Alon Greenbaum

List of Publications by Year
in descending order

34 papers	4,120 citations	279701 23 h-index	395590 33 g-index
36 all docs	36 docs citations	36 times ranked	5553 citing authors

#	Article	IF	Citations
1	Engineered AAVs for efficient noninvasive gene delivery to the central and peripheral nervous systems. Nature Neuroscience, 2017, 20, 1172-1179.	7.1	927
2	Imaging without lenses: achievements and remaining challenges of wide-field on-chip microscopy. Nature Methods, 2012, 9, 889-895.	9.0	461
3	Optical imaging techniques for point-of-care diagnostics. Lab on A Chip, 2013, 13, 51-67.	3.1	320
4	Wide-field computational imaging of pathology slides using lens-free on-chip microscopy. Science Translational Medicine, 2014, 6, 267ra175.	5.8	235
5	Whole-body tissue stabilization and selective extractions via tissue-hydrogel hybrids for high-resolution intact circuit mapping and phenotyping. Nature Protocols, 2015, 10, 1860-1896.	5.5	234
6	Synthetic aperture-based on-chip microscopy. Light: Science and Applications, 2015, 4, e261-e261.	7.7	204
7	Dorsal Raphe Dopamine Neurons Modulate Arousal and Promote Wakefulness by Salient Stimuli. Neuron, 2017, 94, 1205-1219.e8.	3.8	201
8	Single-molecule RNA detection at depth via hybridization chain reaction and tissue hydrogel embedding and clearing. Development (Cambridge), 2016, 143, 2862-7.	1.2	174
9	Maskless imaging of dense samples using pixel super-resolution based multi-height lensfree on-chip microscopy. Optics Express, 2012, 20, 3129.	1.7	160
10	Bone CLARITY: Clearing, imaging, and computational analysis of osteoprogenitors within intact bone marrow. Science Translational Medicine, 2017, 9, .	5.8	160
11	Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies. Nature Communications, 2019, 10, 1944.	5.8	140
12	Multiplexed Cre-dependent selection yields systemic AAVs for targeting distinct brain cell types. Nature Methods, 2020, 17, 541-550.	9.0	121
13	Field-portable wide-field microscopy of dense samples using multi-height pixel super-resolution based lensfree imaging. Lab on A Chip, 2012, 12, 1242.	3.1	117
14	The Regulative Role of Neurite Mechanical Tension in Network Development. Biophysical Journal, 2009, 96, 1661-1670.	0.2	114
15	Field-Portable Pixel Super-Resolution Colour Microscope. PLoS ONE, 2013, 8, e76475.	1.1	81
16	High-Throughput and Label-Free Single Nanoparticle Sizing Based on Time-Resolved On-Chip Microscopy. ACS Nano, 2015, 9, 3265-3273.	7.3	73
17	Wide-field computational color imaging using pixel super-resolved on-chip microscopy. Optics Express, 2013, 21, 12469.	1.7	63
18	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.	3.1	59

#	Article	IF	Citations
19	Toward giga-pixel nanoscopy on a chip: a computational wide-field look at the nano-scale without the use of lenses. Lab on A Chip, 2013, 13, 2028.	3.1	52
20	Deep learning-based autofocus method enhances image quality in light-sheet fluorescence microscopy. Biomedical Optics Express, 2021, 12, 5214.	1.5	32
21	Combined reflection and transmission microscope for telemedicine applications in field settings. Lab on A Chip, 2011, 11, 2738.	3.1	28
22	One-to-one neuronâ€“electrode interfacing. Journal of Neuroscience Methods, 2009, 182, 219-224.	1.3	27
23	Enhancement of Bone Regeneration Through the Converse Piezoelectric Effect, A Novel Approach for Applying Mechanical Stimulation. Bioelectricity, 2021, 3, 255-271.	0.6	24
24	Wide-field pathology imaging using on-chip microscopy. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2015, 467, 3-7.	1.4	23
25	Three-dimensional imaging of intact porcine cochlea using tissue clearing and custom-built light-sheet microscopy. Biomedical Optics Express, 2020, 11, 6181.	1.5	20
26	Lens-free computational imaging of capillary morphogenesis within three-dimensional substrates. Journal of Biomedical Optics, 2012, 17, 126018.	1.4	17
27	Light-guided sectioning for precise in situ localization and tissue interface analysis for brain-implanted optical fibers and GRIN lenses. Cell Reports, 2021, 36, 109744.	2.9	9
28	Illumination angle correction during image acquisition in light-sheet fluorescence microscopy using deep learning. Biomedical Optics Express, 2022, 13, 888.	1.5	9
29	Q&A: How can advances in tissue clearing and optogenetics contribute to our understanding of normal and diseased biology?. BMC Biology, 2017, 15, 87.	1.7	8
30	High throughput on-chip analysis of high-energy charged particle tracks using lensfree imaging. Applied Physics Letters, 2015, 106, 151107.	1.5	7
31	Quantitative analysis of illumination and detection corrections in adaptive light sheet fluorescence microscopy. Biomedical Optics Express, 2022, 13, 2960.	1.5	7
32	Ontogeny of cellular organization and LGR5 expression in porcine cochlea revealed using tissue clearing and 3D imaging. IScience, 2022, 25, 104695.	1.9	7
33	Detection and classification of neurons and glial cells in the MADM mouse brain using RetinaNet. PLoS ONE, 2021, 16, e0257426.	1.1	5
34	Phenotyping Intact Mouse Bones Using Bone CLARITY. Methods in Molecular Biology, 2021, 2230, 217-230.	0.4	0