Jens Rittscher

List of Publications by Year in descending order

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78 papers	2,894 citations	304701 22 h-index	223791 46 g-index
86 all docs	86 docs citations	86 times ranked	3909 citing authors

#	Article	IF	Citations
1	Highly multiplexed single-cell analysis of formalin-fixed, paraffin-embedded cancer tissue. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11982-11987.	7.1	605
2	Shape and Appearance Context Modeling. , 2007, , .		357
3	Image-based consensus molecular subtype (imCMS) classification of colorectal cancer using deep learning. Gut, 2021, 70, 544-554.	12.1	148
4	Learning and classification of complex dynamics. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2000, 22, 1016-1034.	13.9	144
5	Appearance-based person reidentification in camera networks: problem overview and current approaches. Journal of Ambient Intelligence and Humanized Computing, 2011, 2, 127-151.	4.9	142
6	Coupled minimum-cost flow cell tracking for high-throughput quantitative analysis. Medical Image Analysis, 2011, 15, 650-668.	11.6	124
7	Spatio-temporal cell cycle phase analysis using level sets and fast marching methods. Medical Image Analysis, 2009, 13, 143-155.	11.6	117
8	Precision immunoprofiling by image analysis and artificial intelligence. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2019, 474, 511-522.	2.8	101
9	An HMM-based segmentation method for traffic monitoring movies. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2002, 24, 1291-1296.	13.9	84
10	The use of digital pathology and image analysis in clinical trials. Journal of Pathology: Clinical Research, 2019, 5, 81-90.	3.0	71
11	Deep learning for detection and segmentation of artefact and disease instances in gastrointestinal endoscopy. Medical Image Analysis, 2021, 70, 102002.	11.6	67
12	FANet: A Feedback Attention Network for Improved Biomedical Image Segmentation. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 9375-9388.	11.3	67
13	Analysis of live cell images: Methods, tools and opportunities. Methods, 2017, 115, 65-79.	3.8	65
14	Characterization of Biological Processes through Automated Image Analysis. Annual Review of Biomedical Engineering, 2010, 12, 315-344.	12.3	64
15	Artificial intelligenceâ€“based morphological fingerprinting of megakaryocytes: a new tool for assessing disease in MPN patients. Blood Advances, 2020, 4, 3284-3294.	5.2	51
16	Digital pathology and artificial intelligence will be key to supporting clinical and academic cellular pathology through COVID-19 and future crises: the PathLAKE consortium perspective. Journal of Clinical Pathology, 2021, 74, 443-447.	2.0	49
17	An objective comparison of detection and segmentation algorithms for artefacts in clinical endoscopy. Scientific Reports, 2020, 10, 2748.	3.3	41
18	A deep learning framework for quality assessment and restoration in video endoscopy. Medical Image Analysis, 2021, 68, 101900.	11.6	41

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19	Visualization of T Cell Migration in the Spleen Reveals a Network of Perivascular Pathways that Guide Entry into T Zones. Immunity, 2020, 52, 794-807.e7.	14.3	37
20	Role of digital pathology in diagnostic histopathology in the response to COVID-19: results from a survey of experience in a UK tertiary referral hospital. Journal of Clinical Pathology, 2021, 74, 129-132.	2.0	34
21	Towards the automatic analysis of complex human body motions. Image and Vision Computing, 2002, 20, 905-916.	4.5	31
22	Spatio-temporal cell segmentation and tracking for automated screening. , 2008, , .		31
23	Improving Whole Slide Segmentation Through Visual Context - A Systematic Study. Lecture Notes in Computer Science, 2018, , 192-200.	1.3	27
24	Automated classification of normal and Stargardt disease optical coherence tomography images using deep learning. Acta Ophthalmologica, 2020, 98, e715-e721.	1.1	24
25	A Pilot Study on Automatic Three-Dimensional Quantification of Barrettâ€™s Esophagus for Risk Stratification and Therapy Monitoring. Gastroenterology, 2021, 161, 865-878.e8.	1.3	21
26	Motion sensing superpixels (MOSES) is a systematic computational framework to quantify and discover cellular motion phenotypes. ELife, 2019, 8, .	6.0	21
27	Mathematical modelling of animate and intentional motion. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 475-490.	4.0	20
28	Coupled Minimum-Cost Flow Cell Tracking. Lecture Notes in Computer Science, 2009, 21, 374-385.	1.3	20
29	Automated quality assessment of large digitised histology cohorts by artificial intelligence. Scientific Reports, 2022, 12, 5002.	3.3	19
30	An intelligent video framework for homeland protection. , 2007, , .		17
31	The Potential of Artificial Intelligence to Detect Lymphovascular Invasion in Testicular Cancer. Cancers, 2021, 13, 1325.	3.7	17
32	Digitally adjusting chromogenic dye proportions in brightfield microscopy images. Journal of Microscopy, 2012, 245, 319-330.	1.8	16
33	Artificial intelligence for advance requesting of immunohistochemistry in diagnostically uncertain prostate biopsies. Modern Pathology, 2021, 34, 1780-1794.	5.5	16
34	Implementation of digital pathology into diagnostic practice: perceptions and opinions of histopathology trainees and implications for training. Journal of Clinical Pathology, 2020, 73, 223-227.	2.0	14
35	A model change detection approach to dynamic scene modeling. , 2009, , .		11
36	<scp>KCML</scp> : a machineâ€learning framework for inference of multiâ€scale gene functions from genetic perturbation screens. Molecular Systems Biology, 2020, 16, e9083.	7.2	11

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37	Cell segmentation and classification by hierarchical supervised shape ranking. , 2015, , .		10
38	Cell segmentation and classification via unsupervised shape ranking. , 2013, , .		9
39	Ink Removal from Histopathology Whole Slide Images by Combining Classification, Detection and Image Generation Models. , 2019, , .		9
40	Automated Training Data Generation for Microscopy Focus Classification. Lecture Notes in Computer Science, 2010, 13, 446-453.	1.3	9
41	View adaptive detection and distributed site wide tracking. , 2007, , .		8
42	DeepScratch: Single-cell based topological metrics of scratch wound assays. Computational and Structural Biotechnology Journal, 2020, 18, 2501-2509.	4.1	8
43	Tumour irradiation combined with vascular-targeted photodynamic therapy enhances antitumour effects in pre-clinical prostate cancer. British Journal of Cancer, 2021, 125, 534-546.	6.4	8
44	Digital Pathology Transformation in a Supraregional Germ Cell Tumour Network. Diagnostics, 2021, 11, 2191.	2.6	8
45	Conv2Warp: An Unsupervised Deformable Image Registration with Continuous Convolution and Warping. Lecture Notes in Computer Science, 2019, , 489-497.	1.3	7
46	Identifying Nuclear Phenotypes Using Semi-supervised Metric Learning. Lecture Notes in Computer Science, 2011, 22, 398-410.	1.3	7
47	Detailed Molecular and Immune Marker Profiling of Archival Prostate Cancer Samples Reveals an Inverse Association between TMPRSS2:ERG Fusion Status and Immune Cell Infiltration. Journal of Molecular Diagnostics, 2020, 22, 652-669.	2.8	6
48	TRAIT2D: a Software for Quantitative Analysis of Single Particle Diffusion Data. F1000Research, 2021, 10, 838.	1.6	5
49	Identification of C. elegans Strains Using a Fully Convolutional Neural Network on Behavioural Dynamics. Lecture Notes in Computer Science, 2019, , 455-464.	1.3	5
50	Quantitative biological studies enabled by robust cell tracking. , 2011, , .		4
51	Monitoring cardiomyocyte motionin real time through image registration and time series analysis. , 2012, , .		4
52	Discovery of Rare Phenotypes in Cellular Images Using Weakly Supervised Deep Learning. , 2017, , .		4
53	Efficient Video Indexing for Monitoring Disease Activity and Progression in the Upper Gastrointestinal Tract. , 2019, , .		4
54	Protein Tracking By CNN-Based Candidate Pruning And Two-Step Linking With Bayesian Network. , 2019, , .		4

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55	MI-UNet: Improved Segmentation in Ureteroscopy. , 2020, , .		4
56	EndoUDA: A Modality Independent Segmentation Approach for Endoscopy Imaging. Lecture Notes in Computer Science, 2021, , 303-312.	1.3	4
57	Non-parametric Population Analysis of Cellular Phenotypes. Lecture Notes in Computer Science, 2011, 14, 343-351.	1.3	4
58	Towards quantifying the impact of cell boundary estimation on morphometric analysis for phenotypic screening. , 2015, , .		3
59	Single-Molecule Localization Microscopy Reconstruction Using Noise2Noise for Super-Resolution Imaging of Actin Filaments. , 2020, , .		3
60	Early Detection of Liver Fibrosis Using Graph Convolutional Networks. Lecture Notes in Computer Science, 2021, , 217-226.	1.3	3
61	DeepSplit: Segmentation of Microscopy Images Using Multi-task Convolutional Networks. Communications in Computer and Information Science, 2020, , 155-167.	0.5	3
62	Learning Cellular Phenotypes through Supervision. , 2021, 2021, 3592-3595.		3
63	Global probabilistic models for enhancing segmentation with convolutional networks. , 2018, , .		2
64	Artificial intelligence for colonoscopic polyp detection: High performance versus human nature. Journal of Gastroenterology and Hepatology (Australia), 2020, 35, 1663-1664.	2.8	2
65	Transcriptome and genome evolution during HER2-amplified breast neoplasia. Breast Cancer Research, 2021, 23, 73.	5.0	2
66	Sensorless adaptive optics for isoSTED nanoscopy. , 2018, , .		2
67	Characterization of Biological Motion Using Motion Sensing Superpixels. Bio-protocol, 2019, 9, e3365.	0.4	2
68	Additive Angular Margin Loss and Model Scaling Network for Optimised Colitis Scoring. , 2022, , .		2
69	Methods for monitoring cellular motion and function. , 2008, , .		1
70	Epithelial Cell Segmentation via Shape Ranking. Lecture Notes in Computational Vision and Biomechanics, 2014, , 315-338.	0.5	1
71	Towards the Identification of Histology Based Subtypes in Prostate Cancer. , 2019, , .		1
72	Multi-class Object Layout with Unsupervised Image Classification and Object Localization. Lecture Notes in Computer Science, 2011, , 573-585.	1.3	1

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73	Improving Pathological Distribution Measurements with Bayesian Uncertainty. Lecture Notes in Computer Science, 2020, , 61-70.	1.3	1
74	Validation Methods for Cell Cycle Analysis Algorithms in Confocal Fluorescence Images. , 2006, , .		0
75	LPSM: Fitting shape model by linear programming. , 2011, , .		0
76	Tissue segmentation and classification using graph-based unsupervised clustering. , 2012, , .		0
77	Capturing variations in nuclear phenotypes. Journal of Computational Science, 2019, 36, 101014.	2.9	0
78	Semantic Filtering Through Deep Source Separation on Microscopy Images. Lecture Notes in Computer Science, 2019, , 498-506.	1.3	0