Jan Huisken

List of Publications by Year in Descending Order

82 papers	6,841 citations	37 h-index	82 g-index
101 ext. papers	8,601 ext. citations	10.5 avg, IF	6.15 L-index

#	Paper	IF	Citations
82	Hand2 delineates mesothelium progenitors and is reactivated in mesothelioma.. *Nature Communications*, **2022**, 13, 1677	17.4	3
81	Spatial transcriptomics reveals antiparasitic targets associated with essential behaviors in the human parasite Brugia malayi.. *PLoS Pathogens*, **2022**, 18, e1010399	7.6	0
80	KRas-transformed epithelia cells invade and partially dedifferentiate by basal cell extrusion. *Nature Communications*, **2021**, 12, 7180	17.4	5
79	Multidisciplinarity Is Critical to Unlock the Full Potential of Modern Light Microscopy. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 739015	5.7	
78	linus: Conveniently explore, share, and present large-scale biological trajectory data in a web browser. *PLoS Computational Biology*, **2021**, 17, e1009503	5	1
77	Tutorial: practical considerations for tissue clearing and imaging. *Nature Protocols*, **2021**, 16, 2732-2748	18.8	12
76	Role of Secretoglobin (club cell) NFB/RelA-TGF signaling in aero-allergen-induced epithelial plasticity and subepithelial myofibroblast transdifferentiation.. *Respiratory Research*, **2021**, 22, 315	7.3	2
75	Efficacy of Voriconazole against Aspergillus fumigatus Infection Depends on Host Immune Function. *Antimicrobial Agents and Chemotherapy*, **2020**, 64,	5.9	5
74	Label-free redox imaging of patient-derived organoids using selective plane illumination microscopy. *Biomedical Optics Express*, **2020**, 11, 2591-2606	3.5	11
73	Image quality guided smart rotation improves coverage in microscopy. *Nature Communications*, **2020**, 11, 150	17.4	11
72	Long-term in vivo imaging reveals tumor-specific dissemination and captures host tumor interaction in zebrafish xenografts. *Scientific Reports*, **2020**, 10, 13254	4.9	11
71	The effect of hyperglycemia on neurovascular coupling and cerebrovascular patterning in zebrafish. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 298-313	7.3	10
70	A conserved regulatory program initiates lateral plate mesoderm emergence across chordates. *Nature Communications*, **2019**, 10, 3857	17.4	24
69	3Dscript: animating 3D/4D microscopy data using a natural-language-based syntax. *Nature Methods* , **2019**, 16, 278-280	21.6	29
68	Multi-sample SPIM image acquisition, processing and analysis of vascular growth in zebrafish. *Development (Cambridge)*, **2019**, 146,	6.6	26
67	Loss of the Polycomb group protein Rnf2 results in derepression of tbx-transcription factors and defects in embryonic and cardiac development. *Scientific Reports*, **2019**, 9, 4327	4.9	9
66	Cerebrovascular endothelial cells form transient Notch-dependent cystic structures in zebrafish. *EMBO Reports*, **2019**, 20, e47047	6.5	10

65	Putting advanced microscopy in the hands of biologists. *Nature Methods*, **2019**, 16, 1069-1073	21.6	14
64	Multi-scale imaging and analysis identify pan-embryo cell dynamics of germlayer formation in zebrafish. *Nature Communications*, **2019**, 10, 5753	17.4	22
63	Adaptable, illumination patterning light sheet microscopy. *Scientific Reports*, **2018**, 8, 9615	4.9	8
62	Neuromesodermal progenitors are a conserved source of spinal cord with divergent growth dynamics. *Development (Cambridge)*, **2018**, 145,	6.6	35
61	Dynamic and non-contact 3D sample rotation for microscopy. *Nature Communications*, **2018**, 9, 5025	17.4	11
60	Continuous addition of progenitors forms the cardiac ventricle in zebrafish. *Nature Communications* , **2018**, 9, 2001	17.4	28
59	Light Sheet Microscopy **2017**, 243-265		2
58	A guide to light-sheet fluorescence microscopy for multiscale imaging. *Nature Methods*, **2017**, 14, 360-373	21.6	328
57	Spatiotemporal Deformable Prototypes for Motion Anomaly Detection. *International Journal of Computer Vision*, **2017**, 122, 502-523	10.6	3
56	Smart Microscopy for Multi-Scale Developmental Biology in Real-Time. *Microscopy and Microanalysis*, **2017**, 23, 1166-1167	0.5	
55	Cell-accurate optical mapping across the entire developing heart. *ELife*, **2017**, 6,	8.9	39
54	Fast Fluorescence Microscopy with Light Sheets. *Biological Bulletin*, **2016**, 231, 14-25	1.5	20
53	eduSPIM: Light Sheet Microscopy in the Museum. *PLoS ONE*, **2016**, 11, e0161402	3.7	8
52	Software Framework for Controlling Unsupervised Scientific Instruments. *PLoS ONE*, **2016**, 11, e0161671	3.7	1
51	Biology-inspired visualization of morphogenetic motion in the zebrafish endoderm **2016**,		2
50	The smart and gentle microscope. *Nature Biotechnology*, **2015**, 33, 815-8	44.5	52
49	Endothelial cell self-fusion during vascular pruning. *PLoS Biology*, **2015**, 13, e1002126	9.7	94
48	Optical tomography complements light sheet microscopy for in toto imaging of zebrafish development. *Development (Cambridge)*, **2015**, 142, 1016-20	6.6	53

47	Hyperspectral light sheet microscopy. *Nature Communications*, **2015**, 6, 7990	17.4	74
46	Real-time multi-view deconvolution. *Bioinformatics*, **2015**, 31, 3398-400	7.2	26
45	Guide to light-sheet microscopy for adventurous biologists. *Nature Methods*, **2015**, 12, 30-4	21.6	135
44	Regulation of 1 integrin-Klf2-mediated angiogenesis by CCM proteins. *Developmental Cell*, **2015**, 32, 181-90	10.2	99
43	Mechanical Coupling between Endoderm Invagination and Axis Extension in Drosophila. *PLoS Biology*, **2015**, 13, e1002292	9.7	88
42	In vivo imaging of cardiac development and function in zebrafish using light sheet microscopy. *Swiss Medical Weekly*, **2015**, 145, w14227	3.1	19
41	Genome-wide RNA Tomography in the zebrafish embryo. *Cell*, **2014**, 159, 662-75	56.2	174
40	Light sheet microscopy. *Methods in Cell Biology*, **2014**, 123, 193-215	1.8	60
39	High-resolution reconstruction of the beating zebrafish heart. *Nature Methods*, **2014**, 11, 919-22	21.6	153
38	Multilayer mounting for long-term light sheet microscopy of zebrafish. *Journal of Visualized Experiments*, **2014**, e51119	1.6	18
37	Single continuous lumen formation in the zebrafish gut is mediated by smoothened-dependent tissue remodeling. *Development (Cambridge)*, **2014**, 141, 1110-9	6.6	65
36	OpenSPIM: an open-access light-sheet microscopy platform. *Nature Methods*, **2013**, 10, 598-9	21.6	215
35	High-speed panoramic light-sheet microscopy reveals global endodermal cell dynamics. *Nature Communications*, **2013**, 4, 2207	17.4	127
34	Rapid 3D light-sheet microscopy with a tunable lens. *Optics Express*, **2013**, 21, 21010-26	3.3	233
33	The Popeye domain containing 2 (popdc2) gene in zebrafish is required for heart and skeletal muscle development. *Developmental Biology*, **2012**, 363, 438-50	3.1	46
32	Multilayer mounting enables long-term imaging of zebrafish development in a light sheet microscope. *Development (Cambridge)*, **2012**, 139, 3242-7	6.6	172
31	Fibrillin-2b regulates endocardial morphogenesis in zebrafish. *Developmental Biology*, **2012**, 372, 111-9	3.1	13
30	Transgenic zebrafish illuminate the dynamics of thyroid morphogenesis and its relationship to cardiovascular development. *Developmental Biology*, **2012**, 372, 203-16	3.1	52

29	Slicing embryos gently with laser light sheets. *BioEssays*, **2012**, 34, 406-11	4.1	30
28	Light sheet microscopy for real-time developmental biology. *Current Opinion in Genetics and Development*, **2011**, 21, 566-72	4.9	109
27	A dual role for ErbB2 signaling in cardiac trabeculation. *Development (Cambridge)*, **2010**, 137, 3867-75	6.6	151
26	Optogenetic control of cardiac function. *Science*, **2010**, 330, 971-4	33.3	338
25	Cse1l is a negative regulator of CFTR-dependent fluid secretion. *Current Biology*, **2010**, 20, 1840-5	6.3	42
24	Genetic evidence for a noncanonical function of seryl-tRNA synthetase in vascular development. *Circulation Research*, **2009**, 104, 1260-6	15.7	54
23	Arterial-venous segregation by selective cell sprouting: an alternative mode of blood vessel formation. *Science*, **2009**, 326, 294-8	33.3	256
22	Selective plane illumination microscopy techniques in developmental biology. *Development (Cambridge)*, **2009**, 136, 1963-75	6.6	393
21	The extracellular domain of Smoothened regulates ciliary localization and is required for high-level Hh signaling. *Current Biology*, **2009**, 19, 1034-9	6.3	70
20	Multiple roles for Med12 in vertebrate endoderm development. *Developmental Biology*, **2008**, 317, 467-79	3.1	41
19	Regulation of neurocoel morphogenesis by Pard6 gamma b. *Developmental Biology*, **2008**, 324, 41-54	3.1	47
18	High-speed imaging of developing heart valves reveals interplay of morphogenesis and function. *Development (Cambridge)*, **2008**, 135, 1179-87	6.6	159
17	Genetic and physiologic dissection of the vertebrate cardiac conduction system. *PLoS Biology*, **2008**, 6, e109	9.7	196
16	Even fluorescence excitation by multidirectional selective plane illumination microscopy (mSPIM). *Optics Letters*, **2007**, 32, 2608-10	3	270
15	Three-dimensional optical manipulation using four collimated intersecting laser beams. *Optics Express*, **2007**, 15, 4921-8	3.3	9
14	Multi-view image fusion improves resolution in three-dimensional microscopy. *Optics Express*, **2007**, 15, 8029-42	3.3	147
13	Zebrafish model for human long QT syndrome. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 11316-21	11.5	183
12	Selective Plane Illumination Microscopy **2006**, 672-679		2

11	Studying live embryos in 4D: Selective plane illumination microscopy: a new technique for high-resolution four-dimensional imaging. *Biochemist*, **2005**, 27, 13-16	0.5	1
10	Optical sectioning deep inside live embryos by selective plane illumination microscopy. *Science*, **2004**, 305, 1007-9	33.3	1531
9	Active particle manipulation with four laser beams **2004**, 5322, 114		1
8	Multiple imaging axis microscopy improves resolution for thick-sample applications. *Optics Letters*, **2003**, 28, 1654-6	3	48
7	Optical Trapping of Small Particles. *Springer Series in Optical Sciences*, **2003**, 357-388	0.5	
6	Optical levitation of absorbing particles with a nominally Gaussian laser beam. *Optics Letters*, **2002**, 27, 1223-5	3	28
5	Optical scanning holography as a technique for high-resolution three-dimensional biological microscopy. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2002**, 19, 1910-8	1.8	40
4	linus: Conveniently explore, share, and present large-scale biological trajectory data from a web browser		1
3	Hand2 delineates mesothelium progenitors and is reactivated in mesothelioma		3
2	Continuous high-resolution in vivo imaging reveals tumor-specific dissemination in an embryonic zebrafish xenograft model		3
1	Pan-embryo cell dynamics of germlayer formation in zebrafish		4