Thomas Walter

List of Publications by Year
in descending order

50 papers	5,012 citations	201674 27 h-index	302126 39 g-index
60 all docs	60 docs citations	60 times ranked	7163 citing authors

#	Article	IF	Citations
1	Neural network fastâ€classifies biological images through features selecting to power automated microscopy. Journal of Microscopy, 2022, 285, 3-19.	1.8	2
2	FISH-quant v2: a scalable and modular tool for smFISH image analysis. Rna, 2022, 28, 786-795.	3.5	45
3	A choreography of centrosomal mRNAs reveals a conserved localization mechanism involving active polysome transport. Nature Communications, 2021, 12, 1352.	12.8	52
4	Spatial transcriptomics for respiratory research and medicine. European Respiratory Journal, 2021, 58, 2004314.	6.7	3
5	The kinesin KIF1C transports APC-dependent mRNAs to cell protrusions. Rna, 2021, 27, 1528-1544.	3.5	23
6	Domain-invariant features for mechanism of action prediction in a multi-cell-line drug screen. Bioinformatics, 2020, 36, 1607-1613.	4.1	7
7	A Dual Protein-mRNA Localization Screen Reveals Compartmentalized Translation and Widespread Co-translational RNA Targeting. Developmental Cell, 2020, 54, 773-791.e5.	7.0	88
8	Experimentally-Generated Ground Truth for Detecting Cell Types in an Image-Based Immunotherapy Screen. , 2020, , .		1
9	Segmentation of Nuclei in Histopathology Images by Deep Regression of the Distance Map. IEEE Transactions on Medical Imaging, 2019, 38, 448-459.	8.9	351
10	A Deep Learning Approach To Identify MRNA Localization Patterns. , 2019, , .		3
11	Predicting Residual Cancer Burden In A Triple Negative Breast Cancer Cohort. , 2019, , .		5
12	Human lymphoid organ cDC2 and macrophages play complementary roles in T follicular helper responses. Journal of Experimental Medicine, 2019, 216, 1561-1581.	8.5	63
13	Analysing double-strand breaks in cultured cells for drug screening applications by causal inference. , 2018, , .		2
14	A computational framework to study sub-cellular RNA localization. Nature Communications, 2018, 9, 4584.	12.8	47
15	Kernel Multitask Regression for Toxicogenetics. Molecular Informatics, 2017, 36, 1700053.	2.5	2
16	Nuclei segmentation in histopathology images using deep neural networks. , 2017, , .		125
17	smiFISH and FISH-quant â€“ a flexible single RNA detection approach with super-resolution capability. Nucleic Acids Research, 2016, 44, e165-e165.	14.5	312
18	New general features based on superpixels for image segmentation learning. , 2016, , .		10

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19	ARHGEF17 is an essential spindle assembly checkpoint factor that targets Mps1 to kinetochores. Journal of Cell Biology, 2016, 212, 647-659.	5.2	20
20	Prediction of human population responses to toxic compounds by a collaborative competition. Nature Biotechnology, 2015, 33, 933-940.	17.5	88
21	Waterpixels. IEEE Transactions on Image Processing, 2015, 24, 3707-3716.	9.8	85
22	A generic methodological framework for studying single cell motility in high-throughput time-lapse data. Bioinformatics, 2015, 31, i320-i328.	4.1	18
23	Infering an ontology of single cell motions from high-throughput microscopy data. , 2015, , .		1
24	Assessment of algorithms for mitosis detection in breast cancer histopathology images. Medical Image Analysis, 2015, 20, 237-248.	11.6	338
25	Integration of biological data by kernels on graph nodes allows prediction of new genes involved in mitotic chromosome condensation. Molecular Biology of the Cell, 2014, 25, 2522-2536.	2.1	44
26	Waterpixels: Superpixels based on the watershed transformation. , 2014, , .		21
27	MAP1S controls microtubule stability throughout the cell cycle in human cells. Journal of Cell Science, 2014, 127, 5007-13.	2.0	14
28	A Genomic Multiprocess Survey of Machineries that Control and Link Cell Shape, Microtubule Organization, and Cell-Cycle Progression. Developmental Cell, 2014, 31, 227-239.	7.0	36
29	Dynamical modelling of phenotypes in a genome-wide RNAi live-cell imaging assay. BMC Bioinformatics, 2013, 14, 308.	2.6	13
30	Mitotic lamin disassembly is triggered by lipid-mediated signaling. Journal of Cell Biology, 2012, 198, 981-990.	5.2	63
31	Micropilot: automation of fluorescence microscopyâ€“based imaging for systems biology. Nature Methods, 2011, 8, 246-249.	19.0	140
32	Phenotypic profiling of the human genome by time-lapse microscopy reveals cell division genes. Nature, 2010, 464, 721-727.	27.8	768
33	Visualization of image data from cells to organisms. Nature Methods, 2010, 7, S26-S41.	19.0	226
34	CellCognition: time-resolved phenotype annotation in high-throughput live cell imaging. Nature Methods, 2010, 7, 747-754.	19.0	331
35	Visualizing biological dataâ€”now and in the future. Nature Methods, 2010, 7, S2-S4.	19.0	115
36	High-Throughput Microscopy Using Live Mammalian Cells. Cold Spring Harbor Protocols, 2010, 2010, pdb.top84.	0.3	5

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37	Automatic identification and clustering of chromosome phenotypes in a genome wide RNAi screen by time-lapse imaging. Journal of Structural Biology, 2010, 170, 1-9.	2.8	49
38	Evaluation of automated fundus photograph analysis algorithms for detecting microaneurysms, haemorrhages and exudates, and of a computer-assisted diagnostic system for grading diabetic retinopathy. Diabetes and Metabolism, 2010, 36, 213-220.	2.9	75
39	EML3 is a nuclear microtubule-binding protein required for the correct alignment of chromosomes in metaphase. Journal of Cell Science, 2008, 121, 1718-1726.	2.0	37
40	A genome wide RNAI screen by time lapse microscopy in order to identify mitotic genes — computational aspects and challenges. , 2008, , .		0
41	Anti-angiogenic properties ofmyo-inositol trispyrophosphatein ovoand growth reduction of implanted glioma. FEBS Letters, 2007, 581, 962-966.	2.8	28
42	Reverse transfection on cell arrays for high content screening microscopy. Nature Protocols, 2007, 2, 392-399.	12.0	179
43	Redistribution of the neurosensory retina in inferior limited macular translocation: an evaluation using image registration. Graefe's Archive for Clinical and Experimental Ophthalmology, 2007, 245, 437-442.	1.9	3
44	Automatic detection of microaneurysms in color fundus images. Medical Image Analysis, 2007, 11, 555-566.	11.6	292
45	Automatic Analysis of Color Fundus Photographs and Its Application to the Diagnosis of Diabetic Retinopathy. , 2005, , 315-368.		12
46	A contribution of image processing to the diagnosis of diabetic retinopathy-detection of exudates in color fundus images of the human retina. IEEE Transactions on Medical Imaging, 2002, 21, 1236-1243.	8.9	667
47	Automatic Detection of Microaneurysms in Color Fundus Images of the Human Retina by Means of the Bounding Box Closing. Lecture Notes in Computer Science, 2002, , 210-220.	1.3	32
48	Segmentation of Color Fundus Images of the Human Retina: Detection of the Optic Disc and the Vascular Tree Using Morphological Techniques. Lecture Notes in Computer Science, 2001, , 282-287.	1.3	140
49	A Localization Screen Reveals Translation Factories and Widespread Co-Translational Protein Targeting. SSRN Electronic Journal, 0, , .	0.4	1
50	Prediction of Treatment Response in Triple Negative Breast Cancer From Whole Slide Images. Frontiers in Signal Processing, 0, 2, .	1.7	2