Martin MaÅ¡ka

List of Publications by Year
in descending order

33 papers	2,097 citations	623188 14 h-index	676716 22 g-index
34 all docs	34 docs citations	34 times ranked	3124 citing authors

#	Article	IF	Citations
1	BIAFLOWS: A Collaborative Framework to Reproducibly Deploy and Benchmark Bioimage Analysis Workflows. Patterns, 2020, 1, 100040.	3.1	25
2	Deep-Learning-Based Segmentation of Small Extracellular Vesicles in Transmission Electron Microscopy Images. Scientific Reports, 2019, 9, 13211.	1.6	32
3	Automatic Fusion of Segmentation and Tracking Labels. Lecture Notes in Computer Science, 2019, , 446-454.	1.0	2
4	CytoPacq: a web-interface for simulating multi-dimensional cell imaging. Bioinformatics, 2019, 35, 4531-4533.	1.8	18
5	TEM ExosomeAnalyzer: a computerâ€assisted software tool for quantitative evaluation of extracellular vesicles in transmission electron microscopy images. Journal of Extracellular Vesicles, 2019, 8, 1560808.	5.5	36
6	Toward Robust Fully 3D Filopodium Segmentation and Tracking in Time-Lapse Fluorescence Microscopy. , 2019, , .		3
7	3-D Quantification of Filopodia in Motile Cancer Cells. IEEE Transactions on Medical Imaging, 2019, 38, 862-872.	5.4	19
8	Model-Based Generation of Synthetic 3D Time-Lapse Sequences of Multiple Mutually Interacting Motile Cells withÂFilopodia. Lecture Notes in Computer Science, 2018, , 71-79.	1.0	2
9	FiloGen: A Model-Based Generator of Synthetic 3-D Time-Lapse Sequences of Single Motile Cells With Growing and Branching Filopodia. IEEE Transactions on Medical Imaging, 2018, 37, 2630-2641.	5.4	27
10	Segmentation of actin-stained 3D fluorescent cells with filopodial protrusions using convolutional neural networks. , 2018, , .		8
11	An objective comparison of cell-tracking algorithms. Nature Methods, 2017, 14, 1141-1152.	9.0	399
12	Model-based generation of synthetic 3D time-lapse sequences of motile cells with growing filopodia. , 2017, , .		5
13	Particle Tracking Accuracy Measurement Based on Comparison of Linear Oriented Forests. , 2017, , .		0
14	Characterization of three-dimensional cancer cell migration in mixed collagen-Matrigel scaffolds using microfluidics and image analysis. PLoS ONE, 2017, 12, e0171417.	1.1	116
15	Automatic Detection and Segmentation of Exosomes in Transmission Electron Microscopy. Lecture Notes in Computer Science, 2016, , 318-325.	1.0	3
16	Quantification of the 3D collagen network geometry in confocal reflection microscopy. , 2015, , .		3
17	Cell Tracking Accuracy Measurement Based on Comparison of Acyclic Oriented Graphs. PLoS ONE, 2015, 10, e0144959.	1.1	68
18	Characterization of the role of collagen network structure and composition in cancer cell migration. , 2015, 2015, 8139-42.		2

#	Article	IF	Citations
19	A benchmark for comparison of cell tracking algorithms. Bioinformatics, 2014, 30, 1609-1617.	1.8	345
20	On proper simulation of phenomena influencing image formation in fluorescence microscopy. , 2014, , .		4
21	Objective comparison of particle tracking methods. Nature Methods, 2014, 11, 281-289.	9.0	805
22	Segmentation and Shape Tracking of Whole Fluorescent Cells Based on the Chanâ€“Vese Model. IEEE Transactions on Medical Imaging, 2013, 32, 995-1006.	5.4	86
23	Automatic quantification of filopodia-based cell migration. , 2013, , .		0
24	Fast tracking of fluorescent cells based on the Chan-Vese model. , 2012, , .		4
25	Smooth Chanâ€“Vese segmentation via graph cuts. Pattern Recognition Letters, 2012, 33, 1405-1410.	2.6	14
26	The role of chromatin condensation during granulopoiesis in the regulation of gene cluster expression. Epigenetics, 2010, 5, 758-766.	1.3	5
27	A Fast Level Set-Like Algorithm for Region-Based Active Contours. Lecture Notes in Computer Science, 2010, , 387-396.	1.0	6
28	Acquiarium: Free software for the acquisition and analysis of 3D images of cells in fluorescence microscopy. , 2009, , .		13
29	Segmentation of Touching Cell Nuclei Using a Two-Stage Graph Cut Model. Lecture Notes in Computer Science, 2009, , 410-419.	1.0	26
30	A Two-Phase Segmentation of Cell Nuclei Using Fast Level Set-Like Algorithms. Lecture Notes in Computer Science, 2009, , 390-399.	1.0	3
31	A Fast Level Set-Like Algorithm with Topology Preserving Constraint. Lecture Notes in Computer Science, 2009, , 930-938.	1.0	1
32	On Simulating 3D Fluorescent Microscope Images. Lecture Notes in Computer Science, 2007, , 309-316.	1.0	14
33	A Comparison of Fast Level Set-Like Algorithms for Image Segmentation in Fluorescence Microscopy. , 2007, , 571-581.		2