Ashish Ghosh

List of Publications by Year
in descending order

155 papers	3,874 citations	136740 32 h-index	149479 56 g-index
159 all docs	159 docs citations	159 times ranked	3180 citing authors

#	Article	IF	Citations
1	Multi-Label Classification Using Binary Tree of Classifiers. IEEE Transactions on Emerging Topics in Computational Intelligence, 2022, 6, 677-689.	3.4	13
2	Noisy multimodal brain image registration using markov random field model. Biomedical Signal Processing and Control, 2022, 73, 103426.	3.5	0
3	Learning from Others: A Data Driven Transfer Learning based Daily New COVID-19 Case Prediction in India using an Ensemble of LSTM-RNNs. , 2021, , .		3
4	Foreground Segmentation Using Adaptive 3 Phase Background Model. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 2287-2296.	4.7	11
5	Kernelized Fuzzy Modal Variation for Local Change Detection From Video Scenes. IEEE Transactions on Multimedia, 2020, 22, 912-920.	5.2	6
6	Activities of IEEE GRSS Kolkata Chapter [Chapters]. IEEE Geoscience and Remote Sensing Magazine, 2020, 8, 160-165.	4.9	0
7	Clinical ultrasound image standardization using histogram specification. Computers in Biology and Medicine, 2020, 120, 103746.	3.9	7
8	Band Elimination for Dimensionality Reduction of Hyperspectral Images using Mutual Information. , 2020, , .		3
9	Norm Discriminant Eigenspace Transform for Pattern Classification. IEEE Transactions on Cybernetics, 2019, 49, 273-286.	6.2	2
10	Context Dependent Fuzzy Associated Statistical Model for Intensity Inhomogeneity Correction From Magnetic Resonance Images. IEEE Journal of Translational Engineering in Health and Medicine, 2019, 7, 1-9.	2.2	4
11	Implementation of Boolean AND and OR Logic Gates with Biologically Reasonable Time Constants in Spiking Neural Networks. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 10021-10022.	3.6	2
12	Big data analytics for video surveillance. Multimedia Tools and Applications, 2019, 78, 26129-26162.	2.6	37
13	Multi-label classification using a cascade of stacked autoencoder and extreme learning machines. Neurocomputing, 2019, 358, 222-234.	3.5	38
14	Integration of deep feature extraction and ensemble learning for outlier detection. Pattern Recognition, 2019, 89, 161-171.	5.1	76
15	Real-time record sensitive background classifier (RSBC). Expert Systems With Applications, 2019, 119, 104-117.	4.4	3
16	Hyperspectral Remote Sensing Images and Supervised Feature Extraction. Studies in Big Data, 2019, , 265-289.	0.8	2
17	Image co-segmentation using dual active contours. Applied Soft Computing Journal, 2018, 66, 413-427.	4.1	14
18	Surrogate-Assisted Multi-objective Genetic Algorithms for Fuzzy Rule-Based Classification. International Journal of Fuzzy Systems, 2018, 20, 1938-1955.	2.3	13

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19	Real-Time Adaptive Histogram Min-Max Bucket (HMMB) Model for Background Subtraction. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 1513-1525.	5.6	18
20	PCA, Kernel PCA and Dimensionality Reduction in Hyperspectral Images. , 2018, , 19-46.		22
21	Trigger Detection System for American Sign Language using Deep Convolutional Neural Networks. , 2018, , .		10
22	Scaled and oriented object tracking using ensemble of multilayer perceptrons. Applied Soft Computing Journal, 2018, 73, 1081-1094.	4.1	12
23	Artificial intelligence in Internet of things. CAAI Transactions on Intelligence Technology, 2018, 3, 208-218.	3.4	172
24	Speckle de-noising of clinical ultrasound images based on fuzzy spel conformity in its adjacency. Applied Soft Computing Journal, 2018, 73, 394-417.	4.1	5
25	Salient Object Detection based on Bayesian Surprise of Restricted Boltzmann Machine. , 2018, , .		1
26	Unsupervised band extraction for hyperspectral images using clustering and kernel principal component analysis. International Journal of Remote Sensing, 2017, 38, 850-873.	1.3	28
27	Moving Object Detection using Multi-layer Markov Random Field Model. , 2017, , 687-711.		1
28	Supervised Feature Extraction of Hyperspectral Images Using Partitioned Maximum Margin Criterion. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 82-86.	1.4	23
29	Noisy-free Length Discriminant Analysis with cosine hyperbolic framework for dimensionality reduction. Expert Systems With Applications, 2017, 81, 88-107.	4.4	2
30	Functional Link Artificial Neural Network for Multi-label Classification. Lecture Notes in Computer Science, 2017, , 1-10.	1.0	1
31	Moments discriminant analysis for supervised dimensionality reduction. Neurocomputing, 2017, 237, 114-132.	3.5	3
32	Partially Camouflaged Object Tracking using Modified Probabilistic Neural Network and Fuzzy Energy based Active Contour. International Journal of Computer Vision, 2017, 122, 116-148.	10.9	20
33	Moving object detection using spatio-temporal multilayer compound Markov Random Field and histogram thresholding based change detection. Multimedia Tools and Applications, 2017, 76, 13511-13543.	2.6	13
34	Despeckling with Structure Preservation in Clinical Ultrasound Images Using Historical Edge Information Weighted Regularizer. Lecture Notes in Computer Science, 2017, , 144-155.	1.0	0
35	Prototypes based discriminative appearance model for object tracking. , 2016, , .		3
36	Robust global and local fuzzy energy based active contour for image segmentation. Applied Soft Computing Journal, 2016, 47, 191-215.	4.1	46

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37	Tumor or abnormality identification from magnetic resonance images using statistical region fusion based segmentation. Magnetic Resonance Imaging, 2016, 34, 1292-1304.	1.0	23
38	PDComp. , 2016, , .		0
39	On the mining of fuzzy association rule using multi-objective genetic algorithms. International Journal of Data Mining, Modelling and Management, 2016, 8, 1.	0.1	3
40	Robust image segmentation using global and local fuzzy energy based active contour. , 2016, , .		3
41	Maximum Class Boundary Criterion for supervised dimensionality reduction. , 2016, , .		0
42	Statistical feature bag based background subtraction for local change detection. Information Sciences, 2016, 366, 31-47.	4.0	25
43	Integration of fuzzy Markov random field and local information for separation of moving objects and shadows. Information Sciences, 2016, 331, 15-31.	4.0	9
44	Efficient silhouette-based contour tracking using local information. Soft Computing, 2016, 20, 785-805.	2.1	9
45	Application of Gibbsâ€“Markov random field and Hopfield-type neural networks for detecting moving objects from video sequences captured by static camera. Soft Computing, 2015, 19, 2769-2781.	2.1	9
46	Land-Cover Classification of Remotely Sensed Images Using Compressive Sensing Having Severe Scarcity of Labeled Patterns. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1257-1261.	1.4	17
47	Combination of Clustering and Ranking Techniques for Unsupervised Band Selection of Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2814-2823.	2.3	66
48	Edge Preserving Region Growing for Aerial Color Image Segmentation. Advances in Intelligent Systems and Computing, 2015, , 481-488.	0.5	5
49	MIPCE: An MI-based protein complex extraction technique. Journal of Biosciences, 2015, 40, 701-708.	0.5	1
50	A Study on Nonlinear Classifier-Based Moving Object Tracking. Advances in Intelligent Systems and Computing, 2015, , 571-578.	0.5	1
51	A comparative study of local binary pattern descriptors and Gabor Filter for electron microscopy image segmentation. , 2014, , .		2
52	Maximum Margin Criterion Based Band Extraction of Hyperspectral Imagery. , 2014, , .		5
53	Rule induction based object tracking. , 2014, , .		1
54	Data clustering: review and investigation of parallel genetic algorithms for revealing clusters. International Journal of Applied Management Science, 2014, 6, 212.	0.1	2

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55	Semi-supervised change detection using modified self-organizing feature map neural network. Applied Soft Computing Journal, 2014, 15, 1-20.	4.1	56
56	Ensemble of Multilayer Perceptrons for Change Detection in Remotely Sensed Images. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 49-53.	1.4	14
57	A novel approach for change detection of remotely sensed images using semi-supervised multiple classifier system. Information Sciences, 2014, 269, 35-47.	4.0	60
58	Spatio-contextual fuzzy clustering with Markov random field model for change detection in remotely sensed images. Optics and Laser Technology, 2014, 57, 284-292.	2.2	36
59	Band elimination of hyperspectral imagery using partitioned band image correlation and capacitory discrimination. International Journal of Remote Sensing, 2014, 35, 554-577.	1.3	35
60	Moving object detection using Markov Random Field and Distributed Differential Evolution. Applied Soft Computing Journal, 2014, 15, 121-136.	4.1	13
61	FUMET: A fuzzy network module extraction technique for gene expression data. Journal of Biosciences, 2014, 39, 351-364.	0.5	18
62	A Neural Approach Under Active Learning Mode for Change Detection in Remotely Sensed Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1200-1206.	2.3	16
63	Multi-Objective Genetic and Fuzzy Approaches in Rule Mining Problem of Knowledge Discovery in Databases. Advances in Computational Intelligence and Robotics Book Series, 2014, , 147-179.	0.4	0
64	Change detection for moving object segmentation with robust background construction under Wronskian framework. Machine Vision and Applications, 2013, 24, 795-809.	1.7	26
65	A Fast and Efficient Clutter Rejection Algorithm for SAR Imagery. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2431-2439.	2.6	0
66	Integration of Gibbs Markov Random Field and Hopfield-Type Neural Networks for Unsupervised Change Detection in Remotely Sensed Multitemporal Images. IEEE Transactions on Image Processing, 2013, 22, 3087-3096.	6.0	69
67	Aggregation pheromone metaphor for semi-supervised classification. Pattern Recognition, 2013, 46, 2239-2248.	5.1	17
68	Self-adaptive differential evolution for feature selection in hyperspectral image data. Applied Soft Computing Journal, 2013, 13, 1969-1977.	4.1	125
69	Nonâ€parametric modified histogram equalisation for contrast enhancement. IET Image Processing, 2013, 7, 641-652.	1.4	80
70	Band elimination of hyperspectral imagery using correlation of partitioned band images. , 2013, , .		3
71	Revisiting evolutionary algorithms in feature selection and nonfuzzy/fuzzy rule based classification. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2013, 3, 83-108.	4.6	8
72	Efficient silhouette based contour tracking. , 2013, , .		2

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73	Spatial constraint Hopfield-type neural networks for detecting changes in remotely sensed multitemporal images. , 2013, , .		0
74	Moving object detection using Gaussian background model and Wronskian framework. , 2013, , .		5
75	Change detection in remotely sensed images using semi-supervised clustering algorithms. International Journal of Knowledge Engineering and Soft Data Paradigms, 2013, 4, 118.	0.0	2
76	A Survey on Fuzzy Association Rule Mining. International Journal of Data Warehousing and Mining, 2013, 9, 1-27.	0.4	22
77	A Subspace Module Extraction Technique for Gene Expression Data. Lecture Notes in Computer Science, 2013, , 635-640.	1.0	1
78	Enhanced eigenspace separation transform for classification. , 2012, , .		1
79	Semi-supervised Hopfield-Type Neural Network for change detection in remotely sensed images. , 2012, , .		1
80	A semi-supervised change detection for remotely sensed images using ensemble classifier. , 2012, , .		1
81	Clustering based band selection for hyperspectral images. , 2012, , .		8
82	Search-based semi-supervised clustering algorithms for change detection in remotely sensed images. , 2012, , .		2
83	Object and shadow separation using fuzzy Markov Random Field and local gray level co-occurence matrix based textural features. , 2012, , .		3
84	Fuzzy clustering algorithms incorporating local information for change detection in remotely sensed images. Applied Soft Computing Journal, 2012, 12, 2683-2692.	4.1	74
85	Object Detection From Videos Captured by Moving Camera by Fuzzy Edge Incorporated Markov Random Field and Local Histogram Matching. IEEE Transactions on Circuits and Systems for Video Technology, 2012, 22, 1127-1135.	5.6	37
86	Combination of fuzzy clustering algorithms for change detection in remote sensing images. , 2012, , .		1
87	An improved swarm optimized functional link artificial neural network (ISO-FLANN) for classification. Journal of Systems and Software, 2012, 85, 1333-1345.	3.3	121
88	Scalable Fuzzy Genetic Classifier Based on Fitness Approximation. Lecture Notes in Computer Science, 2012, , 492-499.	1.0	0
89	Distributed differential evolution algorithm for MAP estimation of MRF model for detecting moving objects. , 2011, , .		1
90	Hue-preserving color image enhancement using particle swarm optimization. , 2011, , .		37

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91	Histogram thresholding for unsupervised change detection of remote sensing images. International Journal of Remote Sensing, 2011, 32, 6071-6089.	1.3	68
92	A Change Information Based Fast Algorithm for Video Object Detection and Tracking. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 993-1004.	5.6	40
93	Entropy based region selection for moving object detection. Pattern Recognition Letters, 2011, 32, 2097-2108.	2.6	18
94	Supervised and unsupervised landuse map generation from remotely sensed images using ant based systems. Applied Soft Computing Journal, 2011, 11, 5770-5781.	4.1	39
95	A condensed polynomial neural network for classification using swarm intelligence. Applied Soft Computing Journal, 2011, 11, 3106-3113.	4.1	14
96	Fuzzy clustering algorithms for unsupervised change detection in remote sensing images. Information Sciences, 2011, 181, 699-715.	4.0	269
97	Wavelet-fuzzy hybridization: Feature-extraction and land-cover classification of remote sensing images. Applied Soft Computing Journal, 2011, 11, 2999-3011.	4.1	26
98	Moving Objects Detection from Video Sequences Using Fuzzy Edge Incorporated Markov Random Field Modeling and Local Histogram Matching. Lecture Notes in Computer Science, 2011, , 173-179.	1.0	1
99	Neuro-Genetic Approach for Detecting Changes in Multitemporal Remotely Sensed Images. Lecture Notes in Computer Science, 2011, , 318-323.	1.0	0
100	Neuro-fuzzy-combiner: an effective multiple classifier system. International Journal of Knowledge Engineering and Soft Data Paradigms, 2010, 2, 107.	0.0	21
101	Ant Based Semi-supervised Classification. Lecture Notes in Computer Science, 2010, , 376-383.	1.0	8
102	Use of aggregation pheromone density for image segmentation. Pattern Recognition Letters, 2009, 30, 939-949.	2.6	18
103	An unsupervised context-sensitive change detection technique based on modified self-organizing feature map neural network. International Journal of Approximate Reasoning, 2009, 50, 37-50.	1.9	35
104	A novel approach to neuro-fuzzy classification. Neural Networks, 2009, 22, 100-109.	3.3	58
105	Unsupervised Change Detection of Remotely Sensed Images Using Fuzzy Clustering. , 2009, , .		5
106	Detection of Earth Surface Cracks Using Parallel Genetic Algorithm Based Thresholding. , 2009, , .		2
107	Ant based supervised and unsupervised land use map generation from remotely sensed images. , 2009, , .		2
108	Gray-level Image Enhancement By Particle Swarm Optimization. , 2009, , .		109

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109	A Discrete Particle Swarm for Multi-objective Problems in Polynomial Neural Networks used for Classification: A Data Mining Perspective. Studies in Computational Intelligence, 2009, , 115-155.	0.7	1
110	A novel fuzzy classifier based on product aggregation operator. Pattern Recognition, 2008, 41, 961-971.	5.1	33
111	Aggregation pheromone density based data clustering. Information Sciences, 2008, 178, 2816-2831.	4.0	56
112	Application of elitist multi-objective genetic algorithm for classification rule generation. Applied Soft Computing Journal, 2008, 8, 477-487.	4.1	72
113	Protein secondary structure prediction using distance based classifiers. International Journal of Approximate Reasoning, 2008, 47, 37-44.	1.9	19
114	Aggregation Pheromone Density Based Classification. , 2008, , .		1
115	Wasp: A Multi-agent System for Multiple Recommendations Problem. , 2008, , .		5
116	A Neural Approach to Unsupervised Change Detection of Remote-Sensing Images. Studies in Computational Intelligence, 2008, , 243-268.	0.7	2
117	Genetic Algorithm for Optimization of Multiple Objectives in Knowledge Discovery from Large Databases. Studies in Computational Intelligence, 2008, , 1-22.	0.7	5
118	NEURO-WAVELET CLASSIFIER FOR MULTISPECTRAL REMOTE SENSING IMAGES. International Journal of Wavelets, Multiresolution and Information Processing, 2007, 05, 589-611.	0.9	12
119	Parallel Multi-objective Genetic Algorithm for Classification Rule Mining. IETE Journal of Research, 2007, 53, 475-483.	1.8	6
120	Neuro-Wavelet Classifier for Remote Sensing Image Classification. , 2007, , .		1
121	Unsupervised Change Detection in Remote-Sensing Images Using Modified Self-Organizing Feature Map Neural Network. , 2007, , .		11
122	Wavelet-Feature-Based Classifiers for Multispectral Remote-Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1881-1886.	2.7	47
123	Fast mean filtering technique (FMFT). Pattern Recognition, 2007, 40, 890-897.	5.1	62
124	A Context-Sensitive Technique for Unsupervised Change Detection Based on Hopfield-Type Neural Networks. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 778-789.	2.7	121
125	Multispectral Remote Sensing Image Classification Using Wavelet Based Features. , 2007, , 3-34.		3
126	Semi-supervised Learning with Multilayer Perceptron for Detecting Changes of Remote Sensing Images. , 2007, , 161-168.		7

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127	Neuro-Fuzzy Fusion: A New Approach to Multiple Classifier System. , 2006, , .		7
128	Particles with Age for Data Clustering. , 2006, , .		6
129	Aggregation Pheromone Density Based Clustering. , 2006, , .		3
130	Unsupervised Change Detection in Remote-Sensing Images using One-dimensional Self-Organizing Feature Map Neural Network. , 2006, , .		4
131	Aggregation Pheromone Density Based Image Segmentation. Lecture Notes in Computer Science, 2006, , 118-127.	1.0	3
132	Aggregation Pheromone Density Based Change Detection in Remotely Sensed Images. , 2006, , .		7
133	A Comparative Study of Clustering Algorithms. Information Technology Journal, 2006, 5, 551-559.	0.3	13
134	Evolutionary Algorithms for Data Mining and Knowledge Discovery. , 2005, , 1-20.		5
135	Soft computing data mining. Information Sciences, 2004, 163, 1-3.	4.0	13
136	Multi-objective rule mining using genetic algorithms. Information Sciences, 2004, 163, 123-133.	4.0	184
137	Incorporating Ancestors' Influence in Genetic Algorithms. Applied Intelligence, 2003, 18, 7-25.	3.3	5
138	A GA-FUZZY Approach to Evolve Hopfield Type Optimum Networks for Object Extraction. Lecture Notes in Computer Science, 2002, , 444-449.	1.0	1
139	Soft Computing and Image Analysis: Features, Relevance and Hybridization. Studies in Fuzziness and Soft Computing, 2000, , 1-20.	0.6	2
140	Genotypic and phenotypic assortative mating in genetic algorithm. Information Sciences, 1998, 105, 209-226.	4.0	18
141	On Making Neural Network Based Learning Systems Robust. IETE Journal of Research, 1998, 44, 219-225.	1.8	4
142	Forking Genetic Algorithms: GAs with Search Space Division Schemes. Evolutionary Computation, 1997, 5, 61-80.	2.3	97
143	Designing Hopfield Type Networks Using Genetic Algorithms and Its Comparison with Simulated Annealing. International Journal of Pattern Recognition and Artificial Intelligence, 1997, 11, 447-461.	0.7	26
144	Genetic algorithms with a robust solution searching scheme. IEEE Transactions on Evolutionary Computation, 1997, 1, 201-208.	7.5	225

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145	Review Neuro-fuzzy computing for image processing and pattern recognition. International Journal of Systems Science, 1996, 27, 1179-1193.	3.7	23
146	Use of fuzziness measures in layered networks for object extraction: a generalization. Fuzzy Sets and Systems, 1995, 72, 331-348.	1.6	39
147	Neural Computing: An Introduction and Some Applications. IETE Journal of Education Online, 1994, 35, 105-125.	0.7	0
148	OBJECT BACKGROUND CLASSIFICATION USING HOPFIELD TYPE NEURAL NETWORK. International Journal of Pattern Recognition and Artificial Intelligence, 1992, 06, 989-1008.	0.7	28
149	Fuzzy geometry in image analysis. Fuzzy Sets and Systems, 1992, 48, 23-40.	1.6	72
150	Neural network, self-organization and object extraction. Pattern Recognition Letters, 1992, 13, 387-397.	2.6	27
151	Image segmentation using fuzzy correlation. Information Sciences, 1992, 62, 223-250.	4.0	39
152	Image segmentation using a neural network. Biological Cybernetics, 1991, 66, 151-158.	0.6	37
153	Index of area coverage of fuzzy image subsets and object extraction. Pattern Recognition Letters, 1990, 11, 831-841.	2.6	57
154	Performance of Aggregation Pheromone System on Unimodal and Multimodal Problems. , 0, , .		11
155	Multi-Objective Genetic and Fuzzy Approaches in Rule Mining Problem of Knowledge Discovery in Databases. , 0, , 1083-1114.		0