

Mikhail Kandel

List of Publications by Year in descending order

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Version: 2024-02-01

63
papers

1,557
citations

304368

22
h-index

344852

36
g-index

72
all docs

72
docs citations

72
times ranked

1711
citing authors

#	ARTICLE	IF	CITATIONS
1	Gradient light interference microscopy for 3D imaging of unlabeled specimens. Nature Communications, 2017, 8, 210.	5.8	188
2	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464.	3.3	129
3	Phase imaging with computational specificity (PICS) for measuring dry mass changes in sub-cellular compartments. Nature Communications, 2020, 11, 6256.	5.8	109
4	Bond-selective transient phase imaging via sensing of the infrared photothermal effect. Light: Science and Applications, 2019, 8, 116.	7.7	62
5	Epi-illumination gradient light interference microscopy for imaging opaque structures. Nature Communications, 2019, 10, 4691.	5.8	58
6	Label-free tissue scanner for colorectal cancer screening. Journal of Biomedical Optics, 2017, 22, 066016.	1.4	49
7	Breast cancer diagnosis using spatial light interference microscopy. Journal of Biomedical Optics, 2015, 20, 111210.	1.4	48
8	Coupled circumferential and axial tension driven by actin and myosin influences in vivo axon diameter. Scientific Reports, 2017, 7, 14188.	1.6	48
9	Refractive index variance of cells and tissues measured by quantitative phase imaging. Optics Express, 2017, 25, 1573.	1.7	45
10	Real-time halo correction in phase contrast imaging. Biomedical Optics Express, 2018, 9, 623.	1.5	44
11	Spatial light interference microscopy: principle and applications to biomedicine. Advances in Optics and Photonics, 2021, 13, 353.	12.1	43
12	Label-Free Imaging of Single Microtubule Dynamics Using Spatial Light Interference Microscopy. ACS Nano, 2017, 11, 647-655.	7.3	42
13	Optical Assay of Erythrocyte Function in Banked Blood. Scientific Reports, 2014, 4, 6211.	1.6	39
14	Label-free quantitative evaluation of breast tissue using Spatial Light Interference Microscopy (SLIM). Scientific Reports, 2018, 8, 6875.	1.6	39
15	Halo-free Phase Contrast Microscopy. Scientific Reports, 2017, 7, 44034.	1.6	34
16	White-light diffraction phase microscopy at doubled space-bandwidth product. Optics Express, 2016, 24, 29033.	1.7	34
17	Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing. Advanced Healthcare Materials, 2016, 5, 1025-1039.	3.9	32
18	3D-Printed pHEMA Materials for Topographical and Biochemical Modulation of Dorsal Root Ganglion Cell Response. ACS Applied Materials & Interfaces, 2017, 9, 30318-30328.	4.0	32

#	ARTICLE	IF	CITATIONS
19	Quantitative Histopathology of Stained Tissues using Color Spatial Light Interference Microscopy (cSLIM). <i>Scientific Reports</i> , 2019, 9, 14679.	1.6	30
20	Wolf phase tomography (WPT) of transparent structures using partially coherent illumination. <i>Light: Science and Applications</i> , 2020, 9, 142.	7.7	30
21	Reproductive outcomes predicted by phase imaging with computational specificity of spermatozoon ultrastructure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18302-18309.	3.3	28
22	Engineering geometrical 3-dimensional untethered in vitro neural tissue mimic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 25932-25940.	3.3	26
23	Network science characteristics of brain-derived neuronal cultures deciphered from quantitative phase imaging data. <i>Scientific Reports</i> , 2020, 10, 15078.	1.6	26
24	Cell Cycle Stage Classification Using Phase Imaging with Computational Specificity. <i>ACS Photonics</i> , 2022, 9, 1264-1273.	3.2	23
25	Three-dimensional intracellular transport in neuron bodies and neurites investigated by label-free dispersion-relaxation phase spectroscopy. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2017, 91, 519-526.	1.1	22
26	Magnified Image Spatial Spectrum (MISS) microscopy for nanometer and millisecond scale label-free imaging. <i>Optics Express</i> , 2018, 26, 5423.	1.7	22
27	3D-Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. <i>Advanced Healthcare Materials</i> , 2019, 8, e1800788.	3.9	21
28	Cell density modulates intracellular mass transport in neural networks. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2017, 91, 503-509.	1.1	19
29	Multiscale Assay of Unlabeled Neurite Dynamics Using Phase Imaging with Computational Specificity. <i>ACS Sensors</i> , 2021, 6, 1864-1874.	4.0	19
30	Regulation of local GTP availability controls RAC1 activity and cell invasion. <i>Nature Communications</i> , 2021, 12, 6091.	5.8	17
31	Graphene oxide substrates with N-cadherin stimulates neuronal growth and intracellular transport. <i>Acta Biomaterialia</i> , 2019, 90, 412-423.	4.1	16
32	Real-time Jones phase microscopy for studying transparent and birefringent specimens. <i>Optics Express</i> , 2020, 28, 34190.	1.7	16
33	Active intracellular transport in metastatic cells studied by spatial light interference microscopy. <i>Journal of Biomedical Optics</i> , 2015, 20, 111209.	1.4	15
34	Label-free, multi-scale imaging of ex-vivo mouse brain using spatial light interference microscopy. <i>Scientific Reports</i> , 2016, 6, 39667.	1.6	15
35	Quantitative assessment of neural outgrowth using spatial light interference microscopy. <i>Journal of Biomedical Optics</i> , 2017, 22, 066015.	1.4	14
36	SLIM microscopy allows for visualization of DNA-containing liposomes designed for sperm-mediated gene transfer in cattle. <i>Molecular Biology Reports</i> , 2019, 46, 695-703.	1.0	11

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37	Computational interference microscopy enabled by deep learning. <i>APL Photonics</i> , 2021, 6, 046103.	3.0	11
38	Topography and refractometry of sperm cells using spatial light interference microscopy. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	1.4	11
39	Harmonically decoupled gradient light interference microscopy (HD-GLIM). <i>Optics Letters</i> , 2020, 45, 1487.	1.7	11
40	High-resolution impedance mapping using electrically activated quantitative phase imaging. <i>Light: Science and Applications</i> , 2021, 10, 20.	7.7	10
41	Cell-to-cell influence on growth in large populations. <i>Biomedical Optics Express</i> , 2019, 10, 4664.	1.5	10
42	Effects of substrate patterning on cellular spheroid growth and dynamics measured by gradient light interference microscopy (GLIM). <i>Journal of Biophotonics</i> , 2019, 12, e201900178.	1.1	9
43	Morphometric analysis of sperm used for IVP by three different separation methods with spatial light interference microscopy. <i>Systems Biology in Reproductive Medicine</i> , 2020, 66, 26-36.	1.0	9
44	Quantifying myelin content in brain tissue using color Spatial Light Interference Microscopy (cSLIM). <i>PLoS ONE</i> , 2020, 15, e0241084.	1.1	8
45	Synthetic aperture interference light (SAIL) microscopy for high-throughput label-free imaging. <i>Applied Physics Letters</i> , 2021, 119, 233701.	1.5	6
46	Matrix Softness-Mediated 3D Zebrafish Hepatocyte Modulates Response to Endocrine Disrupting Chemicals. <i>Environmental Science & Technology</i> , 2020, 54, 13797-13806.	4.6	5
47	Cellular Microcultures: Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing (<i>Adv. Healthcare Mater.</i> 9/2016). <i>Advanced Healthcare Materials</i> , 2016, 5, 990-990.	3.9	4
48	Automatic tissue segmentation of breast biopsies imaged by QPI. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
49	High-throughput sperm assay using label-free microscopy: morphometric comparison between different sperm structures of boar and stallion spermatozoa. <i>Animal Reproduction Science</i> , 2020, 219, 106509.	0.5	3
50	Monitoring reactivation of latent HIV by label-free gradient light interference microscopy. <i>IScience</i> , 2021, 24, 102940.	1.9	2
51	Circadian Volume Changes in Hippocampal Glia Studied by Label-Free Interferometric Imaging. <i>Cells</i> , 2022, 11, 2073.	1.8	2
52	Antiresonant guiding photonic crystal fibers for distributed temperature gradient measurements. <i>Applied Physics B: Lasers and Optics</i> , 2011, 105, 329-333.	1.1	1
53	Human Analysts at Superhuman Scales: What Has Friendly Software To Do?. <i>Big Data</i> , 2013, 1, 227-236.	2.1	1
54	C++ software integration for a high-throughput phase imaging platform. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1

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55	Diagnosis of breast cancer biopsies using quantitative phase imaging. , 2015, , .		1
56	Nuclear dynamics in metastatic cells studied by quantitative phase imaging. , 2015, , .		1
57	High throughput imaging of blood smears using white light diffraction phase microscopy. Proceedings of SPIE, 2015, , .	0.8	1
58	Monitoring in-vitro bovine embryo development during the first days after fertilization (Conference) Tj ETQq0 0 0 rgBT /Overlçck 10 Tf 5		
59	Gradient light interference microscopy (GLIM) for imaging thick specimens (Conference Presentation). , 2016, , .		0
60	Highly sensitive kinesin-microtubule motility assays using SLIM. Proceedings of SPIE, 2016, , .	0.8	0
61	Label-free tomographic reconstruction of optically thick structures using GLIM (Conference) Tj ETQq1 1 0.784314 rgBT /Overlçck 10 Tf		
62	10.1063/5.0041901.1. , 2021, , .		0
63	Halo-free phase contrast microscopy (Conference Presentation). , 2017, , .		0