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	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
2	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
3	Efficient corner detection based on corner enhancement filters. , 2022, 122, 103364.		15
4	Training radiomics-based CNNs for clinical outcome prediction: Challenges, strategies and findings. Artificial Intelligence in Medicine, 2022, 123, 102230.	3.8	5
5	Automated segmentation of normal and diseased coronary arteries â€" The ASOCA challenge. Computerized Medical Imaging and Graphics, 2022, 97, 102049.	3.5	18
6	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
7	Complex shearlets and rotary phase congruence tensor for corner detection. Pattern Recognition, 2022, 128, 108606.	5.1	2
8	A Machine Learning Framework for Fully Automatic 3D Fetal Cardiac Ultrasound Evaluation. , 2022, , .		0
9	Imbalanced Cell-Cycle Classification Using Wgan-Div and Mixup. , 2022, , .		3
10	Learning Left Main Bifurcation Shape Features with an Autoencoder. , 2022, , .		0
11	Tgnet: A Task-Guided Network Architecture for Multi-Organ and Tumour Segmentation from Partially Labelled Datasets. , 2022, , .		4
12	Data Agnostic Filter Gating For Efficient Deep Networks. , 2022, , .		3
13	Towards Building a Visual Behaviour Analysis Pipeline for Suicide Detection and Prevention. Sensors, 2022, 22, 4488.	2.1	9
14	Estimation of three-dimensional chromatin morphology for nuclear classification and characterisation. Scientific Reports, 2021, 11, 3364.	1.6	4
15	Context-Enhanced Representation Learning for Single Image Deraining. International Journal of Computer Vision, 2021, 129, 1650-1674.	10.9	19
16	Multi-Label Classification Based On Subcellular Region-Guided Feature Description For Protein Localisation. , 2021, , .		4
17	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
18	Model Structure Uncertainty in the Characterization and Growth of Geographic Atrophy. Translational Vision Science and Technology, 2021, 10, 2.	1.1	1

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19	Efficient EM-variational inference for nonparametric Hawkes process. Statistics and Computing, 2021, 31, 1.	0.8	3
20	Deep learning for segmentation in radiation therapy planning: a review. Journal of Medical Imaging and Radiation Oncology, 2021, 65, 578-595.	0.9	40
21	Deep Learning Applied to Automated Segmentation of Geographic Atrophy in Fundus Autofluorescence Images. Translational Vision Science and Technology, 2021, 10, 2.	1.1	7
22	Bidirectional Convolutional-LSTM based Network for lung segmentation of chest X-ray images. , 2021, , .		2
23	Image data augmentation for improving performance of deep learning-based model in pathological lung segmentation. , 2021, , .		3
24	Offshore Underwater Image Restoration Using Reflection-Decomposition-Based Transmission Map Estimation. IEEE Journal of Oceanic Engineering, 2020, 45, 521-533.	2.1	44
25	Multi-Weighted Co-Occurrence Descriptor Encoding for Vein Recognition. IEEE Transactions on Information Forensics and Security, 2020, 15, 375-390.	4.5	22
26	Learning a Compact Vein Discrimination Model With GANerated Samples. IEEE Transactions on Information Forensics and Security, 2020, 15, 635-650.	4.5	9
27	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
28	Artificial Intelligence Algorithms for Analysis of Geographic Atrophy: A Review and Evaluation. Translational Vision Science and Technology, 2020, 9, 57.	1.1	28
29	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
30	Deep Learning for Time Averaged Wall Shear Stress Prediction in Left Main Coronary Bifurcations. , 2020, , .		9
31	Corner detection based on shearlet transform and multi-directional structure tensor. Pattern Recognition, 2020, 103, 107299.	5.1	20
32	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
33	End-of-Line Binning of Full and Half-Cut Cells using Deep Learning on Electroluminescence Images. , 2020, , .		3
34	Deep Learning for Volumetric Segmentation in Spatio-Temporal Data: Application to Segmentation of Prostate in DCE-MRI. , 2019, , .		3
35	Robust CNNs for detecting collapsed buildings with crowd-sourced data. , 2019, , .		1
36	Multimodal Brain Tumour Segmentation using Densely Connected 3D Convolutional Neural Network. , 2019, , .		7

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37	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
38	Deep fusion pipeline for mild cognitive impairment diagnosis. , 2018, , .		26
39	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
40	A Fast Approximate Spectral Unmixing Algorithm Based on Segmentation. , 2017, , .		1
41	Inshore eutrophic underwater image enhancement based on light-particles interaction descattering. , 2017, , .		1
42	Efficient GPU Computing Framework of Cloud Filtering in Remotely Sensed Image Processing. , 2016, , .		4
43	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
44	A context-based privacy preserving framework for wearable visual lifeloggers. , 2016, , .		16
45	Semi-quantitative analysis of prostate perfusion MRI by clustering of pre and post contrast enhancement phases. , 2016, , .		3
46	Optimized GPU implementation for dynamic programming in image data processing. , 2016, , .		2
47	Batch Mode Active Learning for Object Detection Based on Maximum Mean Discrepancy. , 2015, , .		5
48	A Semi-Quantitative Analysis Model with Parabolic Modelling for DCE-MRI Sequences of Prostate. , 2014, , .		3
49	Patient-customized 3D reconstruction of human ribs from lung MDCT dataset. , 2014, , .		2
50	Dictionary learning framework for fabric defect detection. Journal of the Textile Institute, 2014, 105, 223-234.	1.0	40
51	New Image Quality Evaluation Metric for Underwater Video. IEEE Signal Processing Letters, 2014, 21, 1215-1219.	2.1	22
52	Victim detection and localisation in an urban disaster site. , 2013, , .		10
53	Kernel Partial Least Squares Based Hierarchical Building Change Detection Using High Resolution Aerial Images and Lidar Data. , 2013, , .		5
54	Robust human appearance matching across multi-cameras. , 2013, , .		1

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55	Sparse Dictionary Reconstruction for Textile Defect Detection. , 2012, , .		13
56	Classifier ensemble with incremental learning for disaster victim detection. , 2012, , .		6
57	Formal Estimation of Worst-Case Communication Latency in a Network-on-Chip. , 2012, , .		3
58	Multiscale sparse representation of high-resolution computed tomography (HRCT) lung images for diffuse lung disease classification. , 2011, , .		7
59	Feature fusion for vehicle detection and tracking with low-angle cameras. , 2011, , .		4
60	Application of Formal Methods for System-Level Verification of Network on Chip. , 2011, , .		9
61	Affinity Propagation Feature Clustering with Application to Vehicle Detection and Tracking in Road Traffic Surveillance. , 2010, , .		4
62	Vehicle detection and tracking with low-angle cameras. , 2010, , .		11
63	On-line, Incremental Learning for Real-Time Vision Based Movement Recognition. , 2010, , .		0
64	Efficient Additive Models via the Generalized Lasso. , 2010, , .		0
65	Diffuse lung disease classification in HRCT lung images using generalized Gaussian density modeling of wavelets coefficients. , 2009, , .		7
66	Learning to tune level set methods. , 2009, , .		5
67	A spectral method for context based disambiguation of image annotations. , 2009, , .		0
68	Multi-level classification of emphysema in HRCT lung images. Pattern Analysis and Applications, 2009, 12, 9-20.	3.1	29
69	Impact of quasi-expertise on knowledge acquisition in computer vision. , 2009, , .		1
70	Feature clustering for vehicle detection and tracking in road traffic surveillance. , 2009, , .		6
71	Automatic lung segmentation in HRCT images with diffuse parenchymal lung disease using graph-cut. , 2009, , .		11
72	A formal approach to design space exploration of protocol converters. , 2009, , .		8

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73	Boosted dynamic Active Shape Model. , 2009, , .		0
74	DESIGNING RELEVANT FEATURES FOR CONTINUOUS DATA SETS USING ICA. International Journal of Computational Intelligence and Applications, 2008, 07, 447-468.	0.6	6
75	An Adaptable Formal Model for Web Services Protocols. , 2007, , .		0
76	A Semantics-Preserving Transformation of Statecharts to FNLOG. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 29-37.	0.4	5