Ã“scar Barquero-PÃ©rez

List of Publications by Year
in descending order

57 papers	598 citations	623734 14 h-index	713466 21 g-index
63 all docs	63 docs citations	63 times ranked	823 citing authors

#	Article	IF	Citations
1	Heart Rate Turbulence Analysis Based on Photoplethysmography. IEEE Transactions on Biomedical Engineering, 2013, 60, 3149-3155.	4.2	44
2	Regularization Techniques for ECG Imaging during Atrial Fibrillation: A Computational Study. Frontiers in Physiology, 2016, 7, 466.	2.8	44
3	Sudden Cardiac Risk Stratification with Electrocardiographic Indices - A Review on Computational Processing, Technology Transfer, and Scientific Evidence. Frontiers in Physiology, 2016, 7, 82.	2.8	35
4	Quality estimation of the electrocardiogram using cross-correlation among leads. BioMedical Engineering OnLine, 2015, 14, 59.	2.7	32
5	Use of a K-nearest neighbors model to predict the development of type 2 diabetes within 2 years in an obese, hypertensive population. Medical and Biological Engineering and Computing, 2020, 58, 991-1002.	2.8	30
6	Pulse Wave Velocity and Machine Learning to Predict Cardiovascular Outcomes in Prediabetic and Diabetic Populations. Journal of Medical Systems, 2020, 44, 16.	3.6	22
7	Comparison of Detection of Arrhythmias in Patients With Chronic Heart Failure Secondary to Non-Ischemic Versus Ischemic Cardiomyopathy by 1 Versus 7-Day Holter Monitoring. American Journal of Cardiology, 2010, 106, 677-681.	1.6	20
8	Heart Rate Variability on 7-Day Holter Monitoring Using a Bootstrap Rhythmometric Procedure. IEEE Transactions on Biomedical Engineering, 2010, 57, 1366-1376.	4.2	18
9	Cystatin C as a predictor of cardiovascular outcomes in a hypertensive population. Journal of Human Hypertension, 2017, 31, 801-807.	2.2	18
10	Nonparametric Signal Processing Validation in T-Wave Alternans Detection and Estimation. IEEE Transactions on Biomedical Engineering, 2014, 61, 1328-1338.	4.2	17
11	Relevant Features in Nonalcoholic Steatohepatitis Determined Using Machine Learning for Feature Selection. Metabolic Syndrome and Related Disorders, 2019, 17, 444-451.	1.3	17
12	Fundamental Frequency and Regularity of Cardiac Electrograms With Fourier Organization Analysis. IEEE Transactions on Biomedical Engineering, 2010, 57, 2168-2177.	4.2	16
13	Heart Rate Turbulence Denoising Using Support Vector Machines. IEEE Transactions on Biomedical Engineering, 2009, 56, 310-319.	4.2	15
14	Spectrally adapted Mercer kernels for support vector nonuniform interpolation. Signal Processing, 2014, 94, 421-433.	3.7	15
15	Biometrical measurements as efficient indicators to assess wild boar body condition. Ecological Indicators, 2018, 88, 43-50.	6.3	15
16	Association between vitamin D supplementation and severity of tuberculosis in wild boar and red deer. Research in Veterinary Science, 2016, 108, 116-119.	1.9	13
17	Assessment of Classification Models and Relevant Features on Nonalcoholic Steatohepatitis Using Random Forest. Entropy, 2021, 23, 763.	2.2	12
18	Long-term characterization of persistent atrial fibrillation: wave morphology, frequency, and irregularity analysis. Medical and Biological Engineering and Computing, 2014, 52, 1053-1060.	2.8	10

#	Article	IF	Citations
19	Logistic LASSO and Elastic Net to Characterize Vitamin D Deficiency in a Hypertensive Obese Population. Metabolic Syndrome and Related Disorders, 2020, 18, 79-85.	1.3	10
20	Heart rate control in chronic heart failure: Resting versus mean heart rate with prolonged ambulatory ECG recording. International Journal of Cardiology, 2013, 170, e45-e47.	1.7	9
21	Heart rate variability and phantom pain in male amputees: Application of linear and nonlinear methods. Journal of Rehabilitation Research and Development, 2013, 50, 449.	1.6	9
22	A new method for ageing wild boar using dental measures. Ecological Indicators, 2016, 62, 328-332.	6.3	9
23	Characterization of Heart Rate Variability loss with aging and heart failure using Sample Entropy. , 2008, , .		8
24	Nasal shedding of <i>Mycobacterium tuberculosis</i> in wild boar is related to generalised tuberculosis and concomitant infections. Veterinary Record, 2019, 185, 629-629.	0.3	8
25	Autonomic Nervous System and Recall Modeling in Audiovisual Emotion-Mediated Advertising Using Partial Least Squares-Path Modeling. Frontiers in Psychology, 2020, 11, 576771.	2.1	8
26	Analysis of physiological meaning of detrended Fluctuation Analysis in Heart Rate Variability using a lumped parameter model. , 2007, , .		7
27	Ontology for Heart Rate Turbulence Domain From The Conceptual Model of SNOMED-CT. IEEE Transactions on Biomedical Engineering, 2013, 60, 1825-1833.	4.2	7
28	Fetal Heart Rate Analysis for Automatic Detection of Perinatal Hypoxia Using Normalized Compression Distance and Machine Learning. Frontiers in Physiology, 2017, 8, 113.	2.8	7
29	Machine learning approaches to constructing predictive models of vitamin D deficiency in a hypertensive population: a comparative study. Informatics for Health and Social Care, 2021, 46, 355-369.	2.6	7
30	Deep Neural Network: An Alternative to Traditional Channel Estimators in Massive MIMO Systems. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 657-671.	7.9	7
31	Short-Term Variability of Heart Rate Turbulence in Chronic Heart Failure. Journal of Cardiac Failure, 2011, 17, 735-741.	1.7	6
32	Cardiovascular risk assessment in prediabetic patients in a hypertensive population: The role of cystatin C. Diabetes and Metabolic Syndrome: Clinical Research and Reviews, 2018, 12, 625-629.	3.6	6
33	The Use of Machine Learning Techniques to Determine the Predictive Value of Inflammatory Biomarkers in the Development of Type 2 Diabetes Mellitus. Metabolic Syndrome and Related Disorders, 2021, 19, 240-248.	1.3	6
34	Changes in Detrended Fluctuation indices with aging in healthy and Congestive Heart Failure subjects. , 2008, , .		5
35	Full Band Spectra Analysis of Gait Acceleration Signals for Peripheral Arterial Disease Patients. Frontiers in Physiology, 2018, 9, 1061.	2.8	5
36	Identification of clinically relevant features in hypertensive patients using penalized regression: a case study of cardiovascular events. Medical and Biological Engineering and Computing, 2019, 57, 2011-2026.	2.8	5

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37	Prognostic Significance of Long-Period Heart Rate Rhythms in Chronic Heart Failure. Circulation Journal, 2012, 76, 2124-2129.	1.6	4
38	On the Influence of Heart Rate and Coupling Interval Prematurity on Heart Rate Turbulence. IEEE Transactions on Biomedical Engineering, 2017, 64, 302-309.	4.2	4
39	Non-invasive Estimation of Atrial Fibrillation Driver Position With Convolutional Neural Networks and Body Surface Potentials. Frontiers in Physiology, 2021, 12, 733449.	2.8	4
40	A Review on Recent Patents in Digital Processing for Cardiac Electric Signals (II): Advanced Systems and Applications. Recent Patents on Biomedical Engineering, 2009, 2, 32-47.	0.5	3
41	A Review on Recent Patents in Digital Processing for Cardiac Electric Signals (I): From Basic Systems to Arrhythmia Analysis. Recent Patents on Biomedical Engineering, 2009, 2, 22-31.	0.5	3
42	High diagnostic quality ECG compression and CS signal reconstruction in body sensor networks. , 2016, , .		3
43	Electrocardiographic imaging including intracardiac information to achieve accurate global mapping during atrial fibrillation. Biomedical Signal Processing and Control, 2021, 64, 102354.	5.7	3
44	Detection and estimation of T wave alternans with matched filter and nonparametric bootstrap test. , 2008, , .		2
45	Fetal heart rate complexity measures to detect hypoxia. , 2015, , .		2
46	Fundamental frequency estimation in atrial fibrillation signals using correntropy and Fourier Organization Analysis. , 2012, , .		1
47	Lack of improvement in autonomic cardiac tone after sacubitril/valsartan at lower than target doses. Journal of Electrocardiology, 2019, 52, 99-100.	0.9	1
48	Performance of Inverse Problem Regularization Methods for Driver Location during Atrial Fibrillation. , 0, , .		1
49	Estimating heart rate turbulence from a single ectopic beat with robust processing. Journal of Electrocardiology, 2007, 40, S33-S34.	0.9	0
50	Evolution of the Heart Rate Variability complexity during Kangchenjunga climbing. , 2015, , .		0
51	Heart Rate Turbulence modeling using Boosted Regression Trees. , 2015, , .		0
52	Analysis of Heart Rate Variability Influence on Heart Rate Turbulence Using Boosted Regression Trees in Heart Failure Patients. , 0, , .		0
53	Modeling Cardiovascular Condition Evolution in Hypertensive Population Using Graph Signal Processing. , 0, , .		0
54	L1 Penalized Cox Regression to Characterize Cardiovascular Events in Hypertensive Patients. , 0, , .		0

#	Article	IF	Citations
55	Including a Priori Knowledge in the Solution of the Inverse Problem During Atrial Fibrillation. , 0, , .		0
56	A Group Lasso Based Method for Automatic Physiological Rhythm Analysis. , 0, , .		0
57	Atrial Fibrillation Driver Localization From Body Surface Potentials Using Deep Learning. , 0, , .		0