Ignacio Arganda-Carreras

List of Publications by Year
in descending order

69 papers	55,903 citations	279798 23 h-index	133252 59 g-index
75 all docs	75 docs citations	75 times ranked	94613 citing authors

#	Article	IF	Citations
1	Fiji: an open-source platform for biological-image analysis. Nature Methods, 2012, 9, 676-682.	19.0	47,818
2	BoneJ: Free and extensible bone image analysis in ImageJ. Bone, 2010, 47, 1076-1079.	2.9	1,695
3	Trainable Weka Segmentation: a machine learning tool for microscopy pixel classification. Bioinformatics, 2017, 33, 2424-2426.	4.1	1,505
4	MorphoLibJ: integrated library and plugins for mathematical morphology with ImageJ. Bioinformatics, 2016, 32, 3532-3534.	4.1	921
5	TrakEM2 Software for Neural Circuit Reconstruction. PLoS ONE, 2012, 7, e38011.	2.5	832
6	Serial two-photon tomography for automated ex vivo mouse brain imaging. Nature Methods, 2012, 9, 255-258.	19.0	585
7	3D reconstruction of histological sections: Application to mammary gland tissue. Microscopy Research and Technique, 2010, 73, 1019-1029.	2.2	565
8	Mapping Social Behavior-Induced Brain Activation at Cellular Resolution in the Mouse. Cell Reports, 2015, 10, 292-305.	6.4	270
9	Crowdsourcing the creation of image segmentation algorithms for connectomics. Frontiers in Neuroanatomy, 2015, 9, 142.	1.7	248
10	Consistent and Elastic Registration of Histological Sections Using Vector-Spline Regularization. Lecture Notes in Computer Science, 2006, , 85-95.	1.3	214
11	Vision-Based Fall Detection with Convolutional Neural Networks. Wireless Communications and Mobile Computing, 2017, 2017, 1-16.	1.2	176
12	Deep Learning on Chest X-ray Images to Detect and Evaluate Pneumonia Cases at the Era of COVID-19. Journal of Medical Systems, 2021, 45, 75.	3.6	132
13	Olfactory projectome in the zebrafish forebrain revealed by genetic single-neuron labelling. Nature Communications, 2014, 5, 3639.	12.8	81
14	Multicolor multiscale brain imaging with chromatic multiphoton serial microscopy. Nature Communications, 2019, 10, 1662.	12.8	75
15	ANHIR: Automatic Non-Rigid Histological Image Registration Challenge. IEEE Transactions on Medical Imaging, 2020, 39, 3042-3052.	8.9	75
16	Avoiding a replication crisis in deep-learning-based bioimage analysis. Nature Methods, 2021, 18, 1136-1144.	19.0	56
17	MitoEM Dataset: Large-Scale 3D Mitochondria Instance Segmentation from EM Images. Lecture Notes in Computer Science, 2020, 12265, 66-76.	1.3	52
18	Identifying Neuronal Lineages of *Drosophila* by Sequence Analysis of Axon Tracts. Journal of Neuroscience, 2010, 30, 7538-7553.	3.6	50

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19	An Optimized Approach to Perform Bone Histomorphometry. Frontiers in Endocrinology, 2018, 9, 666.	3.5	49
20	*NucleusJ*: an ImageJ plugin for quantifying 3D images of interphase nuclei. Bioinformatics, 2015, 31, 1144-1146.	4.1	48
21	A generic classification-based method for segmentation of nuclei in 3D images of early embryos. BMC Bioinformatics, 2014, 15, 9.	2.6	36
22	Efficient and compact face descriptor for driver drowsiness detection. Expert Systems With Applications, 2021, 168, 114334.	7.6	34
23	Phenotyping nematode feeding sites: three‐dimensional reconstruction and volumetric measurements of giant cells induced by root‐knot nematodes in Arabidopsis. New Phytologist, 2015, 206, 868-880.	7.3	32
24	Robust regression with deep CNNs for facial age estimation: An empirical study. Expert Systems With Applications, 2020, 141, 112942.	7.6	22
25	Toward graph-based semi-supervised face beauty prediction. Expert Systems With Applications, 2020, 142, 112990.	7.6	19
26	Freeze-frame imaging of synaptic activity using SynTagMA. Nature Communications, 2020, 11, 2464.	12.8	19
27	Egocentric Vision-based Action Recognition: A survey. Neurocomputing, 2022, 472, 175-197.	5.9	19
28	Age estimation in facial images through transfer learning. Machine Vision and Applications, 2019, 30, 177-187.	2.7	18
29	Non-rigid consistent registration of 2D image sequences. Physics in Medicine and Biology, 2010, 55, 6215-6242.	3.0	16
30	A Statistically Representative Atlas for Mapping Neuronal Circuits in the Drosophila Adult Brain. Frontiers in Neuroinformatics, 2018, 12, 13.	2.5	16
31	Transfer learning and feature fusion for kinship verification. Neural Computing and Applications, 2020, 32, 7139-7151.	5.6	16
32	Division of labor and brain evolution in insect societies: Neurobiology of extreme specialization in the turtle ant Cephalotes varians. PLoS ONE, 2019, 14, e0213618.	2.5	15
33	Elastic image registration of 2-D gels for differential and repeatability studies. Proteomics, 2008, 8, 62-65.	2.2	14
34	NucMM Dataset: 3D Neuronal Nuclei Instance Segmentation at Sub-Cubic Millimeter Scale. Lecture Notes in Computer Science, 2021, , 164-174.	1.3	14
35	Stable Deep Neural Network Architectures for Mitochondria Segmentation on Electron Microscopy Volumes. Neuroinformatics, 2022, 20, 437-450.	2.8	13
36	Automatic registration of serial mammary gland sections. , 2004, 2004, 1691-4.		9

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37	Deep Learning based Detection of Hair Loss Levels from Facial Images. , 2019, , .		9
38	Brain virtual histology with X-ray phase-contrast tomography Part II: 3D morphologies of amyloid-β plaques in Alzheimer's disease models. Biomedical Optics Express, 2022, 13, 1640.	2.9	9
39	Deep learning based domain adaptation for mitochondria segmentation on EM volumes. Computer Methods and Programs in Biomedicine, 2022, 222, 106949.	4.7	9
40	Designing Image Analysis Pipelines in Light Microscopy: A Rational Approach. Methods in Molecular Biology, 2017, 1563, 185-207.	0.9	8
41	The human remains from Axlor (Dima, Biscay, northern Iberian Peninsula). American Journal of Physical Anthropology, 2020, 172, 475-491.	2.1	8
42	A quantitative biophysical principle to explain the 3D cellular connectivity in curved epithelia. Cell Systems, 2022, 13, 631-643.e8.	6.2	8
43	Multimodal Deep Learning for Advanced Driving Systems. Lecture Notes in Computer Science, 2018, , 95-105.	1.3	7
44	WDR20 regulates shuttling of the USP12 deubiquitinase complex between the plasma membrane, cytoplasm and nucleus. European Journal of Cell Biology, 2019, 98, 12-26.	3.6	7
45	Benchmarking Deep Neural Network Inference Performance on Serverless Environments With MLPerf. IEEE Software, 2021, 38, 81-87.	1.8	7
46	Image-based face beauty analysis via graph-based semi-supervised learning. Multimedia Tools and Applications, 2020, 79, 3005-3030.	3.9	6
47	AxonEM Dataset: 3D Axon Instance Segmentation of Brain Cortical Regions. Lecture Notes in Computer Science, 2021, , 175-185.	1.3	6
48	Group-wise 3D registration based templates to study the evolution of ant worker neuroanatomy. , 2017, , .		5
49	Optimal deployment of face recognition solutions in a heterogeneous IoT platform for secure elderly care applications. Procedia Computer Science, 2021, 192, 3204-3213.	2.0	5
50	Nonlinear, flexible, semisupervised learning scheme for face beauty scoring. Journal of Electronic Imaging, 2019, 28, 1.	0.9	4
51	A Comparative Analysis of Human Behavior Prediction Approaches in Intelligent Environments. Sensors, 2022, 22, 701.	3.8	4
52	3D Object Detection from LiDAR Data using Distance Dependent Feature Extraction. , 2020, , .		3
53	Designing Automated Deployment Strategies of Face Recognition Solutions in Heterogeneous IoT Platforms. Information (Switzerland), 2021, 12, 532.	2.9	3
54	Evaluating Age Estimation Using Deep Convolutional Neural Nets. IS&T International Symposium on Electronic Imaging, 2017, 2017, 100-105.	0.4	2

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55	On-demand Serverless Video Surveillance with Optimal Deployment of Deep Neural Networks. , 2021, , .		2
56	Inferring spatial relations from textual descriptions of images. Pattern Recognition, 2021, 113, 107847.	8.1	2
57	Robust 3D Object Detection from LiDAR Point Cloud Data with Spatial Information Aggregation. Advances in Intelligent Systems and Computing, 2021, , 813-823.	0.6	2
58	Using External Knowledge to Improve Zero-Shot Action Recognition inÂEgocentric Videos. Lecture Notes in Computer Science, 2020, , 174-185.	1.3	2
59	Statistical Atlases and Automatic Labeling Strategies to Accelerate the Analysis of Social Insect Brain Evolution. Frontiers in Ecology and Evolution, 2022, 9, .	2.2	2
60	How Can Deep Neural Networks Be Generated Efficiently for Devices with Limited Resources?. Lecture Notes in Computer Science, 2018, , 24-33.	1.3	1
61	Freeze-Frame Imaging of Synaptic Activity Using SynTagMA. SSRN Electronic Journal, 0, , .	0.4	1
62	Automated segmentation of thick confocal microscopy 3D images for the measurement of white matter volumes in zebrafish brains. Mathematical Morphology - Theory and Applications, 2020, 4, 31-45.	0.7	1
63	3D Object Detection from LiDAR Data using Distance Dependent Feature Extraction. , 2020, , .		1
64	Exploiting Egocentric Cues for Action Recognition for Ambient Assisted Living Applications. Advances in Science, Technology and Innovation, 2021, , 131-158.	0.4	0
65	An Empirical Study of Global Descriptors for Image-based Localization in Dense Urban Scenes. International Journal of Sensors, Wireless Communications and Control, 2016, 6, 142-152.	0.7	0
66	Chromatic serial multiphoton microscopy for high-content multiscale analysis of large brain volumes. , 2019, , .		0
67	Chromatic serial multiphoton microscopy for multicolor imaging of large brain volumes. , 2019, , .		0
68	Accurate 3D Object Detection from Point Cloud Data using Birdâ€™s Eye View Representations. , 2021, , .		0
69	MRI to CTA Translation for Pulmonary Artery Evaluation Using CycleGANs Trained with Unpaired Data. Lecture Notes in Computer Science, 2020, , 118-129.	1.3	0