Zichao Bian

List of Publications by Year
in descending order

32 papers	1,370 citations	361413 20 h-index	434195 31 g-index
33 all docs	33 docs citations	33 times ranked	1028 citing authors

#	Article	IF	Citations
1	Aperture-scanning Fourier ptychography for 3D refocusing and super-resolution macroscopic imaging. Optics Express, 2014, 22, 13586.	3.4	166
2	Moistureâ€Responsive Wrinkling Surfaces with Tunable Dynamics. Advanced Materials, 2017, 29, 1700828.	21.0	133
3	Adaptive system correction for robust Fourier ptychographic imaging. Optics Express, 2013, 21, 32400.	3.4	127
4	Sparsely sampled Fourier ptychography. Optics Express, 2014, 22, 5455.	3.4	116
5	Wide-field, high-resolution lensless on-chip microscopy via near-field blind ptychographic modulation. Lab on A Chip, 2020, 20, 1058-1065.	6.0	80
6	Microscopy illumination engineering using a low-cost liquid crystal display. Biomedical Optics Express, 2015, 6, 574.	2.9	61
7	Autofocusing technologies for whole slide imaging and automated microscopy. Journal of Biophotonics, 2020, 13, e202000227.	2.3	60
8	Stiffness analysis of 3D spheroids using microtweezers. PLoS ONE, 2017, 12, e0188346.	2.5	57
9	InstantScope: a low-cost whole slide imaging system with instant focal plane detection. Biomedical Optics Express, 2015, 6, 3210.	2.9	56
10	Transform- and multi-domain deep learning for single-frame rapid autofocusing in whole slide imaging. Biomedical Optics Express, 2018, 9, 1601.	2.9	51
11	OpenWSI: a low-cost, high-throughput whole slide imaging system via single-frame autofocusing and open-source hardware. Optics Letters, 2020, 45, 260.	3.3	45
12	Rapid focus map surveying for whole slide imaging with continuous sample motion. Optics Letters, 2017, 42, 3379.	3.3	42
13	Super-resolution microscopy via ptychographic structured modulation of a diffuser. Optics Letters, 2019, 44, 3645.	3.3	42
14	Single-frame rapid autofocusing for brightfield and fluorescence whole slide imaging. Biomedical Optics Express, 2016, 7, 4763.	2.9	40
15	Field-portable quantitative lensless microscopy based on translated speckle illumination and sub-sampled ptychographic phase retrieval. Optics Letters, 2019, 44, 1976.	3.3	40
16	Resolution-Enhanced Parallel Coded Ptychography for High-Throughput Optical Imaging. ACS Photonics, 2021, 8, 3261-3271.	6.6	36
17	Super-resolved multispectral lensless microscopy via angle-tilted, wavelength-multiplexed ptychographic modulation. Optics Letters, 2020, 45, 3486.	3.3	28
18	Fourier ptychographic microscopy using wavelength multiplexing. Journal of Biomedical Optics, 2017, 22, 066006.	2.6	23

#	Article	IF	Citations
19	Virtual brightfield and fluorescence staining for Fourier ptychography via unsupervised deep learning. Optics Letters, 2020, 45, 5405.	3.3	22
20	Ptychographic modulation engine: a low-cost DIY microscope add-on for coherent super-resolution imaging. Journal Physics D: Applied Physics, 2020, 53, 014005.	2.8	21
21	Dual lightâ€emitting diodeâ€based multichannel microscopy for wholeâ€slide multiplane, multispectral and phase imaging. Journal of Biophotonics, 2018, 11, e201700075.	2.3	20
22	Ptychographic sensor for large-scale lensless microbial monitoring with high spatiotemporal resolution. Biosensors and Bioelectronics, 2022, 196, 113699.	10.1	17
23	Optical recording reveals topological distribution of functionally classified colorectal afferent neurons in intact lumbosacral <scp>DRG</scp>. Physiological Reports, 2019, 7, e14097.	1.7	15
24	Preparation, characterization and application of a protein hydrogel with rapid selfâ€healing and unique autofluoresent multiâ€functionalities. Journal of Biomedical Materials Research - Part A, 2019, 107, 81-91.	4.0	15
25	Terapixel hyperspectral whole-slide imaging via slit-array detection and projection. Journal of Biomedical Optics, 2018, 23, 1.	2.6	14
26	Rapid and robust whole slide imaging based on LED-array illumination and color-multiplexed single-shot autofocusing. Quantitative Imaging in Medicine and Surgery, 2019, 9, 823-831.	2.0	12
27	High-throughput lensless whole slide imaging via continuous height-varying modulation of a tilted sensor. Optics Letters, 2021, 46, 5212.	3.3	11
28	Digital, Rapid, Accurate, and Label-Free Enumeration of Viable Microorganisms Enabled by Custom-Built On-Glass-Slide Culturing Device and Microscopic Scanning. Sensors, 2018, 18, 3700.	3.8	9
29	Brightfield, fluorescence, and phase-contrast whole slide imaging via dual-LED autofocusing. Biomedical Optics Express, 2021, 12, 4651.	2.9	6
30	Wrinkling Devices: Moistureâ€Responsive Wrinkling Surfaces with Tunable Dynamics (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	21.0	3
31	High-Throughput Functional Characterization of Visceral Afferents by Optical Recordings From Thoracolumbar and Lumbosacral Dorsal Root Ganglia. Frontiers in Neuroscience, 2021, 15, 657361.	2.8	2
32	Axially shifted pattern illumination for macroscale turbidity suppression and virtual volumetric confocal imaging without axial scanning. Optics Letters, 2019, 44, 811.	3.3	0