Ahsan H Khandoker

List of Publications by Year
in descending order

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217 papers	3,602 citations	186209 28 h-index	189801 50 g-index
226 all docs	226 docs citations	226 times ranked	3417 citing authors

#	Article	IF	Citations
1	Support Vector Machines for Automated Recognition of Obstructive Sleep Apnea Syndrome From ECG Recordings. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 37-48.	3.6	299
2	An autonomic cloud environment for hosting ECG data analysis services. Future Generation Computer Systems, 2012, 28, 147-154.	4.9	192
3	Progress in Brain Computer Interface: Challenges and Opportunities. Frontiers in Systems Neuroscience, 2021, 15, 578875.	1.2	128
4	Complex Correlation Measure: a novel descriptor for PoincarÃ© plot. BioMedical Engineering OnLine, 2009, 8, 17.	1.3	127
5	Automated Scoring of Obstructive Sleep Apnea and Hypopnea Events Using Short-Term Electrocardiogram Recordings. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 1057-1067.	3.6	110
6	Low-Power ECG-Based Processor for Predicting Ventricular Arrhythmia. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 1962-1974.	2.1	104
7	Wavelet-Based Feature Extraction for Support Vector Machines for Screening Balance Impairments in the Elderly. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 587-597.	2.7	95
8	Identifying diabetic patients with cardiac autonomic neuropathy by heart rate complexity analysis. BioMedical Engineering OnLine, 2009, 8, 3.	1.3	94
9	PoincarÃ© Plot Methods for Heart Rate Variability Analysis. , 2013, , .		74
10	Comparison of pulse rate variability with heart rate variability during obstructive sleep apnea. Medical Engineering and Physics, 2011, 33, 204-209.	0.8	72
11	Clinical profiles, comorbidities and complications of type 2 diabetes mellitus in patients from United Arab Emirates. BMJ Open Diabetes Research and Care, 2017, 5, e000427.	1.2	67
12	Automated recognition of patients with obstructive sleep apnoea using wavelet-based features of electrocardiogram recordings. Computers in Biology and Medicine, 2009, 39, 88-96.	3.9	63
13	K-EmoCon, a multimodal sensor dataset for continuous emotion recognition in naturalistic conversations. Scientific Data, 2020, 7, 293.	2.4	62
14	A comparative study on approximate entropy measure and poincarÃ© plot indexes of minimum foot clearance variability in the elderly during walking. Journal of NeuroEngineering and Rehabilitation, 2008, 5, 4.	2.4	60
15	Assessment Methods of Post-stroke Gait: A Scoping Review of Technology-Driven Approaches to Gait Characterization and Analysis. Frontiers in Neurology, 2021, 12, 650024.	1.1	60
16	Touchscreen typing pattern analysis for remote detection of the depressive tendency. Scientific Reports, 2019, 9, 13414.	1.6	59
17	Investigating Scale Invariant Dynamics in Minimum Toe Clearance Variability of the Young and Elderly During Treadmill Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 380-389.	2.7	58
18	Identifying Common Genetic Risk Factors of Diabetic Neuropathies. Frontiers in Endocrinology, 2015, 6, 88.	1.5	56

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19	Association of cardiac autonomic neuropathy with alteration of sympatho-vagal balance through heart rate variability analysis. Medical Engineering and Physics, 2010, 32, 161-167.	0.8	52
20	Evidence of Variabilities in EEG Dynamics During Motor Imagery-Based Multiclass Brainâ€“Computer Interface. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 371-382.	2.7	52
21	Sensitivity of temporal heart rate variability in PoincarÃ© plot to changes in parasympathetic nervous system activity. BioMedical Engineering OnLine, 2011, 10, 17.	1.3	50
22	Defining asymmetry in heart rate variability signals using a PoincarÃ© plot. Physiological Measurement, 2009, 30, 1227-1240.	1.2	43
23	Cardiac rehabilitation outcomes following a 6-week program of PCI and CABG Patients. Frontiers in Physiology, 2013, 4, 302.	1.3	41
24	Automated Estimation of Fetal Cardiac Timing Events From Doppler Ultrasound Signal Using Hybrid Models. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1169-1177.	3.9	41
25	Detection of Respiratory Arousals Using Photoplethysmography (PPG) Signal in Sleep Apnea Patients. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1065-1073.	3.9	40
26	Antepartum non-invasive evaluation of opening and closing timings of the cardiac valves in fetal cardiac cycle. Medical and Biological Engineering and Computing, 2009, 47, 1075-1082.	1.6	34
27	Phase asymmetry of heart rate variability signal. Physiological Measurement, 2015, 36, 303-314.	1.2	32
28	Quantifying the Interactions between Maternal and Fetal Heart Rates by Transfer Entropy. PLoS ONE, 2015, 10, e0145672.	1.1	32
29	Association of cardiovascular risk using non-linear heart rate variability measures with the framingham risk score in a rural population. Frontiers in Physiology, 2013, 4, 186.	1.3	31
30	Classification of sleep apnea types using wavelet packet analysis of short-term ECG signals. Journal of Clinical Monitoring and Computing, 2012, 26, 1-11.	0.7	30
31	Fetal Heart Sounds Detection Using Wavelet Transform and Fractal Dimension. Frontiers in Bioengineering and Biotechnology, 2017, 5, 49.	2.0	30
32	Detection of COVID-19 in smartphone-based breathing recordings: A pre-screening deep learning tool. PLoS ONE, 2022, 17, e0262448.	1.1	30
33	Diagnostic accuracy of keystroke dynamics as digital biomarkers for fine motor decline in neuropsychiatric disorders: a systematic review and meta-analysis. Scientific Reports, 2022, 12, 7690.	1.6	30
34	Analyzing temporal variability of standard descriptors of PoincarÃ© plots. Journal of Electrocardiology, 2010, 43, 719-724.	0.4	28
35	QT Variability Index Changes With Severity of Cardiovascular Autonomic Neuropathy. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 900-906.	3.6	28
36	Understanding Ageing Effects by Approximate Entropy Analysis of gait variability. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1965-8.	0.5	26

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37	Predicting Hypertensive Patients With Higher Risk of Developing Vascular Events Using Heart Rate Variability and Machine Learning. IEEE Access, 2020, 8, 192727-192739.	2.6	25
38	Toe clearance and velocity profiles of young and elderly during walking on sloped surfaces. Journal of NeuroEngineering and Rehabilitation, 2010, 7, 18.	2.4	24
39	Estimating Left Ventricle Ejection Fraction Levels Using Circadian Heart Rate Variability Features and Support Vector Regression Models. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 746-754.	3.9	23
40	Risk stratification of cardiac autonomic neuropathy based on multi-lag Toneâ€“Entropy. Medical and Biological Engineering and Computing, 2013, 51, 537-546.	1.6	22
41	Low cost ECG monitor for developing countries. , 2009, , .		21
42	Adaptive technique for P and T wave delineation in electrocardiogram signals. , 2014, 2014, 90-3.		21
43	Model-Based Estimation of Aortic and Mitral Valves Opening and Closing Timings in Developing Human Fetuses. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 240-248.	3.9	21
44	A Comparative Study on Fetal Heart Rates Estimated from Fetal Phonography and Cardiotocography. Frontiers in Physiology, 2017, 8, 764.	1.3	21
45	Fetal Cardiac Doppler Signal Processing Techniques: Challenges and Future Research Directions. Frontiers in Bioengineering and Biotechnology, 2017, 5, 82.	2.0	21
46	Genetic Associations With Diabetic Retinopathy and Coronary Artery Disease in Emirati Patients With Type-2 Diabetes Mellitus. Frontiers in Endocrinology, 2019, 10, 283.	1.5	21
47	Development of respiratory rhythms in perinatal chick embryos. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 131, 817-824.	0.8	20
48	Investigating the changes in heart rate asymmetry (HRA) with perturbation of parasympathetic nervous system. Australasian Physical and Engineering Sciences in Medicine, 2012, 35, 465-474.	1.4	20
49	Predicting depressed patients with suicidal ideation from ECG recordings. Medical and Biological Engineering and Computing, 2017, 55, 793-805.	1.6	20
50	Association of Diabetes Related Complications with Heart Rate Variability among a Diabetic Population in the UAE. PLoS ONE, 2017, 12, e0168584.	1.1	20
51	Cardiac rhythms of late pre-pipped and pipped chick embryos exposed to altered oxygen environments. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2003, 136, 289-299.	0.8	19
52	Validation of beat by beat fetal heart signals acquired from four-channel fetal phonocardiogram with fetal electrocardiogram in healthy late pregnancy. Scientific Reports, 2018, 8, 13635.	1.6	19
53	A Nanowatt Real-Time Cardiac Autonomic Neuropathy Detector. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 739-750.	2.7	19
54	Mobile solutions for front-line health workers in developing countries. , 2009, , .		18

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55	Novel dynamic peak and distribution plantar pressure measures on diabetic patients during walking. Gait and Posture, 2017, 51, 261-267.	0.6	18
56	A Hybrid EMD-Kurtosis Method for Estimating Fetal Heart Rate from Continuous Doppler Signals. Frontiers in Physiology, 2017, 8, 641.	1.3	18
57	Modeling Respiratory Movement Signals During Central and Obstructive Sleep Apnea Events Using Electrocardiogram. Annals of Biomedical Engineering, 2011, 39, 801-811.	1.3	17
58	Analysis of maternalâ€“fetal heart rate coupling directions with partial directed coherence. Biomedical Signal Processing and Control, 2016, 30, 25-30.	3.5	17
59	Enhanced interâ€subject brain computer interface with associative sensorimotor oscillations. Healthcare Technology Letters, 2017, 4, 39-43.	1.9	17
60	A Nano-Watt ECG Feature Extraction Engine in 65-nm Technology. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1099-1103.	2.2	17
61	Maturation of the homeothermic response of heart rate to altered ambient temperature in developing chick hatchlings (Gallus gallus domesticus). American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2004, 286, R129-R137.	0.9	16
62	Analyzing Systolic-Diastolic Interval Interaction Characteristics in Diabetic Cardiac Autonomic Neuropathy Progression. IEEE Journal of Translational Engineering in Health and Medicine, 2015, 3, 1-10.	2.2	15
63	Detecting Subclinical Diabetic Cardiac Autonomic Neuropathy by Analyzing Ventricular Repolarization Dynamics. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 64-72.	3.9	15
64	Advanced PoincarÃ© plot analysis differentiates between hypertensive pregnancy disorders. Physiological Measurement, 2011, 32, 1611-1622.	1.2	14
65	Suicidal Ideation Is Associated with Altered Variability of Fingertip Photo-Plethysmogram Signal in Depressed Patients. Frontiers in Physiology, 2017, 8, 501.	1.3	14
66	Implantable Systems for Stress Urinary Incontinence. Annals of Biomedical Engineering, 2017, 45, 2717-2732.	1.3	13
67	Clinical and genetic associations of renal function and diabetic kidney disease in the United Arab Emirates: a cross-sectional study. BMJ Open, 2018, 8, e020759.	0.8	13
68	Screening Cardiovascular Autonomic Neuropathy in Diabetic Patients With Microvascular Complications Using Machine Learning: A 24-Hour Heart Rate Variability Study. IEEE Access, 2021, 9, 119171-119187.	2.6	13
69	Understanding ageing effects using complexity analysis of footâ€“ground clearance during walking. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 554-564.	0.9	12
70	Temporal dynamics of the circadian heart rate following low and high volume exercise training in sedentary male subjects. European Journal of Applied Physiology, 2015, 115, 2069-2080.	1.2	12
71	Analysis of fetal heart rate asymmetry before and after 35 weeks of gestation. Biomedical Signal Processing and Control, 2015, 21, 43-48.	3.5	12
72	Methodological Comparisons of Heart Rate Variability Analysis in Patients With Type 2 Diabetes and Angiotensin Converting Enzyme Polymorphism. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 55-63.	3.9	12

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73	Assessment of Fetal Development Using Cardiac Valve Intervals. Frontiers in Physiology, 2017, 8, 313.	1.3	12
74	Wavelet Entropy-Based Inter-subject Associative Cortical Source Localization for Sensorimotor BCI. Frontiers in Neuroinformatics, 2019, 13, 47.	1.3	12
75	Power spectral analysis of ECG signals during obstructive sleep apnoea hypopnoea epochs. , 2007, , .		11
76	Assessing the development of fetal myocardial function by a novel Doppler myocardial performance index. , 2016, 2016, 3753-3756.		11
77	Ultrasound-mediated drug delivery by gas bubbles generated from a chemical reaction. Journal of Drug Targeting, 2018, 26, 172-181.	2.1	11
78	Alterations in Maternalâ€“Fetal Heart Rate Coupling Strength and Directions in Abnormal Fetuses. Frontiers in Physiology, 2019, 10, 482.	1.3	11
79	Interaction between sleep EEG and ECG signals during and after obstructive sleep apnea events with or without arousals. , 2008, , .		10
80	Heart rate variability and complexity in people with diabetes associated cardiac autonomic neuropathy. , 2008, 2008, 4696-9.		10
81	Effect of ECG-derived respiration (EDR) on modeling ventricular repolarization dynamics in different physiological and psychological conditions. Medical and Biological Engineering and Computing, 2014, 52, 851-860.	1.6	10
82	Classification of Doppler Ultrasound signal quality for the application of fetal valve motion identification. , 2015, , .		10
83	Deep Learning Predicts Heart Failure With Preserved, Mid-Range, and Reduced Left Ventricular Ejection Fraction From Patient Clinical Profiles. Frontiers in Cardiovascular Medicine, 2021, 8, 755968.	1.1	10
84	Feasibility of Non-invasive Fetal Electrocardiographic Interval Measurement in the Outpatient Clinical Setting. Pediatric Cardiology, 2019, 40, 1175-1182.	0.6	9
85	Model based estimation of QT intervals in non-invasive fetal ECG signals. PLoS ONE, 2020, 15, e0232769.	1.1	9
86	Arousal-Valence Classification from Peripheral Physiological Signals Using Long Short-Term Memory Networks. , 2021, 2021, 686-689.		9
87	A hybrid Support Vector Machine and autoregressive model for detecting gait disorders in the elderly. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	8
88	Automated Identification of fetal cardiac valve timings. , 2013, 2013, 3893-6.		8
89	Effect of biosignal preprocessing and recording length on clinical decision making for cardiac autonomic neuropathy. , 2014, , .		8
90	Revisiting Left Ventricular Ejection Fraction Levels: A Circadian Heart Rate Variability-Based Approach. IEEE Access, 2021, 9, 130111-130126.	2.6	8

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91	Beyond Pathogen Filtration: Possibility of Smart Masks as Wearable Devices for Personal and Group Health and Safety Management. JMIR MHealth and UHealth, 2022, 10, e38614.	1.8	8
92	Automatic Recognition of Obstructive Sleep Apnoea Syndrome Using Power Spectral Analysis of Electrocardiogram and Hidden Markov Models. , 2008, , .		7
93	Energy efficient system-on-chip architecture for non-invasive mobile monitoring of diabetics. , 2013, , .		7
94	Adaptive ECG interval extraction. , 2015, , .		7
95	Regulation of maternal-fetal heart rates and coupling in mice fetuses. , 2018, 2018, 5257-5260.		7
96	The Effect of Ankle Support on Lower Limb Kinematics During the Y-Balance Test Using Non-linear Dynamic Measures. Frontiers in Physiology, 2019, 10, 935.	1.3	7
97	Noninvasive Fetal Electrocardiography in the Diagnosis of Long QT Syndrome: A Case Series. Fetal Diagnosis and Therapy, 2020, 47, 711-716.	0.6	7
98	Privacy Aware Affective State Recognition From Visual Data. IEEE Access, 2022, 10, 40620-40628.	2.6	7
99	Recognizing central and obstructive sleep apnea events from normal breathing events in ECG recordings. , 2008, , .		6
100	Investigating Relative Respiratory Effort Signals During Mixed Sleep Apnea Using Photoplethysmogram. Annals of Biomedical Engineering, 2013, 41, 2229-2236.	1.3	6
101	Heart Sound Segmentation toward Automated Heart Murmur Classification in Pediatric Patents. , 2015, , .		6
102	Gait alterations in the UAE population with and without diabetic complications using both traditional and entropy measures. Gait and Posture, 2017, 58, 72-77.	0.6	6
103	Fetal Cardiac Timing Events Estimation From Doppler Ultrasound Signals Using Swarm Decomposition. Frontiers in Physiology, 2019, 10, 789.	1.3	6
104	Estimating Fetal Age by Fetal Maternal Heart Rate Coupling Parameters. , 2020, 2020, 604-607.		6
105	Genetic Variants and Their Associations to Type 2 Diabetes Mellitus Complications in the United Arab Emirates. Frontiers in Endocrinology, 2021, 12, 751885.	1.5	6
106	Regulation of Minimum Toe Clearance Variability in the Young and Elderly during Walking on Sloped Surfaces. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4887-90.	0.5	5
107	Identifying increased risk of post-infarct people with diabetes using multi-lag Tone-Entropy analysis. , 2012, 2012, 25-8.		5
108	A continuous point measure for quantifying skull deformation in medical diagnostics. Healthcare Technology Letters, 2014, 1, 56-58.	1.9	5

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109	Effect of gender and diabetes on major depressive disorder using heart rate asymmetry. , 2014, 2014, 6679-82.		5
110	Human balance responses to perturbations in the horizontal plane. , 2014, 2014, 4058-61.		5
111	Poincaré plot analysis of heart rate variability in the diabetic patients in the UAE. , 2014, , .		5
112	Non-invasive extraction of fetal electrocardiogram using fast independent component analysis technique. , 2014, , .		5
113	Multi-lag HRV analysis discriminates disease progression of post-infarct people with no diabetes versus diabetes. , 2015, 2015, 2367-70.		5
114	Tone Entropy Analysis of Foetal Heart Rate Variability. Entropy, 2015, 17, 1042-1053.	1.1	5
115	Assessment of autonomic neurodevelopment in the mouse fetuses by using fetal electrocardiography. , 2016, 2016, 2954-2957.		5
116	Heart rate independent QT variability component can detect subclinical cardiac autonomic neuropathy in diabetes. , 2016, 2016, 928-931.		5
117	Singular value decomposition entropy as a measure of ankle dynamics efficacy in a Y-balance test following supportive lower limb taping. , 2019, 2019, 2439-2442.		5
118	Estimating Gestational Age From Maternal-Fetal Heart Rate Coupling Parameters. IEEE Access, 2021, 9, 65369-65379.	2.6	5
119	Colorectal Cancer Tissue Classification Using Semi-Supervised Hypergraph Convolutional Network. , 2021, , .		5
120	Machine Learning for Screening Microvascular Complications in Type 2 Diabetic Patients Using Demographic, Clinical, and Laboratory Profiles. Journal of Clinical Medicine, 2022, 11, 903.	1.0	5
121	Machine Learning-Based Analysis of Digital Movement Assessment and ExerGame Scores for Parkinson's Disease Severity Estimation. Frontiers in Psychology, 2022, 13, 857249.	1.1	5
122	A Comparative Study of Arousal and Valence Dimensional Variations for Emotion Recognition Using Peripheral Physiological Signals Acquired from Wearable Sensors. , 2021, 2021, 1104-1107.		5
123	Analysis of coherence between sleep EEG and ECG signals during and after obstructive sleep apnea events. , 2008, 2008, 3876-9.		4
124	Smartphone-based low cost oximeter photoplethysmography. , 2010, , .		4
125	Estimating relative respiratory effort from features of photo-plethysmography signal. , 2013, 2013, 6575-8.		4
126	Effect of using ECG derived respiration (EDR) signal in linear parametric QT-RR modeling. , 2013, 2013, 1968-71.		4

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127	Investigating the beat by beat phase synchronization between maternal and fetal heart rates. , 2013, 2013, 3821-4.		4
128	Investigating foetal heart rate asymmetry. , 2014, 2014, 2261-4.		4
129	Detecting fetal heart sounds by means of Fractal Dimension analysis in the Wavelet domain. , 2017, 2017, 2201-2204.		4
130	Genetics of diabetic kidney disease: A followâ€up study in the Arab population of the United Arab Emirates. Molecular Genetics & Genomic Medicine, 2019, 7, e985.	0.6	4
131	A novel algorithm for the prediction and detection of ventricular arrhythmia. Analog Integrated Circuits and Signal Processing, 2019, 99, 413-426.	0.9	4
132	Reducing suicidal ideation by biofeedback-guided respiration â€“ heart rate coherence. Digital Psychiatry, 2020, 3, 1-11.	2.1	4
133	Investigating Circadian Heart Rate Variability in Coronary Artery Disease Patients with Various Degrees of Left Ventricle Ejection Fraction. , 2020, 2020, 714-717.		4
134	Estimating Fetal Gestational Age Using Cardiac Valve Intervals. , 0, , .		4
135	Investigating the effect of cholinergic and adrenergic blocking agents on maternal-fetal heart rates and their interactions in mice fetuses. Biology Open, 2022, , .	0.6	4
136	New expression for base transit time in a bipolar transistor for all levels of injection. Microelectronics Reliability, 2001, 41, 137-140.	0.9	3
137	Power spectral analysis for identifying the onset and termination of obstructive sleep apnoea events in ECG recordings. , 2008, , .		3
138	Identification of onset, maximum and termination of obstructive sleep apnoea events in single lead ECG recordings. , 2008, 2008, 1072-5.		3
139	Characterization of chimeric surface submentalis EMG activity during hypopneas in obstructive sleep apnea patients. , 2009, , .		3
140	Effect of premature activation in analyzing QT dynamics instability using QT-RR model for ventricular fibrillation and healthy subjects. , 2013, 2013, 2559-62.		3
141	A multi-dimensional Hidden Markov Model approach to automated identification of fetal cardiac valve motion. , 2014, 2014, 1885-8.		3
142	Reduced variability in pulse wave velocity in depressed patients with suicidal ideation. , 2015, , .		3
143	Transfer entropy analysis of maternal and fetal heart rate coupling. , 2015, 2015, 7865-8.		3
144	The Role of Serious Games in Robot Exoskeleton-Assisted Rehabilitation of Stroke Patients. , 2015, , 233-254.		3

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145	Investigating fetal myocardial function in heart anomalies by Doppler myocardial performance indices. , 2017, 2017, 2197-2200.		3
146	Effect of Î²-blocker on maternal-fetal heart rates and coupling in pregnant mice and fetuses. , 2019, 2019, 1784-1787.		3
147	Discrimination Amongst Various Degrees of Left Ventricular Ejection Fraction in CAD Patients Using Circadian Heart Rate Variability Features. , 2020, , .		3
148	Thyroid Nodule Cell Classification in Cytology Images Using Transfer Learning Approach. Advances in Intelligent Systems and Computing, 2021, , 539-549.	0.5	3
149	Identification of Fetal Cardiac Timing Events by Swarm Decomposition of Doppler Cardiogram Signal. , 0, , .		3
150	What Can Tone and Entropy Tell Us about Risk of Cardiovascular Diseases?. , 0, , .		3
151	Quantification of maternal-fetal cardiac couplings in normal and abnormal pregnancies applying high resolution joint symbolic dynamics. Mathematical Biosciences and Engineering, 2020, 17, 802-813.	1.0	3
152	NeuroSky Mindwave Mobile Headset 2 as an Intervention for Reduction of Stress and Anxiety Measured with Pulse Rate Variability. , 0, , .		3
153	Identification of Cardiac Arrhythmias from 12-lead ECG using Beat-wise Analysis and a Combination of CNN and LSTM. , 0, , .		3
154	Emotion Recognition in the Wild from Long-term Heart Rate Recording using Wearable Sensor and Deep Learning Ensemble Classification. , 2021, , .		3
155	Estimating Falls Risk in the Elderly: A Wavelet Based Multiscale Analysis. , 2006, , .		2
156	A Wavelet-Based Approach for Screening Falls Risk in the Elderly using Support Vector Machines. , 2006, , .		2
157	Wavelet-Based Multiscale Analysis of Minimum Toe Clearance Variability in the Young and Elderly during Walking. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1558-61.	0.5	2
158	Non-invasive determination of electromechanical time intervals of cardiac cycle using abdominal ECG and Doppler ultrasound signals from fetal hearts. , 2007, , .		2
159	Variations in the accuracy of the ECG based detection of obstructive sleep apnoea (OSA) for different numbers of ECG leads and categories of OSA events. , 2008, 2008, 3492-5.		2
160	Cortical response to psycho-physiological changes in auto-adaptive robot assisted gait training. , 2011, 2011, 7409-12.		2
161	Application of automated fetal valve motion identification to investigate fetal heart anomalies. , 2014, , .		2
162	A novel technique to investigate the effect of ageing on ventricular repolarization characteristics in healthy and LQTS subjects. , 2015, 2015, 2796-9.		2

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163	Identifying depressed patients with and without suicidal ideation by finger photo-plethysmography. , 2016, 2016, 1842-1845.		2
164	A biomedical SoC architecture for predicting ventricular arrhythmia. , 2016, , .		2
165	Incoherent Synchronization Between Resting State Respiratory Sinus Arrhythmia and Respiratory Movement in Depressed Patients With Suicidal Ideation. , 0, , .		2
166	Editorial: Recent Advances in Doppler Signal Processing and Modeling Techniques for Fetal Monitoring. Frontiers in Physiology, 2018, 9, 691.	1.3	2
167	Fetal Cardiac Timing Events Estimation from Doppler Ultrasound Signal Cepstrum Analysis. , 2019, 2019, 4677-4681.		2
168	Investigating myocardial performance in normal and sick fetuses by abdominal Doppler signal derived indices. Current Research in Physiology, 2021, 4, 29-38.	0.8	2
169	Quantitative PoincarÃ© Plot. , 2013, , 13-23.		2
170	BeActive. , 2020, , .		2
171	Care4MyHeart-PSG: A Personalized Serious Game Platform to Empower Phase III Cardiac Rehabilitation of Cardiovascular Disease Patients in UAE. Lecture Notes in Computer Science, 2020, , 233-250.	1.0	2
172	Effect of Anesthesia on Fetal-Maternal Heart Rate Variability and Coupling in Pregnant Mice and Fetuses. , 0, , .		2
173	Heart rate variability analysis for diagnosis of diabetic peripheral neuropathy. , 2020, , .		2
174	Effect of Valproic Acid on Maternal - Fetal Heart Rates and Coupling in Mice on Embryonic day 15.5 (E15.5). , 2021, 2021, 5504-5507.		2
175	Comment on the article â€œPrevalence of probable obstructive sleep apnea risk and severity in a population of dental patientsâ€•by D.J. Levendowski et al.. Sleep and Breathing, 2009, 13, 299-300.	0.9	1
176	Evaluating cardiovascular risk using the tone-entropy algorithm. , 2013, 2013, 6139-41.		1
177	Relationship between Heart Rate Variability and angiotensinogen gene polymorphism in diabetic and control individuals. , 2014, 2014, 6683-6.		1
178	Influence of stroke location on heart rate variability in robot-assistive neurorehabilitation. , 2014, , .		1
179	Analysis between ECG and respiration signals in type II diabetic patients in the UAE. , 2014, , .		1
180	A novel technique for analysing beat-to-beat dynamical changes of QT-RR distribution for arrhythmia prediction. , 2015, , .		1

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181	Tone Entropy Analysis of Augmented Information Effects on Toe-Ground Clearance When Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 1218-1224.	2.7	1
182	Detection of End of T-wave in Fetal ECG Using Recurrence Plots. , 2019, 2019, 2618-2621.		1
183	Designing a Low-Cost ECG Sensor and Monitor: Practical Considerations and Measures. , 2016, , 339-373.		1
184	Effect of Chronic Hypoxia on Autonomic Nervous System of Fetal Mice. , 0, , .		1
185	Effect of Propranolol and Its Dosages on Maternal-fetal Heart Rates Coupling in Pregnant Mice and Fetuses. , 0, , .		1
186	CovidSense: A Smartphone-based Initiative for Fighting COVID-19 Spreading. , 2020, , .		1
187	Swarm Decomposition Enhances the Discrimination of Cardiac Arrhythmias in Varied-Lead ECG Using ResNet-BiLSTM Network Activations. , 2021, , .		1
188	Screening obstructive sleep apnoea syndrome from electrocardiogram recordings using support vector machines. , 2007, , .		0
189	Cross power spectral density between two-lead ECG signals at the termination of obstructive sleep apnea with or without arousals. , 2008, , .		0
190	Non-invasive evaluation of opening and closing timings of the cardiac valves in the fetal cardiac cycle. , 2008, , .		0
191	Lateral decubitus posture during sleep: Sub-groups of obstructive sleep apnea patients — therapeutic value of vertical position in OSA. , 2009, , .		0
192	Simulink-based sleep apnea screening model for portable diagnosis. , 2009, , .		0
193	Unravelling unique qualitative and quantitative characteristics of the surface submentalis EMG in OSA polysomnograms. , 2010, , .		0
194	Multi-scale Tone Entropy in differentiating physiologic and synthetic RR time series. , 2013, 2013, 6135-8.		0
195	A Comparative Phonocardiography Study: Two Wavelet Based Methods for Fetal Heart Sound Detection. , 0, , .		0
196	Investigating the Relationship between the Ratings of Perceived Exertion and Tone-Entropy of Heart Rate Variability during a Graded Exercise. , 2018, 2018, 5286-5289.		0
197	Preliminary Evaluation of Fetal Congenital Heart Defects Changes on Fetal-Maternal Heart Rate Coupling Strength. , 2018, 2018, 251-254.		0
198	Investigating Sleep Fragmentation by Autonomic Arousals in Depressed Patients With Obstructive Sleep Apnea. , 2018, , .		0

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