

# Bahram\_Jalali\_UCLA

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2475990/bahramjalaliucla-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Phase Diversity Electro-optic Sampling: A new approach to single-shot terahertz waveform recording.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 14	16.7	1
77	Nonlinear Schrodinger Kernel for hardware acceleration of machine learning. <i>Journal of Lightwave Technology</i> , <b>2022</b> , 1-1	4	1
76	Spectro-temporal encoded multiphoton microscopy and fluorescence lifetime imaging at kilohertz frame-rates. <i>Nature Communications</i> , <b>2020</b> , 11, 2062	17.4	17
75	Time-stretch LiDAR as a spectrally scanned time-of-flight ranging camera. <i>Nature Photonics</i> , <b>2020</b> , 14, 14-18	33.9	56
74	Spectral dynamics on saturable absorber in mode-locking with time stretch spectroscopy. <i>Scientific Reports</i> , <b>2020</b> , 10, 14460	4.9	8
73	Deep Cytometry: Deep learning with Real-time Inference in Cell Sorting and Flow Cytometry. <i>Scientific Reports</i> , <b>2019</b> , 9, 11088	4.9	34
72	Feature Enhancement in Visually Impaired Images. <i>IEEE Access</i> , <b>2018</b> , 6, 1407-1415	3.5	11
71	Invited Article: Optical dynamic range compression. <i>APL Photonics</i> , <b>2018</b> , 3, 110806	5.2	3
70	Time stretch and its applications. <i>Nature Photonics</i> , <b>2017</b> , 11, 341-351	33.9	182
69	Matrix Analysis of Warped Stretch Imaging. <i>Scientific Reports</i> , <b>2017</b> , 7, 11150	4.9	1
68	Signal De-convolution with analog logarithmic computing primitives in silicon photonics <b>2016</b> ,		1
67	Deep Learning in Label-free Cell Classification. <i>Scientific Reports</i> , <b>2016</b> , 6, 21471	4.9	249
66	Context-Aware Image Compression. <i>PLoS ONE</i> , <b>2016</b> , 11, e0158201	3.7	3
65	Phase stretch transform for super-resolution localization microscopy. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 4198-4209	3.5	7
64	Nanoscale Strain Mapping in SIMOX 3-D Sculpted Silicon Waveguides Using Tip-Enhanced Raman Spectroscopy. <i>IEEE Photonics Journal</i> , <b>2016</b> , 8, 1-12	1.8	
63	Ultra-wideband instantaneous frequency estimation. <i>IEEE Instrumentation and Measurement Magazine</i> , <b>2015</b> , 18, 26-30	1.4	11
62	Design of Warped Stretch Transform. <i>Scientific Reports</i> , <b>2015</b> , 5, 17148	4.9	15

61	Optical data compression in time stretch imaging. <i>PLoS ONE</i> , <b>2015</b> , 10, e0125106	3.7	35
60	Edge detection in digital images using dispersive phase stretch transform. <i>International Journal of Biomedical Imaging</i> , <b>2015</b> , 2015, 687819	5.2	29
59	High-throughput biological cell classification featuring real-time optical data compression <b>2015</b> ,		1
58	Experimental Demonstration of Time-Bandwidth Expansion Using Warped Stretch Transform. <i>IEEE Photonics Journal</i> , <b>2015</b> , 7, 1-10	1.8	
57	Warped time lens in temporal imaging for optical real-time data compression. <i>Science Bulletin</i> , <b>2014</b> , 59, 2649-2654		4
56	Experimental demonstration of optical real-time data compression). <i>Applied Physics Letters</i> , <b>2014</b> , 104, 111101	3.4	22
55	Digitally synthesized beat frequency-multiplexed fluorescence lifetime spectroscopy. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 4428-36	3.5	6
54	Demonstration of $V_{\pi}$ Reduction in Electrooptic Modulators Using Modulation Instability. <i>IEEE Photonics Journal</i> , <b>2014</b> , 6, 1-9	1.8	3
53	Time-stretch accelerated processor for real-time, in-service, signal analysis <b>2014</b> ,		2
52	Enhancing electrooptic modulators using modulation instability. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 566-570	2.5	5
51	Digitally synthesized beat frequency multiplexing for sub-millisecond fluorescence microscopy. <i>Nature Photonics</i> , <b>2013</b> , 7, 806-810	33.9	95
50	Image compression using the Anamorphic Stretch Transform <b>2013</b> ,		4
49	Photonic time-stretch digitizer and its extension to real-time spectroscopy and imaging. <i>Laser and Photonics Reviews</i> , <b>2013</b> , 7, 207-263	8.3	47
48	First Demonstration of a Cross-Layer Enabled Network Node. <i>Journal of Lightwave Technology</i> , <b>2013</b> , 31, 1512-1525	4	3
47	High-throughput single-microparticle imaging flow analyzer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 11630-5	11.5	258
46	Dielectric Field Enhancer for Reconfiguring the Beam Pattern and Gain of an Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 4426-4429	4.9	1
45	Digital broadband linearization of analog optical links <b>2012</b> ,		2
44	The third-order nonlinear optical coefficients of Si, Ge, and Si <sub>1-x</sub> Ge <sub>x</sub> in the midwave and longwave infrared. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 011301	2.5	125

43	Impact of Optical Nonlinearity on Performance of Photonic Time-Stretch Analog-to-Digital Converter. <i>Journal of Lightwave Technology</i> , <b>2011</b> , 29, 2025-2030	4	5
42	High-speed nanometer-resolved imaging vibrometer and velocimeter. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 101107	3-4	55
41	Serial Time Encoded Amplified Microscopy (STEAM) for high-throughput detection of rare cells <b>2010</b> ,		1
40	Cross-layer signal monitoring in an optical packet-switching test-bed via real-time burst sampling <b>2010</b> ,		4
39	Breaking Speed and Sensitivity Limits. <i>Optik &amp; Photonik</i> , <b>2010</b> , 5, 32-36		4
38	Theory of amplified dispersive Fourier transformation. <i>Physical Review A</i> , <b>2009</b> , 80,	2.6	120
37	Periodically-Poled Silicon <b>2009</b> ,		1
36	Photonic Bandwidth Compression Front End for Digital Oscilloscopes. <i>Journal of Lightwave Technology</i> , <b>2009</b> , 27, 5073-5077	4	26
35	Stress-induced $\chi^{(2)}$ in silicon [C]Comparison between theoretical and experimental values <b>2009</b> ,		3
34	Demonstration of Raman gain at 800 nm in single-mode fiber and its potential application to biological sensing and imaging. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 251101	3-4	12
33	Influence of Pump-to-Signal RIN Transfer on Noise Figure in Silicon Raman Amplifiers. <i>IEEE Photonics Technology Letters</i> , <b>2008</b> , 20, 2021-2023	2.2	10
32	Real-time optical reflectometry enabled by amplified dispersive Fourier transformation. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 031106	3-4	27
31	Noise Figure of Silicon Raman Amplifiers. <i>Journal of Lightwave Technology</i> , <b>2008</b> , 26, 847-852	4	21
30	150 GS/s real-time oscilloscope using a photonic front end <b>2008</b> ,		12
29	Optically tunable silicon RF antenna <b>2008</b> ,		1
28	Extreme value statistics in silicon photonics <b>2008</b> ,		1
27	Broadband Raman amplification in silicon. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 191105	3-4	10
26	Amplified dispersive Fourier-transform imaging for ultrafast displacement sensing and barcode reading. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 131109	3-4	61

25	High efficiency CARS conversion in silicon <b>2008</b> ,		2
24	Can silicon change photonics?. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 213-224		37
23	All-Dielectric Photonic-Assisted Wireless Receiver. <i>Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS</i> , <b>2007</b> ,		1
22	All-Dielectric Wireless Receiver. <i>IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium</i> , <b>2007</b> ,		6
21	All-dielectric photonic-assisted radio front-end technology. <i>Nature Photonics</i> , <b>2007</b> , 1, 535-538	33.9	32
20	Broadband Raman amplification in silicon. <i>Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS</i> , <b>2007</b> ,		1
19	4-Channel Continuous-Time 77 GSa/s ADC using Photonic Bandwidth Compression <b>2007</b> ,		5
18	Multilayer 3-D Photonics in Silicon <b>2007</b> ,		2
17	Two-Dimensional Spatio-Temporal Signal Processing for Dispersion Compensation in Time-Stretched ADC. <i>Journal of Lightwave Technology</i> , <b>2007</b> , 25, 1580-1587	4	3
16	Distortion Cancellation in Time-Stretch Analog-to-Digital Converter. <i>Journal of Lightwave Technology</i> , <b>2007</b> , 25, 3716-3721	4	35
15	Two-Photon Photovoltaic Effect in Silicon. <i>IEEE Journal of Quantum Electronics</i> , <b>2007</b> , 43, 1211-1217	2	27
14	Multi-mode Mid-IR Silicon Raman Amplifiers. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 958, 1		0
13	Demonstration of CW Raman gain with zero electrical power dissipation in p-i-n silicon waveguides <b>2006</b> ,		2
12	Stress-induced phase matching in Silicon waveguides <b>2006</b> ,		3
11	Continuous time realization of time-stretch ADC <b>2006</b> ,		4
10	Prospects for Silicon Mid-IR Raman Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2006</b> , 12, 1618-1627	3.8	69
9	Silicon Photonics. <i>Journal of Lightwave Technology</i> , <b>2006</b> , 24, 4600-4615	4	933
8	Nonlinear absorption in silicon and the prospects of mid-infrared silicon Raman lasers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, R38-R40	1.6	40

7	Tera-sample per second real-time waveform digitizer. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 241116	3.4	23
6	Demonstration of a silicon Raman laser. <i>Optics Express</i> , <b>2004</b> , 12, 5269-73	3.3	54 <sup>8</sup>
5	Raman induced wavelength conversion in scaled Silicon waveguides. <i>IEICE Electronics Express</i> , <b>2004</b> , 1, 298-304	0.5	4
4	Coherent Optical Multiple-Input Multiple-Output communication. <i>IEICE Electronics Express</i> , <b>2004</b> , 1, 392-397	3.7	9
3	Sculpting of three-dimensional nano-optical structures in silicon. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 4909-4911	3.4	15
2	Applications of Electro-optic Polymers in Photonics. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 413, 147		10
1	Silicon Lasers 147-189		