Yoshitomo Okawachi

List of Publications by Year
in descending order

97 papers	8,190 citations	61984 43 h-index	60623 81 g-index
99 all docs	99 docs citations	99 times ranked	4634 citing authors

#	Article	IF	Citations
1	Active tuning of dispersive waves in Kerr soliton combs. Optics Letters, 2022, 47, 2234.	3.3	9
2	Synchronization of Normal-GVD Kerr Combs. , 2021, , .		0
3	Error-Free Kerr Comb-Driven SiP Microdisk Transmitter. , 2021, , .		3
4	Broadband Dual-Pumped Normal-GVD Kerr Combs. , 2021, , .		0
5	Conversion efficiency of soliton Kerr combs. Optics Letters, 2021, 46, 3657.	3.3	35
6	Theory of Ï‡⁽²⁾-microresonator-based frequency conversion. Optics Letters, 2021, 46, 5393.	3.3	7
7	Soliton-effect compression of picosecond pulses on a photonic chip. Optics Letters, 2021, 46, 4706.	3.3	8
8	Dynamic control of photon lifetime for quantum random number generation. Optica, 2021, 8, 1458.	9.3	8
9	Millimeter-scale chipâ€“based supercontinuum generation for optical coherence tomography. Science Advances, 2021, 7, eabg8869.	10.3	19
10	Synchronization of nonsolitonic Kerr combs. Science Advances, 2021, 7, eabi4362.	10.3	23
11	Kerr Comb-Driven Silicon Photonic Transmitter. , 2021, , .		6
12	Demonstration of chip-based coupled degenerate optical parametric oscillators for realizing a nanophotonic spin-glass. Nature Communications, 2020, 11, 4119.	12.8	60
13	Near-Degenerate Quadrature-Squeezed Vacuum Generation on a Silicon-Nitride Chip. Physical Review Letters, 2020, 124, 193601.	7.8	87
14	Raman lasing and soliton mode-locking in lithium niobate microresonators. Light: Science and Applications, 2020, 9, 9.	16.6	79
15	Ultraviolet to Mid-Infrared Supercontinuum Generation in Lithium-Niobate Waveguides. , 2020, , .		4
16	PINE: Photonic Integrated Networked Energy efficient datacenters (ENLITENED Program) [Invited]. Journal of Optical Communications and Networking, 2020, 12, 443.	4.8	26
17	Performance scaling of a 10-GHz solid-state laser enabling self-referenced CEO frequency detection without amplification. Optics Express, 2020, 28, 12755.	3.4	19
18	Chip-based self-referencing using integrated lithium niobate waveguides. Optica, 2020, 7, 702.	9.3	63

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19	Visible nonlinear photonics via high-order-mode dispersion engineering. Optica, 2020, 7, 135.	9.3	43
20	Universal Conversion Efficiency Scaling with Free-Spectral-Range for Soliton Kerr Combs. , 2020, , .		2
21	Frequency Comb Offset Stabilization via Integrated Lithium Niobate f-2f Interferometer. , 2020, , .		0
22	Microresonator Based Discrete- and Continuous-Variable Quantum Sources on Silicon-Nitride. , 2020, , .		1
23	Observation of Arnold Tongues in Coupled Soliton Kerr Frequency Combs. Physical Review Letters, 2019, 123, 153901.	7.8	26
24	Tightly locked optical frequency comb from a semiconductor disk laser. Optics Express, 2019, 27, 1786.	3.4	28
25	Coherent two-octave-spanning supercontinuum generation in lithium-niobate waveguides. Optics Letters, 2019, 44, 1222.	3.3	106
26	Microfluidic mid-infrared spectroscopy via microresonator-based dual-comb source. Optics Letters, 2019, 44, 4259.	3.3	12
27	Turn-key, high-efficiency Kerr comb source. Optics Letters, 2019, 44, 4475.	3.3	104
28	Raman Laser in a Lithium-Niobate Microresonator. , 2019, , .		0
29	Coherent Two-Octave-Spanning Supercontinuum Generation in Lithium-Niobate Waveguides. , 2019, , .		0
30	Supercontinuum generation in angle-etched diamond waveguides. Optics Letters, 2019, 44, 4056.	3.3	18
31	On-chip dual-comb source for spectroscopy. Science Advances, 2018, 4, e1701858.	10.3	256
32	Synchronization of coupled optical microresonators. Nature Photonics, 2018, 12, 688-693.	31.4	89
33	Battery-operated integrated frequency comb generator. Nature, 2018, 562, 401-405.	27.8	453
34	Carrier envelope offset detection via simultaneous supercontinuum and second-harmonic generation in a silicon nitride waveguide. Optics Letters, 2018, 43, 4627.	3.3	40
35	Counter-rotating cavity solitons in a silicon nitride microresonator. Optics Letters, 2018, 43, 547.	3.3	38
36	Silicon-chip-based mid-infrared dual-comb spectroscopy. Nature Communications, 2018, 9, 1869.	12.8	234

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37	Gas-Phase Microresonator-Based Comb Spectroscopy without an External Pump Laser. ACS Photonics, 2018, 5, 2780-2785.	6.6	23
38	Dynamics of Coupled Microresonator-Based Degenerate Optical Parametric Oscillators. , 2018, , .		1
39	Direct thermo-optical tuning of silicon microresonators for the mid-infrared. Optics Express, 2018, 26, 34965.	3.4	9
40	Breather soliton dynamics in microresonators. Nature Communications, 2017, 8, 14569.	12.8	122
41	Competition between Raman and Kerr effects in microresonator comb generation. Optics Letters, 2017, 42, 2786.	3.3	56
42	Ultra-low-loss on-chip resonators with sub-milliwatt parametric oscillation threshold. Optica, 2017, 4, 619.	9.3	370
43	Coherent Supercontinuum Generation with Picosecond Pulses. , 2017, , .		1
44	Coherent, directional supercontinuum generation. Optics Letters, 2017, 42, 4466.	3.3	32
45	Microresonator-based high-resolution gas spectroscopy. Optics Letters, 2017, 42, 4442.	3.3	39
46	Dynamics of mode-coupling-induced microresonator frequency combs in normal dispersion. Optics Express, 2016, 24, 28794.	3.4	47
47	Thermally controlled comb generation and soliton modelocking in microresonators. Optics Letters, 2016, 41, 2565.	3.3	295
48	Quantum random number generator using a microresonator-based Kerr oscillator. Optics Letters, 2016, 41, 4194.	3.3	44
49	Gigahertz frequency comb offset stabilization based on supercontinuum generation in silicon nitride waveguides. Optics Express, 2016, 24, 11043.	3.4	88
50	Mode-locked mid-infrared frequency combs in a silicon microresonator. Optica, 2016, 3, 854.	9.3	149
51	Coherent mid-infrared frequency combs in silicon-microresonators in the presence of Raman effects. Optics Express, 2016, 24, 13044.	3.4	41
52	Octave-spanning coherent supercontinuum generation in a silicon nitride waveguide. Optics Letters, 2015, 40, 5117.	3.3	153
53	Broadband mid-infrared frequency comb generation in a Si_3N_4 microresonator. Optics Letters, 2015, 40, 4823.	3.3	417
54	Dual-pumped degenerate Kerr oscillator in a silicon nitride microresonator. Optics Letters, 2015, 40, 5267.	3.3	66

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55	Silicon-chip mid-infrared frequency comb generation. Nature Communications, 2015, 6, 6299.	12.8	312
56	Effects of multiphoton absorption on parametric comb generation in silicon microresonators. Optics Letters, 2015, 40, 2778.	3.3	45
57	Tunable frequency combs based on dual microring resonators. Optics Express, 2015, 23, 21527.	3.4	94
58	Optical nonlinearities in high-confinement silicon carbide waveguides. Optics Letters, 2015, 40, 4138.	3.3	59
59	Strong polarization mode coupling in microresonators. Optics Letters, 2014, 39, 5134.	3.3	93
60	Microresonator-based comb generation without an external laser source. Optics Express, 2014, 22, 1394.	3.4	44
61	On-chip frequency comb generation at visible wavelengths via simultaneous second- and third-order optical nonlinearities. Optics Express, 2014, 22, 26517.	3.4	73
62	Octave-spanning mid-infrared supercontinuum generation in silicon nanowaveguides. Optics Letters, 2014, 39, 4518.	3.3	114
63	Bandwidth shaping of microresonator-based frequency combs via dispersion engineering. Optics Letters, 2014, 39, 3535.	3.3	106
64	Route to stabilized ultrabroadband microresonator-based frequency combs. Optics Letters, 2013, 38, 3478.	3.3	171
65	Modelocking and femtosecond pulse generation in chip-based frequency combs. Optics Express, 2013, 21, 1335.	3.4	217
66	Breakthroughs in Nonlinear Silicon Photonics 2011. IEEE Photonics Journal, 2012, 4, 601-606.	2.0	11
67	Wavelength conversion and unicast of 10-Gb/s data spanning up to 700 nm using a silicon nanowaveguide. Optics Express, 2012, 20, 6488.	3.4	17
68	Broadband parametric frequency comb generation with a 1-Î¼m pump source. Optics Express, 2012, 20, 26935.	3.4	33
69	Asynchronous single-shot characterization of high-repetition-rate ultrafast waveforms using a time-lens-based temporal magnifier. Optics Letters, 2012, 37, 4892.	3.3	68
70	Chip-based frequency combs with sub-100 GHz repetition rates. Optics Letters, 2012, 37, 875.	3.3	68
71	Compressing light and sound. Nature Photonics, 2012, 6, 274-276.	31.4	6
72	Characterization of Nonlinear Optical Crosstalk in Silicon Nanowaveguides. IEEE Photonics Technology Letters, 2012, 24, 185-187.	2.5	15

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73	Demonstration of temporal cloaking. Nature, 2012, 481, 62-65.	27.8	180
74	First Demonstration of a 10-Gb/s RZ End-to-End Four-Wave-Mixing Based Link at 1884 nm Using Silicon Nanowaveguides. IEEE Photonics Technology Letters, 2012, 24, 276-278.	2.5	19
75	High-Performance Silicon-Nitride-Based Multiple-Wavelength Source. IEEE Photonics Technology Letters, 2012, 24, 1375-1377.	2.5	67
76	Dynamics of elliptical beams in the anomalous group-velocity dispersion regime. Optics Express, 2011, 19, 9139.	3.4	3
77	Continuous-wave mid-infrared frequency conversion in silicon nanowaveguides. Optics Letters, 2011, 36, 1263.	3.3	62
78	Octave-spanning frequency comb generation in a silicon nitride chip. Optics Letters, 2011, 36, 3398.	3.3	452
79	Ultralong continuously tunable parametric delays via a cascading discrete stage. Optics Express, 2010, 18, 333.	3.4	27
80	Ultrafast waveform compression using a time-domain telescope. Nature Photonics, 2009, 3, 581-585.	31.4	158
81	High-resolution spectroscopy using a frequency magnifier. Optics Express, 2009, 17, 5691.	3.4	40
82	1 Î¼s tunable delay using parametric mixing and optical phase conjugation in Si waveguides. Optics Express, 2009, 17, 7004.	3.4	37
83	1 Î¼s tunable delay using parametric mixing and optical phase conjugation in Si waveguides: reply. Optics Express, 2009, 17, 16029.	3.4	2
84	Theoretical and experimental investigation of broadband cascaded four-wave mixing in high-Q microspheres. Optics Express, 2009, 17, 16209.	3.4	119
85	Spectral phase conjugation via temporal imaging. Optics Express, 2009, 17, 20605.	3.4	43
86	Large tunable delays using parametric mixing and phase conjugation in Si nanowaveguides. Optics Express, 2008, 16, 10349.	3.4	40
87	Parametric oscillation via dispersion-compensation in high-Q microspheres. , 2007, , .		0
88	Absorption of ultrashort optical pulses in water. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 3343.	1.5	13
89	Continuous Tunable Delays at 10-Gb/s Data Rates Using Self-Phase Modulation and Dispersion. Journal of Lightwave Technology, 2007, 25, 3710-3715.	4.6	14
90	Large Tunable Optical Delays via Self-Phase Modulation and Dispersion. , 2007, , .		3

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91	All-optical slow-light on a photonic chip. Optics Express, 2006, 14, 2317.	3.4	159
92	Large tunable optical delays via self-phase modulation and dispersion. Optics Express, 2006, 14, 12022.	3.4	84
93	Raman-induced slow-light on a silicon photonic chip. , 2006, , .		0
94	Tailored anomalous group-velocity dispersion in silicon waveguides. , 2006, , .		1
95	Tunable All-Optical Delays via Brillouin Slow Light in an Optical Fiber. Physical Review Letters, 2005, 94, 153902.	7.8	772
96	Wide bandwidth slow light using a Raman fiber amplifier. Optics Express, 2005, 13, 6092.	3.4	339
97	All-optical, wavelength and bandwidth preserving, pulse delay based on parametric wavelength conversion and dispersion. Optics Express, 2005, 13, 7872.	3.4	151