Joshua C Vaughan

List of Publications by Year
in descending order

83	6,106	136950 32	149698 56
papers	citations	h-index	g-index

91	91	91	7641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prostate Cancer Risk Stratification via Nondestructive 3D Pathology with Deep Learningâ€“Assisted Gland Analysis. Cancer Research, 2022, 82, 334-345.	0.9	42
2	Versatile, do-it-yourself, low-cost spinning disk confocal microscope. Biomedical Optics Express, 2022, 13, 1102.	2.9	11
3	Fluorescent labeling of abundant reactive entities (FLARE) for cleared-tissue and super-resolution microscopy. Nature Protocols, 2022, 17, 819-846.	12.0	9
4	Intrinsically disordered peptides enhance regenerative capacities of bone composite xenografts. Materials Today, 2022, 52, 63-79.	14.2	9
5	Multiresolution nondestructive 3D pathology of whole lymph nodes for breast cancer staging. Journal of Biomedical Optics, 2022, 27, .	2.6	9
6	The Giardia ventrolateral flange is a lamellar membrane protrusion that supports attachment. PLoS Pathogens, 2022, 18, e1010496.	4.7	5
7	Incorporation of sensing modalities into de novo designed fluorescence-activating proteins. Nature Communications, 2021, 12, 856.	12.8	31
8	Tunable, division-independent control of gene activation timing by a polycomb switch. Cell Reports, 2021, 34, 108888.	6.4	19
9	Multiplexed single-cell profiling of chromatin states at genomic loci by expansion microscopy. Nucleic Acids Research, 2021, 49, e82-e82.	14.5	18
10	Podocyte Aging: Why and How Getting Old Matters. Journal of the American Society of Nephrology: JASN, 2021, , ASN.2021-05-0614.	6.1	1
11	Podocyte Aging: Why and How Getting Old Matters. Journal of the American Society of Nephrology: JASN, 2021, 32, 2697-2713.	6.1	28
12	Feature-rich covalent stains for super-resolution and cleared tissue fluorescence microscopy. Science Advances, 2020, 6, eaba4542.	10.3	60
13	Multi-immersion open-top light-sheet microscope for high-throughput imaging of cleared tissues. Nature Communications, 2019, 10, 2781.	12.8	135
14	Simple Chemical Stains for Feature-Rich Super-Resolution and Cleared-Tissue Microscopy. Microscopy and Microanalysis, 2019, 25, 1202-1203.	0.4	0
15	Dual lineage tracing shows that glomerular parietal epithelial cells can transdifferentiate toward theÂadult podocyte fate. Kidney International, 2019, 96, 597-611.	5.2	42
16	Microscopy with ultraviolet surface excitation for wide-area pathology of breast surgical margins. Journal of Biomedical Optics, 2019, 24, 1.	2.6	40
17	Rapid pathology of lumpectomy margins with open-top light-sheet (OTLS) microscopy. Biomedical Optics Express, 2019, 10, 1257.	2.9	51
18	A conserved morphogenetic mechanism for epidermal ensheathment of nociceptive sensory neurites. ELife, 2019, 8, .	6.0	39

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19	Extended-Depth 3D Super-Resolution Imaging Using Probe-Refresh STORM. Biophysical Journal, 2018, 114, 1980-1987.	0.5	19
20	Microtubule Acetylation Is Required for Mechanosensation in Drosophila. Cell Reports, 2018, 25, 1051-1065.e6.	6.4	47
21	Switchable Fluorophores for Single-Molecule Localization Microscopy. Chemical Reviews, 2018, 118, 9412-9454.	47.7	223
22	Reduction of Residual Vibration in Displacement-Amplified Micro-Electromagnetic Actuators with Non-linear Dynamics Using Input Shaping. , 2018, , .		0
23	De novo design of a fluorescence-activating Î²-barrel. Nature, 2018, 561, 485-491.	27.8	269
24	Imaging nanobubble nucleation and hydrogen spillover during electrocatalytic water splitting. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5878-5883.	7.1	108
25	Superresolution imaging of Drosophila tissues using expansion microscopy. Molecular Biology of the Cell, 2018, 29, 1413-1421.	2.1	43
26	Volumetric, Nanoscale Optical Imaging of Mouse and Human Kidney via Expansion Microscopy. Scientific Reports, 2018, 8, 10396.	3.3	31
27	Single-Molecule Electrochemistry on a Porous Silica-Coated Electrode. Journal of the American Chemical Society, 2017, 139, 2964-2971.	13.7	50
28	The tetrameric kinesin Kif25 suppresses pre-mitotic centrosome separation to establish proper spindleÂorientation. Nature Cell Biology, 2017, 19, 384-390.	10.3	35
29	Hybrid Structured Illumination Expansion Microscopy Reveals Microbial Cytoskeleton Organization. ACS Nano, 2017, 11, 12677-12686.	14.6	120
30	Super-resolution Microscopy Made Simple. , 2017, , .		0
31	Command shaping of a boom crane subject to nonzero initial conditions. , 2017, , .		7
32	Suppression of cable suspended parallel manipulator vibration utilizing input shaping. , 2017, , .		3
33	Expansion microscopy with conventional antibodies and fluorescent proteins. Nature Methods, 2016, 13, 485-488.	19.0	363
34	Point by Point: An Introductory Guide to Sample Preparation for Singleâ€Molecule, Superâ€Resolution Fluorescence Microscopy. Current Protocols in Chemical Biology, 2015, 7, 103-120.	1.7	33
35	A model for the generation and interconversion of ER morphologies. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5243-51.	7.1	112
36	Isotropic three-dimensional super-resolution imaging with a self-bending point spread function. Nature Photonics, 2014, 8, 302-306.	31.4	416

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37	Twinkle, twinkle little star: Photoswitchable fluorophores for superâ€resolution imaging. FEBS Letters, 2014, 588, 3603-3612.	2.8	117
38	Reductive Caging enables Ultra-Bright Photoactivatable Fluorophores for Superresolution Imaging. Biophysical Journal, 2013, 104, 534a.	0.5	0
39	Phosphine Quenching of Cyanine Dyes as a Versatile Tool for Fluorescence Microscopy. Journal of the American Chemical Society, 2013, 135, 1197-1200.	13.7	124
40	Isotropic 3D Super Resolution Imaging with Self-Bending Point Spread Function. Biophysical Journal, 2013, 104, 668a.	0.5	7
41	Modeling and control of rocking in cable-riding systems. , 2013, , .		0
42	Multi-input shaping control for multi-hoist cranes. , 2013, , .		16
43	Oscillation suppressing for an energy efficient bridge crane using input shaping. , 2013, , .		4
44	Super-resolution fluorescence imaging of organelles in live cells with photoswitchable membrane probes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13978-13983.	7.1	439
45	Ultrabright photoactivatable fluorophores created by reductive caging. Nature Methods, 2012, 9, 1181-1184.	19.0	201
46	Reducing Vibration by Digital Filtering and Input Shaping. IEEE Transactions on Control Systems Technology, 2011, 19, 1410-1420.	5.2	71
47	New fluorescent probes for super-resolution imaging. Nature Biotechnology, 2011, 29, 880-881.	17.5	27
48	Evaluation of fluorophores for optimal performance in localization-based super-resolution imaging. Nature Methods, 2011, 8, 1027-1036.	19.0	1,198
49	A study of crane operator performance comparing PD-control and input shaping. , 2011, , .		24
50	Advantages of using command shaping over feedback for crane control. , 2010, , .		19
51	Reducing vibration and providing robustness with multi-input shapers. , 2009, , .		6
52	Optimal input shaping filters for non-zero initial states. , 2009, , .		2
53	Use of design competitions in mechatronics education. , 2009, , .		4
54	Input shapers for reducing overshoot in human-operated flexible systems. , 2009, , .		13

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55	Rapid Actin-Dependent Viral Motility in Live Cells. Biophysical Journal, 2009, 97, 1647-1656.	0.5	41
56	Using mechatronics to teach mechanical design and technical communication. Mechatronics, 2008, 18, 179-186.	3.3	14
57	Performance comparison of robust negative input shapers. , 2008, , .		11
58	Use of Cranes in System Dynamics and Controls Education. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9099-9104.	0.4	5
59	Performance Comparison of Robust Input Shapers. , 2007, , .		6
60	Initial Experiments on the Control of a Mobile Tower Crane. , 2007, , 1861.		3
61	Coherently Controlled Ultrafast Four-Wave Mixing Spectroscopy. Journal of Physical Chemistry A, 2007, 111, 4873-4883.	2.5	85
62	Terahertz Polaritonics. Annual Review of Materials Research, 2007, 37, 317-350.	9.3	147
63	Terahertz amplification in high-dielectric materials. Springer Series in Chemical Physics, 2007, , 802-804.	0.2	3
64	Spatiotemporal femtosecond pulse shaping using a MEMS-based micromirror SLM. Springer Series in Chemical Physics, 2007, , 184-186.	0.2	2
65	Coherently Controlled Multidimensional Optical Spectroscopy. Springer Series in Chemical Physics, 2007, , 371-373.	0.2	0
66	THz Polaritonics: Shaped Waveforms, Large Amplitudes and Linear and Nonlinear Spectroscopy. , 2007, , .		0
67	Analysis of replica pulses in femtosecond pulse shaping with pixelated devices. Optics Express, 2006, 14, 1314.	3.4	71
68	Spatiotemporal femtosecond pulse shaping using a MEMS-based micromirror SLM. , 2006, , MH2.		0
69	Terahertz polaritonics: High-field THz coherent control and spectroscopy. , 2006, , .		0
70	Coherently Controlled Multidimensional Optical Spectroscopy. , 2006, , .		0
71	Degenerate four-wave mixing spectroscopy based on two dimensional pulse shaping. Springer Series in Chemical Physics, 2005, , 569-571.	0.2	1
72	Typesetting THz Waveforms. Springer Series in Chemical Physics, 2005, , 717-719.	0.2	0

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73	Diffraction-based femtosecond pulse shaping with a two-dimensional spatial light modulator. Optics Letters, 2005, 30, 323.	3.3	112
74	Typesetting of terahertz waveforms. Optics Letters, 2004, 29, 1802.	3.3	22
75	Degenerate four-wave mixing spectroscopy based on two-dimensional femtosecond pulse shaping. Optics Letters, 2004, 29, 2052.	3.3	51
76	Fourier phase microscopy for investigation of biological structures and dynamics. Optics Letters, 2004, 29, 2503.	3.3	442
77	Spatiotemporal Coherent Control of Lattice Vibrational Waves. Science, 2003, 299, 374-377.	12.6	236
78	Automated spatiotemporal diffraction of ultrashort laser pulses. Optics Letters, 2003, 28, 2408.	3.3	23
79	Two-dimensional Arbitrary THz Waveform Generation and Integrated Waveguide Propagation. , 2003, , .		0
80	Coherent Control Over Collective Polariton Excitations: The Dawn of Polaritonics. Springer Series in Chemical Physics, 2003, , 541-545.	0.2	0
81	Multidimensional control of femtosecond pulses by use of a programmable liquid-crystal matrix. Optics Letters, 2002, 27, 652.	3.3	69
82	Automated two-dimensional femtosecond pulse shaping. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 2489.	2.1	48
83	PHONON-POLARITONS: CONTROLLED PROPAGATION AND AMPLIFICATION. , 2002, , .		0