Xingchen Ji

List of Publications by Year
in descending order

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106	3,402	186209	302012
papers	citations	28 h-index	39 g-index

107	107	107	2708
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Battery-operated integrated frequency comb generator. Nature, 2018, 562, 401-405.	13.7	453
2	Ultra-low-loss on-chip resonators with sub-milliwatt parametric oscillation threshold. Optica, 2017, 4, 619.	4.8	370
3	Thermally controlled comb generation and soliton modelocking in microresonators. Optics Letters, 2016, 41, 2565.	1.7	295
4	On-chip dual-comb source for spectroscopy. Science Advances, 2018, 4, e1701858.	4.7	256
5	Large-scale optical phased array using a low-power multi-pass silicon photonic platform. Optica, 2020, 7, 3.	4.8	202
6	Low-loss silicon platform for broadband mid-infrared photonics. Optica, 2017, 4, 707.	4.8	148
7	Breather soliton dynamics in microresonators. Nature Communications, 2017, 8, 14569.	5.8	122
8	Compact narrow-linewidth integrated laser based on a low-loss silicon nitride ring resonator. Optics Letters, 2017, 42, 4541.	1.7	115
9	Turn-key, high-efficiency Kerr comb source. Optics Letters, 2019, 44, 4475.	1.7	104
10	Reconfigurable nanophotonic silicon probes for sub-millisecond deep-brain optical stimulation. Nature Biomedical Engineering, 2020, 4, 223-231.	11.6	101
11	Chip-scale blue light phased array. Optics Letters, 2020, 45, 1934.	1.7	93
12	Synchronization of coupled optical microresonators. Nature Photonics, 2018, 12, 688-693.	15.6	89
13	Near-Degenerate Quadrature-Squeezed Vacuum Generation on a Silicon-Nitride Chip. Physical Review Letters, 2020, 124, 193601.	2.9	87
14	Methods to achieve ultra-high quality factor silicon nitride resonators. APL Photonics, 2021, 6, .	3.0	65
15	Exploiting Ultralow Loss Multimode Waveguides for Broadband Frequency Combs. Laser and Photonics Reviews, 2021, 15, .	4.4	64
16	Modeling and simulation of bulk heterojunction polymer solar cells. Solar Energy Materials and Solar Cells, 2014, 127, 67-86.	3.0	60
17	Demonstration of chip-based coupled degenerate optical parametric oscillators for realizing a nanophotonic spin-glass. Nature Communications, 2020, 11, 4119.	5.8	60
18	Robust, efficient, micrometre-scale phase modulators at visible wavelengths. Nature Photonics, 2021, 15, 908-913.	15.6	53

#	Article	IF	Citations
19	Dynamics of mode-coupling-induced microresonator frequency combs in normal dispersion. Optics Express, 2016, 24, 28794.	1.7	47
20	Visible nonlinear photonics via high-order-mode dispersion engineering. Optica, 2020, 7, 135.	4.8	43
21	Frequency-Domain Quantum Interference with Correlated Photons from an Integrated Microresonator. Physical Review Letters, 2020, 124, 143601.	2.9	41
22	Carrier envelope offset detection via simultaneous supercontinuum and second-harmonic generation in a silicon nitride waveguide. Optics Letters, 2018, 43, 4627.	1.7	40
23	Counter-rotating cavity solitons in a silicon nitride microresonator. Optics Letters, 2018, 43, 547.	1.7	38
24	512-Element Actively Steered Silicon Phased Array for Low-Power LIDAR. , 2018, , .		37
25	On-chip tunable photonic delay line. APL Photonics, 2019, 4, 090803.	3.0	35
26	Conversion efficiency of soliton Kerr combs. Optics Letters, 2021, 46, 3657.	1.7	35
27	Chip-based frequency comb sources for optical coherence tomography. Optics Express, 2019, 27, 19896.	1.7	34
28	Coherent, directional supercontinuum generation. Optics Letters, 2017, 42, 4466.	1.7	32
29	Strong Nonlinear Coupling in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Si</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">N</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Ring Resonator. Physical Review Letters, 2019, 122, 153906.	2.9	32
30	Tightly locked optical frequency comb from a semiconductor disk laser. Optics Express, 2019, 27, 1786.	1.7	28
31	Observation of Arnold Tongues in Coupled Soliton Kerr Frequency Combs. Physical Review Letters, 2019, 123, 153901.	2.9	26
32	Gas-Phase Microresonator-Based Comb Spectroscopy without an External Pump Laser. ACS Photonics, 2018, 5, 2780-2785.	3.2	23
33	Synchronization of nonsolitonic Kerr combs. Science Advances, 2021, 7, eabi4362.	4.7	23
34	Parametric sideband generation in CMOS-compatible oscillators from visible to telecom wavelengths. Optica, 2021, 8, 316.	4.8	22
35	Millimeter-scale chipâ€“based supercontinuum generation for optical coherence tomography. Science Advances, 2021, 7, eabg8869.	4.7	19
36	Performance scaling of a 10-GHz solid-state laser enabling self-referenced CEO frequency detection without amplification. Optics Express, 2020, 28, 12755.	1.7	19

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37	Active tuning of dispersive waves in Kerr soliton combs. Optics Letters, 2022, 47, 2234.	1.7	9
38	Soliton-effect compression of picosecond pulses on a photonic chip. Optics Letters, 2021, 46, 4706.	1.7	8
39	Dynamic control of photon lifetime for quantum random number generation. Optica, 2021, 8, 1458.	4.8	8
40	Robust Hybrid III-V/Si3N4 Laser with kHz-Linewidth and GHz-Pulling Range. , 2020, , .		6
41	Kerr Comb-Driven Silicon Photonic Transmitter. , 2021, , .		6
42	Measurements and Modeling of Atomicâ€Scale Sidewall Roughness and Losses in Integrated Photonic Devices. Advanced Optical Materials, 2022, 10, .	3.6	6
43	Silicon Photonics Integration for Future Generation Optical Network. , 2018, , .		4
44	Error-Free Kerr Comb-Driven SiP Microdisk Transmitter. , 2021, , .		3
45	High Quality Factor PECVD Si3N4 Ring Resonators Compatible with CMOS Process. , 2019, , .		3
46	Overcoming the Trade-Off Between Loss and Dispersion in Microresonators. , 2020, , .		3
47	Narrow Linewidth, Widely Tunable Integrated Lasers from Visible to Near-IR. , 2021, , .		2
48	Sidewall Roughness in Si3N4 Waveguides Directly Measured by Atomic Force Microscopy. , 2017, , .		2
49	Dual-comb Spectroscopy using On-chip Mode-locked Frequency Combs. , 2017, , .		2
50	Broadband Frequency Comb Generation in the Near-Visible using Higher-Order Modes in Silicon Nitride Microresonators. , 2017, , .		2
51	Fully Integrated Chip Platform for Electrically Pumped Frequency Comb Generation. , 2018, , .		2
52	Compact narrow-linewidth integrated laser based on low-loss silicon nitride ring resonator. , 2018, , .		2
53	Micron-scale, Efficient, Robust Phase Modulators in the Visible. , 2019, , .		2
54	Broadband High-Resolution Scanning of Soliton Micro-Combs. , 2019, , .		2

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55	Universal Conversion Efficiency Scaling with Free-Spectral-Range for Soliton Kerr Combs. , 2020, , .		2
56	Self-referenced CEO Frequency Detection of a Semiconductor Disk Laser using a Silicon Nitride Waveguide. , 2017, , .		1
57	Coherent Supercontinuum Generation with Picosecond Pulses. , 2017, , .		1
58	Millimeter-Scale Chip-Based Supercontinuum Generation for Optical Coherence Tomography. , 2021, , .		1
59	Micron-scale, efficient, and robust phase modulators at visible wavelengths. , 2021, , .		1
60	An Active Visible Nanophotonics Platform for Sub-Millisecond Deep Brain Neural Stimulation. , 2018, , .		1
61	Observation of Breather Solitons in Microresonators. , 2016, , .		1
62	Large Effective Ï‡(2) Nonlinearity via Coherent Photon Conversion on a Si3N4 Chip. , 2017, , .		1
63	Synchronization of coupled microresonator frequency combs. , 2018, , .		1
64	Silicon nitride waveguide enables self-referenced frequency comb from a semiconductor disk laser. , 2018, , .		1
65	Characterization of Ultra-High-Q Si3N4 Micro-Ring Resonators with High-Precision Temperature Control. , 2018, , .		1
66	Chip-scale Blue Phased Array. , 2019, , .		1
67	Coupled Degenerate Parametric Oscillators Towards Photonic Coherent Ising Machine. , 2019, , .		1
68	Near-Visible Microresonator-Based Soliton Combs. , 2019, , .		1
69	Scalable low-power silicon photonic platform for all-solid-state beam steering. , 2019, , .		1
70	Robust Miniature Pure-Phase Modulators at ƙ = 488 nm. , 2020, , .		1
71	Microresonator Based Discrete- and Continuous-Variable Quantum Sources on Silicon-Nitride. , 2020, , .		1
72	Frequency-Domain Quantum Interference with Correlated Photons from an Integrated Microresonator. , 2020, , .		1

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73	Guiding light at criticality and beyond. , 2021, , .		0
74	Photonic-Chip-Based Nonlinear Compression of Picosecond Pulses. , 2021, , .		0
75	Fully Integrated Broad-Band High Power Frequency Comb Based on a Multimode Gain Chip. , 2021, , .		0
76	Synchronization of Normal-GVD Kerr Combs. , 2021, , .		0
77	Broadband Dual-Pumped Normal-GVD Kerr Combs. , 2021, , .		0
78	On demand control of bus-cavity coupling. , 2021, , .		0
79	Quantum Random Number Generation via Dynamically-Controlled Coupled-Resonator-Based Kerr Oscillator. , 2021, , .		0
80	Breather Solitons in Microresonators. , 2016, , .		0
81	Dynamics of Mode-Coupling-Assisted Microresonator Frequency Combs. , 2016, , .		0
82	Generation of Dual Frequency Combs using Cascaded Microring Resonators. , 2016, , .		0
83	High Quality Factor Si3N4 Ring Resonators Achieved by Surface Roughness Reduction. , 2016, , .		0
84	Thermally-Controlled Single-Soliton Modelocking in Silicon Nitride Microresonators. , 2016, , .		0
85	Stability of Modelocked Microresonator Frequency Combs. , 2016, , .		0
86	Silicon Photonics as a Broadband Platform for Parametric Oscillation in the Mid-Infrared. , 2017, , .		0
87	Counter-Propagating Solitons in Microresonators. , 2017, , .		0
88	Rb-Compatible Silicon-Based Correlated Photon Source. , 2017, , .		0
89	High Confinement and Low Loss Si3N4 Waveguides for Miniaturizing Optical Coherence Tomography. , 2017, , .		0
90	Dual-Cavity Scanning Comb Spectroscopy. , 2018, , .		0

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91	Fully Stabilized Optical Frequency Comb from a Semiconductor Disk Laser. , 2018, , .		0
92	Coherent Directional Supercontinuum Generation. , 2018, , .		0
93	Synchronization of microresonator optical frequency combs. , 2018, , .		0
94	Chip-Based Frequency Combs for High-Resolution Optical Coherence Tomography. , 2018, , .		0
95	On-Chip Photon-Pair Generation in the Near-Visible. , 2019, , .		0
96	Long-Term Stabilization and Operation of a Soliton Micro-Comb for 9-Days. , 2019, , .		0
97	Sub-Harmonic Synchronization of Kerr Frequency Combs. , 2019, , .		0
98	Silicon-Chip-Based f-2f Interferometer. , 2019, , .		0
99	Ultra-Low Threshold Broadband Soliton Frequency Comb Generation. , 2020, , .		0
100	On-Chip Squeezed-State Generation via Dual-Pumped Four-Wave Mixing. , 2020, , .		0
101	Slaving a Highly Multi-Mode Laser to an On-Chip Single Mode Microresonator. , 2020, , .		0
102	Frequency-Domain Quantum Interference with Entangled Photons from an Integrated Microresonator. , 2020, , .		0
103	On-Chip Synchronization of Kerr Frequency Combs. , 2020, , .		0
104	Photonic Ising Spin-Glass via Chip-Based Degenerate Kerr Oscillators. , 2020, , .		0
105	Turn-Key, High-Efficiency Kerr Comb Source. , 2020, , .		0
106	Exploiting Ultra-Low Loss Silicon Nitride Platform for Various Applications (Invited). , 2022, , .		0