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List of Publications by Citations

78 papers	3,579 citations	25 h-index	59 g-index
112 ext. papers	4,611 ext. citations	7.7 avg, IF	5.7 L-index

#	Paper	IF	Citations
78	Silicon Photonics. *Journal of Lightwave Technology*, **2006**, 24, 4600-4615	4	933
77	Demonstration of a silicon Raman laser. *Optics Express*, **2004**, 12, 5269-73	3.3	548
76	High-throughput single-microparticle imaging flow analyzer. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 11630-5	11.5	258
75	Deep Learning in Label-free Cell Classification. *Scientific Reports*, **2016**, 6, 21471	4.9	249
74	Time stretch and its applications. *Nature Photonics*, **2017**, 11, 341-351	33.9	182
73	The third-order nonlinear optical coefficients of Si, Ge, and Si1−xGex in the midwave and longwave infrared. *Journal of Applied Physics*, **2011**, 110, 011301	2.5	125
72	Theory of amplified dispersive Fourier transformation. *Physical Review A*, **2009**, 80,	2.6	120
71	Digitally synthesized beat frequency multiplexing for sub-millisecond fluorescence microscopy. *Nature Photonics*, **2013**, 7, 806-810	33.9	95
70	Prospects for Silicon Mid-IR Raman Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1618-1627	3.8	69
69	Amplified dispersive Fourier-transform imaging for ultrafast displacement sensing and barcode reading. *Applied Physics Letters*, **2008**, 93, 131109	3.4	61
68	Time-stretch LiDAR as a spectrally scanned time-of-flight ranging camera. *Nature Photonics*, **2020**, 14, 14-18	33.9	56
67	High-speed nanometer-resolved imaging vibrometer and velocimeter. *Applied Physics Letters*, **2011**, 98, 101107	3.4	55
66	Photonic time-stretch digitizer and its extension to real-time spectroscopy and imaging. *Laser and Photonics Reviews*, **2013**, 7, 207-263	8.3	47
65	Nonlinear absorption in silicon and the prospects of mid-infrared silicon Raman lasers. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, R38-R40	1.6	40
64	Can silicon change photonics?. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 213-224	1.6	37
63	Optical data compression in time stretch imaging. *PLoS ONE*, **2015**, 10, e0125106	3.7	35
62	Distortion Cancellation in Time-Stretch Analog-to-Digital Converter. *Journal of Lightwave Technology*, **2007**, 25, 3716-3721	4	35

61	Deep Cytometry: Deep learning with Real-time Inference in Cell Sorting and Flow Cytometry. *Scientific Reports*, **2019**, 9, 11088	4.9	34
60	All-dielectric photonic-assisted radio front-end technology. *Nature Photonics*, **2007**, 1, 535-538	33.9	32
59	Edge detection in digital images using dispersive phase stretch transform. *International Journal of Biomedical Imaging*, **2015**, 2015, 687819	5.2	29
58	Real-time optical reflectometry enabled by amplified dispersive Fourier transformation. *Applied Physics Letters*, **2008**, 93, 031106	3.4	27
57	Two-Photon Photovoltaic Effect in Silicon. *IEEE Journal of Quantum Electronics*, **2007**, 43, 1211-1217	2	27
56	Photonic Bandwidth Compression Front End for Digital Oscilloscopes. *Journal of Lightwave Technology*, **2009**, 27, 5073-5077	4	26
55	Tera-sample per second real-time waveform digitizer. *Applied Physics Letters*, **2005**, 87, 241116	3.4	23
54	Experimental demonstration of optical real-time data compressiona). *Applied Physics Letters*, **2014**, 104, 111101	3.4	22
53	Noise Figure of Silicon Raman Amplifiers. *Journal of Lightwave Technology*, **2008**, 26, 847-852	4	21
52	Spectro-temporal encoded multiphoton microscopy and fluorescence lifetime imaging at kilohertz frame-rates. *Nature Communications*, **2020**, 11, 2062	17.4	17
51	Design of Warped Stretch Transform. *Scientific Reports*, **2015**, 5, 17148	4.9	15
50	Sculpting of three-dimensional nano-optical structures in silicon. *Applied Physics Letters*, **2003**, 83, 4909-4911	3.4	15
49	Demonstration of Raman gain at 800 nm in single-mode fiber and its potential application to biological sensing and imaging. *Applied Physics Letters*, **2009**, 95, 251101	3.4	12
48	150 GS/s real-time oscilloscope using a photonic front end **2008**,		12
47	Ultra-wideband instantaneous frequency estimation. *IEEE Instrumentation and Measurement Magazine*, **2015**, 18, 26-30	1.4	11
46	Feature Enhancement in Visually Impaired Images. *IEEE Access*, **2018**, 6, 1407-1415	3.5	11
45	Influence of Pump-to-Signal RIN Transfer on Noise Figure in Silicon Raman Amplifiers. *IEEE Photonics Technology Letters*, **2008**, 20, 2021-2023	2.2	10
44	Broadband Raman amplification in silicon. *Applied Physics Letters*, **2008**, 93, 191105	3.4	10

43	Applications of Electro-optic Polymers in Photonics. *Materials Research Society Symposia Proceedings*, **1995**, 413, 147		10
42	Coherent Optical Multiple-Input Multiple-Output communication. *IEICE Electronics Express*, **2004**, 1, 392-397		9
41	Spectral dynamics on saturable absorber in mode-locking with time stretch spectroscopy. *Scientific Reports*, **2020**, 10, 14460	4.9	8
40	Phase stretch transform for super-resolution localization microscopy. *Biomedical Optics Express*, **2016**, 7, 4198-4209	3.5	7
39	Digitally synthesized beat frequency-multiplexed fluorescence lifetime spectroscopy. *Biomedical Optics Express*, **2014**, 5, 4428-36	3.5	6
38	All-Dielectric Wireless Receiver. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		6
37	Enhancing electrooptic modulators using modulation instability. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 566-570	2.5	5
36	Impact of Optical Nonlinearity on Performance of Photonic Time-Stretch Analog-to-Digital Converter. *Journal of Lightwave Technology*, **2011**, 29, 2025-2030	4	5
35	4-Channel Continuous-Time 77 GSa/s ADC using Photonic Bandwidth Compression **2007**,		5
34	Warped time lens in temporal imaging for optical real-time data compression. *Science Bulletin*, **2014**, 59, 2649-2654		4
33	Image compression using the Anamorphic Stretch Transform **2013**,		4
32	Cross-layer signal monitoring in an optical packet-switching test-bed via real-time burst sampling **2010**,		4
31	Breaking Speed and Sensitivity Limits. *Optik & Photonik*, **2010**, 5, 32-36		4
30	Continuous time realization of time-stretch ADC **2006**,		4
29	Raman induced wavelength conversion in scaled Silicon waveguides. *IEICE Electronics Express*, **2004**, 1, 298-304	0.5	4
28	Demonstration of V_{pi} Reduction in Electrooptic Modulators Using Modulation Instability. *IEEE Photonics Journal*, **2014**, 6, 1-9	1.8	3
27	First Demonstration of a Cross-Layer Enabled Network Node. *Journal of Lightwave Technology*, **2013**, 31, 1512-1525	4	3
26	Stress-induced χ(2) in silicon □Comparison between theoretical and experimental values **2009**,		3

25	Stress-induced phase matching in Silicon waveguides **2006**,		3
24	Two-Dimensional Spatio-Temporal Signal Processing for Dispersion Compensation in Time-Stretched ADC. *Journal of Lightwave Technology*, **2007**, 25, 1580-1587	4	3
23	Context-Aware Image Compression. *PLoS ONE*, **2016**, 11, e0158201	3.7	3
22	Invited Article: Optical dynamic range compression. *APL Photonics*, **2018**, 3, 110806	5.2	3
21	Time-stretch accelerated processor for real-time, in-service, signal analysis **2014**,		2
20	Digital broadband linearization of analog optical links **2012**,		2
19	High efficiency CARS conversion in silicon **2008**,		2
18	Demonstration of CW Raman gain with zero electrical power dissipation in p-i-n silicon waveguides **2006**,		2
17	Multilayer 3-D Photonics in Silicon **2007**,		2
16	Signal De-convolution with analog logarithmic computing primitives in silicon photonics **2016**,		1
15	Matrix Analysis of Warped Stretch Imaging. *Scientific Reports*, **2017**, 7, 11150	4.9	1
14	High-throughput biological cell classification featuring real-time optical data compression **2015**,		1
13	Dielectric Field Enhancer for Reconfiguring the Beam Pattern and Gain of an Antenna. *IEEE Transactions on Antennas and Propagation*, **2012**, 60, 4426-4429	4.9	1
12	Serial Time Encoded Amplified Microscopy (STEAM) for high-throughput detection of rare cells **2010**,		1
11	Periodically-Poled Silicon **2009**,		1
10	Optically tunable silicon RF antenna **2008**,		1
9	Extreme value statistics in silicon photonics **2008**,		1
8	All-Dielectric Photonic-Assisted Wireless Receiver. *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, **2007**,		1

7	Broadband Raman amplification in silicon. *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, **2007**,		1
6	Phase Diversity Electro-optic Sampling: A new approach to single-shot terahertz waveform recording.. *Light: Science and Applications*, **2022**, 11, 14	16.7	1
5	Nonlinear Schrodinger Kernel for hardware acceleration of machine learning. *Journal of Lightwave Technology*, **2022**, 1-1	4	1
4	Multi-mode Mid-IR Silicon Raman Amplifiers. *Materials Research Society Symposia Proceedings*, **2006**, 958, 1		0
3	Experimental Demonstration of Time-Bandwidth Expansion Using Warped Stretch Transform. *IEEE Photonics Journal*, **2015**, 7, 1-10	1.8	
2	Silicon Lasers147-189		
1	Nanoscale Strain Mapping in SIMOX 3-D Sculpted Silicon Waveguides Using Tip-Enhanced Raman Spectroscopy. *IEEE Photonics Journal*, **2016**, 8, 1-12	1.8	