Yair Rivenson

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/7722831/yair-rivenson-publications-by-year.pdf
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49	3,013	23	54
papers	citations	h-index	g-index
58	4,608	11.3	5.93
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
49	Computational imaging without a computer: seeing through random diffusers at the speed of light. *ELight*, **2022**, 2,		12
48	Automatic segmentation of peripheral arteries and veins in ferumoxytol-enhanced MR angiography. *Magnetic Resonance in Medicine*, **2022**, 87, 984-998	4.4	0
47	Classification and reconstruction of spatially overlapping phase images using diffractive optical networks.. *Scientific Reports*, **2022**, 12, 8446	4.9	1
46	Biopsy-free in vivo virtual histology of skin using deep learning. *Light: Science and Applications*, **2021** , 10, 233	16.7	4
45	Spectrally encoded single-pixel machine vision using diffractive networks. *Science Advances*, **2021**, 7,	14.3	25
44	Holographic Image Reconstruction with Phase Recovery and Autofocusing Using Recurrent Neural Networks. *ACS Photonics*, **2021**, 8, 1763-1774	6.3	5
43	Deep-Learning-Based Virtual Refocusing of Images Using an Engineered Point-Spread Function. *ACS Photonics*, **2021**, 8, 2174-2182	6.3	5
42	Scale-, Shift-, and Rotation-Invariant Diffractive Optical Networks. *ACS Photonics*, **2021**, 8, 324-334	6.3	15
41	Terahertz pulse shaping using diffractive surfaces. *Nature Communications*, **2021**, 12, 37	17.4	32
40	Misalignment Tolerant Diffractive Optical Networks **2021**,		1
39	Neural Network-Based On-Chip Spectroscopy Using a Scalable Plasmonic Encoder. *ACS Nano*, **2021**, 15, 6305-6315	16.7	8
38	Recurrent neural network-based volumetric fluorescence microscopy. *Light: Science and Applications*, **2021**, 10, 62	16.7	9
37	Neural network-based image reconstruction in swept-source optical coherence tomography using undersampled spectral data. *Light: Science and Applications*, **2021**, 10, 155	16.7	4
36	Deep learning-based transformation of H&E stained tissues into special stains. *Nature Communications*, **2021**, 12, 4884	17.4	12
35	All-optical synthesis of an arbitrary linear transformation using diffractive surfaces. *Light: Science and Applications*, **2021**, 10, 196	16.7	8
34	Single-Shot Autofocusing of Microscopy Images Using Deep Learning. *ACS Photonics*, **2021**, 8, 625-638	6.3	17
33	Ensemble learning of diffractive optical networks. *Light: Science and Applications*, **2021**, 10, 14	16.7	18

32	All-optical information-processing capacity of diffractive surfaces. *Light: Science and Applications*, **2021**, 10, 25	16.7	21
31	Terahertz Pulse Shaping Using Diffractive Optical Networks **2021**,		3
30	Digital synthesis of histological stains using micro-structured and multiplexed virtual staining of label-free tissue. *Light: Science and Applications*, **2020**, 9, 78	16.7	24
29	Automated screening of sickle cells using a smartphone-based microscope and deep learning. *Npj Digital Medicine*, **2020**, 3, 76	15.7	20
28	Early detection and classification of live bacteria using time-lapse coherent imaging and deep learning. *Light: Science and Applications*, **2020**, 9, 118	16.7	33
27	Integration of Diffractive Optical Neural Networks with Electronic Neural Networks **2020**,		2
26	Misalignment resilient diffractive optical networks. *Nanophotonics*, **2020**, 9, 4207-4219	6.3	22
25	Emerging Advances to Transform Histopathology Using Virtual Staining. *BME Frontiers*, **2020**, 2020, 1-11	4.4	18
24	Deep Learning to Refocus 3D Images. *Optics and Photonics News*, **2020**, 31, 57	1.9	
23	Pathological crystal imaging with single-shot computational polarized light microscopy. *Journal of Biophotonics*, **2020**, 13, e201960036	3.1	10
22	Deep Learning-Based Holographic Polarization Microscopy. *ACS Photonics*, **2020**, 7, 3023-3034	6.3	17
21	Analysis of Diffractive Optical Neural Networks and Their Integration with Electronic Neural Networks. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26,	3.8	48
20	Deep learning in holography and coherent imaging. *Light: Science and Applications*, **2019**, 8, 85	16.7	89
19	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	16.7	62
18	Virtual histological staining of unlabelled tissue-autofluorescence images via deep learning. *Nature Biomedical Engineering*, **2019**, 3, 466-477	19	174
17	Deep learning-based super-resolution in coherent imaging systems. *Scientific Reports*, **2019**, 9, 3926	4.9	45
16	PhaseStain: the digital staining of label-free quantitative phase microscopy images using deep learning. *Light: Science and Applications*, **2019**, 8, 23	16.7	121
15	Generative Adversarial Networks Enable Cross-Modality Super-Resolution in Fluorescence Microscopy. *Microscopy and Microanalysis*, **2019**, 25, 1228-1229	0.5	

14	Resolution enhancement in scanning electron microscopy using deep learning. *Scientific Reports*, **2019**, 9, 12050	4.9	40
13	Deep learning-based color holographic microscopy. *Journal of Biophotonics*, **2019**, 12, e201900107	3.1	24
12	Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning. *Nature Methods*, **2019**, 16, 1323-1331	21.6	85
11	Class-specific differential detection in diffractive optical neural networks improves inference accuracy. *Advanced Photonics*, **2019**, 1, 1	8.1	35
10	Design of task-specific optical systems using broadband diffractive neural networks. *Light: Science and Applications*, **2019**, 8, 112	16.7	60
9	Deep learning enables cross-modality super-resolution in fluorescence microscopy. *Nature Methods*, **2019**, 16, 103-110	21.6	291
8	Accurate color imaging of pathology slides using holography and absorbance spectrum estimation of histochemical stains. *Journal of Biophotonics*, **2019**, 12, e201800335	3.1	5
7	Phase recovery and holographic image reconstruction using deep learning in neural networks. *Light: Science and Applications*, **2018**, 7, 17141	16.7	406
6	Deep Learning Enhanced Mobile-Phone Microscopy. *ACS Photonics*, **2018**, 5, 2354-2364	6.3	101
5	Extended depth-of-field in holographic imaging using deep-learning-based autofocusing and phase recovery. *Optica*, **2018**, 5, 704	8.6	157
4	All-optical machine learning using diffractive deep neural networks. *Science*, **2018**, 361, 1004-1008	33.3	467
3	Label-Free Bioaerosol Sensing Using Mobile Microscopy and Deep Learning. *ACS Photonics*, **2018**, 5, 4617-4627	6.3	42
2	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	16.7	75
1	Deep learning microscopy. *Optica*, **2017**, 4, 1437	8.6	337