

Hongzhan Liu

List of Publications by Year in descending order

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papers

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430874

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454955

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102
all docs

102
docs citations

102
times ranked

785
citing authors

#	ARTICLE	IF	CITATIONS
1	Focusing properties of circle Pearcey beams. Optics Letters, 2018, 43, 3626.	3.3	115
2	Analogue Electromagnetically Induced Transparency Based on Low-loss Metamaterial and its Application in Nanosensor and Slow-light Device. Plasmonics, 2017, 12, 641-647.	3.4	77
3	Active plasmonic band-stop filters based on graphene metamaterial at THz wavelengths. Optics Express, 2016, 24, 14344.	3.4	63
4	Abruptly autofocused and rotated circular chirp Pearcey Gaussian vortex beams. Optics Letters, 2019, 44, 955.	3.3	59
5	High-Efficiency, Near-Diffraction Limited, Dielectric Metasurface Lenses Based on Crystalline Titanium Dioxide at Visible Wavelengths. Nanomaterials, 2018, 8, 288.	4.1	53
6	Dynamically Temperature-Voltage Controlled Multifunctional Device Based on VO ₂ and Graphene Hybrid Metamaterials: Perfect Absorber and Highly Efficient Polarization Converter. Nanomaterials, 2019, 9, 1101.	4.1	44
7	Inverse solutions for a Risley prism scanner with iterative refinement by a forward solution. Applied Optics, 2015, 54, 9981.	2.1	43
8	Effects of the modulated vortex and second-order chirp on the propagation dynamics of ring Pearcey Gaussian beams. Optics Letters, 2019, 44, 4654.	3.3	40
9	Symmetric Pearcey Gaussian beams. Optics Letters, 2021, 46, 2461.	3.3	33
10	Multifunctional metalens generation using bilayer all-dielectric metasurfaces. Optics Express, 2021, 29, 9332.	3.4	32
11	Nonparaxial propagation of abruptly autofocusing circular Pearcey Gaussian beams. Applied Optics, 2018, 57, 8418.	1.8	27
12	Near-infrared thermally modulated varifocal metalens based on the phase change material Sb ₂ S ₃ . Optics Express, 2021, 29, 7925.	3.4	25
13	Enhanced plasmonic band-pass filter with symmetric dual side-coupled nanodisk resonators. Journal of Applied Physics, 2015, 118, .	2.5	24
14	BER Analysis of a Hybrid Modulation Scheme Based on PPM and MSK Subcarrier Intensity Modulation. IEEE Photonics Journal, 2015, 7, 1-10.	2.0	24
15	The approximate ABCD matrix for a parabolic lens of revolution and its application in calculating the coupling efficiency. Optik, 2008, 119, 666-670.	2.9	22
16	Dynamics of breathers-like circular Pearcey Gaussian waves in a Kerr medium. Optics Express, 2019, 27, 17482.	3.4	22
17	High-Accuracy Recognition of Orbital Angular Momentum Modes Propagated in Atmospheric Turbulences Based on Deep Learning. IEEE Access, 2020, 8, 159542-159551.	4.2	21
18	Analogy of electromagnetically induced transparency in plasmonic nanodisk with a square ring resonator. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 232-237.	2.1	19

#	ARTICLE	IF	CITATIONS
19	Dynamically Tunable Resonant Strength in Electromagnetically Induced Transparency (EIT) Analogue by Hybrid Metal-Graphene Metamaterials. <i>Nanomaterials</i> , 2019, 9, 171.	4.1	19
20	Nonparaxial propagation of the radially polarized Airy-Gaussian beams with different initial launch angles in uniaxial crystals. <i>Optics Communications</i> , 2019, 445, 147-154.	2.1	18
21	Broadband Filter and Adjustable Extinction Ratio Modulator Based on Metal-Graphene Hybrid Metamaterials. <i>Nanomaterials</i> , 2020, 10, 1359.	4.1	17
22	Goos-Hänchen and Imbert-Fedorov shifts of off-axis Airy vortex beams. <i>Optics Express</i> , 2020, 28, 28916.	3.4	16
23	Effects of Atmospheric Turbulence on OAM-POL-FDM Hybrid Multiplexing Communication System. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 5063.	2.5	15
24	Dynamic generation of giant linear and circular dichroism via phase-change metasurface. <i>Optics Express</i> , 2021, 29, 40759.	3.4	15
25	Rolling Surface Defect Inspection for Drum-Shaped Rollers Based on Deep Learning. <i>IEEE Sensors Journal</i> , 2022, 22, 8693-8700.	4.7	15
26	Metalenses Based on Symmetric Slab Waveguide and c-TiO ₂ : Efficient Polarization-Insensitive Focusing at Visible Wavelengths. <i>Nanomaterials</i> , 2018, 8, 699.	4.1	14
27	Performance of a QAM/FSO communication system employing spatial diversity in weak and saturation turbulence channels. <i>Journal of Modern Optics</i> , 2019, 66, 965-975.	1.3	14
28	Abruptly autofocusing chirped ring Pearcey Gaussian vortex beams with caustics state in the nonlinear medium. <i>Optics Express</i> , 2020, 28, 425.	3.4	14
29	Tightly focusing evolution of the auto-focusing linear polarized circular Pearcey Gaussian vortex beams. <i>Chaos, Solitons and Fractals</i> , 2021, 143, 110608.	5.1	14
30	Efficient identification of orbital angular momentum modes carried by Bessel Gaussian beams in oceanic turbulence channels using convolutional neural network. <i>Optics Communications</i> , 2021, 498, 127251.	2.1	14
31	The Scattering Problem in PT -Symmetric Periodic Structures of 1D Two-Material Waveguide Networks. <i>Annalen Der Physik</i> , 2019, 531, 1900120.	2.4	13
32	A novel CoMP-ROF communication network system based on photonic decouple frequency and optical delay interference. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	3.3	11
33	Active Modulating the Intensity of Bifocal Metalens with Electrically Tunable Barium Titanate (BTO) Nanofins. <i>Nanomaterials</i> , 2021, 11, 2023.	4.1	11
34	Propagation of a radially polarized Pearcey beam in uniaxial crystals. <i>Laser Physics</i> , 2018, 28, 115001.	1.2	10
35	Spatiotemporal rapidly autofocused ring Pearcey Gaussian vortex wavepackets. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 075607.	2.2	10
36	Reflectionless phenomenon in PT -symmetric periodic structures of one-dimensional two-material optical waveguide networks. <i>Physical Review A</i> , 2019, 100, .	2.5	10

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37	Propagation of a radially polarized partially coherent rotating elliptical cosine-Gaussian beam with vortices in anisotropic turbulence. <i>Applied Physics B: Lasers and Optics</i> , 2019, 125, 1.	2.2	10
38	Efficient point-to-point manipulated visible meta-vortex lenses with arbitrary orbital angular momentum. <i>Nanotechnology</i> , 2020, 31, 035702.	2.6	10
39	Tight-focusing properties of radially polarized chirped circular Airy Gaussian beam. <i>Optics Communications</i> , 2020, 476, 126312.	2.1	10
40	Smooth Surface Defect Detection by Deep Learning Based on Wrapped Phase Map. <i>IEEE Sensors Journal</i> , 2021, 21, 16236-16244.	4.7	10
41	Singular properties generated by finite periodic PT-symmetric optical waveguide network. <i>Optics Express</i> , 2019, 27, 1538.	3.4	10
42	Performance of multi-hop parallel free-space optical communication over gamma-gamma fading channel with pointing errors. <i>Applied Optics</i> , 2016, 55, 9178.	2.1	9
43	A 40 GHz-100 GBPS wireless access network system based on all optical transformation and photoelectric direct detection. <i>Microwave and Optical Technology Letters</i> , 2016, 58, 2194-2202.	1.4	9
44	Singular Characteristics of Optical Thue-Morse Multilayers Composed of PT-Symmetric Elements. <i>Annalen Der Physik</i> , 2019, 531, 1900275.	2.4	9
45	Performance Improvement for Mixed RF-FSO Communication System by Adopting Hybrid Subcarrier Intensity Modulation. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3724.	2.5	9
46	Generation and control of dynamically tunable circular Pearcey beams with annular spiral-zone phase. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.	5.1	9
47	Elliptical Pearcey beam. <i>Optics Communications</i> , 2022, 504, 127475.	2.1	9
48	Multiple and off-axis optical bottles from the chirped circular Pearcey Gaussian vortex beams. <i>Optics Express</i> , 2022, 30, 1762.	3.4	9
49	Multifunctional Sensors and Switch in MDM Waveguide With Symmetric Dual Side-Coupled Nanodisks. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 2893-2896.	2.5	8
50	New hybrid reverse differential pulse position width modulation scheme for wireless optical communication. <i>Optical Engineering</i> , 2014, 53, 056112.	1.0	7
51	Propagation properties of electromagnetic multi-Gaussian Schell model beams propagating through atmospheric turbulence. <i>Journal of the Korean Physical Society</i> , 2014, 64, 826-831.	0.7	7
52	Effects of the multi-order and off-axis vortex on quadratically chirped Airy beams in the right-handed and left-handed materials slabs. <i>Optics Communications</i> , 2019, 437, 160-167.	2.1	7
53	Metasurface Spiral Focusing Generators with Tunable Orbital Angular Momentum Based on Slab Silicon Nitride Waveguide and Vanadium Dioxide (VO ₂). <i>Nanomaterials</i> , 2020, 10, 1864.	4.1	7
54	A Thermal Tuning Meta-Duplex-Lens (MDL): Design and Characterization. <i>Nanomaterials</i> , 2020, 10, 1135.	4.1	7

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55	Generation and conversion of a dual-band Laguerre-Gaussian beam with different OAM based on a bilayer metasurface. <i>Optical Materials Express</i> , 2022, 12, 1163.	3.0	7
56	Analogue of electromagnetically induced absorption with double absorption windows in a plasmonic system. <i>PLoS ONE</i> , 2017, 12, e0179609.	2.5	6
57	A dynamically tunable plasmonic multi-functional device based on graphene nano-sheet pair arrays. <i>Optics Communications</i> , 2018, 415, 130-134.	2.1	6
58	Band-tunable achromatic metalens based on phase change material. <i>Optics Express</i> , 2022, 30, 17541.	3.4	6
59	Properties of Non-Bridging Oxygen Hole Centers Defects in $\text{Yb}^{3+}/\text{Al}^{3+}$ Co-Doped Photonic Crystal Fiber by Using Powder Melting Technology. <i>Journal of Lightwave Technology</i> , 2013, 31, 2864-2868.	4.6	5
60	COHERENT ANTI-STOKES RAMAN SCATTERING MICROSCOPY BY DISPERSIVE WAVE GENERATIONS IN A POLARIZATION MAINTAINING PHOTONIC CRYSTAL FIBER. <i>Progress in Electromagnetics Research</i> , 2013, 141, 659-670.	4.4	5
61	Transmission characteristics of one-dimensional periodic optical waveguide networks. <i>Physical Review A</i> , 2019, 99, .	2.5	5
62	Performance Improvement for Wireless Sensors Networks by Adopting Hybrid Subcarrier Intensity Modulation Over Exponentiated Weibull Turbulence Channels. <i>IEEE Access</i> , 2020, 8, 118612-118622.	4.2	5
63	Characteristics and mechanism of all-optical switching based on one-dimensional periodic two-segment-connected tetrahedral optical waveguide network. <i>Optics Communications</i> , 2020, 474, 126091.	2.1	5
64	Improve The Capacity Of Data Transmission In Orbital Angular Momentum Multiplexing By Adjusting Link Structure. <i>IEEE Photonics Journal</i> , 2020, 12, 1-11.	2.0	5
65	Electrically-Driven Zoom Metalens Based on Dynamically Controlling the Phase of Barium Titanate (BTO) Column Antennas. <i>Nanomaterials</i> , 2021, 11, 729.	4.1	5
66	Ultrawide Photonic Bandgap and Ultrastrong Photonic Localization Produced by Series of Periodic Networks. <i>Annalen Der Physik</i> , 2021, 533, 2000584.	2.4	5
67	A Bifunctional Silicon Dielectric Metasurface Based on Quasi-Bound States in the Continuum. <i>Nanomaterials</i> , 2021, 11, 2357.	4.1	5
68	Characteristics and mechanism of all-optical switching based on a one-dimensional two-connected periodic triangle optical waveguide network. <i>Applied Optics</i> , 2020, 59, 8182.	1.8	5
69	A design of dual guided modes ring-based photonic crystal fiber supporting 170+62 OAM modes with large effective mode field area. <i>Applied Physics B: Lasers and Optics</i> , 2022, 128, 1.	2.2	5
70	Multifunctional Optical Vortex Beam Generator via Cross-Phase Based on Metasurface. <i>Nanomaterials</i> , 2022, 12, 653.	4.1	5
71	Autofocusing self-imaging: symmetric Pearcey Talbot-like effect. <i>Optics Express</i> , 2022, 30, 14146.	3.4	5
72	Analysis of supermode and structural characteristics of octagonal multicore photonic crystal fiber with large effective mode area and low confinement loss. <i>Optical Engineering</i> , 2014, 53, 056114.	1.0	4

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73	Emotion Classification of Text Based on BERT and Broad Learning System. Lecture Notes in Computer Science, 2021, , 382-396.	1.3	4
74	Singular characteristics of one-dimensional Fibonacci optical waveguide networks composed of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2392" altimg="si469.svg"} \rangle \langle \text{mml:mi mathvariant="script"} \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -symmetric elements. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 135, 114992.	2.7	4
75	Hybrid Dual-Hop RF/FSO Terrestrial-Deep Space Communication System under Solar Scintillation during Superior Solar Conjunction. Applied Sciences (Switzerland), 2022, 12, 619.	2.5	4
76	High-gain narrowband radio frequency signal amplifier based on a dual-loop optoelectronic oscillator. Optics Express, 2022, 30, 13994.	3.4	4
77	Abruptly Autofocusing Twisted Optical Bottle Beams. Physical Review Applied, 2022, 17, .	3.8	4
78	Angular and Wavelength Simultaneous Selection in Transparent OPVs Based on Near-Infrared Bragg Reflector and Antireflection Coating. IEEE Photonics Journal, 2017, 9, 1-8.	2.0	3
79	Singular systematic phases, transparencies, and invisibilities produced by parity-time-symmetric Thue-Morse optical waveguide networks. Results in Physics, 2021, 30, 104763.	4.1	3
80	Dual-channel metasurfaces for independent and simultaneous display in near-field and far-field. Optics Express, 2022, 30, 18434.	3.4	3
81	A Novel System of Mixed RF/FSO UAV Communication Based on MRR and RIS by Adopting Hybrid Modulation. Photonics, 2022, 9, 379.	2.0	3
82	Performance of free-space optical communication system using differential phase-shift keying subcarrier-intensity modulated over the exponentiated Weibull channel. Optical Engineering, 2015, 54, 106109.	1.0	2
83	Research on ytterbium-doped photonic crystal fiber amplifier for the femtosecond fiber laser. Laser Physics, 2016, 26, 015103.	1.2	2
84	Optimization of the All-optical Switching Constructed from Photonic Bandgap Network. Physica Status Solidi (B): Basic Research, 2020, 257, 1900702.	1.5	2
85	Multifunctional metalens generation using bilayer all-dielectric metasurfaces: erratum. Optics Express, 2021, 29, 18304.	3.4	2
86	Effects of the multi-order and off-axis vortex on the propagation of Pearcey Gaussian vortex beams with the astigmatic phase in a chiral medium. Waves in Random and Complex Media, 0, , 1-11.	2.7	2
87	Singular optical characteristics generated by Fibonacci multilayers composed of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2620" altimg="si65.svg"} \rangle \langle \text{mml:mi mathvariant="script"} \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -symmetric elements. Results in Physics, 2021, 31, 104993.	4.1	2
88	Designing a coupler for the intersatellite optical communication system. Optik, 2008, 119, 608-611.	2.9	1
89	The affection of fiber nonlinearity in coherent optical communication system. , 2013, , .		1
90	Ultra-compact low-voltage and slow-light MZI electro-optic modulator based on monolithically integrated photonic crystal. Optics Communications, 2014, 315, 138-146.	2.1	1

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91	Blue-shifted dispersive wave generation by the diffraction-arrested solitons for coherent anti-Stokes Raman scattering microscopy in a photonic crystal fiber. Optics Communications, 2014, 320, 73-76.	2.1	1
92	High peak power continuum generation by high-order solitons at the mid-infrared wavelength in a photonic crystal fiber. Laser Physics, 2015, 25, 045401.	1.2	1
93	A novel multi point cooperative multidirectional radio on fiber network system. , 2017, , .		1
94	Switchable Multifunctional Meta-Surface Composed by Dielectric-Metal Hybrid Antenna Array Architecture. Nanomaterials, 2021, 11, 2862.	4.1	1
95	Shaping autofocusing Airy beams through the modification of Fourier spectrum. Optics Express, 2022, 30, 232.	3.4	1
96	Causes of the reconstructed cross appearing in lensless Fourier transform digital holography. Optik, 2010, 121, 1777-1780.	2.9	0
97	Anti-Stokes signal conversion of femtosecond pulses at near-ultraviolet wavelength in photonic crystal fibre. Electronics Letters, 2013, 49, 1348-1350.	1.0	0
98	The study of fiber nonlinearity compensation effect based on mid-nonlinearity temporal inversion in CO-OFDM system. , 2013, , .		0
99	Propagation of the chirped-Airy-Gaussian-Hermite-Laguerre-Gaussian wave packets in free space. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	0
100	Flexible Control of Two-Channel Transmission and Group Delay in an Optomechanical System with Double Quantum Dots Driven by External Field. Nanomaterials, 2021, 11, 1554.	4.1	0
101	Singular Optical Characteristics Generated by Fibonacci Multilayers Composed of PT-Symmetric Elements. SSRN Electronic Journal, 0, , .	0.4	0
102	Electronically Controlled Time-Domain Integral Average Depolarizer Based on a Barium Titanate (BTO) Metasurface. Nanomaterials, 2022, 12, 1228.	4.1	0