Shaikh Anowarul Fattah

List of Publications by Year
in descending order

125 papers	1,610 citations	516710 16 h-index	414414 32 g-index
125 all docs	125 docs citations	125 times ranked	1401 citing authors

#	Article	IF	Citations
1	CovXNet: A multi-dilation convolutional neural network for automatic COVID-19 and other pneumonia detection from chest X-ray images with transferable multi-receptive feature optimization. Computers in Biology and Medicine, 2020, 122, 103869.	7.0	356
2	An integrated autoencoder-based hybrid CNN-LSTM model for COVID-19 severity prediction from lung ultrasound. Computers in Biology and Medicine, 2021, 132, 104296.	7.0	57
3	PolypSegNet: A modified encoder-decoder architecture for automated polyp segmentation from colonoscopy images. Computers in Biology and Medicine, 2021, 128, 104119.	7.0	56
4	A time-frequency domain approach of heart rate estimation from photoplethysmographic (PPG) signal. Biomedical Signal Processing and Control, 2017, 36, 146-154.	5.7	44
5	CHOBS: Color Histogram of Block Statistics for Automatic Bleeding Detection in Wireless Capsule Endoscopy Video. IEEE Journal of Translational Engineering in Health and Medicine, 2018, 6, 1-12.	3.7	42
6	Sleep Apnea Detection Based on Rician Modeling of Feature Variation in Multiband EEG Signal. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1066-1074.	6.3	41
7	DeepArrNet: An Efficient Deep CNN Architecture for Automatic Arrhythmia Detection and Classification From Denoised ECG Beats. IEEE Access, 2020, 8, 104788-104800.	4.2	41
8	CovTANet: A Hybrid Tri-Level Attention-Based Network for Lesion Segmentation, Diagnosis, and Severity Prediction of COVID-19 Chest CT Scans. IEEE Transactions on Industrial Informatics, 2021, 17, 6489-6498.	11.3	31
9	Detection of anemia from image of the anterior conjunctiva of the eye by image processing and thresholding. , 2017, , .		30
10	Automated Brain Tumor Segmentation Based on Multi-Planar Superpixel Level Features Extracted From 3D MR Images. IEEE Access, 2020, 8, 25335-25349.	4.2	29
11	Real-Time American Sign Language Recognition Using Skin Segmentation and Image Category Classification with Convolutional Neural Network and Deep Learning. , 2018, , .		28
12	A Novel Multi-Stage Training Approach for Human Activity Recognition From Multimodal Wearable Sensor Data Using Deep Neural Network. IEEE Sensors Journal, 2021, 21, 1715-1726.	4.7	28
13	A statistical feature based novel method to detect bleeding in wireless capsule endoscopy images. , 2014, , .		27
14	Identification of motor neuron disease using wavelet domain features extracted from EMG signal. , 2013, , .		24
15	An Automatic Bleeding Frame and Region Detection Scheme for Wireless Capsule Endoscopy Videos Based on Interplane Intensity Variation Profile in Normalized RGB Color Space. Journal of Healthcare Engineering, 2018, 2018, 1-12.	1.9	24
16	Automatic brain tumor detection and segmentation from multi-modal MRI images based on region growing and level set evolution. , 2015, , .		22
17	Image-based Bengali Sign Language Alphabet Recognition for Deaf and Dumb Community. , 2019, , .		22
18	Identifying the Motor Neuron Disease in EMG Signal Using Time and Frequency Domain Features with Comparison. Signal and Image Processing: an International Journal, 2012, 3, 99-114.	0.3	21

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19	Automatic bleeding detection in wireless capsule endoscopy based on RGB pixel intensity ratio. , 2014, , .		19
20	Cluster based statistical feature extraction method for automatic bleeding detection in wireless capsule endoscopy video. Computers in Biology and Medicine, 2018, 94, 41-54.	7.0	19
21	Unmanned Floating Waste Collecting Robot. , 2019, , .		19
22	SPECMAR: fast heart rate estimation from PPG signal using a modified spectral subtraction scheme with composite motion artifacts reference generation. Medical and Biological Engineering and Computing, 2019, 57, 689-702.	2.8	19
23	DCT domain feature extraction scheme based on motor unit action potential of EMG signal for neuromuscular disease classification. Healthcare Technology Letters, 2014, 1, 26-31.	3.3	18
24	Automatic detection of sleep apnea events based on interâ€band energy ratio obtained from multiâ€band EEG signal. Healthcare Technology Letters, 2019, 6, 82-86.	3.3	18
25	Epileptic seizure detection in EEG signals using normalized IMFs in CEEMDAN domain and quadratic discriminant classifier. Biomedical Signal Processing and Control, 2020, 58, 101833.	5.7	18
26	Cascade and parallel combination (CPC) of adaptive filters for estimating heart rate during intensive physical exercise from photoplethysmographic signal. Healthcare Technology Letters, 2018, 5, 18-24.	3.3	17
27	AutoCovNet: Unsupervised feature learning using autoencoder and feature merging for detection of COVID-19 from chest X-ray images. Biocybernetics and Biomedical Engineering, 2021, 41, 1685-1701.	5.9	17
28	Efficient approaches for accuracy improvement of breast cancer classification using wisconsin database. , 2017, , .		15
29	Real-time non-intrusive eye-gaze tracking based wheelchair control for the physically challenged. , 2016, , .		14
30	Low-cost EEG based electric wheelchair with advanced control features. , 2017, , .		14
31	Multiple Linear Discriminant Models for Extracting Salient Characteristic Patterns in Capsule Endoscopy Images for Multi-Disease Detection. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-11.	3.7	14
32	Sleep Apnea Detection From Variational Mode Decomposed EEG Signal Using a Hybrid CNN-BiLSTM. IEEE Access, 2021, 9, 102355-102367.	4.2	14
33	An adaptive noise cancellation scheme using particle swarm optimization algorithm. , 2010, , .		13
34	Automated detection of optic disc and blood vessel in retinal image using morphological, edge detection and feature extraction technique. , 2014, , .		13
35	Stetho-phone: Low-cost digital stethoscope for remote personalized healthcare. , 2017, , .		13
36	Seizure and Non-Seizure EEG Signals Detection Using 1-D Convolutional Neural Network Architecture of Deep Learning Algorithm. , 2019, , .		13

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37	A histogram-based dominant wavelet domain feature selection algorithm for palm-print recognition. Computers and Electrical Engineering, 2013, 39, 1114-1128.	4.8	12
38	Low-cost smart electric wheelchair with destination mapping and intelligent control features. , 2017, , .		12
39	Automatic Computer Aided Bleeding Detection Scheme for Wireless Capsule Endoscopy (WCE) Video Based on Higher and Lower Order Statistical Features in a Composite Color. Journal of Medical and Biological Engineering, 2018, 38, 482-496.	1.8	12
40	VMD-RiM: Rician Modeling of Temporal Feature Variation Extracted From Variational Mode Decomposed EEG Signal for Automatic Sleep Apnea Detection. IEEE Access, 2018, 6, 77440-77453.	4.2	12
41	Probability density function based modeling of spatial feature variation in capsule endoscopy data for automatic bleeding detection. Computers in Biology and Medicine, 2019, 115, 103478.	7.0	12
42	Least Square Saliency Transformation of Capsule Endoscopy Images for PDF Model Based Multiple Gastrointestinal Disease Classification. IEEE Access, 2020, 8, 58509-58521.	4.2	12
43	CovSegNet: A Multi Encoderâ€"Decoder Architecture for Improved Lesion Segmentation of COVID-19 Chest CT Scans. IEEE Transactions on Artificial Intelligence, 2021, 2, 283-297.	4.7	12
44	Real time injecting device with automated robust vein detection using near infrared camera and live video. , 2017, , .		11
45	A secured electronic transaction scheme for mobile banking in Bangladesh incorporating digital watermarking. , 2010, , .		10
46	An approach for human identification based on time and frequency domain features extracted from ECG signals. , 2011, , .		10
47	Seizure activity classification based on bimodal Gaussian modeling of the gamma and theta band IMFs of EEG signals. Biomedical Signal Processing and Control, 2021, 64, 102273.	5.7	10
48	SpecMEn-DL: spectral mask enhancement with deep learning models to predict COVID-19 from lung ultrasound videos. Health Information Science and Systems, 2021, 9, 28.	5.2	10
49	A wavelet-domain local feature selection scheme for face recognition. , 2011, , .		9
50	Motor imagery EEG signal classification scheme based on autoregressive reflection coefficients. , 2014, , .		9
51	A Single-Channel Acoustic Echo Cancellation Scheme Using Gradient-Based Adaptive Filtering. Circuits, Systems, and Signal Processing, 2014, 33, 1541-1572.	2.0	9
52	Robust single finger movement detection scheme for real time wheelchair control by physically challenged people. , 2017, , .		9
53	Mental Task Classification Scheme Utilizing Correlation Coefficient Extracted from Interchannel Intrinsic Mode Function. BioMed Research International, 2017, 2017, 1-11.	1.9	9
54	Bangla Sign Language Recognition with Skin Segmentation and Binary Masking. , 2019, , .		9

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55	A DCT-based feature extraction algorithm for palm-print recognition. , 2010, , .		8
56	Automated brain tumor segmentation from mri data based on exploration of histogram characteristics of the cancerous hemisphere. , 2017, , .		8
57	An Automatic Ocular Disease Detection Scheme from Enhanced Fundus Images Based on Ensembling Deep CNN Networks. , 2020, , .		8
58	Transfer Learning Based Method for COVID-19 Detection From Chest X-ray Images. , 2020, , .		8
59	A Basic Digital Watermarking Algorithm in Discrete Cosine Transformation Domain. , 2011, , .		7
60	Noise Robust Formant Frequency Estimation Method Based on Spectral Model of Repeated Autocorrelation of Speech. IEEE/ACM Transactions on Audio Speech and Language Processing, 2017, 25, 1357-1370.	5.8	7
61	Cost efficient autonomous navigation system (e-cane) for visually impaired human beings. , 2017, , .		7
62	Text to Braille Scanner with Ultra Low Cost Refreshable Braille Display. , 2018, , .		7
63	Real time hand movement controlled robotic arm for risk prevention. , 2017, , .		6
64	An efficient feature extraction scheme for classification of mental tasks based on inter-channel correlation in wavelet domain utilizing EEG signal. Biomedical Signal Processing and Control, 2020, 61, 102033.	5.7	6
65	A face recognition scheme based on spectral domain cross-correlation function. , 2011, , .		5
66	Design of a low cost anti-theft sensor for motorcycle security device. , 2017, , .		5
67	A cost effective GPS guided autonomous object transporter robot for disaster management and industrial automation. , 2017, , .		5
68	Wrist-card: PPG sensor based wrist wearable unit for low cost personalized cardio healthcare system. , 2017, , .		5
69	Application of Electrical Network Frequency of Digital Recordings for Location-Stamp Verification. Applied Sciences (Switzerland), 2019, 9, 3135.	2.5	5
70	ECGDeepNET: A Deep Learning approach for classifying ECG beats. , 2019, , .		5
71	Automated Heart Valve Disorder Detection Based on PDF Modeling of Formant Variation Pattern in PCG Signal. IEEE Access, 2022, 10, 27330-27342.	4.2	5
72	Manipulation and transparency control of ICT constituted e-administrative protocol via digital watermarking for LDC's. , 2010, , .		4

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73	A face recognition scheme based on spatial correlation function. , 2010, , .		4
74	Security Enhancement Protocol in SMS-Banking using Digital Watermarking Technique. , 2010, , .		4
75	Classification of seizure and non-seizure activity in seizure patients using time-frequency domain processing of gamma band EEG signals. , 2017, , .		4
76	Audio Visual Emotion Recognition Using Cross Correlation and Wavelet Packet Domain Features. , 2017, , .		4
77	A Low-cost Venturi Tube Spirometer for the Diagnosis of COPD. , 2018, , .		4
78	Eye Gaze Controlled Immersive Video Navigation System for Disabled People. , 2019, , .		4
79	A time domain approach of acoustic echo cancellation based on particle swarm optimization. , 2010, , .		3
80	An acoustic echo cancellation scheme based on particle swarm optimization algorithm. , 2010, , .		3
81	A face recognition scheme using wavelet-based local features. , 2011, , .		3
82	Gradient based adaptive filter algorithm for single channel acoustic echo cancellation in noise. , 2012, , .		3
83	ECG signal based human identification method using features in temporal and wavelet domains. , 2012, , .		3
84	A DCT-Based Local Dominant Feature Extraction Algorithm for Palm-Print Recognition. Circuits, Systems, and Signal Processing, 2013, 32, 1179-1204.	2.0	3
85	An automatic scheme for brain tumor region detection from 3D MRI data based on enhanced intensity variation. , 2017, , .		3
86	Enhancement of noisy speech based on decision-directed Wiener approach in perceptual wavelet packet domain. , 2017, , .		3
87	Higher order statistics of bispectrum and MRP of ECoG signals for motor imagery tasks classification. , 2017, , .		3
88	Automated Brain Tumor Segmentation from MRI Data Based on Local Region Analysis. , 2019, , .		3
89	ResCovNet: A Deep Learning-Based Architecture For COVID-19 Detection From Chest CT Scan Images. , 2020, , .		3
90	A design for low cost electronic toll collection system with secured data communication. , 2010, , .		2

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91	A spectral domain feature extraction scheme for palm-print recognition. , 2010, , .		2
92	EM shielding, dosimetry control and Xe(135)-Sm(149) Poisoning effect for nuclear waste treatment. , 2010, , .		2
93	Nuclear waste transmutation by decay energetics, compton imaging, Bremsstrahlung and nuclei dynamics. , 2010, , .		2
94	A spectral domain feature extraction algorithm for face recognition. , 2010, , .		2
95	Palm-print recognition based on DCT domain statistical features extracted from enhanced image. , 2014, , .		2
96	An efficient scheme for detecting region of interest encompassing the brain tumor from 3D MRI data based on voxel statistics. , 2016, , .		2
97	Brain-drive: A smart driver for controlling digital appliances using cognitive command. , 2017, , .		2
98	A Spectral Centroid Based Analysis of Heart sounds for Disease Detection Using Machine Learning. , 2019, , .		2
99	Complete Automation of an E-commerce System with Internet of Things. , 2019, , .		2
100	A Machine Learning based Human Activity Recognition during Physical Exercise using Wavelet Packet Transform of PPG and Inertial Sensors data. , 2019, , .		2
101	Phonocardiogram Heartbeat Segmentation and Autoregressive Modeling for Person Identification. , 2019, , .		2
102	A Sub-frame Based Feature Extraction Approach from Split-Band EEG Signal for Sleep Apnea Event Detection Using Multi-Layer LSTM. , 2020, , .		2
103	Analog Signal Processing Based Hardware Implementation of Real-Time Audio Visualizer. , 2020, , .		2
104	Deep Convolutional Neural Network Based Sleep Apnea Detection Scheme Using Spectro-temporal Subframes of EEG Signal. , 2020, , .		2
105	DeepBanglaNet: A Deep Convolutional Neural Network to Recognize Bengali Handwritten Digits. , 2020, , .		2
106	A face recognition scheme based on spectral domain feature extraction. , 2010, , .		1
107	Digital security algorithm for GSM incorporated virtual e-banking protocol using watermarking technique. , 2010, , .		1
108	Secured cellular banking protocols using virtual internet with digital watermarking. , 2010, , .		1

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109	An approach for formant based speech recognition in noise. , 2012, , .		1
110	Spatial domain entropy based local feature extraction scheme for face recognition. , 2012, , .		1
111	Human identification method using time and wavelet domain features based on modified dECG. , 2012, , .		1
112	A detection method of nasalised vowels based on an acoustic parameter derived from phase spectrum. , 2013, , .		1
113	Voice Based Eye Vision Tester for Underprivileged Community. , 2017, , .		1
114	Configurable Digital Hearing Aid System with Reduction of Noise for Speech Enhancement Using Spectral Subtraction Method and Frequency Dependent Amplification. , 2018, , .		1
115	Location Identification Using Power and Audio Data Based on Temporal Variation of Electric Network Frequency and Its Harmonics. , 2018, , .		1
116	A Wavelet-Domain Local Dominant Feature Selection Scheme for Face Recognition. , 2012, 2012, 1-13.		1
117	An efficient face recognition algorithm based on frequency domain cross-correlation function. , 2010, , .		0
118	Design and implementation of an FPGA-based realtime face recognition system using spatial correlation function. , 2014, , .		0
119	Palm-print recognition based on spectral domain statistical features extracted from enhanced image. , 2014, , .		0
120	Seizure activity classification using parameters of Gaussian PDF in the gamma and theta band DWT coefficients of EEG signals. , 2017, , .		0
121	Auto-HRID: Automated Heart Rate Monitoring and Injecting Device with Precise Vein Detection. , 2017, , .		0
122	Bimodal Gaussian PDF of the Dominant IMFs of EEG Signals for Seizure Activity Classification. , 2017, , .		0
123	Real Time Sleep Apnea Event Detection with Deep Neural Network. , 2019, , .		0
124	ALS Detection Based on T-Location Scale Statistical Modeling of the DWT Coefficients of EMG Signals. , 2019, , .		0
125	Multistage Adaptive Noise Cancellation Scheme for Heart Rate Estimation From PPG Signal Utilizing Mode Based Decomposition of Acceleration Data. IEEE Access, 2022, 10, 59759-59771.	4.2	0