Andrew M Weiner

List of Publications by Citations

126 papers	5,786 citations	40 h-index	74 g-index
181 ext. papers	8,079 ext. citations	7.6 avg, IF	6.24 L-index

#	Paper	IF	Citations
126	Ultrafast optical pulse shaping: A tutorial review. *Optics Communications*, **2011**, 284, 3669-3692	2	398
125	Optical arbitrary waveform processing of more than 100 spectral comb lines. *Nature Photonics*, **2007**, 1, 463-467	33.9	314
124	Optical arbitrary waveform generation. *Nature Photonics*, **2010**, 4, 760-766	33.9	294
123	Spectral line-by-line pulse shaping of on-chip microresonator frequency combs. *Nature Photonics*, **2011**, 5, 770-776	33.9	292
122	Mode-locked dark pulse Kerr combs in normal-dispersion microresonators. *Nature Photonics*, **2015**, 9, 594-600	33.9	262
121	Ultrabroad-bandwidth arbitrary radiofrequency waveform generation with a silicon photonic chip-based spectral shaper. *Nature Photonics*, **2010**, 4, 117-122	33.9	247
120	Micro-combs: A novel generation of optical sources. *Physics Reports*, **2018**, 729, 1-81	27.7	205
119	Optical frequency comb technology for ultra-broadband radio-frequency photonics. *Laser and Photonics Reviews*, **2014**, 8, 368-393	8.3	198
118	Comb-based radiofrequency photonic filters with rapid tunability and high selectivity. *Nature Photonics*, **2012**, 6, 186-194	33.9	195
117	**2009**,		191
116	. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 3269-3278	4.1	144
115	Investigation of mode coupling in normal-dispersion silicon nitride microresonators for Kerr frequency comb generation. *Optica*, **2014**, 1, 137	8.6	128
114	Quantum optical microcombs. *Nature Photonics*, **2019**, 13, 170-179	33.9	115
113	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 231-236	3.8	100
112	High-Q silicon nitride microresonators exhibiting low-power frequency comb initiation. *Optica*, **2016**, 3, 1171	8.6	97
111	High-order coherent communications using mode-locked dark-pulse Kerr combs from microresonators. *Nature Communications*, **2018**, 9, 1598	17.4	87
110	Normal-dispersion microcombs enabled by controllable mode interactions. *Laser and Photonics Reviews*, **2015**, 9, L23-L28	8.3	84

109	A temporal cloak at telecommunication data rate. *Nature*, **2013**, 498, 205-8	50.4	82
108	Observation of Fermi-Pasta-Ulam Recurrence Induced by Breather Solitons in an Optical Microresonator. *Physical Review Letters*, **2016**, 117, 163901	7.4	79
107	Programmable Single-Bandpass Photonic RF Filter Based on Kerr Comb from a Microring. *Journal of Lightwave Technology*, **2014**, 32, 3557-3565	4	78
106	Reconfigurable radio-frequency arbitrary waveforms synthesized in a silicon photonic chip. *Nature Communications*, **2015**, 6, 5957	17.4	73
105	Microresonator Kerr frequency combs with high conversion efficiency. *Laser and Photonics Reviews*, **2017**, 11, 1600276	8.3	72
104	Intracavity characterization of micro-comb generation in the single-soliton regime. *Optics Express*, **2016**, 24, 10890-7	3.3	71
103	Photonic generation of W-band arbitrary waveforms with high time-bandwidth products enabling 39 mm range resolution. *Optica*, **2014**, 1, 446	8.6	69
102	Electro-Optic Frequency Beam Splitters and Tritters for High-Fidelity Photonic Quantum Information Processing. *Physical Review Letters*, **2018**, 120, 030502	7.4	68
101	Reconfigurable and Tunable Flat-Top Microwave Photonic Filters Utilizing Optical Frequency Combs. *IEEE Photonics Technology Letters*, **2011**, 23, 1618-1620	2.2	65
100	Second-harmonic-assisted four-wave mixing in chip-based microresonator frequency comb generation. *Light: Science and Applications*, **2017**, 6, e16253	16.7	62
99	Advances in Spectral Optical Code-Division Multiple-Access Communications. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 1351-1369	3.8	62
98	50-GHz-spaced comb of high-dimensional frequency-bin entangled photons from an on-chip silicon nitride microresonator. *Optics Express*, **2018**, 26, 1825-1840	3.3	61
97	Dispersion engineering and frequency comb generation in thin silicon nitride concentric microresonators. *Nature Communications*, **2017**, 8, 372	17.4	60
96	Ultrafast double-pulse ablation of fused silica. *Applied Physics Letters*, **2005**, 86, 151110	3.4	56
95	Spectral Line-by-Line Pulse Shaping on an Optical Frequency Comb Generator. *IEEE Journal of Quantum Electronics*, **2007**, 43, 1163-1174	2	54
94	Observation of correlation between route to formation, coherence, noise, and communication performance of Kerr combs. *Optics Express*, **2012**, 20, 29284-95	3.3	52
93	. *IEEE Transactions on Microwave Theory and Techniques*, **2006**, 54, 4247-4255	4.1	50
92	High-dimensional optical quantum logic in large operational spaces. *Npj Quantum Information*, **2019** , 5,	8.6	46

91	Development of Quantum Interconnects (QuICs) for Next-Generation Information Technologies. *PRX Quantum*, **2021**, 2,	6.1	46
90	Spatial mode-interaction induced single soliton generation in microresonators. *Optica*, **2017**, 4, 1011	8.6	45
89	Photonic synthesis of high fidelity microwave arbitrary waveforms using near field frequency to time mapping. *Optics Express*, **2013**, 21, 22974-87	3.3	44
88	Quantum interference and correlation control of frequency-bin qubits. *Optica*, **2018**, 5, 1455	8.6	42
87	Roadmap on transformation optics. *Journal of Optics (United Kingdom)*, **2018**, 20, 063001	1.7	40
86	Persistent energy–time entanglement covering multiple resonances of an on-chip biphoton frequency comb. *Optica*, **2017**, 4, 655	8.6	39
85	Simulations of subatomic many-body physics on a quantum frequency processor. *Physical Review A*, **2019**, 100,	2.6	37
84	Experimental Investigation of Security Issues in O-CDMA. *Journal of Lightwave Technology*, **2006**, 24, 4228-4234	4	35
83	A controlled-NOT gate for frequency-bin qubits. *Npj Quantum Information*, **2019**, 5,	8.6	34
82	. *Journal of Lightwave Technology*, **2018**, 36, 2312-2321	4	34
81	. *IEEE Journal of Quantum Electronics*, **2016**, 52, 1-17	2	34
80	Deterministic single soliton generation and compression in microring resonators avoiding the chaotic region. *Optics Express*, **2015**, 23, 9618-26	3.3	30
79	Integrated line-by-line optical pulse shaper for high-fidelity and rapidly reconfigurable RF-filtering. *Optics Express*, **2016**, 24, 23925-23940	3.3	30
78	Drop-port study of microresonator frequency combs: power transfer, spectra and time-domain characterization. *Optics Express*, **2013**, 21, 22441-52	3.3	29
77	Orthogonal spectral coding of entangled photons. *Physical Review Letters*, **2014**, 112, 133602	7.4	28
76	Direct soliton generation in microresonators. *Optics Letters*, **2017**, 42, 2519-2522	3	28
75	Long-haul coherent communications using microresonator-based frequency combs. *Optics Express*, **2017**, 25, 26678-26688	3.3	25
74	Temporal cloaking for data suppression and retrieval. *Optica*, **2014**, 1, 372	8.6	25

73	Photonic Synthesis of Spread Spectrum Radio Frequency Waveforms With Arbitrarily Long Time Apertures. *Journal of Lightwave Technology*, **2014**, 32, 3580-3587	4	24
72	Multichannel Radio-Frequency Arbitrary Waveform Generation Based on Multiwavelength Comb Switching and 2-D Line-by-Line Pulse Shaping. *IEEE Photonics Technology Letters*, **2012**, 24, 891-893	2.2	24
71	Directly Generated Gaussian-Shaped Optical Frequency Comb for Microwave Photonic Filtering and Picosecond Pulse Generation. *IEEE Photonics Technology Letters*, **2012**, 24, 1484-1486	2.2	24
70	Normal-dispersion microresonator Kerr frequency combs. *Nanophotonics*, **2016**, 5, 244-262	6.3	23
69	Phase-Only Matched Filtering of Ultrawideband Arbitrary Microwave Waveforms via Optical Pulse Shaping. *Journal of Lightwave Technology*, **2008**, 26, 2355-2363	4	23
68	Roadmap on integrated quantum photonics. *JPhys Photonics*,	2.5	22
67	Experimental Investigation of UWB Impulse Response and Time Reversal Technique Up to 12 GHz: Omnidirectional and Directional Antennas. *IEEE Transactions on Antennas and Propagation*, **2012**, 60, 3407-3415	4.9	21
66	Dispersion Limitations of Ultra-Wideband Wireless Links and Their Compensation Via Photonically Enabled Arbitrary Waveform Generation. *IEEE Transactions on Microwave Theory and Techniques*, **2008**, 56, 710-719	4.1	21
65	Selective Correlation Detection of Photonically Generated Ultrawideband RF Signals. *Journal of Lightwave Technology*, **2008**, 26, 2692-2699	4	20
64	A Complete Spectral Polarimeter Design for Lightwave Communication Systems. *Journal of Lightwave Technology*, **2006**, 24, 3982-3991	4	20
63	Soliton repetition rate in a silicon-nitride microresonator. *Optics Letters*, **2017**, 42, 759-762	3	19
62	Post-Compensation of Ultra-Wideband Antenna Dispersion Using Microwave Photonic Phase Filters and Its Applications to UWB Systems. *IEEE Transactions on Microwave Theory and Techniques*, **2009**, 57, 890-898	4.1	18
61	Dissipative cnoidal waves (Turing rolls) and the soliton limit in microring resonators. *Optica*, **2019**, 6, 1228	8.6	18
60	Frequency-domain Hong-Ou-Mandel interference with linear optics. *Optics Letters*, **2018**, 43, 2760-2763	3	17
59	Quantum Information Processing With Frequency-Comb Qudits. *IEEE Photonics Technology Letters*, **2019**, 31, 1858-1861	2.2	16
58	Microwave photonics connected with microresonator frequency combs. *Frontiers of Optoelectronics* , **2016**, 9, 238-248	2.8	15
57	. *Journal of Lightwave Technology*, **2014**, 32, 3478-3488	4	14
56	Rapidly Tunable Dual-Comb RF Photonic Filter for Ultrabroadband RF Spread Spectrum Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 64, 3351-3362	4.1	14

55	Compression of ultra-long microwave pulses using programmable microwave photonic phase filtering with > 100 complex-coefficient taps. *Optics Express*, **2014**, 22, 6329-38	3.3	13
54	Synthesis of Millimeter-Wave Power Spectra Using Time-Multiplexed Optical Pulse Shaping. *IEEE Photonics Technology Letters*, **2009**, 21, 1287-1289	2.2	13
53	Noise Comparison of RF Photonic Filters Based on Coherent and Incoherent Multiwavelength Sources. *IEEE Photonics Technology Letters*, **2012**, 24, 1236-1238	2.2	12
52	Ultrabroadband radio-frequency arbitrary waveform generation with high-speed phase and amplitude modulation capability. *Optics Express*, **2015**, 23, 12265-73	3.3	11
51	Characterization of coherent quantum frequency combs using electro-optic phase modulation. *Physical Review A*, **2018**, 97,	2.6	11
50	Superchannel engineering of microcombs for optical communications. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 2013	1.7	11
49	Observation of Breathing Dark Pulses in Normal Dispersion Optical Microresonators. *Physical Review Letters*, **2018**, 121, 257401	7.4	11
48	Phase compensation communication technique against time reversal for ultra-wideband channels. *IET Communications*, **2013**, 7, 1287-1295	1.3	10
47	All-Order Polarization-Mode Dispersion (PMD) Compensation via Virtually Imaged Phased Array (VIPA)-Based Pulse Shaper. *IEEE Photonics Technology Letters*, **2008**, 20, 545-547	2.2	10
46	Generation of biphoton correlation trains through spectral filtering. *Optics Express*, **2014**, 22, 9585-96	3.3	9
45	Reconfigurable Quantum Local Area Network Over Deployed Fiber. *PRX Quantum*, **2021**, 2,	6.1	9
44	Fully Arbitrary Control of Frequency-Bin Qubits. *Physical Review Letters*, **2020**, 125, 120503	7.4	9
43	Switching dynamics of dark-pulse Kerr frequency comb states in optical microresonators. *Physical Review A*, **2021**, 103,	2.6	9
42	Tunable radio frequency photonic filter based on intensity modulation of optical combs **2010**,		8
41	Performance of Asynchronous Time-Spreading and Spectrally Coded OCDMA Systems. *Journal of Lightwave Technology*, **2008**, 26, 2873-2881	4	8
40	Performance of Nonlinear Receivers in Asynchronous Spectral-Phase-Encoding Optical CDMA Systems. *Journal of Lightwave Technology*, **2007**, 25, 2069-2080	4	8
39	Quantum frequency combs and Hong-Ou-Mandel interferometry: the role of spectral phase coherence. *Optics Express*, **2019**, 27, 38683-38697	3.3	7
38	Fast Characterization of Dispersion and Dispersion Slope of Optical Fiber Links Using Spectral Interferometry With Frequency Combs. *IEEE Photonics Technology Letters*, **2010**, 22, 155-157	2.2	6

37	Adaptive bandwidth management for entanglement distribution in quantum networks. *Optica*, **2021**, 8, 329	8.6	6
36	Microresonator Frequency Combs for Integrated Microwave Photonics. *IEEE Photonics Technology Letters*, **2018**, 30, 1814-1817	2.2	6
35	All-Optical Frequency Processor for Networking Applications. *Journal of Lightwave Technology*, **2020**, 38, 1678-1687	4	5
34	Rapid Wideband RF Subsampling and Disambiguation Using Dual Combs **2019**,		5
33	Probing quantum walks through coherent control of high-dimensionally entangled photons. *Science Advances*, **2020**, 6, eaba8066	14.3	5
32	Radio-Frequency Signal Processing Using Optical Frequency Combs. *IEEE Photonics Technology Letters*, **2019**, 31, 1874-1877	2.2	5
31	Kerr Combs for Stimulated Brillouin Scattering Mitigation in Long-Haul Analog Optical Links. *Journal of Lightwave Technology*, **2019**, 37, 5773-5779	4	4
30	Experimental Test-Bed for Studying Multiple Antenna Beamforming over Ultra Wideband Channels up to 12 GHz. *IEEE Wireless Communications Letters*, **2012**, 1, 520-523	5.9	4
29	Reply to Comment on Generalized grating equation for virtually-imaged phased-array spectral dispersions *Applied Optics*, **2012**, 51, 8187	1.7	4
28	Space-time focusing in a highly multimode fiber via optical pulse shaping. *Optics Letters*, **2018**, 43, 4675-4678	3	4
27	Measurement of the lifetime of the 7sS1/22 state in atomic cesium using asynchronous gated detection. *Physical Review A*, **2018**, 97,	2.6	4
26	A Silicon Optical Transistor **2012**, 2012,		3
25	Achieving the upper bound time-bandwidth product for radio-frequency arbitrary waveform generation **2013**,		3
24	PMD Tolerance Testing of a Commercial Communication System Using a Spectral Polarimeter. *Journal of Lightwave Technology*, **2006**, 24, 4120-4126	4	3
23	Deterministic access of broadband frequency combs in microresonators using cnoidal waves in the soliton crystal limit. *Optics Express*, **2020**, 28, 36304-36315	3.3	3
22	Superchannel Engineering with Microresonator Combs **2018**,		2
21	Wideband Deterministic All-Order Polarization-Mode Dispersion Generation via Pulse Shaping. *IEEE Photonics Technology Letters*, **2008**, 20, 159-161	2.2	2
20	Efficient compressive and Bayesian characterization of biphoton frequency spectra. *Optics Letters*, **2020**, 45, 2886-2889	3	2

19	Polarization diversity phase modulator for measuring frequency-bin entanglement of a biphoton frequency comb in a depolarized channel. *Optics Letters*, **2019**, 44, 1674-1677	3	2
18	Agile frequency transformations for dense wavelength-multiplexed communications. *Optics Express*, **2020**, 28, 20379-20390	3.3	2
17	Experimental investigation of UWB MISO beamforming **2013**,		1
16	Quantitative Study of Optical Frequency Noise to Intensity Noise Conversion in Line-by-Line Pulse Shaping. *IEEE Journal of Quantum Electronics*, **2009**, 45, 661-673	2	1
15	Multichannel Differential Group Delay Emulation and Compensation via a Phase Pulse Shaper. *IEEE Photonics Technology Letters*, **2007**, 19, 1203-1205	2.2	1
14	Hardware Correlation of Ultra-Wideband RF Signals Generated via Optical Pulse Shaping **2007**,		1
13	Photonically-Synthesized Waveforms to Combat Broadband Antenna Phase Distortions **2007**,		1
12	Induced transient birefringence of a resonantly pumped molecular gas. *Journal of Chemical Physics*, **1996**, 105, 6200-6215	3.9	1
11	Spectral compression using time-varying cavities. *Optics Letters*, **2020**, 45, 5688-5691	3	1
10	Extremely Wide Bandwidth Microwave Photonic Phase Shifter for W-band Chirped Monopulse Radar **2018**,		1
9	Ultra-Broadband Photonic Monopulse-Like Radar for Remote Sensing **2019**,		1
8	W-Band Photonic Pulse Compression Radar With Dual Transmission Mode Beamforming. *Journal of Lightwave Technology*, **2021**, 39, 1619-1628	4	1
7	Kerr Combs for Single-Span Long-Haul Analog Optical Links **2018**,		1
6	High-dimensional discrete Fourier transform gates with a quantum frequency processor.. *Optics Express*, **2022**, 30, 10126-10134	3.3	1
5	High-speed switching of biphoton delays through electro-optic pump frequency modulation. *APL Photonics*, **2017**, 2, 011301	5.2	0
4	Temporal modulation of a spectral compressor for efficient quantum storage.. *Optics Letters*, **2022**, 47, 1387-1390	3	0
3	Characterizing pump line phase offset of a single-soliton Kerr comb by dual comb interferometry. *Optics Letters*, **2019**, 44, 1460-1463	3	0
2	InP high power monolithically integrated widely tunable laser and SOA array for hybrid integration. *Optics Express*, **2021**, 29, 3490-3502	3.3	0

List of Publications

1 Nonreciprocal Transmission of 10 Gbps OOK Data through an All-Silicon Passive Optical Diode **2012**, 703-704