. Sensors, 2020, 20, 2862.	3.8	6

#	Article	IF	Citations
37	Highly Dispersive Germanium-Doped Coupled Ring-Core Fiber for Vortex Modes. Journal of Lightwave Technology, 2022, 40, 2144-2150.	4.6	6
38	Special Issue on Novel Insights into Orbital Angular Momentum Beams: From Fundamentals, Devices to Applications. Applied Sciences (Switzerland), 2019, 9, 2600.	2.5	3
39	Air-Core Ring Fiber Guiding >400 Radially Fundamental OAM Modes Across S + C + L Bands. IEEE Access, 2021, 9, 75617-75625.	4.2	3
40	Dividing and multiplying the mode order for orbital-angular-momentum beams. , 2015, , .		2
41	Air-Core Non-Zero Dispersion-Shifted Fiber With High-Index Ring for OAM Mode. IEEE Access, 2021, 9, 107804-107811.	4.2	2
42	Analysis of aperture size for partially receiving and de-multiplexing 100-Gbit/s optical orbital angular momentum channels over free-space link. , 2013, , .		1
43	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
44	Hollow Ring-Core Hybrid Photonic Crystal Fiber Supporting >500 OAM Modes Across O, E, S, C, L Bands. , 2020, , .		1
45	1.3-Octave Coherent Supercontinuum Generation of OAM Mode in Ring-Core Fiber With All-Normal Dispersion. IEEE Access, 2022, 10, 76990-76997.	4.2	1
46	Exploiting the unique intensity gradient of an orbital-angular-momentum beam for accurate receiver alignment monitoring in a free-space communication link. , 2015, , .		0
47	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
48	Object Wedge Angle and Direction Identification Using Machine Learning Algorithms. , 2019, , .		0
49	Octave-Spanning Dispersive Slot Waveguide Based Chip-Level Ultrashort Pulse Stretcher. IEEE Access, 2020, 8, 172086-172095.	4.2	0
50	Beyond Two-Octave OAM Supercontinuum Generation in Gemanium-Doped Ring-Core Fiber. , 2021, , .		0