

# Minming Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

102  
papers

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citations

394421

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345221

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102  
docs citations

102  
times ranked

845  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct modulation bandwidth enhancement of uncooled DFB laser operating over a wide temperature range based on groove-in-trench waveguide structure. Optics Express, 2022, 30, 15757.	3.4	1
2	Experiment demonstration of high speed 1.3 $\mu\text{m}$ grating assisted surface-emitting DFB lasers. Optics Express, 2022, 30, 25111.	3.4	1
3	On-chip reconfigurable inverse-designed nanophotonic devices based on phase-change materials. , 2021, , .		0
4	Demonstration of Dual-Mode Photonic Integrated Circuit Based on Inverse-Designed Photonic Components. IEEE Photonics Technology Letters, 2021, 33, 1289-1292.	2.5	4
5	Experimental demonstration of a broadband optoelectronic chaos system based on highly nonlinear configuration of IQ modulator. Optics Letters, 2021, 46, 4654.	3.3	5
6	High speed direct modulation of 1.3 $\mu\text{m}$ grating assisted surface-emitting DFB laser with wide temperature operation. , 2021, , .		0
7	On-chip reconfigurable mode converter based on cross-connected subwavelength Y-junctions. Photonics Research, 2021, 9, 43.	7.0	7
8	Optical meta-waveguides for integrated photonics and beyond. Light: Science and Applications, 2021, 10, 235.	16.6	196
9	On-chip broadband and reconfigurable quasi-circulator based on mode conversion. , 2021, , .		0
10	Detection of Polarization and Topological Charge Based on Multidimensional Field of Metasurface. IEEE Photonics Journal, 2020, 12, 1-10.	2.0	1
11	Silicon-based multimode waveguide crossings. JPhys Photonics, 2020, 2, 022002.	4.6	10
12	Enhancing the Physical Layer Security of OFDM-PONs With Hardware Fingerprint Authentication: A Machine Learning Approach. Journal of Lightwave Technology, 2020, 38, 3238-3245.	4.6	33
13	Integrated Dual-Mode 3-dB Power Splitter Based on Multimode Interference Coupler. IEEE Photonics Technology Letters, 2020, 32, 883-886.	2.5	24
14	Reconfigurable Optical Boolean Function Generator Based on Electro-Optical Nonlinear Dynamics. Physical Review Applied, 2020, 13, .	3.8	0
15	Polarization and direction-controlled asymmetric multifunctional metadvice for focusing, vortex and Bessel beam generation. Optics Express, 2020, 28, 3732.	3.4	10
16	Unveil the time delay signature of optical chaos systems with a convolutional neural network. Optics Express, 2020, 28, 15221.	3.4	16
17	Robust chaotic-shift-keying scheme based on electro-optical hybrid feedback system. Optics Express, 2020, 28, 10847.	3.4	27
18	Inverse design of a single-step-etched ultracompact silicon polarization rotator. Optics Express, 2020, 28, 28343.	3.4	36

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19	Inverse design of digital nanophotonic devices using the adjoint method. <i>Photonics Research</i> , 2020, 8, 528.	7.0	91
20	On-chip reconfigurable mode-order converter based on subwavelength symmetric multimode Y-junctions. , 2020, , .		0
21	An Image Encryption Scheme Based on Hybrid Electro-Optic Chaotic Sources and Compressive Sensing. <i>IEEE Access</i> , 2019, 7, 156582-156591.	4.2	20
22	Inverse design and demonstration of ultracompact silicon polarization rotator. , 2019, , .		3
23	Semiconductor-laser-based hybrid chaos source and its application in secure key distribution. <i>Optics Letters</i> , 2019, 44, 2605.	3.3	33
24	Subwavelength adiabatic multimode Y-junctions. <i>Optics Letters</i> , 2019, 44, 4729.	3.3	13
25	Robust digital-controllable broadband analog optical chaos generation. , 2019, , .		0
26	Maximizing the security of digital chaos based OFDM-PON with a dynamical nonlinear transformation. , 2019, , .		1
27	Surface-emitting distributed feedback laser based on high-order gratings. <i>Applied Optics</i> , 2019, 58, 5443.	1.8	3
28	4 MIMO fiber-wireless transmission based on an integrated four-channel directly modulated optical transceiver. <i>Photonics Research</i> , 2019, 7, 1461.	7.0	3
29	Computational Temporal Ghost Imaging Using Intensity-Only Detection Over a Single Optical Fiber. <i>IEEE Photonics Journal</i> , 2018, 10, 1-9.	2.0	6
30	Secure Key Distribution Strategy in OFDM-PON by Utilizing the Redundancy of Training Symbol and Digital Chaos Technique. <i>IEEE Photonics Journal</i> , 2018, 10, 1-8.	2.0	17
31	PAM4 based symmetrical 112-Gbps long-reach TWDM-PON. <i>Optics Communications</i> , 2018, 409, 117-122.	2.1	3
32	Secure Optical Communication System Based on ASE Noise with No Need for Key Distribution. , 2018, , .		1
33	Single-Shot Temporal Ghost Imaging Based on Orthogonal Frequency-Division Multiplexing. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 1555-1558.	2.5	11
34	Stable and Compact Dual-Loop Optoelectronic Oscillator Using Self-Polarization-Stabilization Technique and Multicore Fiber. <i>Journal of Lightwave Technology</i> , 2018, 36, 5196-5202.	4.6	8
35	Ultra-compact silicon multi-mode waveguide bend based on subwavelength asymmetric Y-junction. , 2018, , .		13
36	Inverse design and demonstration of an ultracompact broadband dual-mode 3 dB power splitter. <i>Optics Express</i> , 2018, 26, 24135.	3.4	82

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37	Bidirectional long-reach PON using Kramers-Kronig-based receiver for Rayleigh Backscattering noise and SSBI interference elimination. Optics Express, 2018, 26, 19020.	3.4	9
38	Synchronized Random Bit Sequences Generation Based on Analog-Digital Hybrid Electro-Optic Chaotic Sources. Journal of Lightwave Technology, 2018, 36, 4995-5002.	4.6	16
39	An Ultracompact Multimode Waveguide Crossing Based on Subwavelength Asymmetric Y-Junction. IEEE Photonics Journal, 2018, 10, 1-8.	2.0	30
40	Deterministic Single Soliton Formation and Manipulation in Anomalous Dispersion Microresonators via Parametric Seeding. IEEE Photonics Journal, 2018, 10, 1-8.	2.0	1
41	Ultra-compact mode (de) multiplexer based on subwavelength asymmetric Y-junction. Optics Express, 2018, 26, 8162.	3.4	162
42	On-chip cyclic-AWG-based 12 $\times$ 12 silicon wavelength routing switches with minimized port-to-port insertion loss fluctuation. Photonics Research, 2018, 6, 380.	7.0	9
43	Ultracompact dual-mode waveguide crossing based on subwavelength multimode-interference couplers. Photonics Research, 2018, 6, 660.	7.0	93
44	Wavelength division multiplexing secure communication scheme based on an optically coupled phase chaos system and PM-to-IM conversion mechanism. Nonlinear Dynamics, 2018, 94, 1949-1959.	5.2	30
45	Broadband Wavelength Conversion Based on Parallel-Coupled Micro-Ring Resonators. IEEE Photonics Technology Letters, 2018, 30, 1559-1562.	2.5	4
46	Arbitrary Bias Point Control Technique for Optical IQ Modulator Based on Dither-Correlation Detection. Journal of Lightwave Technology, 2018, 36, 3824-3836.	4.6	32
47	An Electrooptic Chaotic System Based on a Hybrid Feedback Loop. Journal of Lightwave Technology, 2018, 36, 4259-4266.	4.6	33
48	Secure Strategy for OFDM-PON Using Digital Chaos Algorithm With Fixed-Point Implementation. Journal of Lightwave Technology, 2018, 36, 4826-4833.	4.6	22
49	Wideband and continuously-tunable fractional photonic Hilbert transformer based on a single high-birefringence planar Bragg grating. Optics Express, 2018, 26, 20450.	3.4	12
50	An Ultra-Compact Colorless Dual-Mode 3 dB Power Splitter Based on Axisymmetrical Subwavelength Structure. , 2018, , .		5
51	Deterministic Single Soliton Formation and Manipulation in Anomalous Dispersion Microresonators via Parametric Seeding. , 2018, , .		0
52	Simultaneous Suppression of Even-Order and Third-Order Distortions in Directly Modulated Analog Photonic Links. IEEE Photonics Journal, 2017, 9, 1-12.	2.0	15
53	An Optically Coupled Electro-Optic Chaos System With Suppressed Time-Delay Signature. IEEE Photonics Journal, 2017, 9, 1-9.	2.0	19
54	Broadband optical chaos generation by constructing a simple hybrid feedback loop. , 2017, , .		2

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55	Inverse-designed ultra-compact star-crossings based on PhC-like subwavelength structures for optical intercross connect. Optics Express, 2017, 25, 18355.	3.4	47
56	Novel dual-loop optoelectronic oscillator based on self-polarization-stabilization technique. Optics Express, 2017, 25, 21993.	3.4	16
57	Reproducible optical noise-like signal generation subjected by digital sequences. Optics Express, 2017, 25, 29189.	3.4	7
58	Ultra-compact, Low-loss and Low-crosstalk Wavelength Demultiplexer for CWDM System Based on the Photonic-Crystal-Like Metamaterial Structure. , 2017, , .		7
59	Inverse Design of an Ultra-Compact Mode (De)multiplexer Based on Subwavelength Structure. , 2017, , .		4
60	Inverse-designed Ultra-compact Star-crossings Based on PhC-like Subwavelength Structures. , 2017, , .		0
61	Experimental Demonstration of On-chip 56x56 OXC Based on AWG Arrays. , 2017, , .		0
62	Reproducible Broadband Optical Noise Generation Based on Phase Modulation to Intensity Modulation Conversion and a Nonlinear Transformation. , 2017, , .		1
63	Electro-optic chaotic system based on the reverse-time chaos theory and a nonlinear hybrid feedback loop. Optics Express, 2016, 24, 28804.	3.4	17
64	Low dispersion broadband integrated double-slot microring resonators optical buffer. Frontiers of Optoelectronics, 2016, 9, 571-577.	3.7	1
65	Design of reconfigurable on-chip mode filters based on phase transition in vanadium dioxide. Applied Physics Express, 2016, 9, 112201.	2.4	10
66	Ultra-flat and broad optical frequency combs generation based on novel dispersion-flattened double-slot microring resonator. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	6
67	Experimental Demonstration of a 16.27 Gb/s 2-D Coherent Optical OFDM System With 3-D Signal Mapper and 2-D IFFT Modulator. Journal of Lightwave Technology, 2016, 34, 1177-1183.	4.6	10
68	High-frequency reverse-time chaos generation using an optical matched filter. Optics Letters, 2016, 41, 1157.	3.3	19
69	Highly efficient tunable optical filter based on liquid crystal micro-ring resonator with large free spectral range. Frontiers of Optoelectronics, 2016, 9, 112-120.	3.7	4
70	High-efficiency and Broad-bandwidth All Optical Wavelength Converters Based on Parallel-Cascaded Micro-ring Resonators. , 2016, , .		1
71	An Ultra-compact Colorless 50:50 Coupler Based on PhC-like Metamaterial Structure. , 2016, , .		7
72	Inverse-designed single-step-etched colorless 3â€dB couplers based on RIE-lag-insensitive PhC-like subwavelength structures. Optics Letters, 2016, 41, 5051.	3.3	79

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73	A Tunable Photonic Differentiator Based on Temporal Pulse Shaping System. , 2016, , .		0
74	2Å—2 PolMux-MIMO RoF System Employing Interference Cancellation Based OFDM/OQAM Technique. , 2016, , .		2
75	High-efficiency and broadband wavelength conversion in a slot waveguide with the periodic structure altering the phase-mismatch. , 2015, , .		0
76	Flexible Tuning Optical Frequency Combs via Parametric Seeding in Microresonators With Normal Dispersion. IEEE Photonics Journal, 2015, 7, 1-7.	2.0	4
77	Time-Delay Concealment in a Three-Dimensional Electro-Optic Chaos System. IEEE Photonics Technology Letters, 2015, 27, 1030-1033.	2.5	31
78	Efficiently tunable and fabrication tolerant double-slot microring resonators incorporating nematic liquid crystal as claddings. Optics Communications, 2015, 350, 235-240.	2.1	7
79	All-optical logic operation of polarized light signals in highly nonlinear silicon hybrid plasmonic microring resonators. Applied Optics, 2015, 54, 4471.	1.8	14
80	Efficient and broadband wavelength conversion in a slot waveguide with the periodic structure altering the phase-mismatch. Applied Optics, 2015, 54, 7753.	2.1	3
81	Broadband and transparent wavelength conversion based on dispersion-flattened double-slot waveguide. Applied Optics, 2015, 54, 7520.	2.1	1
82	Quasi-phase-matched four-wave mixing generation between C-band and mid-infrared regions using a symmetric hybrid plasmonic waveguide grating. Applied Optics, 2015, 54, 6961.	2.1	2
83	Polarization insensitive 3-dB directional coupler based on sub-wavelength grating structure. , 2015, , .		1
84	Phase Noise Jitter Synchronization for Coherent Optical OFDM via Pilot-Data-Aided and Wiener Filter. Journal of Computer and Information Science, 2014, 7, .	0.3	0
85	Electro-optical Tunable Arrayed Waveguide Grating based on Liquid Crystal Clad waveguide. , 2014, , .		1
86	High-performance and compact polarization-independent grating coupler. , 2014, , .		2
87	Improved pilot data aided feed forward based on maximum likelihood for carrier phase jitter recovery in coherent optical orthogonal frequency division multiplexing. Frontiers of Optoelectronics, 2014, 7, 493-500.	3.7	0
88	Measurement of Gain Spectra of Semiconductor Lasers Using Least Squares Fitting Method. IEEE Photonics Technology Letters, 2013, 25, 1122-1124.	2.5	3
89	Optimization of few-mode-fiber based mode converter for mode division multiplexing transmission. Optics Communications, 2013, 306, 185-189.	2.1	12
90	Practicable model of coaxial cable channel with splitter and tap via state-transition matrix. Measurement: Journal of the International Measurement Confederation, 2013, 46, 1190-1199.	5.0	7

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91	RECONSTRUCTION OF FAULTY CABLE NETWORK USING TIME-DOMAIN REFLECTOMETRY. Progress in Electromagnetics Research, 2013, 136, 457-478.	4.4	7
92	A novel design of orthogonal frequency division multiplexing-based passive optical networks. Photonic Network Communications, 2012, 23, 265-271.	2.7	4
93	Performance Analysis of Coherent Optical OFDM with Weiner Phase Noise jitters. , 2012, , .		1
94	Burst-Mode Wavelength Upconversion Using Gain-Clamped SOA for Applying WDM Technique to TDM-PON. , 2012, , .		1
95	Accurate Channel Model of Coaxial Cable Network and Its Application in Fault Location. , 2012, , .		0
96	A novel medium access control protocol for passive optical network supporting local area networking capabilities. Photonic Network Communications, 2011, 21, 7-12.	2.7	1
97	Design and evaluation of scheduling algorithms for TDM/WDM PON based on RSOA. Frontiers of Optoelectronics in China, 2011, 4, 217-222.	0.2	0
98	OFDMA-based LAN emulation in long-reach hybrid PON system. Optics Communications, 2011, 284, 740-746.	2.1	10
99	A Distributed Dynamic Bandwidth Allocation Algorithm in EPON. Modern Applied Science, 2010, 4, .	0.6	3
100	Downhill simplex algorithm based approach to holey fiber design for tunable fiber parametric wavelength converters. Optics Express, 2010, 18, 9831.	3.4	3
101	Fiber Raman laser and amplifier pumped by Nd <sup>3+</sup> :YVO <sub>4</sub> solid state laser. , 2005, , .		0
102	Efficient numerical method for predicting the polarization-dependent Raman gain in fiber Raman amplifiers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 263.	1.5	2