M Sabarimalai Manikandan

List of Publications by Year
in descending order

82 papers	2,157 citations	361045 20 h-index	301761 39 g-index
82 all docs	82 docs citations	82 times ranked	1720 citing authors

#	Article	IF	Citations
1	Evaluation of Objective Distortion Measures for Automatic Quality Assessment of Processed PPG Signals for Real-Time Health Monitoring Devices. IEEE Access, 2022, 10, 15707-15745.	2.6	14
2	Design and Analysis of Digital Compressed ECG Sensing Encoder for IoT Health Monitoring Devices. Smart Innovation, Systems and Technologies, 2022, , 550-562.	0.5	3
3	Deep Learning-Based Wireless Module Identification (WMI) Methods for Cognitive Wireless Communication Network. Algorithms for Intelligent Systems, 2021, , 595-605.	0.5	1
4	Performance Study of Ultra Wide Band Radar Based Respiration Rate Measurement Methods. Algorithms for Intelligent Systems, 2021, , 645-657.	0.5	0
5	Lightweight Compressed Sensing (CS) and Partial DCT Based Compression Schemes for Energy-Efficient Wearable PPG Monitoring Devices. , 2021, , .		12
6	Performance of Spectral, Autocorrelation and Peak Count Based PR Estimation Methods Under Normal/Abnormal PPG for Wearable Devices. , 2021, , .		7
7	Localization of Multi-Class On-Road and Aerial Targets Using mmWave FMCW Radar. Electronics (Switzerland), 2021, 10, 2905.	1.8	2
8	Predictive Coding with Simultaneous Extraction of Pulse and Respiration Rates from PPG Signal for Energy Constrained Wearable Devices. , 2021, , .		9
9	Information Theoretic Metrics for Automatic Quality Assessment of Processed PPG Signals. , 2021, , .		1
10	Bioâ€inspired evolutionary computing approach for distributed active noise control problem. Cognitive Computation and Systems, 2020, 2, 57-65.	0.8	5
11	Incremental Learning Based Adaptive Filter for Nonlinear Distributed Active Noise Control System. IEEE Open Journal of Signal Processing, 2020, 1, 1-13.	2.3	5
12	On-Device Integrated PPG Quality Assessment and Sensor Disconnection/Saturation Detection System for IoT Health Monitoring. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6351-6361.	2.4	36
13	Islanding detection using total variationâ€based signal decomposition technique. IET Energy Systems Integration, 2020, 2, 22-31.	1.1	10
14	Convolutional Neural Network Based Sound Recognition Methods for Detecting Presence of Amateur Drones inÂUnauthorized Zones. Communications in Computer and Information Science, 2020, , 229-244.	0.4	1
15	A Robust Pulse Onset and Peak Detection Method for Automated PPG Signal Analysis System. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 807-817.	2.4	49
16	Design of a Real-Time Automatic Source Monitoring Framework Based on Sound Source Localization. , 2019, , .		1
17	Automatic Audio Event Recognition Schemes for Context-Aware Audio Computing Devices. , 2019, , .		7
18	Real-Time Quality-Aware PPG Waveform Delineation and Parameter Extraction for Effective Unsupervised and IoT Health Monitoring Systems. IEEE Sensors Journal, 2019, 19, 7613-7623.	2.4	26

#	Article	IF	Citations
19	A New Quality-Aware Quality-Control Data Compression Framework for Power Reduction in IoT and Smartphone PPG Monitoring Devices. , 2019, 3, 1-4.		16
20	SSQA: Speech Signal Quality Assessment Method using Spectrogram and 2-D Convolutional Neural Networks for Improving Efficiency of ASR Devices. , 2019, , .		6
21	Empirical Wavelet Transform Based Lung Sound Removal from Phonocardiogram Signal for Heart Sound Segmentation. , 2019, , .		4
22	Deep Learning Based Effective Baby Crying Recognition Method under Indoor Background Sound Environments. , 2019, , .		3
23	Use of zeroâ€frequency resonator for automatically detecting systolic peaks of photoplethysmogram signal. Healthcare Technology Letters, 2019, 6, 53-58.	1.9	2
24	Real-Time PPG Signal Quality Assessment System for Improving Battery Life and False Alarms. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1910-1914.	2.2	42
25	Reduced complexity diffusion filtered x least mean square algorithm for distributed active noise cancellation. Signal, Image and Video Processing, 2019, 13, 447-455.	1.7	9
26	A New Automated Signal Quality-Aware ECG Beat Classification Method for Unsupervised ECG Diagnosis Environments. IEEE Sensors Journal, 2019, 19, 277-286.	2.4	70
27	A Review of Signal Processing Techniques for Electrocardiogram Signal Quality Assessment. IEEE Reviews in Biomedical Engineering, 2018, 11, 36-52.	13.1	174
28	Variational Mode Decomposition and Decision Tree Based Detection and Classification of Power Quality Disturbances in Grid-Connected Distributed Generation System. IEEE Transactions on Smart Grid, 2018, 9, 3122-3132.	6.2	183
29	Effective Glottal Instant Detection and Electroglottographic Parameter Extraction for Automated Voice Pathology Assessment. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 398-408.	3.9	15
30	Automated ECG Noise Detection and Classification System for Unsupervised Healthcare Monitoring. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 722-732.	3.9	124
31	Blind Impulse Estimation and Removal Using Sparse Signal Decomposition Framework for OFDM Systems. Circuits, Systems, and Signal Processing, 2018, 37, 847-861.	1.2	2
32	An automated ECG signal quality assessment method for unsupervised diagnostic systems. Biocybernetics and Biomedical Engineering, 2018, 38, 54-70.	3.3	24
33	Integrated Data Compression and Pulse Rate Extraction Scheme Using Differential Coding for Wireless PPG Monitoring Devices. , 2018, , .		13
34	Detection of Epileptic Seizure Event in EEG Signals Using Variational Mode Decomposition and Mode Spectral Entropy. , 2018, , .		6
35	Automatic Identification of S1 and S2 Heart Sounds Using Simultaneous PCG and PPG Recordings. IEEE Sensors Journal, 2018, 18, 9430-9440.	2.4	30
36	On distributed nonâ€linear active noise control using diffusion collaborative learning strategy. IET Signal Processing, 2018, 12, 410-421.	0.9	8

#	Article	IF	Citations
37	Real-Time Signal Quality-Aware ECG Telemetry System for IoT-Based Health Care Monitoring. IEEE Internet of Things Journal, 2017, 4, 815-823.	5.5	253
38	A Novel Sparse Classifier for Automatic Modulation Classification using Cyclostationary Features. Wireless Personal Communications, 2017, 96, 4895-4917.	1.8	6
39	Noiseâ€aware dictionaryâ€learningâ€based sparse representation framework for detection and removal of single and combined noises from ECG signal. Healthcare Technology Letters, 2017, 4, 2-12.	1.9	27
40	Detection of voltage variation events using variational mode decomposition. , 2017, , .		0
41	Robust distributed active noise control in presence of secondary path and error sensor disturbances. , 2017, , .		0
42	Real-time detection of S2 sound using simultaneous recording of PCG and PPG. , 2017, , .		1
43	S1 and S2 heart sound segmentation using variational mode decomposition. , 2017, , .		11
44	Elimination of impulsive disturbances from archive audio signals using sparse representation in mixed dictionaries. , 2017, , .		2
45	Effective systolic peak detection algorithm using variational mode decomposition and center of gravity. , 2016, , .		8
46	A robust sparse signal decomposition framework for baseline wander removal from ECG signal. , 2016, , .		14
47	Low complexity distributed active noise control using secondary path constraints. , 2016, , .		2
48	A novel method for automatic modulation classification under non-Gaussian noise based on variational mode decomposition. , 2016, , .		11
49	Robust cardiac event change detection method for longâ€term healthcare monitoring applications. Healthcare Technology Letters, 2016, 3, 116-123.	1.9	14
50	Low-complexity detection and classification of ECG noises for automated ECG analysis system. , 2016, , .		10
51	Robust photoplethysmographic (PPG) based biometric authentication for wireless body area networks and m-health applications. , 2016, , .		24
52	On the use of variational mode decomposition for removal of baseline wander in ECG signals. , 2016, , .		13
53	Detection of life-threatening arrhythmias using random noise and zerocrossing information. , 2016, , .		2
54	Efficient and robust ventricular tachycardia and fibrillation detection method for wearable cardiac health monitoring devices. Healthcare Technology Letters, 2016, 3, 239-246.	1.9	9

#	Article	IF	Citations
55	A unified sparse signal decomposition and reconstruction framework for elimination of muscle artifacts from ECG signal. , 2016, , .		22
56	Unified framework for triaxial accelerometerâ€based fall event detection and classification using cumulants and hierarchical decision tree classifier. Healthcare Technology Letters, 2015, 2, 101-107.	1.9	14
57	A simple method for detection and classification of ECG noises for wearable ECG monitoring devices. , 2015, , .		22
58	Robust detection of premature ventricular contractions using sparse signal decomposition and temporal features. Healthcare Technology Letters, 2015, 2, 141-148.	1.9	12
59	Improving accuracy of glottal closure instant detection methods in nonstationary noise. , 2015, , .		0
60	A novel unified framework for noise-robust ECG-based biometric authentication. , 2015, , .		21
61	Simultaneous denoising and compression of power system disturbances using sparse representation on overcomplete hybrid dictionaries. IET Generation, Transmission and Distribution, 2015, 9, 1077-1088.	1.4	11
62	Detection and Classification of Power Quality Disturbances Using Sparse Signal Decomposition on Hybrid Dictionaries. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 27-38.	2.4	161
63	Straightforward and robust QRS detection algorithm for wearable cardiac monitor. Healthcare Technology Letters, 2014, 1, 40-44.	1.9	32
64	Wavelet-based electrocardiogram signal compression methods and their performances: A prospective review. Biomedical Signal Processing and Control, 2014, 14, 73-107.	3.5	106
65	An automated method for detecting systolic peaks from arterial blood pressure signals. , 2014, , .		11
66	Performance Study of Active Contour Model Based Character Segmentation with Nonlinear Diffusion. , 2012, , .		3
67	A New Framework to Automatically Select Noise Model for Rician Noise Estimation in MR Images. , 2012, , .		0
68	Noise robust zerocrossing rate computation for audio signal classification. , 2011, , .		10
69	An Efficient R-peak Detection Based on New Nonlinear Transformation and First-Order Gaussian Differentiator. Cardiovascular Engineering and Technology, 2011, 2, 408-425.	0.7	83
70	Automated cardiac event change detection for continuous remote patient monitoring devices. , 2011, , .		3
71	Novel approach for detecting applause in continuous meeting speech. , 2011, , .		3
72	Robust heart sound activity detection in noisy environments. Electronics Letters, 2010, 46, 1100.	0.5	38

#	Article	IF	Citations
73	Audio visual based pronunciation dictionary for Indian languages. , 2010, , .		0
74	ECG Distortion Measures and their Effectiveness. , 2008, , .		7
75	Multiscale Entropy-Based Weighted Distortion Measure for ECG Coding. IEEE Signal Processing Letters, 2008, 15, 829-832.	2.1	33
76	An effective wavelet-based lossy compression of noisy ECG signals. , 2008, , .		0
77	Quality Controlled Wavelet Compression of ECG Signals by WEDD. , 2007, , .		5
78	Wavelet-Based ECG and PCG Signals Compression Technique for Mobile Telemedicine. , 2007, , .		16
79	Wavelet energy based diagnostic distortion measure for ECG. Biomedical Signal Processing and Control, 2007, 2, 80-96.	3.5	124
80	Wavelet based ECG Compression with Large Zero Zone Quantizer. , 2006, , .		3
81	Wavelet threshold based ECG compression using USZZQ and Huffman coding of DSM. Biomedical Signal Processing and Control, 2006, 1, 261-270.	3.5	82
82	Wavelet-Threshold based ECG Compression with Smooth Retrieved Quality for Telecardiology. , 2006, , .		8