

Rafael Marcos Luque-Baena

List of Publications by Year in descending order

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79
papers

812
citations

623734
14
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580821
25
g-index

87
all docs

87
docs citations

87
times ranked

876
citing authors

#	ARTICLE	IF	CITATIONS
1	Wound image evaluation with machine learning. Neurocomputing, 2015, 164, 112-122.	5.9	68
2	FOREGROUND DETECTION IN VIDEO SEQUENCES WITH PROBABILISTIC SELF-ORGANIZING MAPS. International Journal of Neural Systems, 2011, 21, 225-246.	5.2	62
3	Efficient Implementation of the Backpropagation Algorithm in FPGAs and Microcontrollers. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 1840-1850.	11.3	62
4	Vehicle type detection by ensembles of convolutional neural networks operating on super resolved images. Integrated Computer-Aided Engineering, 2018, 25, 321-333.	4.6	56
5	Assessment of geometric features for individual identification and verification in biometric hand systems. Expert Systems With Applications, 2013, 40, 3580-3594.	7.6	47
6	Study and classification of plum varieties using image analysis and deep learning techniques. Progress in Artificial Intelligence, 2018, 7, 119-127.	2.4	35
7	Stochastic approximation for background modelling. Computer Vision and Image Understanding, 2011, 115, 735-749.	4.7	30
8	Application of growing hierarchical SOM for visualisation of network forensics traffic data. Neural Networks, 2012, 32, 275-284.	5.9	27
9	Robust gene signatures from microarray data using genetic algorithms enriched with biological pathway keywords. Journal of Biomedical Informatics, 2014, 49, 32-44.	4.3	24
10	Application of genetic algorithms and constructive neural networks for the analysis of microarray cancer data. Theoretical Biology and Medical Modelling, 2014, 11, S7.	2.1	24
11	Foreground Detection by Competitive Learning for Varying Input Distributions. International Journal of Neural Systems, 2018, 28, 1750056.	5.2	24
12	A self-organizing map to improve vehicle detection in flow monitoring systems. Soft Computing, 2015, 19, 2499-2509.	3.6	20
13	A Neural Network Approach for Video Object Segmentation in Traffic Surveillance. Lecture Notes in Computer Science, 2008, , 151-158.	1.3	20
14	Foreground detection by probabilistic modeling of the features discovered by stacked denoising autoencoders in noisy video sequences. Pattern Recognition Letters, 2019, 125, 481-487.	4.2	17
15	A Competitive Neural Network for Multiple Object Tracking in Video Sequence Analysis. Neural Processing Letters, 2013, 37, 47-67.	3.2	14
16	Computational Intelligence Techniques in Medicine. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-2.	1.3	14
17	Background subtraction by probabilistic modeling of patch features learned by deep autoencoders. Integrated Computer-Aided Engineering, 2020, 27, 253-265.	4.6	13
18	Addressing the 5G Cell Switch-off Problem with a Multi-objective Cellular Genetic Algorithm. , 2018, , .		11

#	ARTICLE	IF	CITATIONS
19	Saving energy in WSNs with beamforming. , 2014, , .		10
20	Road pollution estimation from vehicle tracking in surveillance videos by deep convolutional neural networks. Applied Soft Computing Journal, 2021, 113, 107950.	7.2	10
21	A New GHSOM Model Applied to Network Security. Lecture Notes in Computer Science, 2008, , 680-689.	1.3	9
22	Video Object Segmentation with Multivalued Neural Networks. , 2008, , .		9
23	NeuralSens: A neural network based framework to allow dynamic adaptation in wireless sensor and actor networks. Journal of Network and Computer Applications, 2012, 35, 382-393.	9.1	9
24	The effect of noise on foreground detection algorithms. Artificial Intelligence Review, 2018, 49, 407-438.	15.7	9
25	Deep learning-based super-resolution of 3D magnetic resonance images by regularly spaced shifting. Neurocomputing, 2020, 398, 314-327.	5.9	9
26	Clustering and Beamforming for Efficient Communication in Wireless Sensor Networks. Sensors, 2016, 16, 1334.	3.8	8
27	Selecting the Color Space for Self-Organizing Map Based Foreground Detection in Video. Neural Processing Letters, 2016, 43, 345-361.	3.2	8
28	Improved detection of small objects in road network sequences using <scp>CNN</scp> and super resolution. Expert Systems, 2022, 39, .	4.5	8
29	Object recognition and inspection in difficult industrial environments. , 2006, , .		7
30	Image Compression and Video Segmentation Using Hierarchical Self-Organization. Neural Processing Letters, 2013, 37, 69-87.	3.2	7
31	GA-based feature selection approach in biometric hand systems. , 2011, , .		6
32	Color space selection for self-organizing map based foreground detection in video sequences. , 2014, , .		6
33	Vehicle Type Detection by Convolutional Neural Networks. Lecture Notes in Computer Science, 2017, , 268-278.	1.3	6
34	Anomalous object detection by active search with PTZ cameras. Expert Systems With Applications, 2021, 181, 115150.	7.6	6
35	Object Tracking in Video Sequences by Unsupervised Learning. Lecture Notes in Computer Science, 2009, , 1070-1077.	1.3	6
36	Image Hierarchical Segmentation Based on a GHSOM. Lecture Notes in Computer Science, 2009, , 743-750.	1.3	5

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37	Visualisation of network forensics traffic data with a self-organising map for qualitative features. , 2011, , .		5
38	Panoramic background modeling for PTZ cameras with competitive learning neural networks. , 2017, , .		5
39	Aggregation of Convolutional Neural Network Estimations of Homographies by Color Transformations of the Inputs. IEEE Access, 2020, 8, 79552-79560.	4.2	5
40	Background Modeling for Video Sequences by Stacked Denoising Autoencoders. Lecture Notes in Computer Science, 2018, , 341-350.	1.3	5
41	Network Security Using Growing Hierarchical Self-Organizing Maps. Lecture Notes in Computer Science, 2009, , 130-139.	1.3	5
42	Measuring cooperative massive MIMO in reverberation chamber. Journal of Electromagnetic Waves and Applications, 2015, 29, 636-646.	1.6	4
43	Analysis of beamforming for improving the energy efficiency in wireless sensor networks with metaheuristics. Progress in Artificial Intelligence, 2016, 5, 199-206.	2.4	4
44	Neural controller for PTZ cameras based on nonpanoramic foreground detection. , 2017, , .		4
45	A New Self-Organizing Neural Gas Model based on Bregman Divergences. , 2018, , .		4
46	A Dipolar Competitive Neural Network for Video Segmentation. Lecture Notes in Computer Science, 2008, , 103-112.	1.3	4
47	An anomaly detection system using a GHSOM-1. , 2010, , .		3
48	An adaptive system for compressed video deblocking. Signal Processing, 2014, 103, 415-425.	3.7	3
49	Dynamic tree topology learning by self-organization. Neural Computing and Applications, 2017, 28, 911-924.	5.6	3
50	Machine learning models to search relevant genetic signatures in clinical context. , 2017, , .		3
51	Panorama construction for PTZ camera surveillance with the neural gas network. Expert Systems, 2018, 35, e12249.	4.5	3
52	Fuzzy techniques for IPO underpricing prediction. Journal of Intelligent and Fuzzy Systems, 2018, 35, 367-381.	1.4	3
53	Background Modeling by Shifted Tilings of Stacked Denoising Autoencoders. Lecture Notes in Computer Science, 2019, , 307-316.	1.3	3
54	SOM-Based Techniques towards Hierarchical Visualisation of Network Forensics Traffic Data. Studies in Computational Intelligence, 2012, , 75-95.	0.9	3

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55	Road Pollution Estimation Using Static Cameras And Neural Networks. , 2018, , .		2
56	The effect of downsamplingâ€“upsampling strategy on foreground detection algorithms. Artificial Intelligence Review, 2020, 53, 4935-4965.	15.7	2
57	Frame Size Reduction for Foreground Detection in Video Sequences. Lecture Notes in Computer Science, 2016, , 3-12.	1.3	2
58	A Competitive Neural Network for Intrusion Detection Systems. Communications in Computer and Information Science, 2008, , 530-537.	0.5	2
59	A Constructive Neural Network to Predict Pitting Corrosion Status of Stainless Steel. Lecture Notes in Computer Science, 2013, , 88-95.	1.3	2
60	Vehicle Classification in Traffic Environments Using the Growing Neural Gas. Lecture Notes in Computer Science, 2017, , 225-234.	1.3	2
61	A Self-Organized Multiagent System for Intrusion Detection. Lecture Notes in Computer Science, 2009, , 84-94.	1.3	1
62	Residual oxides detection and measurement in stainless steel production lines. , 2009, , .		1
63	Lossy Image Compression Using a GHSOM. Lecture Notes in Computer Science, 2011, , 1-8.	1.3	1
64	Foreground detection by ensembles of random polygonal tilings. Expert Systems With Applications, 2020, 161, 113518.	7.6	1
65	Visualization of Complex Datasets with the Self-Organizing Spanning Tree. Lecture Notes in Computer Science, 2015, , 209-217.	1.3	1
66	Committee C-Mantec: A Probabilistic Constructive Neural Network. Lecture Notes in Computer Science, 2013, , 339-346.	1.3	1
67	A Growing Neural Gas Approach to Classify Vehicles in Traffic Environments. International Journal of Computer Vision and Image Processing, 2017, 7, 1-12.	0.4	1
68	Securing and Greening Wireless Sensor Networks with Beamforming. Mobile Networks and Applications, 2019, 24, 712-720.	3.3	0
69	Adaptive estimation of optimal color transformations for deep convolutional network based homography estimation. , 2021, , .		0
70	Foreground Segmentation Improvement by Image Denoising Preprocessing Applied to Noisy Video Sequences. Advances in Intelligent Systems and Computing, 2022, , 388-397.	0.6	0
71	Growing Competitive Network for Tracking Objects in Video Sequences. Lecture Notes in Computer Science, 2009, , 109-118.	1.3	0
72	Hierarchical Graphs for Data Clustering. Lecture Notes in Computer Science, 2009, , 432-439.	1.3	0

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73	A Neural Recognition System for Manufactured Objects. Lecture Notes in Computer Science, 2009, , 1274-1281.	1.3	0
74	Spam Detection Based on a Hierarchical Self-Organizing Map. Lecture Notes in Computer Science, 2009, , 30-37.	1.3	0
75	Feature Weighting in Competitive Learning for Multiple Object Tracking in Video Sequences. Lecture Notes in Computer Science, 2011, , 17-24.	1.3	0
76	Feature Selection of Hand Biometrical Traits Based on Computational Intelligence Techniques. Studies in Computational Intelligence, 2012, , 159-180.	0.9	0
77	A Self-organizing Map for Traffic Flow Monitoring. Lecture Notes in Computer Science, 2013, , 458-466.	1.3	0
78	Hierarchical Self-Organizing Networks for Multispectral Data Visualization. Lecture Notes in Computer Science, 2013, , 449-457.	1.3	0
79	Foreground Detection Enhancement Using Pearson Correlation Filtering. Communications in Computer and Information Science, 2018, , 417-428.	0.5	0