

# Shaowei Jiang

## List of Publications by Year in descending order

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43  
papers

1,211  
citations

394421

19  
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377865

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44  
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44  
docs citations

44  
times ranked

661  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ptychographic sensor for large-scale lensless microbial monitoring with high spatiotemporal resolution. <i>Biosensors and Bioelectronics</i> , 2022, 196, 113699.	10.1	17
2	Blood-Coated Sensor for High-Throughput Ptychographic Cytometry on a Blu-ray Disc. <i>ACS Sensors</i> , 2022, 7, 1058-1067.	7.8	19
3	High-throughput digital pathology <i>via</i> a handheld, multiplexed, and AI-powered ptychographic whole slide scanner. <i>Lab on A Chip</i> , 2022, 22, 2657-2670.	6.0	18
4	Deep distributed optimization for blind diffuser-modulation ptychography. <i>Optics Letters</i> , 2022, 47, 3015.	3.3	3
5	Synthetic aperture ptychography: coded sensor translation for joint spatial-Fourier bandwidth expansion. <i>Photonics Research</i> , 2022, 10, 1624.	7.0	13
6	Concept, implementations and applications of Fourier ptychography. <i>Nature Reviews Physics</i> , 2021, 3, 207-223.	26.6	180
7	High-Throughput Functional Characterization of Visceral Afferents by Optical Recordings From Thoracolumbar and Lumbosacral Dorsal Root Ganglia. <i>Frontiers in Neuroscience</i> , 2021, 15, 657361.	2.8	2
8	Neural network model assisted Fourier ptychography with Zernike aberration recovery and total variation constraint. <i>Journal of Biomedical Optics</i> , 2021, 26, .	2.6	9
9	Mask-modulated lensless imaging via translated structured illumination. <i>Optics Express</i> , 2021, 29, 12491.	3.4	10
10	Brightfield, fluorescence, and phase-contrast whole slide imaging via dual-LED autofocusing. <i>Biomedical Optics Express</i> , 2021, 12, 4651.	2.9	6
11	Low-cost whole slide imaging system with single-shot autofocusing based on color-multiplexed illumination and deep learning. <i>Biomedical Optics Express</i> , 2021, 12, 5644.	2.9	4
12	Bypassing the resolution limit of diffractive zone plate optics via rotational Fourier ptychography. <i>Optics Communications</i> , 2021, 493, 127031.	2.1	1
13	High-throughput lensless whole slide imaging via continuous height-varying modulation of a tilted sensor. <i>Optics Letters</i> , 2021, 46, 5212.	3.3	11
14	Accelerated Phase Shifting for Structured Illumination Microscopy Based on Deep Learning. <i>IEEE Transactions on Computational Imaging</i> , 2021, 7, 700-712.	4.4	5
15	Effective color transfer enables rapid computational microscopy for digital pathology. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.	5.1	0
16	Resolution-Enhanced Parallel Coded Ptychography for High-Throughput Optical Imaging. <i>ACS Photonics</i> , 2021, 8, 3261-3271.	6.6	36
17	Ptychography-based high-throughput lensless on-chip microscopy via incremental proximal algorithms. <i>Optics Express</i> , 2021, 29, 37892.	3.4	6
18	Quantitative multi-height phase retrieval via a coded image sensor. <i>Biomedical Optics Express</i> , 2021, 12, 7173.	2.9	15

#	ARTICLE	IF	CITATIONS
19	Optofluidic ptychography on a chip. <i>Lab on A Chip</i> , 2021, 21, 4549-4556.	6.0	12
20	Deep learning-enabled whole slide imaging (DeepWSI): oil-immersion quality using dry objectives, longer depth of field, higher system throughput, and better functionality. <i>Optics Express</i> , 2021, 29, 39669.	3.4	12
21	Ptychographic modulation engine: a low-cost DIY microscope add-on for coherent super-resolution imaging. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 014005.	2.8	21
22	Autofocusing technologies for whole slide imaging and automated microscopy. <i>Journal of Biophotonics</i> , 2020, 13, e202000227.	2.3	60
23	Wide-field, high-resolution lensless on-chip microscopy via near-field blind ptychographic modulation. <i>Lab on A Chip</i> , 2020, 20, 1058-1065.	6.0	80
24	Super-resolved multispectral lensless microscopy via angle-tilted, wavelength-multiplexed ptychographic modulation. <i>Optics Letters</i> , 2020, 45, 3486.	3.3	28
25	Virtual brightfield and fluorescence staining for Fourier ptychography via unsupervised deep learning. <i>Optics Letters</i> , 2020, 45, 5405.	3.3	22
26	OpenWSI: a low-cost, high-throughput whole slide imaging system via single-frame autofocusing and open-source hardware. <i>Optics Letters</i> , 2020, 45, 260.	3.3	45
27	High-throughput and field-portable ptychographic lensless microscopy based on translated pattern modulation. , 2020, , .		0
28	Rapid and robust whole slide imaging based on LED-array illumination and color-multiplexed single-shot autofocusing. <i>Quantitative Imaging in Medicine and Surgery</i> , 2019, 9, 823-831.	2.0	12
29	Full-field Fourier ptychography (FFP): Spatially varying pupil modeling and its application for rapid field-dependent aberration metrology. <i>APL Photonics</i> , 2019, 4, .	5.7	32
30	Near-field Fourier ptychography: super-resolution phase retrieval via speckle illumination. <i>Optics Express</i> , 2019, 27, 7498.	3.4	51
31	Rapid and robust two-dimensional phase unwrapping via deep learning. <i>Optics Express</i> , 2019, 27, 23173.	3.4	100
32	Field-portable quantitative lensless microscopy based on translated speckle illumination and sub-sampled ptychographic phase retrieval. <i>Optics Letters</i> , 2019, 44, 1976.	3.3	40
33	Quantitative phase imaging via a cGAN network with dual intensity images captured under centrosymmetric illumination. <i>Optics Letters</i> , 2019, 44, 2879.	3.3	12
34	Super-resolution microscopy via ptychographic structured modulation of a diffuser. <i>Optics Letters</i> , 2019, 44, 3645.	3.3	42
35	Axially shifted pattern illumination for macroscale turbidity suppression and virtual volumetric confocal imaging without axial scanning. <i>Optics Letters</i> , 2019, 44, 811.	3.3	0
36	Dual light-emitting diode-based multichannel microscopy for whole-slide multiplane, multispectral and phase imaging. <i>Journal of Biophotonics</i> , 2018, 11, e201700075.	2.3	20

#	ARTICLE	IF	CITATIONS
37	13-fold resolution gain through turbid layer via translated unknown speckle illumination. Biomedical Optics Express, 2018, 9, 260.	2.9	30
38	Transform- and multi-domain deep learning for single-frame rapid autofocusing in whole slide imaging. Biomedical Optics Express, 2018, 9, 1601.	2.9	51
39	Solving Fourier ptychographic imaging problems via neural network modeling and TensorFlow. Biomedical Optics Express, 2018, 9, 3306.	2.9	90
40	Invited Article: Mask-modulated lensless imaging with multi-angle illuminations. APL Photonics, 2018, 3, 060803.	5.7	30
41	Terapixel hyperspectral whole-slide imaging via slit-array detection and projection. Journal of Biomedical Optics, 2018, 23, 1.	2.6	14
42	Multilayer fluorescence imaging on a single-pixel detector. Biomedical Optics Express, 2016, 7, 2425.	2.9	33
43	Recovering higher dimensional image data using multiplexed structured illumination. Optics Express, 2015, 23, 30393.	3.4	19