Yichen Wu

List of Publications by Year
in descending order

39 papers	2,181 citations	394421 19 h-index	526287 27 g-index
39 all docs	39 docs citations	39 times ranked	2359 citing authors

#	Article	IF	Citations
1	Virtual histological staining of unlabelled tissue-autofluorescence images via deep learning. Nature Biomedical Engineering, 2019, 3, 466-477.	22.5	397
2	Extended depth-of-field in holographic imaging using deep-learning-based autofocusing and phase recovery. Optica, 2018, 5, 704.	9.3	247
3	Deep learning in holography and coherent imaging. Light: Science and Applications, 2019, 8, 85.	16.6	174
4	Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning. Nature Methods, 2019, 16, 1323-1331.	19.0	172
5	Lensless digital holographic microscopy and its applications in biomedicine and environmental monitoring. Methods, 2018, 136, 4-16.	3.8	142
6	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
7	Edge sparsity criterion for robust holographic autofocusing. Optics Letters, 2017, 42, 3824.	3.3	122
8	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
9	Performance of ultra-thin SOI-based resonators for sensing applications. Optics Express, 2014, 22, 14166.	3.4	91
10	Deep-Learning-Based Image Reconstruction and Enhancement in Optical Microscopy. Proceedings of the IEEE, 2020, 108, 30-50.	21.3	90
11	Sparsity-based multi-height phase recovery in holographic microscopy. Scientific Reports, 2016, 6, 37862.	3.3	81
12	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
13	Label-Free Bioaerosol Sensing Using Mobile Microscopy and Deep Learning. ACS Photonics, 2018, 5, 4617-4627.	6.6	59
14	Deep Learning Enables High-Throughput Analysis of Particle-Aggregation-Based Biosensors Imaged Using Holography. ACS Photonics, 2019, 6, 294-301.	6.6	53
15	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
16	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
17	Inorganic anion removal using micellar enhanced ultrafiltration (MEUF), modeling anion distribution and suggested improvements of MEUF: A review. Chemical Engineering Journal, 2020, 398, 125413.	12.7	35
18	Demosaiced pixel super-resolution for multiplexed holographic color imaging. Scientific Reports, 2016, 6, 28601.	3.3	34

#	ARTICLE	IF	CITATIONS
19	Hydrophobicity of peat soils: Characterization of organic compound changes associated with heat-induced water repellency. Science of the Total Environment, 2020, 714, 136444.	8.0	28
20	Synthesis of cross-linked cationic surfactant nanoparticles for removing anions from water. Environmental Science: Nano, 2017, 4, 1534-1543.	4.3	18
21	Deep-Learning-Based Virtual Refocusing of Images Using an Engineered Point-Spread Function. ACS Photonics, 2021, 8, 2174-2182.	6.6	15
22	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
23	Simultaneous Dechlorination and Advanced Oxidation Using Electrically Conductive Carbon Nanotube Membranes. ACS Applied Materials & Interfaces, 2021, 13, 34084-34092.	8.0	10
24	Accurate color imaging of pathology slides using holography and absorbance spectrum estimation of histochemical stains. Journal of Biophotonics, 2019, 12, e201800335.	2.3	9
25	Assessing leached TOC, nutrients and phenols from peatland soils after lab-simulated wildfires: Implications to source water protection. Science of the Total Environment, 2022, 822, 153579.	8.0	9
26	Upcycling wildfire-impacted boreal peats into porous carbons that efficiently remove phenolic micropollutants. Journal of Environmental Chemical Engineering, 2021, 9, 105305.	6.7	8
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	Fast synthesis of high surface area bio-based porous carbons for organic pollutant removal. MethodsX, 2021, 8, 101464.	1.6	3
29	Mobile Microscopy and Machine Learning Provide Accurate and High-throughput Monitoring of Air Quality. , 2017, , .		3
30	Robust Holographic Autofocusing Based on Edge Sparsity. , 2018, , .		2
31	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
32	Yeast viability and concentration analysis using lens-free computational microscopy and machine learning. , 2017, , .		0
33	Demosaiced pixel super-resolution in digital holography for multiplexed computational color imaging on-a-chip (Conference Presentation). , 2017, , .		0
34	Deep Neural Network-Based Phase-Recovery and Auto-Focusing Extend the Depth-of-Field in Digital Holography. , 2018, , .		0
35	Multiplexed Color Imaging Using Demosaiced Pixel Super-Resolution. , 2016, , .		0
36	Fusion of lens-free and lens-based microscope images for accurate color imaging. , 2016, , .		0

#	Article	IF	Citations
37	Sparsity-based On-chip Holographic Microscopy. , 2017, , .		0
38	Lensfree On-chip Microscopy Achieves Accurate Measurement of Yeast Cell Viability and Concentration Using Machine Learning. , 2017, , .		0
39	Spatial mapping and analysis of aerosols during a forest fire using computational mobile microscopy. , 2018, , .		0