Scott B Papp

List of Publications by Citations

62 papers	2,551 citations	26 h-index	49 g-index
77 ext. papers	3,691 ext. citations	10.3 avg, IF	5.2 L-index

#	Paper	IF	Citations
62	An optical-frequency synthesizer using integrated photonics. *Nature*, **2018**, 557, 81-85	50.4	297
61	Microresonator frequency comb optical clock. *Optica*, **2014**, 1, 10	8.6	229
60	Soliton crystals in Kerr resonators. *Nature Photonics*, **2017**, 11, 671-676	33.9	154
59	Architecture for the photonic integration of an optical atomic clock. *Optica*, **2019**, 6, 680	8.6	153
58	Stably accessing octave-spanning microresonator frequency combs in the soliton regime. *Optica*, **2017**, 4, 193-203	8.6	134
57	Searching for Exoplanets Using a Microresonator Astrocomb. *Nature Photonics*, **2019**, 13, 25-30	33.9	107
56	Molecular fingerprinting with bright, broadband infrared frequency combs. *Optica*, **2018**, 5, 727	8.6	96
55	Electronic synthesis of light. *Optica*, **2017**, 4, 406	8.6	80
54	Ultra-efficient frequency comb generation in AlGaAs-on-insulator microresonators. *Nature Communications*, **2020**, 11, 1331	17.4	77
53	Dual-microcavity narrow-linewidth Brillouin laser. *Optica*, **2015**, 2, 225	8.6	67
52	Thermal and Nonlinear Dissipative-Soliton Dynamics in Kerr-Microresonator Frequency Combs. *Physical Review Letters*, **2018**, 121, 063902	7.4	66
51	Ultrabroadband Supercontinuum Generation and Frequency-Comb Stabilization Using On-Chip Waveguides with Both Cubic and Quadratic Nonlinearities. *Physical Review Applied*, **2017**, 8,	4.3	65
50	Ultrafast electro-optic light with subcycle control. *Science*, **2018**, 361, 1358-1363	33.3	60
49	Heterogeneously Integrated GaAs Waveguides on Insulator for Efficient Frequency Conversion. *Laser and Photonics Reviews*, **2018**, 12, 1800149	8.3	55
48	Self-referenced frequency combs using high-efficiency silicon-nitride waveguides. *Optics Letters*, **2017**, 42, 2314-2317	3	54
47	Laser-machined ultra-high-Q microrod resonators for nonlinear optics. *Applied Physics Letters*, **2013**, 102, 221119	3.4	54
46	Stellar spectroscopy in the near-infrared with a laser frequency comb. *Optica*, **2019**, 6, 233	8.6	47

45	Efficient telecom-to-visible spectral translation through ultralow power nonlinear nanophotonics. *Nature Photonics*, **2019**, 13, 593-601	33.9	46
44	Optical-Frequency Measurements with a Kerr Microcomb and Photonic-Chip Supercontinuum. *Physical Review Applied*, **2018**, 9,	4.3	42
43	Strong frequency conversion in heterogeneously integrated GaAs resonators. *APL Photonics*, **2019**, 4, 036103	5.2	37
42	Interlocking Kerr-microresonator frequency combs for microwave to optical synthesis. *Optics Letters*, **2018**, 43, 2933-2936	3	36
41	High-harmonic generation in periodically poled waveguides. *Optica*, **2017**, 4, 1538	8.6	31
40	Mechanical Control of a Microrod-Resonator Optical Frequency Comb. *Physical Review X*, **2013**, 3,	9.1	31
39	Kerr-microresonator solitons from a chirped background. *Optica*, **2018**, 5, 1304	8.6	30
38	Photonic-Chip Supercontinuum with Tailored Spectra for Counting Optical Frequencies. *Physical Review Applied*, **2017**, 8,	4.3	28
37	Self-organized nonlinear gratings for ultrafast nanophotonics. *Nature Photonics*, **2019**, 13, 494-499	33.9	27
36	Broadband resonator-waveguide coupling for efficient extraction of octave-spanning microcombs. *Optics Letters*, **2019**, 44, 4737-4740	3	26
35	Quasi-Phase-Matched Supercontinuum Generation in Photonic Waveguides. *Physical Review Letters* , **2018**, 120, 053903	7.4	25
34	Terahertz-Rate Kerr-Microresonator Optical Clockwork. *Physical Review X*, **2019**, 9,	9.1	25
33	Direct Kerr frequency comb atomic spectroscopy and stabilization. *Science Advances*, **2020**, 6, eaax6230	14.3	23
32	Tuning Kerr-Soliton Frequency Combs to Atomic Resonances. *Physical Review Applied*, **2019**, 11,	4.3	22
31	Deuterated silicon nitride photonic devices for broadband optical frequency comb generation. *Optics Letters*, **2018**, 43, 1527-1530	3	22
30	Milliwatt-threshold visible-telecom optical parametric oscillation using silicon nanophotonics. *Optica*, **2019**, 6,	8.6	21
29	A microrod-resonator Brillouin laser with 240 Hz absolute linewidth. *New Journal of Physics*, **2016**, 18, 045001	2.9	21
28	Generating few-cycle pulses with integrated nonlinear photonics. *Optics Express*, **2019**, 27, 37374-37382	3.3	20

27	30 GHz electro-optic frequency comb spanning 300 THz in the near infrared and visible. *Optics Letters*, **2019**, 44, 2673	3	20
26	Kerr-Microresonator Soliton Frequency Combs at Cryogenic Temperatures. *Physical Review Applied*, **2019**, 12,	4.3	18
25	Ultranarrow Linewidth Photonic-Atomic Laser. *Laser and Photonics Reviews*, **2020**, 14, 1900293	8.3	17
24	Dual-comb spectroscopy with tailored spectral broadening in SiN nanophotonics. *Optics Express*, **2019**, 27, 11869-11876	3.3	14
23	Thermal decoherence and laser cooling of Kerr microresonator solitons. *Nature Photonics*, **2020**, 14, 480-485	33.9	13
22	Theory of Kerr frequency combs in Fabry-Perot resonators. *Physical Review A*, **2018**, 98,	2.6	13
21	Mid-infrared frequency combs at 10 GHz. *Optics Letters*, **2020**, 45, 3677-3680	3	13
20	Subharmonic Entrainment of Kerr Breather Solitons. *Physical Review Letters*, **2019**, 123, 173904	7.4	11
19	. *Journal of Lightwave Technology*, **2020**, 38, 3376-3386	4	11
18	Tantala Kerr nonlinear integrated photonics. *Optica*, **2021**, 8, 811	8.6	11
17	Microresonator Brillouin laser stabilization using a microfabricated rubidium cell. *Optics Express*, **2016**, 24, 14513-24	3.3	11
16	Spontaneous pulse formation in edgeless photonic crystal resonators. *Nature Photonics*,	33.9	10
15	Ultra-precise optical-frequency stabilization with heterogeneous III-V/Si lasers. *Optics Letters*, **2020**, 45, 5275-5278	3	8
14	Generating Octave-Bandwidth Soliton Frequency Combs with Compact Low-Power Semiconductor Lasers. *Physical Review Applied*, **2020**, 14,	4.3	7
13	Nanophotonic tantala waveguides for supercontinuum generation pumped at 1560 nm. *Optics Letters*, **2020**, 45, 4192-4195	3	7
12	Low loss (Al)GaAs on an insulator waveguide platform. *Optics Letters*, **2019**, 44, 4075-4078	3	7
11	Kerr Solitons with Tantala Ring Resonators **2019**,		6
10	Harnessing Dispersion in Soliton Microcombs to Mitigate Thermal Noise. *Physical Review Letters*, **2020**, 125, 153901	7.4	6

9	Optically synchronized fibre links using spectrally pure chip-scale lasers. *Nature Photonics*, **2021**, 15, 588-593	39.9	6
8	Hybrid InP and SiN integration of an octave-spanning frequency comb. *APL Photonics*, **2021**, 6, 026102	5.2	6
7	Microrod Optical Frequency Reference in the Ambient Environment. *Physical Review Applied*, **2019**, 12,	4.3	5
6	Group-velocity-dispersion engineering of tantala integrated photonics. *Optics Letters*, **2021**, 46, 817-820	3	5
5	Broadband, electro-optic, dual-comb spectrometer for linear and nonlinear measurements. *Optics Express*, **2020**, 28, 29148-29154	3.3	4
4	Towards integrated photonic interposers for processing octave-spanning microresonator frequency combs. *Light: Science and Applications*, **2021**, 10, 109	16.7	2
3	Self-organized nonlinear gratings for ultrafast nanophotonics **2018**,		1
2	Kerr Microresonator Soliton Frequency Combs at Cryogenic Temperatures. *Physical Review Applied*, **2019**, 12,	4.3	1
1	Synchronization of Electro-Optically Modulated Kerr Soliton to a Chip-Scale Mode-Locked Laser PIC via Regenerative Harmonic Injection Locking. *Journal of Lightwave Technology*, **2021**, 1-1	4	0