

# Hari Shroff

## List of Publications by Year in descending order

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Version: 2024-02-01

90  
papers

9,295  
citations

81839

39  
h-index

56687

83  
g-index

111  
all docs

111  
docs citations

111  
times ranked

13016  
citing authors

#	ARTICLE	IF	CITATIONS
1	Human deafness-associated variants alter the dynamics of key molecules in hair cell stereocilia F-actin cores. <i>Human Genetics</i> , 2022, 141, 363-382.	1.8	12
2	Cytonemes coordinate asymmetric signaling and organization in the <i>Drosophila</i> muscle progenitor niche. <i>Nature Communications</i> , 2022, 13, 1185.	5.8	8
3	The HIV-1 Viral Protease Is Activated during Assembly and Budding Prior to Particle Release. <i>Journal of Virology</i> , 2022, 96, e0219821.	1.5	18
4	Plasticity in structure and assembly of SARS-CoV-2 nucleocapsid protein. , 2022, 1, .		36
5	Nanoscale Pattern Extraction from Relative Positions of Sparse 3D Localizations. <i>Nano Letters</i> , 2021, 21, 1213-1220.	4.5	19
6	Semi-automated single-molecule microscopy screening of fast-dissociating specific antibodies directly from hybridoma cultures. <i>Cell Reports</i> , 2021, 34, 108708.	2.9	13
7	Structural and developmental principles of neuropil assembly in <i>C. elegans</i> . <i>Nature</i> , 2021, 591, 99-104.	13.7	60
8	Three-dimensional residual channel attention networks denoise and sharpen fluorescence microscopy image volumes. <i>Nature Methods</i> , 2021, 18, 678-687.	9.0	94
9	Signaling through polymerization and degradation: Analysis and simulations of T cell activation mediated by Bcl10. <i>PLoS Computational Biology</i> , 2021, 17, e1007986.	1.5	5
10	Pupal behavior emerges from unstructured muscle activity in response to neuromodulation in <i>Drosophila</i> . <i>ELife</i> , 2021, 10, .	2.8	6
11	Actomyosin dynamics modulate microtubule deformation and growth during T-cell activation. <i>Molecular Biology of the Cell</i> , 2021, 32, 1641-1653.	0.9	7
12	A polymer index-matched to water enables diverse applications in fluorescence microscopy. <i>Lab on A Chip</i> , 2021, 21, 1549-1562.	3.1	18
13	Differential adhesion regulates neurite placement via a retrograde zipper mechanism. <i>ELife</i> , 2021, 10, .	2.8	13
14	Multiview confocal super-resolution microscopy. <i>Nature</i> , 2021, 600, 279-284.	13.7	55
15	Quantitative live cell imaging reveals influenza virus manipulation of Rab11A transport through reduced dynein association. <i>Nature Communications</i> , 2020, 11, 23.	5.8	37
16	Determining Protein Organisation within the Z-Disc Using 3D Super-Resolution Microscopy and Pattern Recognition Analysis.. <i>Microscopy and Microanalysis</i> , 2020, 26, 128-129.	0.2	0
17	Sequence-Independent Self-Assembly of Germ Granule mRNAs into Homotypic Clusters. <i>Molecular Cell</i> , 2020, 78, 941-950.e12.	4.5	58
18	Rapid image deconvolution and multiview fusion for optical microscopy. <i>Nature Biotechnology</i> , 2020, 38, 1337-1346.	9.4	105

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19	WASP family proteins regulate the mobility of the B cell receptor during signaling activation. <i>Nature Communications</i> , 2020, 11, 439.	5.8	27
20	Spatio-angular fluorescence microscopy III Constrained angular diffusion, polarized excitation, and high-NA imaging. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2020, 37, 1465.	0.8	9
21	Zebrafish Posterior Lateral Line primordium migration requires interactions between a superficial sheath of motile cells and the skin. <i>ELife</i> , 2020, 9, .	2.8	17
22	Transforming the development and dissemination of cutting-edge microscopy and computation. <i>Nature Methods</i> , 2019, 16, 667-669.	9.0	16
23	Anchoring cortical granules in the cortex ensures trafficking to the plasma membrane for post-fertilization exocytosis. <i>Nature Communications</i> , 2019, 10, 2271.	5.8	19
24	Isotropic Light-Sheet Microscopy and Automated Cell Lineage Analyses to Catalogue <i>Caenorhabditis elegans</i> Embryogenesis with Subcellular Resolution. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	17
25	Generating a 4D Atlas of Nuclear Positions in Embryonic <i>Caenorhabditis elegans</i> . <i>Biophysical Journal</i> , 2019, 116, 558a.	0.2	0
26	A 2-dimensional ratchet model describes assembly initiation of a specialized bacterial cell surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21789-21799.	3.3	23
27	Spatio-angular fluorescence microscopy I Basic theory. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2019, 36, 1334.	0.8	26
28	Spatio-angular fluorescence microscopy II Paraxial 4f imaging. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2019, 36, 1346.	0.8	15
29	Faster, sharper, and deeper: structured illumination microscopy for biological imaging. <i>Nature Methods</i> , 2018, 15, 1011-1019.	9.0	257
30	A scheme for 3-dimensional morphological reconstruction and force inference in the early <i>C. elegans</i> embryo. <i>PLoS ONE</i> , 2018, 13, e0199151.	1.1	13
31	Biological Imaging at High Spatiotemporal Resolution. <i>Microscopy and Microanalysis</i> , 2018, 24, 1350-1351.	0.2	0
32	A Genetically Encoded Biosensor Strategy for Quantifying Non-muscle Myosin II Phosphorylation Dynamics in Living Cells and Organisms. <i>Cell Reports</i> , 2018, 24, 1060-1070.e4.	2.9	13
33	Single-shot super-resolution total internal reflection fluorescence microscopy. <i>Nature Methods</i> , 2018, 15, 425-428.	9.0	57
34	Adaptive optics improves multiphoton super-resolution imaging. , 2018, , .		0
35	Fluorescence Microscopy: A Concise Guide to Current Imaging Methods. <i>Current Protocols in Neuroscience</i> , 2017, 79, 2.1.1-2.1.25.	2.6	73
36	Visualizing Calcium Flux in Freely Moving Nematode Embryos. <i>Biophysical Journal</i> , 2017, 112, 1975-1983.	0.2	31

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37	Adaptive optics improves multiphoton super-resolution imaging. <i>Nature Methods</i> , 2017, 14, 869-872.	9.0	97
38	mRNA quantification using single-molecule FISH in <i>Drosophila</i> embryos. <i>Nature Protocols</i> , 2017, 12, 1326-1348.	5.5	92
39	Real-time visualization of chromatin modification in isolated nuclei. <i>Journal of Cell Science</i> , 2017, 130, 2926-2940.	1.2	16
40	Myc Regulates Chromatin Decompaction and Nuclear Architecture during B Cell Activation. <i>Molecular Cell</i> , 2017, 67, 566-578.e10.	4.5	174
41	Albumin/vaccine nanocomplexes that assemble in vivo for combination cancer immunotherapy. <i>Nature Communications</i> , 2017, 8, 1954.	5.8	237
42	Intertwining DNA-RNA nanocapsules loaded with tumor neoantigens as synergistic nanovaccines for cancer immunotherapy. <i>Nature Communications</i> , 2017, 8, 1482.	5.8	193
43	Reflective imaging improves spatiotemporal resolution and collection efficiency in light sheet microscopy. <i>Nature Communications</i> , 2017, 8, 1452.	5.8	41
44	Assessing phototoxicity in live fluorescence imaging. <i>Nature Methods</i> , 2017, 14, 657-661.	9.0	346
45	Single-fluorophore orientation determination with multiview polarized illumination: modeling and microscope design. <i>Optics Express</i> , 2017, 25, 31309.	1.7	8
46	Anticipating, measuring, and minimizing MEMS mirror scan error to improve laser scanning microscopy's speed and accuracy. <i>PLoS ONE</i> , 2017, 12, e0185849.	1.1	6
47	Immunogenic cancer cell death selectively induced by near infrared photoimmunotherapy initiates host tumor immunity. <i>Oncotarget</i> , 2017, 8, 10425-10436.	0.8	179
48	Simultaneous multiview capture and fusion improves spatial resolution in wide-field and light-sheet microscopy. <i>Optica</i> , 2016, 3, 897.	4.8	53
49	Using Stage- and Slit-Scanning to Improve Contrast and Optical Sectioning in Dual-View Inverted Light Sheet Microscopy (diSPIM). <i>Biological Bulletin</i> , 2016, 231, 26-39.	0.7	24
50	Clustered nuclei maintain autonomy and nucleocytoplasmic ratio control in a syncytium. <i>Molecular Biology of the Cell</i> , 2016, 27, 2000-2007.	0.9	37
51	Imaging Calcium Activity Patterns in the <i>Drosophila</i> Pupal Ecdysis Neural Circuit. <i>Biophysical Journal</i> , 2015, 108, 153a.	0.2	0
52	Watching a roundworm develop with a sheet of light. <i>Physics Today</i> , 2015, 68, 58-59.	0.3	4
53	An imaging and analysis toolset for the study of <i>Caenorhabditis elegans</i> neurodevelopment. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
54	<i>Drosophila</i> germ granules are structured and contain homotypic mRNA clusters. <i>Nature Communications</i> , 2015, 6, 7962.	5.8	151

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55	Construction of an instant structured illumination microscope. <i>Methods</i> , 2015, 88, 37-47.	1.9	31
56	WormGUIDES: an interactive single cell developmental atlas and tool for collaborative multidimensional data exploration. <i>BMC Bioinformatics</i> , 2015, 16, 189.	1.2	40
57	Incoherent structured illumination improves optical sectioning and contrast in multiphoton super-resolution microscopy. <i>Optics Express</i> , 2015, 23, 5327.	1.7	17
58	A New Simplified 3D Model of Cardiac Pacemaker Cell Based on Superresolution Structured Illumination Microscopy (SIM). <i>Biophysical Journal</i> , 2015, 108, 569a.	0.2	0
59	Three-Dimensional Photoactivated Localization Microscopy with Genetically Expressed Probes. <i>Methods in Molecular Biology</i> , 2015, 1251, 231-261.	0.4	6
60	Untwisting the <i>Caenorhabditis elegans</i> embryo. <i>ELife</i> , 2015, 4, .	2.8	33
61	Influenza A Virus Assembly Intermediates Fuse in the Cytoplasm. <i>PLoS Pathogens</i> , 2014, 10, e1003971.	2.1	128
62	Asymmetric Division and Differential Gene Expression during a Bacterial Developmental Program Requires DivIVA. <i>PLoS Genetics</i> , 2014, 10, e1004526.	1.5	52
63	Two-photon instant structured illumination microscopy improves the depth penetration of super-resolution imaging in thick scattering samples. <i>Optica</i> , 2014, 1, 181.	4.8	107
64	Richardson's Lucy Deconvolution as a General Tool for Combining Images with Complementary Strengths. <i>ChemPhysChem</i> , 2014, 15, 794-800.	1.0	83
65	Faster fluorescence microscopy: advances in high speed biological imaging. <i>Current Opinion in Chemical Biology</i> , 2014, 20, 46-53.	2.8	90
66	Two-photon excitation improves multifocal structured illumination microscopy in thick scattering tissue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 5254-5259.	3.3	111
67	Dual-view plane illumination microscopy for rapid and spatially isotropic imaging. <i>Nature Protocols</i> , 2014, 9, 2555-2573.	5.5	195
68	Instant super-resolution imaging in live cells and embryos via analog image processing. <i>Nature Methods</i> , 2013, 10, 1122-1126.	9.0	355
69	Spatially isotropic four-dimensional imaging with dual-view plane illumination microscopy. <i>Nature Biotechnology</i> , 2013, 31, 1032-1038.	9.4	290
70	Advanced optical imaging techniques for neurodevelopment. <i>Current Opinion in Neurobiology</i> , 2013, 23, 1090-1097.	2.0	27
71	3D Palm Shows Distinct Distributions of Z-Disc Proteins with the Z-Discs in Cardiomyocytes. <i>Biophysical Journal</i> , 2013, 104, 485a.	0.2	0
72	Photoactivated Localization Microscopy (PALM) of Adhesion Complexes. <i>Current Protocols in Cell Biology</i> , 2013, 58, Unit4.21.	2.3	14

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73	Tools for the Quantitative Analysis of Sedimentation Boundaries Detected by Fluorescence Optical Analytical Ultracentrifugation. <i>PLoS ONE</i> , 2013, 8, e77245.	1.1	27
74	Resolution doubling in live, multicellular organisms via multifocal structured illumination microscopy. <i>Nature Methods</i> , 2012, 9, 749-754.	9.0	397
75	Confined activation and subdiffraction localization enables whole-cell PALM with genetically expressed probes. <i>Nature Methods</i> , 2011, 8, 327-333.	9.0	174
76	Microscopy in 3D: a biologist's toolbox. <i>Trends in Cell Biology</i> , 2011, 21, 682-691.	3.6	133
77	Inverted selective plane illumination microscopy (SPIM) enables coupled cell identity lineaging and neurodevelopmental imaging in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17708-17713.	3.3	264
78	Single-Molecule Discrimination of Discrete Perisynaptic and Distributed Sites of Actin Filament Assembly within Dendritic Spines. <i>Neuron</i> , 2010, 67, 86-99.	3.8	248
79	Self-Organization of the <i>Escherichia coli</i> Chemotaxis Network Imaged with Super-Resolution Light Microscopy. <i>PLoS Biology</i> , 2009, 7, e1000137.	2.6	310
80	Three-Dimensional Nanoscopy of Biological Samples. , 2009, , .		0
81	High-density mapping of single-molecule trajectories with photoactivated localization microscopy. <i>Nature Methods</i> , 2008, 5, 155-157.	9.0	1,104
82	Live-cell photoactivated localization microscopy of nanoscale adhesion dynamics. <i>Nature Methods</i> , 2008, 5, 417-423.	9.0	796
83	Advances in the speed and resolution of light microscopy. <i>Current Opinion in Neurobiology</i> , 2008, 18, 605-616.	2.0	117
84	Optical Measurement of Mechanical Forces Inside Short DNA Loops. <i>Biophysical Journal</i> , 2008, 94, 2179-2186.	0.2	25
85	Multilayer three-dimensional super resolution imaging of thick biological samples. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 20221-20226.	3.3	182
86	Photoactivated Localization Microscopy (PALM) of Adhesion Complexes. <i>Current Protocols in Cell Biology</i> , 2008, 41, Unit 4.21.	2.3	47
87	Dual-color superresolution imaging of genetically expressed probes within individual adhesion complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20308-20313.	3.3	478
88	Optical trapping and integration of semiconductor nanowire assemblies in water. <i>Nature Materials</i> , 2006, 5, 97-101.	13.3	399
89	Biocompatible Force Sensor with Optical Readout and Dimensions of 6 nm <sup>3</sup> . <i>Nano Letters</i> , 2005, 5, 1509-1514.	4.5	112
90	The phosphorescence microphone: A device for testing oxygen sensors and films. <i>Review of Scientific Instruments</i> , 2003, 74, 5260-5266.	0.6	21