Arcot Sowmya

List of Publications by Year
in descending order

76 papers	839 citations	687220 13 h-index	610775 24 g-index
78 all docs	78 docs citations	78 times ranked	670 citing authors

#	Article	IF	Citations
1	A comparison of machine learning methods for survival analysis of high-dimensional clinical data for dementia prediction. Scientific Reports, 2020, 10, 20410.	1.6	131
2	Computer vision in autism spectrum disorder research: a systematic review of published studies from 2009 to 2019. Translational Psychiatry, 2020, 10, 333.	2.4	77
3	Offshore Underwater Image Restoration Using Reflection-Decomposition-Based Transmission Map Estimation. IEEE Journal of Oceanic Engineering, 2020, 45, 521-533.	2.1	44
4	Dictionary learning framework for fabric defect detection. Journal of the Textile Institute, 2014, 105, 223-234.	1.0	40
5	Deep learning for segmentation in radiation therapy planning: a review. Journal of Medical Imaging and Radiation Oncology, 2021, 65, 578-595.	0.9	40
6	Multi-level classification of emphysema in HRCT lung images. Pattern Analysis and Applications, 2009, 12, 9-20.	3.1	29
7	Artificial Intelligence Algorithms for Analysis of Geographic Atrophy: A Review and Evaluation. Translational Vision Science and Technology, 2020, 9, 57.	1.1	28
8	Deep fusion pipeline for mild cognitive impairment diagnosis. , 2018, , .		26
9	New Image Quality Evaluation Metric for Underwater Video. IEEE Signal Processing Letters, 2014, 21, 1215-1219.	2.1	22
10	Multi-Weighted Co-Occurrence Descriptor Encoding for Vein Recognition. IEEE Transactions on Information Forensics and Security, 2020, 15, 375-390.	4.5	22
11	Corner detection based on shearlet transform and multi-directional structure tensor. Pattern Recognition, 2020, 103, 107299.	5.1	20
12	Context-Enhanced Representation Learning for Single Image Deraining. International Journal of Computer Vision, 2021, 129, 1650-1674.	10.9	19
13	Automated segmentation of normal and diseased coronary arteries â€" The ASOCA challenge. Computerized Medical Imaging and Graphics, 2022, 97, 102049.	3.5	18
14	A context-based privacy preserving framework for wearable visual lifeloggers. , 2016, , .		16
15	Introducing the Targeted Mass Killing Data Set for the Study and Forecasting of Mass Atrocities. Journal of Conflict Resolution, 2020, 64, 1524-1547.	1.1	16
16	Automated post-operative brain tumour segmentation: A deep learning model based on transfer learning from pre-operative images. Magnetic Resonance Imaging, 2022, 86, 28-36.	1.0	15
17	Efficient corner detection based on corner enhancement filters. , 2022, 122, 103364.		15
18	Sparse Dictionary Reconstruction for Textile Defect Detection. , 2012, , .		13

#	Article	IF	Citations
19	Automatic lung segmentation in HRCT images with diffuse parenchymal lung disease using graph-cut. , 2009, , .		11
20	Vehicle detection and tracking with low-angle cameras. , 2010, , .		11
21	The Use of Closed-Circuit Television and Video in Suicide Prevention: Narrative Review and Future Directions. JMIR Mental Health, 2021, 8, e27663.	1.7	11
22	Victim detection and localisation in an urban disaster site. , 2013, , .		10
23	Application of Formal Methods for System-Level Verification of Network on Chip. , 2011, , .		9
24	Learning a Compact Vein Discrimination Model With GANerated Samples. IEEE Transactions on Information Forensics and Security, 2020, 15, 635-650.	4.5	9
25	Deep Learning for Time Averaged Wall Shear Stress Prediction in Left Main Coronary Bifurcations. , 2020, , .		9
26	Towards Building a Visual Behaviour Analysis Pipeline for Suicide Detection and Prevention. Sensors, 2022, 22, 4488.	2.1	9
27	A formal approach to design space exploration of protocol converters. , 2009, , .		8
28	Single camera multi-view anthropometric measurement of human height and mid-upper arm circumference using linear regression. PLoS ONE, 2018, 13, e0195600.	1.1	8
29	Building change detection from remotely sensed images based on spatial domain analysis and Markov random field. Journal of Applied Remote Sensing, 2019, 13, 1.	0.6	8
30	Diffuse lung disease classification in HRCT lung images using generalized Gaussian density modeling of wavelets coefficients. , 2009, , .		7
31	Multiscale sparse representation of high-resolution computed tomography (HRCT) lung images for diffuse lung disease classification. , 2011, , .		7
32	Multimodal Brain Tumour Segmentation using Densely Connected 3D Convolutional Neural Network. , 2019, , .		7
33	Deep Learning Applied to Automated Segmentation of Geographic Atrophy in Fundus Autofluorescence Images. Translational Vision Science and Technology, 2021, 10, 2.	1.1	7
34	Half and full solar cell efficiency binning by deep learning on electroluminescence images. Progress in Photovoltaics: Research and Applications, 2022, 30, 276-287.	4.4	7
35	DESIGNING RELEVANT FEATURES FOR CONTINUOUS DATA SETS USING ICA. International Journal of Computational Intelligence and Applications, 2008, 07, 447-468.	0.6	6
36	Feature clustering for vehicle detection and tracking in road traffic surveillance. , 2009, , .		6

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37	Classifier ensemble with incremental learning for disaster victim detection. , 2012, , .		6
38	A Semantics-Preserving Transformation of Statecharts to FNLOG. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 29-37.	0.4	5
39	Learning to tune level set methods. , 2009, , .		5
40	Kernel Partial Least Squares Based Hierarchical Building Change Detection Using High Resolution Aerial Images and Lidar Data. , 2013, , .		5
41	Batch Mode Active Learning for Object Detection Based on Maximum Mean Discrepancy. , 2015, , .		5
42	Training radiomics-based CNNs for clinical outcome prediction: Challenges, strategies and findings. Artificial Intelligence in Medicine, 2022, 123, 102230.	3.8	5
43	Affinity Propagation Feature Clustering with Application to Vehicle Detection and Tracking in Road Traffic Surveillance. , 2010, , .		4
44	Feature fusion for vehicle detection and tracking with low-angle cameras. , 2011, , .		4
45	Efficient GPU Computing Framework of Cloud Filtering in Remotely Sensed Image Processing. , 2016, , .		4
46	Estimation of three-dimensional chromatin morphology for nuclear classification and characterisation. Scientific Reports, 2021, 11, 3364.	1.6	4
47	Multi-Label Classification Based On Subcellular Region-Guided Feature Description For Protein Localisation. , 2021, , .		4
48	Tgnet: A Task-Guided Network Architecture for Multi-Organ and Tumour Segmentation from Partially Labelled Datasets. , 2022, , .		4
49	Formal Estimation of Worst-Case Communication Latency in a Network-on-Chip. , 2012, , .		3
50	A Semi-Quantitative Analysis Model with Parabolic Modelling for DCE-MRI Sequences of Prostate. , 2014, , .		3
51	Semi-quantitative analysis of prostate perfusion MRI by clustering of pre and post contrast enhancement phases. , 2016, , .		3
52	Deep Learning for Volumetric Segmentation in Spatio-Temporal Data: Application to Segmentation of Prostate in DCE-MRI. , 2019, , .		3
53	Efficient EM-variational inference for nonparametric Hawkes process. Statistics and Computing, 2021, 31, 1.	0.8	3
54	End-of-Line Binning of Full and Half-Cut Cells using Deep Learning on Electroluminescence Images. , 2020, , .		3

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55	Image data augmentation for improving performance of deep learning-based model in pathological lung segmentation. , 2021, , .		3
56	Imbalanced Cell-Cycle Classification Using Wgan-Div and Mixup. , 2022, , .		3
57	Data Agnostic Filter Gating For Efficient Deep Networks. , 2022, , .		3
58	Patient-customized 3D reconstruction of human ribs from lung MDCT dataset. , 2014, , .		2
59	Automatic 3D modelling of human diaphragm from lung MDCT images. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 767-776.	1.7	2
60	Optimized GPU implementation for dynamic programming in image data processing. , 2016, , .		2
61	Bidirectional Convolutional-LSTM based Network for lung segmentation of chest X-ray images. , 2021, , .		2
62	Complex shearlets and rotary phase congruence tensor for corner detection. Pattern Recognition, 2022, 128, 108606.	5.1	2
63	Impact of quasi-expertise on knowledge acquisition in computer vision. , 2009, , .		1
64	Robust human appearance matching across multi-cameras. , 2013, , .		1
65	A Fast Approximate Spectral Unmixing Algorithm Based on Segmentation. , 2017, , .		1
66	Inshore eutrophic underwater image enhancement based on light-particles interaction descattering. , 2017, , .		1
67	Robust CNNs for detecting collapsed buildings with crowd-sourced data. , 2019, , .		1
68	Model Structure Uncertainty in the Characterization and Growth of Geographic Atrophy. Translational Vision Science and Technology, 2021, 10, 2.	1.1	1
69	An Adaptable Formal Model for Web Services Protocols. , 2007, , .		0
70	A spectral method for context based disambiguation of image annotations. , 2009, , .		0
71	Boosted dynamic Active Shape Model. , 2009, , .		0
72	On-line, Incremental Learning for Real-Time Vision Based Movement Recognition. , 2010, , .		0

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73	Efficient Additive Models via the Generalized Lasso. , 2010, , .		0
74	Supervised and semi-supervised 3D organ localisation in CT images combining reinforcement learning with imitation learning. Biomedical Physics and Engineering Express, 2022, , .	0.6	0
75	A Machine Learning Framework for Fully Automatic 3D Fetal Cardiac Ultrasound Evaluation. , 2022, , .		0
76	Learning Left Main Bifurcation Shape Features with an Autoencoder. , 2022, , .		0