Yichen Wu

List of Publications by Year
in descending order

39 papers	2,186 citations	394421 19 h-index	642732 23 g-index
39 all docs	39 docs citations	39 times ranked	2374 citing authors

#	Article	IF	Citations
1	Dynamic Imaging and Characterization of Volatile Aerosols in E-Cigarette Emissions Using Deep Learning-Based Holographic Microscopy. ACS Sensors, 2021, 6, 2403-2410.	7.8	12
2	Deep-Learning-Based Virtual Refocusing of Images Using an Engineered Point-Spread Function. ACS Photonics, 2021, 8, 2174-2182.	6.6	15
3	Dynamic imaging and characterization of volatile aerosols using deep learning-based holographic microscopy. , 2021, , .		0
4	Deep-Learning-Based Image Reconstruction and Enhancement in Optical Microscopy. Proceedings of the IEEE, 2020, 108, 30-50.	21.3	90
5	Deep Learning-based Virtual Refocusing of Fluorescence Microscopy Images for Neuron Imaging in 3D. , 2020, , .		0
6	Deep Learning to Refocus 3D Images. Optics and Photonics News, 2020, 31, 57.	0.5	1
7	Resolution Enhancement in Scanning Electron Microscopy using Deep Learning. , 2020, , .		0
8	Color Holographic Microscopy Using a Deep Neural Network. , 2020, , .		1
9	Deep-Z: 3D Virtual Refocusing of Fluorescence Images Using Deep Learning. , 2020, , .		1
10	Resolution enhancement in scanning electron microscopy using deep learning. Scientific Reports, 2019, 9, 12050.	3.3	78
11	Deep learningâ€based color holographic microscopy. Journal of Biophotonics, 2019, 12, e201900107.	2.3	36
12	Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning. Nature Methods, 2019, 16, 1323-1331.	19.0	172
13	Deep learning in holography and coherent imaging. Light: Science and Applications, 2019, 8, 85.	16.6	174
14	Bright-field holography: cross-modality deep learning enables snapshot 3D imaging with bright-field contrast using a single hologram. Light: Science and Applications, 2019, 8, 25.	16.6	98
15	Virtual histological staining of unlabelled tissue-autofluorescence images via deep learning. Nature Biomedical Engineering, 2019, 3, 466-477.	22.5	397
16	Deep Learning Enables High-Throughput Analysis of Particle-Aggregation-Based Biosensors Imaged Using Holography. ACS Photonics, 2019, 6, 294-301.	6.6	53
17	Accurate color imaging of pathology slides using holography and absorbance spectrum estimation of histochemical stains. Journal of Biophotonics, 2019, 12, e201800335.	2.3	9
18	Holographic Reconstruction with Bright-field Microscopy Contrast using Cross-Modality Deep Learning. , 2019, , .		1

#	Article	IF	Citations
19	Label-free Bio-aerosol Sensing Using On-Chip Holographic Microscopy and Deep Learning. , 2019, , .		0
20	Portable Imaging Flow cytometer Using Deep Learning based Holographic Image Reconstruction. , 2019, , .		0
21	Particle-Aggregation Based Virus Sensor Using Deep Learning and Lensless Digital Holography. , 2019, , .		0
22	An absorbance spectrum estimation-based accurate colorization method for holographic imaging of pathology slides. , 2019, , .		0
23	Lensless digital holographic microscopy and its applications in biomedicine and environmental monitoring. Methods, 2018, 136, 4-16.	3.8	142
24	Label-Free Bioaerosol Sensing Using Mobile Microscopy and Deep Learning. ACS Photonics, 2018, 5, 4617-4627.	6.6	59
25	A deep learning-enabled portable imaging flow cytometer for cost-effective, high-throughput, and label-free analysis of natural water samples. Light: Science and Applications, 2018, 7, 66.	16.6	131
26	Extended depth-of-field in holographic imaging using deep-learning-based autofocusing and phase recovery. Optica, 2018, 5, 704.	9.3	247
27	A robust holographic autofocusing criterion based on edge sparsity: Comparison of Gini index and Tamura coefficient for holographic autofocusing based on the edge sparsity of the complex optical wavefront. , 2018, , .		5
28	Spatial mapping and analysis of aerosols during a forest fire using computational mobile microscopy. , 2018, , .		0
29	Fusion of lens-free microscopy and mobile-phone microscopy images for high-color-accuracy and high-resolution pathology imaging. Proceedings of SPIE, 2017, , .	0.8	0
30	Yeast viability and concentration analysis using lens-free computational microscopy and machine learning. , 2017, , .		0
31	Edge sparsity criterion for robust holographic autofocusing. Optics Letters, 2017, 42, 3824.	3.3	122
32	Sparsity-based On-chip Holographic Microscopy. , 2017, , .		0
33	Mobile Microscopy and Machine Learning Provide Accurate and High-throughput Monitoring of Air Quality. , 2017, , .		3
34	Sparsity-based multi-height phase recovery in holographic microscopy. Scientific Reports, 2016, 6, 37862.	3.3	81
35	Rapid, portable and cost-effective yeast cell viability and concentration analysis using lensfree on-chip microscopy and machine learning. Lab on A Chip, 2016, 16, 4350-4358.	6.0	59
36	Color calibration and fusion of lens-free and mobile-phone microscopy images for high-resolution and accurate color reproduction. Scientific Reports, 2016, 6, 27811.	3.3	37

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37	Demosaiced pixel super-resolution for multiplexed holographic color imaging. Scientific Reports, 2016, 6, 28601.	3.3	34
38	Compact Shielding of Graphene Monolayer Leads to Extraordinary SERS-Active Substrate with Large-Area Uniformity and Long-Term Stability. Scientific Reports, 2015, 5, 17167.	3.3	37
39	Performance of ultra-thin SOI-based resonators for sensing applications. Optics Express, 2014, 22, 14166.	3.4	91