

# Yaocheng Shi

## List of Publications by Year in descending order

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96  
papers

4,148  
citations

101543

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96  
docs citations

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times ranked

2264  
citing authors

#	ARTICLE	IF	CITATIONS
1	Subwavelength-Structure-Assisted Ultracompact Polarization-Handling Components on Silicon. <i>Journal of Lightwave Technology</i> , 2022, 40, 1784-1801.	4.6	12
2	Fabrication of Polymer Optical Waveguides by Digital Ultraviolet Lithography. <i>Journal of Lightwave Technology</i> , 2022, 40, 163-169.	4.6	3
3	Reconfigurable hybrid silicon waveguide Bragg filter using ultralow-loss phase-change material. <i>Applied Optics</i> , 2022, 61, 1660.	1.8	8
4	Toward calibration-free Mach-Zehnder switches for next-generation silicon photonics. <i>Photonics Research</i> , 2022, 10, 793.	7.0	12
5	Dual Polarization and Bi-Directional Silicon-Photonic Optical Phased Array With Large Scanning Range. <i>IEEE Photonics Journal</i> , 2022, 14, 1-5.	2.0	12
6	All-Optical Switching of Silicon Nanobeam Cavities with an Ultra-compact Heater Utilizing the Photothermal Effect. <i>ACS Photonics</i> , 2022, 9, 197-202.	6.6	7
7	Low-Loss Calibration-Free 2 × 2 Mach-Zehnder Switches With Varied-Width Multimode-Interference Couplers. <i>Journal of Lightwave Technology</i> , 2022, 40, 5254-5259.	4.6	9
8	Reconfigurable add-drop filter based on an antisymmetric multimode photonic crystal nanobeam cavity in a silicon waveguide. <i>Optics Express</i> , 2022, 30, 17332.	3.4	5
9	Ultra-compact electro-optic modulator based on etchless lithium niobate photonic crystal nanobeam cavity. <i>Optics Express</i> , 2022, 30, 20839.	3.4	13
10	All-Solid-State Beam Steering via Integrated Optical Phased Array Technology. <i>Micromachines</i> , 2022, 13, 894.	2.9	14
11	Photonic-circuited resonance fluorescence of single molecules with an ultrastable lifetime-limited transition. <i>Nature Communications</i> , 2022, 13, .	12.8	4
12	Silicon photonic filters. <i>Microwave and Optical Technology Letters</i> , 2021, 63, 2252-2268.	1.4	39
13	Compact Racetrack Resonator on LiNbO <sub>3</sub> . <i>Journal of Lightwave Technology</i> , 2021, 39, 1770-1776.	4.6	19
14	Polarization Multiplexing Silicon-Photonic Optical Phased Array for 2D Wide-Angle Optical Beam Steering. <i>IEEE Photonics Journal</i> , 2021, 13, 1-6.	2.0	19
15	Broadband Arbitrary Ratio Power Splitters Based on Directional Couplers With Subwavelength Structure. <i>IEEE Photonics Technology Letters</i> , 2021, 33, 479-482.	2.5	22
16	Silicon/2D-material photodetectors: from near-infrared to mid-infrared. <i>Light: Science and Applications</i> , 2021, 10, 123.	16.6	177
17	Low-crosstalk and fabrication-tolerant four-channel CWDM filter based on dispersion-engineered Mach-Zehnder interferometers. <i>Optics Express</i> , 2021, 29, 20617.	3.4	31
18	Analysis of the Underwater Wireless Optical Communication Channel Based on a Comprehensive Multiparameter Model. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6051.	2.5	13

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19	Fabrication-Friendly On-Chip Silicon Polarizer Based on Polarization-Selective Corner Mirrors. IEEE Photonics Technology Letters, 2021, 33, 652-655.	2.5	4
20	Inverse Design of Ultra-Compact Multimode Waveguide Bends Based on the Free-Form Curves. Laser and Photonics Reviews, 2021, 15, 2100162.	8.7	27
21	Subwavelength silicon photonics for on-chip mode-manipulation. Photonix, 2021, 2, .	13.5	47
22	Ultra-Broadband Dual-Polarization Power Splitter Based on Silicon Subwavelength Gratings. IEEE Photonics Technology Letters, 2021, 33, 765-768.	2.5	14
23	Demonstration of an Ultra-Sensitive Temperature Sensor Using an Asymmetric Mach-Zehnder Interferometer. IEEE Photonics Journal, 2021, 13, 1-5.	2.0	3
24	Direct-access mode-division multiplexing switch for scalable on-chip multi-mode networks. Nanophotonics, 2021, 10, 4551-4566.	6.0	10
25	Silicon Integrated Nanophotonic Devices for On-Chip Multi-Mode Interconnects. Applied Sciences (Switzerland), 2020, 10, 6365.	2.5	41
26	High Efficiency Silicon Edge Coupler Based On Uniform Arrayed Waveguides With Un-Patterned Cladding. IEEE Photonics Technology Letters, 2020, 32, 1077-1080.	2.5	13
27	Efficient Hybrid Integration of Long-Wavelength VCSELs on Silicon Photonic Circuits. Journal of Lightwave Technology, 2020, 38, 5100-5106.	4.6	22
28	Ultra-Compact and Ultra-Broadband Guided-Mode Exchangers on Silicon. Laser and Photonics Reviews, 2020, 14, 2000058.	8.7	27
29	Thermally-Reconfigurable Silicon Photonic Devices and Circuits. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-20.	2.9	36
30	High-performance silicon-graphene hybrid plasmonic waveguide photodetectors beyond 1.55- $\mu$ m. Light: Science and Applications, 2020, 9, 29.	16.6	155
31	Four-Channel CWDM (de)Multiplexers Using Cascaded Multimode Waveguide Gratings. IEEE Photonics Technology Letters, 2020, 32, 192-195.	2.5	33
32	Silicon-Waveguide-Integrated High-Quality Metagrating Supporting Bound State in the Continuum. Laser and Photonics Reviews, 2020, 14, 1900430.	8.7	19
33	Proposal for an ultra-broadband polarization beam splitter using an anisotropy-engineered Mach-Zehnder interferometer on the x-cut lithium-niobate-on-insulator. Optics Express, 2020, 28, 10899.	3.4	41
34	Ultra-broadband on-chip multimode power splitter with an arbitrary splitting ratio. OSA Continuum, 2020, 3, 1212.	1.8	30
35	Ultrahigh-Q silicon racetrack resonators. Photonics Research, 2020, 8, 684.	7.0	86
36	Diffraction engineering for silicon waveguide grating antenna by harnessing bound state in the continuum. Nanophotonics, 2020, 9, 1439-1446.	6.0	19

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37	Silicon Nanophotonics for Light Manipulation. , 2019, , .		0
38	High-Speed and High-Responsivity Hybrid Silicon/Black-Phosphorus Waveguide Photodetectors at 2 $\mu$ m. Laser and Photonics Reviews, 2019, 13, 1900032.	8.7	91
39	Design of a Single Nanoparticle Trapping Device Based on Bow-Tie-Shaped Photonic Crystal Nanobeam Cavities. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	12
40	Ultra-Broadband and Ultra-Compact On-Chip Silicon Polarization Beam Splitter by Using Hetero-Anisotropic Metamaterials. Laser and Photonics Reviews, 2019, 13, 1800349.	8.7	117
41	Flat-Top CWDM (De)Multiplexers Based on Contra-Directional Couplers With Subwavelength Gratings. IEEE Photonics Technology Letters, 2019, 31, 2003-2006.	2.5	14
42	Subwavelength-grating-assisted silicon polarization rotator covering all optical communication bands. Optics Express, 2019, 27, 5588.	3.4	48
43	On-chip simultaneous sensing of humidity and temperature with a dual-polarization silicon microring resonator. Optics Express, 2019, 27, 28649.	3.4	28
44	Anisotropic metamaterial-assisted all-silicon polarizer with 415-nm bandwidth. Photonics Research, 2019, 7, 1432.	7.0	49
45	Flat-Top CWDM (De)Multiplexer Based on MZI With Bent Directional Couplers. IEEE Photonics Technology Letters, 2018, 30, 169-172.	2.5	84
46	Ultra-Sharp Multi-Mode Waveguide Bending Assisted with Metamaterial-Based Mode Converters. Laser and Photonics Reviews, 2018, 12, 1700240.	8.7	79
47	10-Channel Mode (de)multiplexer with Dual Polarizations. Laser and Photonics Reviews, 2018, 12, 1700109.	8.7	210
48	On-Chip Coarse Wavelength Division Multiplexers Based on Silicon Subwavelength Gratings. , 2018, , .		1
49	Optical phased array based on silicon waveguides with non-uniform widths. , 2018, , .		2
50	Metamaterial-Based Maxwell's Fisheye Lens for Multimode Waveguide Crossing. Laser and Photonics Reviews, 2018, 12, 1800094.	8.7	91
51	Athermal Narrow-Band Filters Based on Side-Modulated Bragg Gratings. IEEE Photonics Technology Letters, 2018, 30, 1226-1229.	2.5	7
52	Polarization-insensitive four-channel coarse wavelength-division (de)multiplexer based on Mach-Zehnder interferometers with bent directional couplers and polarization rotators. Optics Letters, 2018, 43, 1483.	3.3	44
53	Silicon-based on-chip diplexing/triplexing technologies and devices. Science China Information Sciences, 2018, 61, 1.	4.3	9
54	Polarization-insensitive silicon waveguide crossing based on multimode interference couplers. Optics Letters, 2018, 43, 5961.	3.3	14

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55	Ultra-compact on-chip photothermal power monitor based on silicon hybrid plasmonic waveguides. <i>Nanophotonics</i> , 2017, 6, 1121-1131.	6.0	11
56	On-Chip Silicon TE-Pass Polarizer Based on Asymmetrical Directional Couplers. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 861-864.	2.5	39
57	On-Chip Silicon Triplexer Based on Asymmetrical Directional Couplers. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 1265-1268.	2.5	17
58	An On-Chip Triplexer Based on Silicon Bragg Grating-Assisted Multimode Interference Couplers. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 63-65.	2.5	21
59	A Polarization-Insensitive Dual-Wavelength Multiplexer Based on Bent Directional Couplers. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 1975-1978.	2.5	13
60	An Ultra-compact Silicon Triplexer Based on Cascaded Bent Directional Couplers. <i>Journal of Lightwave Technology</i> , 2017, 35, 5260-5264.	4.6	19
61	Ultra-broadband silicon polarization splitter-rotator based on the multi-mode waveguide. <i>Optics Express</i> , 2017, 25, 18485.	3.4	45
62	Compact high-efficiency perfectly-vertical grating coupler on silicon at O-band. <i>Optics Express</i> , 2017, 25, 22032.	3.4	21
63	On-chip reconfigurable optical add-drop multiplexer for hybrid wavelength/mode-division-multiplexing systems. <i>Optics Letters</i> , 2017, 42, 2802.	3.3	66
64	Ultra-compact and highly efficient polarization rotator utilizing multi-mode waveguides. <i>Optics Letters</i> , 2017, 42, 771.	3.3	29
65	Polarization-insensitive broadband 20-23 dB power splitter based on silicon-bent directional couplers. <i>Optics Letters</i> , 2017, 42, 3738.	3.3	53
66	Ultra-compact polarization-independent directional couplers utilizing a subwavelength structure. <i>Optics Letters</i> , 2017, 42, 5202.	3.3	34
67	High sensitivity temperature sensor based on cascaded silicon photonic crystal nanobeam cavities. <i>Optics Express</i> , 2016, 24, 23037.	3.4	41
68	Dual-mode waveguide crossing utilizing taper-assisted multimode-interference couplers. <i>Optics Letters</i> , 2016, 41, 5381.	3.3	67
69	Ultra-broadband dual-mode 30 dB power splitter based on a Y-junction assisted with mode converters. <i>Optics Letters</i> , 2016, 41, 5047.	3.3	68
70	Simultaneous measurement of refractive index and temperature using a dual polarization ring. <i>Applied Optics</i> , 2016, 55, 3537.	2.1	39
71	Compact Eight-Channel Thermally Reconfigurable Optical Add/Drop Multiplexers on Silicon. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 1874-1877.	2.5	39
72	Silicon waveguide grating coupler for perfectly vertical fiber based on a tilted membrane structure. <i>Optics Letters</i> , 2016, 41, 820.	3.3	23

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73	Low-loss and broadband 2 $\mu\text{m}$ silicon thermo-optic Mach-Zehnder switch with bent directional couplers. Optics Letters, 2016, 41, 836.	3.3	159
74	Thermally tunable silicon photonic microdisk resonator with transparent graphene nanoheaters. Optica, 2016, 3, 159.	9.3	131
75	Design, optimization and fabrication of two-dimension high contrast subwavelength grating (HCG) mirror on Silicon-on-insulator. , 2015, , .		0
76	Optical integrated chips with micro and nanostructures for refractive index and SERS-based optical label-free sensing. Nanophotonics, 2015, 4, 419-436.	6.0	11
77	Design and experimental verification of all waveguide type triplexers using cascaded MMI couplers. Optical and Quantum Electronics, 2015, 47, 1151-1156.	3.3	5
78	Temperature insensitive lower-index-mode photonic crystal nanobeam cavity. Optics Letters, 2015, 40, 264.	3.3	27
79	High-order microring resonators with bent couplers for a box-like filter response. Optics Letters, 2014, 39, 6304.	3.3	92
80	Ultra-compact channel drop filter based on photonic crystal nanobeam cavities utilizing a resonant tunneling effect. Optics Letters, 2014, 39, 6973.	3.3	38
81	Integrated Optical Chemical Sensor Based on an SOI Ring Resonator Using Phase-Interrogation. IEEE Photonics Journal, 2014, 6, 1-7.	2.0	5
82	Low-loss ultracompact transverse-magnetic-pass polarizer with a silicon subwavelength grating waveguide. Optics Letters, 2014, 39, 4514.	3.3	144
83	Extremely small polarization beam splitter based on a multimode interference coupler with a silicon hybrid plasmonic waveguide. Optics Letters, 2014, 39, 259.	3.3	115
84	Fabrication of High Precision Self-Aligned V-Grooves Integrated on Silica-on-Silicon Chips. IEEE Photonics Technology Letters, 2014, 26, 1169-1171.	2.5	1
85	Optical bistability in a high-Q racetrack resonator based on small SU-8 ridge waveguides. Optics Letters, 2013, 38, 2134.	3.3	13
86	Ultracompact and broadband polarization beam splitter utilizing the evanescent coupling between a hybrid plasmonic waveguide and a silicon nanowire. Optics Letters, 2013, 38, 3005.	3.3	135
87	Silicon mode (de)multiplexer enabling high capacity photonic networks-on-chip with a single-wavelength-carrier light. Optics Letters, 2013, 38, 1422.	3.3	356
88	Ultra-compact Broadband TM-pass Polarizer Using a Silicon Hybrid Plasmonic Waveguide Grating. , 2013, , .		9
89	Sub- $\frac{1}{4}\lambda^2$ power splitters by using silicon hybrid plasmonic waveguides. Optics Express, 2011, 19, 838.	3.4	72
90	An Integrated Optical Mixer Based on SU8 Polymer for PDM-QPSK Demodulation. IEEE Photonics Technology Letters, 2011, 23, 1490-1492.	2.5	7

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91	Experimental demonstration of an ultracompact Si-nanowire-based reflective arrayed-waveguide grating (de)multiplexer with photonic crystal reflectors. <i>Optics Letters</i> , 2010, 35, 2594.	3.3	58
92	Design of a Polarization Insensitive Triplexer Using Directional Couplers Based on Submicron Silicon Rib Waveguides. <i>Journal of Lightwave Technology</i> , 2009, 27, 1443-1447.	4.6	36
93	Ultracompact directional couplers realized in InP by utilizing feature size dependent etching. <i>Optics Letters</i> , 2008, 33, 1927.	3.3	14
94	Proposal for an Ultracompact Polarization-Beam Splitter Based on a Photonic-Crystal-Assisted Multimode Interference Coupler. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 825-827.	2.5	65
95	A Polarization-Insensitive 1310/1550-nm Demultiplexer Based on Sandwiched Multimode Interference Waveguides. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 1789-1791.	2.5	25
96	Novel Ultracompact Triplexer Based on Photonic Crystal Waveguides. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 2293-2295.	2.5	39