

Hao Huang

List of Publications by Year in descending order

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4949
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Highly Dispersive Germanium-Doped Coupled Ring-Core Fiber for Vortex Modes. Journal of Lightwave Technology, 2022, 40, 2144-2150. | 2.7 | 6 |
| 2 | Causes and mitigation of modal crosstalk in OAM multiplexed optical communication links. , 2021, , 259-289. | | 1 |
| 3 | Hollow Ring-Core Photonic Crystal Fiber With >500 OAM Modes Over 360-nm Communications Bandwidth. IEEE Access, 2021, 9, 66999-67005. | 2.6 | 9 |
| 4 | Perspectives on advances in high-capacity, free-space communications using multiplexing of orbital-angular-momentum beams. APL Photonics, 2021, 6, . | 3.0 | 53 |
| 5 | Beyond Two-Octave Coherent OAM Supercontinuum Generation in Air-Core As ₂ S ₃ Ring Fiber. IEEE Access, 2020, 8, 96543-96549. | 2.6 | 16 |
| 6 | Two-Octave Supercontinuum Generation of High-Order OAM Modes in Air-Core As ₂ S ₃ Ring Fiber. IEEE Access, 2020, 8, 114135-114142. | 2.6 | 15 |
| 7 | 1.6-Octave Coherent OAM Supercontinuum Generation in As ₂ S ₃ Photonic Crystal Fiber. IEEE Access, 2020, 8, 168177-168185. | 2.6 | 18 |
| 8 | Air-Core Ring Fiber With >1000 Radially Fundamental OAM Modes Across O, E, S, C, and L Bands. IEEE Access, 2020, 8, 68280-68287. | 2.6 | 23 |
| 9 | Three-Octave Supercontinuum Generation Using SiO ₂ Cladded Si ₃ N ₄ Slot Waveguide With All-Normal Dispersion. Journal of Lightwave Technology, 2020, 38, 3431-3438. | 2.7 | 14 |
| 10 | Highly dispersive coupled ring-core fiber for orbital angular momentum modes. Applied Physics Letters, 2020, 117, . | 1.5 | 13 |
| 11 | Polarization Beam Splitter Based on Si ₃ N ₄ /SiO ₂ Horizontal Slot Waveguides for On-Chip High-Power Applications. Sensors, 2020, 20, 2862. | 2.1 | 6 |
| 12 | 19-Ring-Core Chalcogenide Fiber Supporting >2000 Radially Fundamental OAM Modes Across C and L Bands. , 2020, , . | | 0 |
| 13 | Hollow Ring-Core Hybrid Photonic Crystal Fiber Supporting >500 OAM Modes Across O, E, S, C, L Bands. , 2020, , . | | 1 |
| 14 | Two-Octave OAM _{17,1} Supercontinuum Generation in Air-Core Chalcogenide Ring Fiber. , 2020, , . | | 0 |
| 15 | Octave-spanning Coherent OAM Supercontinuum Generation Using As ₂ S ₃ PCF with All-normal Dispersion. , 2020, , . | | 0 |
| 16 | Two-octave Supercontinuum Generation of OAM Mode in Air-core AS ₂ S ₃ Ring Fiber. , 2020, , . | | 0 |
| 17 | Extremely Dispersive Schott Glass Fiber with Coupled High-Index Ring for OAM Modes. , 2020, , . | | 0 |
| 18 | Ge-doped Coupled Ring Fiber with Large Negative Dispersion for Vortex Modes. , 2020, , . | | 0 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Air-core Ring Fiber Supporting >1000 OAM Modes across O, E, S, C, and L Bands. , 2020, , . | | 0 |
| 20 | Highly dispersive Ge-doped coupled ring fiber for high-order OAM modes. , 2020, , . | | 1 |
| 21 | Ge-doped air-core ring fiber supporting >400 radially fundamental OAM modes across O, E, S, C, L bands. , 2020, , . | | 0 |
| 22 | Special Issue on Novel Insights into Orbital Angular Momentum Beams: From Fundamentals, Devices to Applications. Applied Sciences (Switzerland), 2019, 9, 2600. | 1.3 | 3 |
| 23 | Object Wedge Angle and Direction Identification Using Machine Learning Algorithms. , 2019, , . | | 0 |
| 24 | 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 |
| 25 | Dipolar bright solitons and solitary vortices in a radial lattice. Physical Review A, 2017, 96, . | 1.0 | 14 |
| 26 | 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. | 1.6 | 63 |
| 27 | Multipath Effects in Millimetre-Wave Wireless Communication using Orbital Angular Momentum Multiplexing. Scientific Reports, 2016, 6, 33482. | 1.6 | 37 |
| 28 | Orbital-angular-momentum-based reconfigurable optical switching and routing. Photonics Research, 2016, 4, B5. | 3.4 | 31 |
| 29 | Experimental demonstration of a 200-Gbit/s free-space optical link by multiplexing Laguerre-Gaussian beams with different radial indices. Optics Letters, 2016, 41, 3447. | 1.7 | 85 |
| 30 | Experimental characterization of a 400-Gbit/s orbital angular momentum multiplexed free-space optical link over 120 m. Optics Letters, 2016, 41, 622. | 1.7 | 136 |
| 31 | Demonstration of a 280-Gbit/s free-space space-division-multiplexing communications link utilizing plane-wave spatial multiplexing. Optics Letters, 2016, 41, 851. | 1.7 | 17 |
| 32 | Orbital-angular-momentum-multiplexed free-space optical communication link using transmitter lenses. Applied Optics, 2016, 55, 2098. | 2.1 | 27 |
| 33 | 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 |
| 34 | Experimental measurements of multipath-induced intra- and inter-channel crosstalk effects in a millimeter-wave communications link using orbital-angular-momentum multiplexing. , 2015, , . | | 18 |
| 35 | Demonstration of Distance Emulation for an Orbital-Angular-Momentum Beam. , 2015, , . | | 1 |
| 36 | 4 Å– 20-Gbit/s mode division multiplexing over free space using vector modes and a q-plate mode (de)multiplexer. Optics Letters, 2015, 40, 1980. | 1.7 | 372 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | 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 |
| 38 | Performance metrics and design considerations for a free-space optical orbital-angular-momentum multiplexed communication link. Optica, 2015, 2, 357. | 4.8 | 164 |
| 39 | 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. | 1.7 | 46 |
| 40 | Experimental demonstration of 16-Gbit/s millimeter-wave communications link using thin metamaterial plates to generate data-carrying orbital-angular-momentum beams. , 2015, , . | | 17 |
| 41 | 400-Gbit/s Free-Space Optical Communications Link Over 120-meter Using Multiplexing of 4 Collocated Orbital-Angular-Momentum Beams. , 2015, , . | | 12 |
| 42 | Performance Enhancement of an Orbital-Angular-Momentum-Based Free-Space Optical Communication Link through Beam Divergence Controlling. , 2015, , . | | 2 |
| 43 | Experiment Turbulence Compensation of 50-Gbaud/s Orbital-Angular-Momentum QPSK Signals Using Intensity-only based SPGD Algorithm. , 2014, , . | | 0 |
| 44 | 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 |
| 45 | 100-Tbit/s free-space data link enabled by three-dimensional multiplexing of orbital angular momentum, polarization, and wavelength. Optics Letters, 2014, 39, 197. | 1.7 | 443 |
| 46 | Space division multiplexing in a basis of vector modes. , 2014, , . | | 6 |
| 47 | Performance metrics and design parameters for an FSO communications link based on multiplexing of multiple orbital-angular-momentum beams. , 2014, , . | | 6 |
| 48 | A Quasi-Optical Tool for the Demultiplexing of Orbital Angular Momentum Carried at Millimeter-Wave Frequencies. , 2014, , . | | 0 |
| 49 | Data Switching in Communication Networks using Orbital-Angular-Momentum Multiplexing. , 2014, , . | | 1 |
| 50 | 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. | 4.8 | 177 |
| 51 | Tunable orbital angular momentum mode filter based on optical geometric transformation. Optics Letters, 2014, 39, 1689. | 1.7 | 23 |
| 52 | Crosstalk mitigation in a free-space orbital angular momentum multiplexed communication link using 4A–4 MIMO equalization. Optics Letters, 2014, 39, 4360. | 1.7 | 116 |
| 53 | Demonstration of 8-mode 32-Gbit/s millimeter-wave free-space communication link using 4 orbital-angular-momentum modes on 2 polarizations. , 2014, , . | | 11 |
| 54 | High-capacity millimetre-wave communications with orbital angular momentum multiplexing. Nature Communications, 2014, 5, 4876. | 5.8 | 972 |

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| 55 | Adaptive optics compensation of multiple orbital angular momentum beams propagating through emulated atmospheric turbulence. Optics Letters, 2014, 39, 2845. | 1.7 | 138 |
| 56 | Reconfigurable 2 Å– 2 orbital angular momentum based optical switching of 50-Gbaud QPSK channels. Optics Express, 2014, 22, 756. | 1.7 | 22 |
| 57 | Experimental Analysis of Multiplexing/demultiplexing Laguerre Gaussian Beams with Different Radial Index. , 2014, , . | | 2 |
| 58 | 1-Tbit/s Orbital-Angular-Momentum Multiplexed Link Through Emulated Turbulence With a Data-Carrying Beacon on a Separate Wavelength for Compensation. , 2014, , . | | 0 |
| 59 | Demonstration of a 280 G-bit/s communications link utilizing plane-wave multiplexing. , 2014, , . | | 0 |
| 60 | Multimode Communications Using Orbital Angular Momentum. , 2013, , 569-615. | | 15 |
| 61 | Terabit-Scale Orbital Angular Momentum Mode Division Multiplexing in Fibers. Science, 2013, 340, 1545-1548. | 6.0 | 2,330 |
| 62 | Analysis of aperture size for partially receiving and de-multiplexing 100-Gbit/s optical orbital angular momentum channels over free-space link. , 2013, , . | | 1 |
| 63 | Performance analysis of spectrally efficient free-space data link using spatially multiplexed orbital angular momentum beams. Proceedings of SPIE, 2013, , . | 0.8 | 2 |
| 64 | 100 Tbit/s Free-Space Data Link using Orbital Angular Momentum Mode Division Multiplexing Combined with Wavelength Division Multiplexing. , 2013, , . | | 22 |
| 65 | Liquid-crystal-on-silicon-based optical add/drop multiplexer for orbital-angular-momentum-multiplexed optical links. Optics Letters, 2013, 38, 5142. | 1.7 | 21 |
| 66 | Multicasting in a spatial division multiplexing system based on optical orbital angular momentum. Optics Letters, 2013, 38, 3930. | 1.7 | 60 |
| 67 | Phase-shift interference-based wavefront characterization for orbital angular momentum modes. Optics Letters, 2013, 38, 2348. | 1.7 | 48 |
| 68 | Reconfigurable switching of orbital-angular-momentum-based free-space data channels. Optics Letters, 2013, 38, 5118. | 1.7 | 29 |
| 69 | Reconfigurable orbital angular momentum and polarization manipulation of 100 Gbit/s QPSK data channels. Optics Letters, 2013, 38, 5240. | 1.7 | 13 |
| 70 | Reconfigurable orbital-angular-momentum manipulation and switching of polarization-multiplexed 100-Gbit/s QPSK data channels. , 2013, , . | | 0 |
| 71 | Atmospheric turbulence effects on the performance of a free space optical link employing orbital angular momentum multiplexing. Optics Letters, 2013, 38, 4062. | 1.7 | 233 |
| 72 | Tunable Filter for Orbital-Angular-Momentum Multiplexed Optical Channels. , 2013, , . | | 0 |

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| 73 | Orbital-Angular-Momentum-Based Reconfigurable and "Lossless" Optical Add/Drop Multiplexing of Multiple 100-Gbit/s Channels. , 2013, , . | | 0 |
| 74 | Simultaneous subchannel data updating for multiple channels of 16-quadrature amplitude modulation signals using a single periodically poled lithium niobate waveguide. Optics Letters, 2012, 37, 4365. | 1.7 | 1 |
| 75 | Efficient generation and multiplexing of optical orbital angular momentum modes in a ring fiber by using multiple coherent inputs. Optics Letters, 2012, 37, 3645. | 1.7 | 58 |
| 76 | Octave-spanning supercontinuum generation of vortices in an As ₂ S ₃ ring photonic crystal fiber. Optics Letters, 2012, 37, 1889. | 1.7 | 111 |
| 77 | 2-Tbit/s free-space data transmission on two orthogonal orbital-angular-momentum beams each carrying 25 WDM channels. Optics Letters, 2012, 37, 4753. | 1.7 | 34 |
| 78 | A Different Angle on Light Communications. Science, 2012, 337, 655-656. | 6.0 | 126 |
| 79 | Terabit free-space data transmission employing orbital angular momentum multiplexing. Nature Photonics, 2012, 6, 488-496. | 15.6 | 3,471 |
| 80 | Silicon-on-Nitride Waveguide With Ultralow Dispersion Over an Octave-Spanning Mid-Infrared Wavelength Range. IEEE Photonics Journal, 2012, 4, 126-132. | 1.0 | 34 |
| 81 | Mode Properties and Propagation Effects of Optical Orbital Angular Momentum (OAM) Modes in a Ring Fiber. IEEE Photonics Journal, 2012, 4, 535-543. | 1.0 | 180 |
| 82 | Tapped delay-line matched filtering using a high-contrast grating hollow-core waveguide. , 2011, , . | | 0 |
| 83 | Nondegenerate four-wave-mixing-based radio frequency up/downconversion using a parametric loop mirror. Optics Letters, 2011, 36, 4593. | 1.7 | 5 |
| 84 | Reconfigurable 40-Gbit/s tributary selection from a 640-Gbit/s signal using NOLM-based cascaded demultiplexing. , 2010, , . | | 0 |
| 85 | Demonstration of 100-Gbit/s DQPSK data exchange between two different wavelength channels using parametric depletion in a highly nonlinear fiber. , 2010, , . | | 2 |