Hongda Wang

List of Publications by Year
in descending order

36 papers	2,336 citations	567281 15 h-index	839539 18 g-index
37 all docs	37 docs citations	37 times ranked	2737 citing authors

#	Article	IF	Citations
1	Deep Learning-Enabled Detection and Classification of Bacterial Colonies Using a Thin-Film Transistor (TFT) Image Sensor. ACS Photonics, 2022, 9, 2455-2466.	6.6	4
2	Deep-learning-enabled Holographic Polarization Microscopy. , 2021, , .		0
3	Deep Learning-enabled Coherent Imaging Achieves Early Detection and Classification of Bacteria in Water Samples. , 2021, , .		1
4	Deep-Learning-Based Virtual Refocusing of Images Using an Engineered Point-Spread Function. ACS Photonics, 2021, 8, 2174-2182.	6.6	15
5	Biopsy-free in vivo virtual histology of skin using deep learning. Light: Science and Applications, 2021, 10, 233.	16.6	36
6	Pathological crystal imaging with singleâ€shot computational polarized light microscopy. Journal of Biophotonics, 2020, 13, e201960036.	2.3	23
7	Deep Learning-Based Holographic Polarization Microscopy. ACS Photonics, 2020, 7, 3023-3034.	6.6	41
8	Early detection and classification of live bacteria using time-lapse coherent imaging and deep learning. Light: Science and Applications, 2020, 9, 118.	16.6	93
9	Deep Learning-based Virtual Refocusing of Fluorescence Microscopy Images for Neuron Imaging in 3D. , 2020, , .		0
10	Deep Learning to Refocus 3D Images. Optics and Photonics News, 2020, 31, 57.	0.5	1
11	Deep learning-based super-resolution and image transformation into structured illumination microscopy. , 2020, , .		0
12	Deep-Z: 3D Virtual Refocusing of Fluorescence Images Using Deep Learning. , 2020, , .		1
13	Generative Adversarial Networks Enable Cross-Modality Super-Resolution in Fluorescence Microscopy. Microscopy and Microanalysis, 2019, 25, 1228-1229.	0.4	0
14	Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning. Nature Methods, 2019, 16, 1323-1331.	19.0	172
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 cross-modality super-resolution in fluorescence microscopy. Nature Methods, 2019, 16, 103-110.	19.0	545
17	Cross-Modality Deep Learning Achieves Super-Resolution in Fluorescence Microscopy. , 2019, , .		4
18	Label-free Bio-aerosol Sensing Using On-Chip Holographic Microscopy and Deep Learning. , 2019, , .		0

#	Article	IF	Citations
19	High-Throughput and Label-Free Detection of Motile Parasites in Bodily Fluids Using Lensless Time-Resolved Speckle Imaging. , 2019, , .		0
20	Deep Learning Enhanced Mobile-Phone Microscopy. ACS Photonics, 2018, 5, 2354-2364.	6.6	142
21	Motility-based label-free detection of parasites in bodily fluids using holographic speckle analysis and deep learning. Light: Science and Applications, 2018, 7, 108.	16.6	45
22	Label-Free Bioaerosol Sensing Using Mobile Microscopy and Deep Learning. ACS Photonics, 2018, 5, 4617-4627.	6.6	59
23	Deep Learning Microscopy: Enhancing Resolution, Field-of-View and Depth-of-Field of Optical Microscopy Images Using Neural Networks. , 2018, , .		5
24	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
25	Robust Holographic Autofocusing Based on Edge Sparsity. , 2018, , .		2
26	3D on-chip microscopy of optically cleared tissue. , 2018, , .		1
27	Super-resolution through out-of-focus imaging in lens-based microscopy (Conference Presentation). , 2017, , .		0
28	High resolution computational on-chip imaging of biological samples using sparsity constraint (Conference Presentation). , 2017, , .		0
29	3D imaging of optically cleared tissue using a simplified CLARITY method and on-chip microscopy. Science Advances, 2017, 3, e1700553.	10.3	29
30	Edge sparsity criterion for robust holographic autofocusing. Optics Letters, 2017, 42, 3824.	3.3	122
31	Deep learning microscopy. Optica, 2017, 4, 1437.	9.3	475
32	Pixel Super-Resolution in Coherent Microscopy Systems Through Out-of-Focus Imaging. , 2017, , .		0
33	Sparsity-based On-chip Holographic Microscopy. , 2017, , .		0
34	Holographic 3D Microscopy of Optically Cleared Tissue. , 2017, , .		0
35	Computational out-of-focus imaging increases the spaceâ€“bandwidth product in lens-based coherent microscopy. Optica, 2016, 3, 1422.	9.3	32
36	Sparsity-based multi-height phase recovery in holographic microscopy. Scientific Reports, 2016, 6, 37862.	3.3	81