Mahua Bhattacharya

List of Publications by Year
in descending order

96	474	1040056 9	1058476 14
papers	citations	h-index	g-index

97	97	97	351
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Classification of brain MR images using Modified version of Simplified Pulse-Coupled Neural Network and Linear Programming Twin Support Vector Machines. Journal of Supercomputing, 2022, 78, 13831-13863.	3.6	5
2	A novel <scp>DeepML</scp> framework for multiâ€classification of breast cancer based on transfer learning. International Journal of Imaging Systems and Technology, 2022, 32, 1963-1977.	4.1	4
3	Automated Diagnosis system for detection of the pathological brain using Fast version of Simplified Pulse-Coupled Neural Network and Twin Support Vector Machine. Multimedia Tools and Applications, 2021, 80, 30479-30502.	3.9	3
4	Quantitative and Qualitative Image Analysis of In Vitro Co-Culture 3D Tumor Spheroid Model by Employing Image-Processing Techniques. Applied Sciences (Switzerland), 2021, 11, 4636.	2.5	4
5	Memetic Algorithm-Based Data Gathering Scheme for IoT-Enabled Wireless Sensor Networks. IEEE Sensors Journal, 2020, 20, 11725-11734.	4.7	19
6	Discrimination and quantification of live/dead rat brain cells using a non-linear segmentation model. Medical and Biological Engineering and Computing, 2020, 58, 1127-1146.	2.8	6
7	An automated computer-aided diagnosis system for classification of MR images using texture features and gbest-guided gravitational search algorithm. Biocybernetics and Biomedical Engineering, 2020, 40, 815-835.	5.9	14
8	Brain tumor segmentation of normal and lesion tissues using hybrid clustering and hierarchical centroid shape descriptor. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2019, 7, 676-689.	1.9	13
9	Segmentation of CA3 Hippocampal Region of Rat Brain Cells Images Based on Bio-inspired Clustering Technique. , 2019, , .		0
10	A Novel Computational Approach based on 3D Reconstruction and WEKA Tool to analyse the morphology of Golgi-Cox stained Rat Brain Cells. , 2019, , .		0
11	Energy Conservation Schemes of Wireless Sensor Networks for IoT Applications: A Survey. , 2019, , .		3
12	An Automatic Cell Nuclei Segmentation based on Deep Learning Strategies. , 2019, , .		2
13	Brain Tumor Segmentation with Skull Stripping and Modified Fuzzy C-Means. Smart Innovation, Systems and Technologies, 2019, , 229-237.	0.6	9
14	Nissl Stained Rat Brain Cell Image Analysis Post Exposure to Electromagnetic Fields Using Image Processing Techniques. , 2018, , .		0
15	Study of Image Segmentation Techniques on Microscopic Cell Images of Section of Rat Brain for Identification of Cell Body and Dendrite. Advances in Intelligent Systems and Computing, 2018, , 452-462.	0.6	0
16	Blur robust extremal region-based interest points for medical image registration. Pattern Analysis and Applications, 2018, 21, 45-56.	4.6	1
17	Brain Tumor Segmentation of Normal and Pathological Tissues Using K-mean Clustering with Fuzzy C-mean Clustering. Lecture Notes in Computational Vision and Biomechanics, 2018, , 286-296.	0.5	5
18	Segmentation of Heavily Clustered Cell Nuclei in Histopathological Images. Lecture Notes in Computational Vision and Biomechanics, 2018, , 244-254.	0.5	1

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19	Biomedical Watermarking. , 2018, , 618-646.		0
20	Study on neurodegeneration at different stages using MR images: computational approach to registration process with optimisation techniques. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2017, 5, 165-182.	1.9	4
21	A density invariant approach to clustering. Neural Computing and Applications, 2017, 28, 1695-1713.	5.6	6
22	Classification of breast tumors as benign and malignant using textural feature descriptor. , 2017, , .		10
23	Mammographic image segmentation by marker controlled watershed algorithm. , 2017, , .		12
24	Segmentation of tumor and edema based on K-mean clustering and hierarchical centroid shape descriptor. , 2017, , .		7
25	Kapur's and Otsu's based optimal multilevel image thresholding using social spider and firefly algorithm. , 2016, , .		6
26	Automatic parameter setting of pulse coupled neural network for image segmentation. , 2016, , .		0
27	MR brain tumor detection employing Laplacian Eigen maps and kernel support vector machine. , 2016, , .		2
28	Navigation in Multi Robot system using cooperative learning: A survey. , 2016, , .		6
29	Detectors and descriptors for registration of illumination varying, globally distorted images. International Journal of Computers and Applications, 2016, 38, 75-81.	1.3	0
30	Performance analysis of 16-channel 80-gbps optical fiber communication system. , 2016, , .		6
31	A variant of DBSCAN algorithm to find embedded and nested adjacent clusters. , 2016, , .		5
32	Social Spider Algorithm Employed Multi-level Thresholding Segmentation Approach. Smart Innovation, Systems and Technologies, 2016, , 249-259.	0.6	7
33	A Generic Algorithm for Segmenting a Specified Region of Interest Based on Chanveseâ€™s Algorithm and Active Contours. Advances in Intelligent Systems and Computing, 2016, , 239-247.	0.6	2
34	Multi-level Thresholding Segmentation Approach Based on Spider Monkey Optimization Algorithm. Advances in Intelligent Systems and Computing, 2016, , 273-287.	0.6	17
35	Segmentation of Cotton Bolls by Efficient Feature Selection Using Conventional Fuzzy C-Means Algorithm with Perception of Color. Advances in Intelligent Systems and Computing, 2016, , 731-741.	0.6	3
36	Medical image registration using extremal region based interest points. , 2015, , .		2

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37	Effective image fusion method to study Alzheimer's disease using MR, PET images. , 2015, , .		10
38	On global transform preservation by region based interest points for image registration. , 2015, , .		1
39	Affinity based seeded region growing algorithm for medical image segmentation. , 2015, , .		2
40	A Combination of Bias-Field Corrected Fuzzy C-Means and Level Set Approach for Brain MRI Image Segmentation. , 2015, , .		12
41	Automatic classification of cotton boll using signature curve and boundary descriptors. , 2015, , .		0
42	Generation of novel encrypted code using cryptography for multiple level data security for Electronic Patient Record. , 2015, , .		3
43	Quality assessment of modeled protein structure using physicochemical properties. Journal of Bioinformatics and Computational Biology, 2015, 13, 1550005.	0.8	21
44	GUI based smart breast cancer identification system for mammographic images through 2nd level secured combined Crypto-watermarking. , 2014, , .		2
45	Development of CAD system for analysis of vague set theory based contrast enhancement technique in mammograms. International Journal of Hybrid Intelligent Systems, 2014, 11, 227-240.	1.2	0
46	Quick object extraction in fuzzy framework. , 2014, , .		1
47	Safe Transmission of Text Files through a New Audio Steganography Technique. , 2014, , .		0
48	Automatic Speech Recognition of accented Hindi data. , 2014, , .		3
49	Consignor Is a Spammer. , 2014, , .		0
50	GUI Based Brain Tumor Identification System by Detecting Infected Region through a Combination of Region Growing, Cryptography, and Digital Watermarking Technique. , 2014, , .		0
51	Genetic Algorithm Based Feature Selection In a Recognition Scheme Using Adaptive Neuro Fuzzy Techniques. International Journal of Computers, Communications and Control, 2014, 5, 458.	1.8	7
52	A Diversity-Based Comparative Study for Advance Variants of Differential Evolution. Advances in Intelligent Systems and Computing, 2014, , 1317-1331.	0.6	0
53	Biomedical Watermarking. Advances in Computational Intelligence and Robotics Book Series, 2014, , 208-234.	0.4	3
54	Secure Transmission and Recovery of Embedded Patient Information from Biomedical Images of Different Modalities through a Combination of Cryptography and Watermarking. International Journal of Image Graphics and Signal Processing, 2014, 6, 18-31.	1.2	2

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55	Optimized Coronary Artery Segmentation Using Frangi Filter and Anisotropic Diffusion Filtering. , 2013, , .		4
56	A new combined crypto-watermarking technique using RSA algorithm and discrete cosine transform to retrieve embedded EPR from noisy bio-medical images. , 2013, , .		6
57	An Efficient Approach to Set Up High Performance Network Center in Academia. , 2013, , .		0
58	Collaborative rough-fuzzy clustering: An application to intensity non-uniformity correction in brain MR images. , 2013, , .		1
59	Speaker Independent Speech Recognition Implementation with Adaptive Language Models. , 2013, , .		1
60	Colour vision deficiency correction in image processing. , 2013, , .		6
61	User History Based Mail Filtering Process. , 2013, , .		1
62	Structure stability analysis of Ni<SUB align="right">n(n = 2 - 22) using nature inspired algorithms: a performance study. International Journal of Advanced Intelligence Paradigms, 2013, 5, 16.	0.3	1
63	Tumor Mass Identification Based on Surface Analysis and Fractal Dimensions. Lecture Notes in Electrical Engineering, 2013, , 173-180.	0.4	0
64	Multiresolution Framework Based Global Optimization Technique for Multimodal Image Registration. Communications in Computer and Information Science, 2013, , 336-347.	0.5	0
65	Biomedical image watermarking for content protection using multiple copies of information and bit majority algorithm in wavelet domain. , 2012, , .		3
66	Hybrid softcomputing model for lesion identification and information combination: some case studies. International Journal of Data Mining and Bioinformatics, 2012, 6, 335.	0.1	1
67	GA-based multiresolution fusion of segmented brain images using PD-, T1- and T2-weighted MR modalities. Neural Computing and Applications, 2012, 21, 1433-1447.	5.6	7
68	Retrieval of hidden infected region using biomedical image watermarking for tele-diagnosis to ensure better treatment. , 2012, , .		5
69	Development of advanced contrast enhancement technique for mammographie images. , 2012, , .		0
70	Analytical assessment of intelligent segmentation techniques for cortical tissues of MR brain images: a comparative study. Artificial Intelligence Review, 2012, 37, 69-81.	15.7	1
71	Guided Reproduction in Differential Evolution. Lecture Notes in Computer Science, 2012, , 117-127.	1.3	1
72	Reversible Digital Image Watermarking Scheme Using Bit Replacement and Majority Algorithm Technique. Journal of Intelligent Learning Systems and Applications, 2012, 04, 199-206.	0.5	10

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73	Classification of poor contrast mammograms using a novel and fast boundary detection technique. , 2011, , .		0
74	Affine-based registration of CT and MR modality images of human brain using multiresolution approaches: comparative study on genetic algorithm and particle swarm optimization. Neural Computing and Applications, 2011, 20, 223-237.	5.6	29
75	Multimodality Medical Image Registration and Fusion Techniques Using Mutual Information and Genetic Algorithm-Based Approaches. Advances in Experimental Medicine and Biology, 2011, 696, 441-449.	1.6	9
76	Computerized Decision Support System for Mass Identification in Breast Using Digital Mammogram: A Study on GA-Based Neuro-Fuzzy Approaches. Advances in Experimental Medicine and Biology, 2011, 696, 523-533.	1.6	9
77	A STUDY ON GENETIC ALGORITHM BASED HYBRID SOFTCOMPUTING MODEL FOR BENIGNANCY/MALIGNANCY DETECTION OF MASSES USING DIGITAL MAMMOGRAM. International Journal of Computational Intelligence and Applications, 2011, 10, 141-165.	0.8	6
78	Fast hybrid rough-set theoretic fuzzy clustering technique with application to multispectral image segmentation. , 2010, , .		1
79	Identification of tiny and large calcification in breast: a study on mammographic image analysis. International Journal of Bioinformatics Research and Applications, 2010, 6, 418.	0.2	3
80	Identification of microcalcifications and grading of masses using digital mammogram. International Journal of Medical Engineering and Informatics, 2010, 2, 122.	0.3	4
81	Toolkit for grid-enabled high resolution image processing. , 2010, , .		0
82	Speech based dialog query system over asterisk PBX server. , 2010, , .		9
83	A fast and noise-adaptive rough-fuzzy hybrid algorithm for medical image segmentation. , 2010, , .		7
84	Segmentation of medical images using Selective Binary and Gaussian Filtering regularized level set (SBGFRLS) method. , 2010, , .		2
85	Content-Based Medical Image Retrieval Using the Generic Fourier Descriptor with Brightness. , 2009, , .		4
86	A Study on Prognosis of Brain Tumors Using Fuzzy Logic and Genetic Algorithm Based Techniques. , 2009, , .		12
87	Evolutionary algorithm based automated medical image fusion technique: Comparative study with fuzzy fusion approach. , 2009, , .		2
88	ASR System Integration with Asterisk for SIP or IAX Softphone Clients. , 2009, , .		1
89	Registration of Multimodality Medical Imaging of Brain using Particle Swarm Optimization. , 2009, , 131-139.		3
90	A novel vague set approach for selective contrast enhancement of mammograms using multiresolution. Journal of Biomedical Science and Engineering, 2009, 02, 575-581.	0.4	2

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91	SOFT COMPUTING BASED DECISION MAKING APPROACH FOR TUMOR MASS IDENTIFICATION IN MAMMOGRAM. International Journal of Bioinformatics Research, 2009, 1, 37-46.	0.3	3
92	GA Based Neuro Fuzzy Techniques for Breast Cancer Identification. , 2008, , .		20
93	Hiding sensitive association rules efficiently by introducing new variable hiding counter. , 2008, , .		8
94	Fuzzy Logic Based Segmentation of Microcalcification in Breast Using Digital Mammograms Considering Multiresolution. , 2007, , .		15
95	Multi resolution medical image registration using maximization of mutual information & optimization by genetic algorithm. , 2007, , .		11
96	Registration of CT and MR images of Alzheimerâ€™s patient: a shape theoretic approach. Pattern Recognition Letters, 2000, 21, 531-548.	4.2	15