

M Sabarimalai Manikandan

List of Publications by Year in descending order

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Version: 2024-02-01

82
papers

2,157
citations

361045
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39
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82
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docs citations

82
times ranked

1720
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | 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 |
| 2 | 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 |
| 3 | A Review of Signal Processing Techniques for Electrocardiogram Signal Quality Assessment. IEEE Reviews in Biomedical Engineering, 2018, 11, 36-52. | 13.1 | 174 |
| 4 | 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 |
| 5 | Wavelet energy based diagnostic distortion measure for ECG. Biomedical Signal Processing and Control, 2007, 2, 80-96. | 3.5 | 124 |
| 6 | 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 |
| 7 | Wavelet-based electrocardiogram signal compression methods and their performances: A prospective review. Biomedical Signal Processing and Control, 2014, 14, 73-107. | 3.5 | 106 |
| 8 | 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 |
| 9 | Wavelet threshold based ECG compression using USZZQ and Huffman coding of DSM. Biomedical Signal Processing and Control, 2006, 1, 261-270. | 3.5 | 82 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | Robust heart sound activity detection in noisy environments. Electronics Letters, 2010, 46, 1100. | 0.5 | 38 |
| 14 | 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 |
| 15 | Multiscale Entropy-Based Weighted Distortion Measure for ECG Coding. IEEE Signal Processing Letters, 2008, 15, 829-832. | 2.1 | 33 |
| 16 | Straightforward and robust QRS detection algorithm for wearable cardiac monitor. Healthcare Technology Letters, 2014, 1, 40-44. | 1.9 | 32 |
| 17 | Automatic Identification of S1 and S2 Heart Sounds Using Simultaneous PCG and PPG Recordings. IEEE Sensors Journal, 2018, 18, 9430-9440. | 2.4 | 30 |
| 18 | Noise-aware dictionary learning-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 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | 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 |
| 20 | Robust photoplethysmographic (PPG) based biometric authentication for wireless body area networks and m-health applications. , 2016, , . | | 24 |
| 21 | An automated ECG signal quality assessment method for unsupervised diagnostic systems. Biocybernetics and Biomedical Engineering, 2018, 38, 54-70. | 3.3 | 24 |
| 22 | A simple method for detection and classification of ECG noises for wearable ECG monitoring devices. , 2015, , . | | 22 |
| 23 | A unified sparse signal decomposition and reconstruction framework for elimination of muscle artifacts from ECG signal. , 2016, , . | | 22 |
| 24 | A novel unified framework for noise-robust ECG-based biometric authentication. , 2015, , . | | 21 |
| 25 | Wavelet-Based ECG and PCG Signals Compression Technique for Mobile Telemedicine. , 2007, , . | | 16 |
| 26 | A New Quality-Aware Quality-Control Data Compression Framework for Power Reduction in IoT and Smartphone PPG Monitoring Devices. , 2019, 3, 1-4. | | 16 |
| 27 | 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 |
| 28 | Unified framework for triaxial accelerometer-based fall event detection and classification using cumulants and hierarchical decision tree classifier. Healthcare Technology Letters, 2015, 2, 101-107. | 1.9 | 14 |
| 29 | A robust sparse signal decomposition framework for baseline wander removal from ECG signal. , 2016, , . | | 14 |
| 30 | Robust cardiac event change detection method for long-term healthcare monitoring applications. Healthcare Technology Letters, 2016, 3, 116-123. | 1.9 | 14 |
| 31 | 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 |
| 32 | On the use of variational mode decomposition for removal of baseline wander in ECG signals. , 2016, , . | | 13 |
| 33 | Integrated Data Compression and Pulse Rate Extraction Scheme Using Differential Coding for Wireless PPG Monitoring Devices. , 2018, , . | | 13 |
| 34 | Robust detection of premature ventricular contractions using sparse signal decomposition and temporal features. Healthcare Technology Letters, 2015, 2, 141-148. | 1.9 | 12 |
| 35 | Lightweight Compressed Sensing (CS) and Partial DCT Based Compression Schemes for Energy-Efficient Wearable PPG Monitoring Devices. , 2021, , . | | 12 |
| 36 | An automated method for detecting systolic peaks from arterial blood pressure signals. , 2014, , . | | 11 |

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| 37 | 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 |
| 38 | A novel method for automatic modulation classification under non-Gaussian noise based on variational mode decomposition. , 2016, , . | | 11 |
| 39 | S1 and S2 heart sound segmentation using variational mode decomposition. , 2017, , . | | 11 |
| 40 | Noise robust zerocrossing rate computation for audio signal classification. , 2011, , . | | 10 |
| 41 | Low-complexity detection and classification of ECG noises for automated ECG analysis system. , 2016, , . | | 10 |
| 42 | Islanding detection using total variation-based signal decomposition technique. IET Energy Systems Integration, 2020, 2, 22-31. | 1.1 | 10 |
| 43 | 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 |
| 44 | 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 |
| 45 | Predictive Coding with Simultaneous Extraction of Pulse and Respiration Rates from PPG Signal for Energy Constrained Wearable Devices. , 2021, , . | | 9 |
| 46 | Wavelet-Threshold based ECG Compression with Smooth Retrieved Quality for Telecardiology. , 2006, , . | | 8 |
| 47 | Effective systolic peak detection algorithm using variational mode decomposition and center of gravity. , 2016, , . | | 8 |
| 48 | On distributed non-linear active noise control using diffusion collaborative learning strategy. IET Signal Processing, 2018, 12, 410-421. | 0.9 | 8 |
| 49 | ECG Distortion Measures and their Effectiveness. , 2008, , . | | 7 |
| 50 | Automatic Audio Event Recognition Schemes for Context-Aware Audio Computing Devices. , 2019, , . | | 7 |
| 51 | Performance of Spectral, Autocorrelation and Peak Count Based PR Estimation Methods Under Normal/Abnormal PPG for Wearable Devices. , 2021, , . | | 7 |
| 52 | A Novel Sparse Classifier for Automatic Modulation Classification using Cyclostationary Features. Wireless Personal Communications, 2017, 96, 4895-4917. | 1.8 | 6 |
| 53 | Detection of Epileptic Seizure Event in EEG Signals Using Variational Mode Decomposition and Mode Spectral Entropy. , 2018, , . | | 6 |
| 54 | SSQA: Speech Signal Quality Assessment Method using Spectrogram and 2-D Convolutional Neural Networks for Improving Efficiency of ASR Devices. , 2019, , . | | 6 |

| # | ARTICLE | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Quality Controlled Wavelet Compression of ECG Signals by WEDD. , 2007, , . | | 5 |
| 56 | Bioâ€inspired evolutionary computing approach for distributed active noise control problem. Cognitive Computation and Systems, 2020, 2, 57-65. | 0.8 | 5 |
| 57 | 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 |
| 58 | Empirical Wavelet Transform Based Lung Sound Removal from Phonocardiogram Signal for Heart Sound Segmentation. , 2019, , . | | 4 |
| 59 | Wavelet based ECG Compression with Large Zero Zone Quantizer. , 2006, , . | | 3 |
| 60 | Automated cardiac event change detection for continuous remote patient monitoring devices. , 2011, , . | | 3 |
| 61 | Novel approach for detecting applause in continuous meeting speech. , 2011, , . | | 3 |
| 62 | Performance Study of Active Contour Model Based Character Segmentation with Nonlinear Diffusion. , 2012, , . | | 3 |
| 63 | Deep Learning Based Effective Baby Crying Recognition Method under Indoor Background Sound Environments. , 2019, , . | | 3 |
| 64 | 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 |
| 65 | Low complexity distributed active noise control using secondary path constraints. , 2016, , . | | 2 |
| 66 | Detection of life-threatening arrhythmias using random noise and zerocrossing information. , 2016, , . | | 2 |
| 67 | Elimination of impulsive disturbances from archive audio signals using sparse representation in mixed dictionaries. , 2017, , . | | 2 |
| 68 | 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 |
| 69 | Use of zeroâ€frequency resonator for automatically detecting systolic peaks of photoplethysmogram signal. Healthcare Technology Letters, 2019, 6, 53-58. | 1.9 | 2 |
| 70 | Localization of Multi-Class On-Road and Aerial Targets Using mmWave FMCW Radar. Electronics (Switzerland), 2021, 10, 2905. | 1.8 | 2 |
| 71 | Real-time detection of S2 sound using simultaneous recording of PCG and PPG. , 2017, , . | | 1 |
| 72 | Design of a Real-Time Automatic Source Monitoring Framework Based on Sound Source Localization. , 2019, , . | | 1 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Deep Learning-Based Wireless Module Identification (WMI) Methods for Cognitive Wireless Communication Network. Algorithms for Intelligent Systems, 2021, , 595-605. | 0.5 | 1 |
| 74 | Convolutional Neural Network Based Sound Recognition Methods for Detecting Presence of Amateur Drones in Unauthorized Zones. Communications in Computer and Information Science, 2020, , 229-244. | 0.4 | 1 |
| 75 | Information Theoretic Metrics for Automatic Quality Assessment of Processed PPG Signals. , 2021, , . | | 1 |
| 76 | An effective wavelet-based lossy compression of noisy ECG signals. , 2008, , . | | 0 |
| 77 | Audio visual based pronunciation dictionary for Indian languages. , 2010, , . | | 0 |
| 78 | A New Framework to Automatically Select Noise Model for Rician Noise Estimation in MR Images. , 2012, , . | | 0 |
| 79 | Improving accuracy of glottal closure instant detection methods in nonstationary noise. , 2015, , . | | 0 |
| 80 | Detection of voltage variation events using variational mode decomposition. , 2017, , . | | 0 |
| 81 | Robust distributed active noise control in presence of secondary path and error sensor disturbances. , 2017, , . | | 0 |
| 82 | Performance Study of Ultra Wide Band Radar Based Respiration Rate Measurement Methods. Algorithms for Intelligent Systems, 2021, , 645-657. | 0.5 | 0 |