JosÃ© Luis Rojo-Ãlvarez

List of Publications by Year
in descending order

131 papers	1,776 citations	361045 20 h-index	344852 36 g-index
148 all docs	148 docs citations	148 times ranked	1776 citing authors

#	Article	IF	Citations
1	Autocorrelation Metrics to Estimate Soil Moisture Persistence From Satellite Time Series: Application to Semiarid Regions. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	2.7	1
2	On the Black-Box Challenge for Fraud Detection Using Machine Learning (I): Linear Models and Informative Feature Selection. Applied Sciences (Switzerland), 2022, 12, 3328.	1.3	7
3	On the Black-Box Challenge for Fraud Detection Using Machine Learning (II): Nonlinear Analysis through Interpretable Autoencoders. Applied Sciences (Switzerland), 2022, 12, 3856.	1.3	8
4	Multivariate feature selection and autoencoder embeddings of ovarian cancer clinical and genetic data. Expert Systems With Applications, 2022, 206, 117865.	4.4	3
5	Comparison of Omegawave Device and an Ambulatory ECG for RR Interval Measurement at rest. International Journal of Sports Medicine, 2021, 42, 138-146.	0.8	5
6	Data Science Analysis and Profile Representation Applied to Secondary Prevention of Acute Coronary Syndrome. IEEE Access, 2021, 9, 78607-78620.	2.6	0
7	Comparison of Infinite Impulse Response (IIR) and Finite Impulse Response (FIR) Filters in Cardiac Optical Mapping Records. Communications in Computer and Information Science, 2021, , 207-224.	0.4	1
8	A Resampling Univariate Analysis Approach to Ovarian Cancer From Clinical and Genetic Data. IEEE Access, 2021, 9, 25959-25972.	2.6	5
9	Text Analytics and Mixed Feature Extraction in Ovarian Cancer Clinical and Genetic Data. IEEE Access, 2021, 9, 58034-58051.	2.6	2
10	Sentiment Analysis of Political Tweets From the 2019 Spanish Elections. IEEE Access, 2021, 9, 101847-101862.	2.6	11
11	Electrocardiographic Imaging for Atrial Fibrillation: A Perspective From Computer Models and Animal Experiments to Clinical Value. Frontiers in Physiology, 2021, 12, 653013.	1.3	20
12	Automatic ladybird beetle detection using deep-learning models. PLoS ONE, 2021, 16, e0253027.	1.1	14
13	Optimal Axes for Data Value Estimation in Star Coordinates and Radial Axes Plots. Computer Graphics Forum, 2021, 40, 483-494.	1.8	3
14	Causal Quantification of Cannibalization During Promotional Sales in Grocery Retail. IEEE Access, 2021, 9, 34078-34089.	2.6	2
15	A Big Data Approach to Customer Relationship Management Strategy in Hospitality Using Multiple Correspondence Domain Description. Applied Sciences (Switzerland), 2021, 11, 256.	1.3	13
16	Informative variable identifier: Expanding interpretability in feature selection. Pattern Recognition, 2020, 98, 107077.	5.1	19
17	On the Differential Analysis of Enterprise Valuation Methods as a Guideline for Unlisted Companies Assessment (I): Empowering Discounted Cash Flow Valuation. Applied Sciences (Switzerland), 2020, 10, 5875.	1.3	6
18	Quantitative Cluster Headache Analysis for Neurological Diagnosis Support Using Statistical Classification. Information (Switzerland), 2020, 11, 393.	1.7	2

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19	Cold-Start Promotional Sales Forecasting Through Gradient Boosted-Based Contrastive Explanations. IEEE Access, 2020, 8, 137574-137586.	2.6	7
20	On the Differential Analysis of Enterprise Valuation Methods as a Guideline for Unlisted Companies Assessment (II): Applying Machine-Learning Techniques for Unbiased Enterprise Value Assessment. Applied Sciences (Switzerland), 2020, 10, 5334.	1.3	4
21	Spectral Analysis and Mutual Information Estimation of Left and Right Intracardiac Electrograms during Ventricular Fibrillation. Sensors, 2020, 20, 4162.	2.1	1
22	Rapid Estimation of TVWS: A Probabilistic Approach Based on Sensed Signal Parameters. Telecom, 2020, 1, 161-180.	1.6	0
23	Spatial-Temporal Signals and Clinical Indices in Electrocardiographic Imaging (II): Electrogram Clustering and T-Wave Alternans. Sensors, 2020, 20, 3070.	2.1	2
24	Spatial-Temporal Signals and Clinical Indices in Electrocardiographic Imaging (I): Preprocessing and Bipolar Potentials. Sensors, 2020, 20, 3131.	2.1	2
25	On the Statistical and Temporal Dynamics of Sentiment Analysis. IEEE Access, 2020, 8, 87994-88013.	2.6	8
26	An approach to automatic classification of Culicoides species by learning the wing morphology. PLoS ONE, 2020, 15, e0241798.	1.1	8
27	Finding Associations among Chronic Conditions by Bootstrap and Multiple Correspondence Analysis. , 2020, , .		1
28	Deep Neural Nets for DOA Estimation With Random Arrays. , 2020, , .		4
29	Gaussian Processes for Direction-of-Arrival Estimation With Random Arrays. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2297-2300.	2.4	13
30	Forecasting Promotional Sales Within the Neighbourhood. IEEE Access, 2019, 7, 74759-74775.	2.6	8
31	On the Robustness of Multiscale Indices for Long-Term Monitoring in Cardiac Signals. Entropy, 2019, 21, 594.	1.1	5
32	Deep Learning and Big Data in Healthcare: A Double Review for Critical Beginners. Applied Sciences (Switzerland), 2019, 9, 2331.	1.3	71
33	An Accurate Probabilistic Model for TVWS Identification. Applied Sciences (Switzerland), 2019, 9, 4232.	1.3	7
34	Electrocardiographic Fragmented Activity (I): Physiological Meaning of Multivariate Signal Decompositions. Applied Sciences (Switzerland), 2019, 9, 3566.	1.3	1
35	Electrocardiographic Fragmented Activity (II): A Machine Learning Approach to Detection. Applied Sciences (Switzerland), 2019, 9, 3565.	1.3	4
36	Enabling Heart Self-Monitoring for All and for AALâ€"Portable Device within a Complete Telemedicine System. Sensors, 2019, 19, 3969.	2.1	8

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37	Towards Organization Management Using Exploratory Screening and Big Data Tests: A Case Study of the Spanish Red Cross. IEEE Access, 2019, 7, 80661-80674.	2.6	6
38	Multiple Correspondence Analysis of Emergencies Attended by Integrated Security Services. Applied Sciences (Switzerland), 2019, 9, 1396.	1.3	7
39	Entropic Statistical Description of Big Data Quality in Hotel Customer Relationship Management. Entropy, 2019, 21, 419.	1.1	10
40	Big and Deep Hype and Hope: On the Special Issue for Deep Learning and Big Data in Healthcare. Applied Sciences (Switzerland), 2019, 9, 4452.	1.3	1
41	Gaussian Process Regression for Array Interpolation. , 2019, , .		4
42	Lack of improvement in autonomic cardiac tone after sacubitril/valsartan at lower than target doses. Journal of Electrocardiology, 2019, 52, 99-100.	0.4	1
43	Adaptive Kernel Learning for Signal Processing. , 2018, , 387-431.		2
44	Using big data from Customer Relationship Management information systems to determine the client profile in the hotel sector. Tourism Management, 2018, 68, 187-197.	5.8	98
45	Classifying cardiac arrhythmic episodes via data compression. Neurocomputing, 2018, 307, 1-13.	3.5	3
46	Arrhythmia Mechanism and Scaling Effect on the Spectral Properties of Electroanatomical Maps With Manifold Harmonics. IEEE Transactions on Biomedical Engineering, 2018, 65, 723-732.	2.5	0
47	Event Analysis on Power Communication Networks With Big Data for Maintenance Forms. IEEE Access, 2018, 6, 72263-72274.	2.6	5
48	Cardiac Fibrosis Detection Applying Machine Learning Techniques to Standard 12-Lead ECG. , 2018, , .		1
49	Data Amount Reduction in Mosaic Image Transmission Techniques for Digital Interactive Television Applications. IEEE Access, 2018, 6, 70283-70297.	2.6	2
50	A Flexible 12-Lead/Holter Device with Compression Capabilities for Low-Bandwidth Mobile-ECG Telemedicine Applications. Sensors, 2018, 18, 3773.	2.1	9
51	Kernel DOA estimation in nonuniform arrays. , 2018, , .		3
52	From E-911 to NG-911: Overview and Challenges in Ecuador. IEEE Access, 2018, 6, 42578-42591.	2.6	10
53	Statistical, Spatial and Temporal Mapping of 911 Emergencies in Ecuador. Applied Sciences (Switzerland), 2018, 8, 199.	1.3	5
54	Multiparametric Monitoring in Equatorian Tomato Greenhouses (III): Environmental Measurement Dynamics. Sensors, 2018, 18, 2557.	2.1	8

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55	Multiparametric Monitoring in Equatorian Tomato Greenhouses (II): Energy Consumption Dynamics. Sensors, 2018, 18, 2556.	2.1	5
56	Multiparametric Monitoring in Equatorian Tomato Greenhouses (I): Wireless Sensor Network Benchmarking. Sensors, 2018, 18, 2555.	2.1	22
57	Convex Programming and Bootstrap Sensitivity for Optimized Electricity Bill in Healthcare Buildings under a Time-Of-Use Pricing Scheme. Energies, 2018, 11, 1454.	1.6	1
58	A new approach to the intracardiac inverse problem using Laplacian distance kernel. BioMedical Engineering OnLine, 2018, 17, 86.	1.3	6
59	Analyzing and Forecasting Electrical Load Consumption in Healthcare Buildings. Energies, 2018, 11, 493.	1.6	18
60	An Interoperable System toward Cardiac Risk Stratification from ECG Monitoring. International Journal of Environmental Research and Public Health, 2018, 15, 428.	1.2	10
61	On the Beat Detection Performance in Long-Term ECG Monitoring Scenarios. Sensors, 2018, 18, 1387.	2.1	11
62	Force Trends and Pulsatility for Catheter Contact Identification in Intracardiac Electrograms during Arrhythmia Ablation. Sensors, 2018, 18, 1399.	2.1	2
63	Spatio-Temporal River Contamination Measurements with Electrochemical Probes and Mobile Sensor Networks. Sustainability, 2018, 10, 1449.	1.6	1
64	Simple Algorithms for Estimating the Symbol Timing Offset in DCT-Based Multicarrier Systems. Wireless Communications and Mobile Computing, 2018, 2018, 1-8.	0.8	3
65	On the Influence of Heart Rate and Coupling Interval Prematurity on Heart Rate Turbulence. IEEE Transactions on Biomedical Engineering, 2017, 64, 302-309.	2.5	4
66	Benchmarking of a T-wave alternans detection method based on empirical mode decomposition. Computer Methods and Programs in Biomedicine, 2017, 145, 147-155.	2.6	10
67	On the use of multi-class support vector machines for classification of seismic signals at Cotopaxi volcano. , 2017, , .		7
68	Extended iris color features analysis and cluster headache diagnosis based on support vector classifier. , 2017, , .		0
69	Effect of Different Ventricular Arrhythmia Origin on Cardiac Sound Variability Using M-mode Signal Representation. , 2017, , .		0
70	Fetal Heart Rate Analysis for Automatic Detection of Perinatal Hypoxia Using Normalized Compression Distance and Machine Learning. Frontiers in Physiology, 2017, 8, 113.	1.3	7
71	Water Quality Sensing and Spatio-Temporal Monitoring Structure with Autocorrelation Kernel Methods. Sensors, 2017, 17, 2357.	2.1	4
72	Noise Maps for Quantitative and Clinical Severity Towards Long-Term ECG Monitoring. Sensors, 2017, 17, 2448.	2.1	25

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73	Spatio-Temporal Analysis of Water Quality Parameters in MachÃ¡ngara River with Nonuniform Interpolation Methods. Water (Switzerland), 2016, 8, 507.	1.2	9
74	Sudden Cardiac Risk Stratification with Electrocardiographic Indices - A Review on Computational Processing, Technology Transfer, and Scientific Evidence. Frontiers in Physiology, 2016, 7, 82.	1.3	35
75	Safety threshold of R-wave amplitudes in patients with implantable cardioverter defibrillator. Heart, 2016, 102, 1662-1670.	1.2	15
76	A Support Vector Laplacian Distance Kernel Approach to the Inverse Problem in Intracardiac Electrophysiology. IFMBE Proceedings, 2016, , 89-94.	0.2	1
77	Feature selection of seismic waveforms for long period event detection at Cotopaxi Volcano. Journal of Volcanology and Geothermal Research, 2016, 316, 34-49.	0.8	21
78	Influence of Normalization on the Analysis of Electroanatomical Maps with Manifold Harmonics. Lecture Notes in Computer Science, 2016, , 415-425.	1.0	1
79	Predicting colorectal surgical complications using heterogeneous clinical data and kernel methods. Journal of Biomedical Informatics, 2016, 61, 87-96.	2.5	57
80	Automatic Recognition of Long Period Events From Volcano Tectonic Earthquakes at Cotopaxi Volcano. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5247-5257.	2.7	34
81	Support Vector Feature Selection for Early Detection of Anastomosis Leakage From Bag-of-Words in Electronic Health Records. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1404-1415.	3.9	60
82	On the use of conventional and statistical-learning techniques for the analysis of PISA results in Spain. Neurocomputing, 2016, 171, 625-637.	3.5	20
83	Prediction of Healthcare Associated Infections in an Intensive Care Unit Using Machine Learning and Big Data Tools. IFMBE Proceedings, 2016, , 840-845.	0.2	4
84	Web application for data exchange and follow-up in Heart Rate Turbulence. , 2015, , .		0
85	Evolution of the Heart Rate Variability complexity during Kangchenjunga climbing. , 2015, , .		0
86	Spectral analysis of Electroanatomical Maps for spatial bandwidth estimation as support to ablation. , 2015, , .		1
87	Automatic Supporting System for Regionalization of Ventricular Tachycardia Exit Site in Implantable Defibrillators. PLoS ONE, 2015, 10, e0124514.	1.1	4
88	Time and Frequency Feature Selection for Seismic Events from Cotopaxi Volcano. , 2015, , .		12
89	Heart Rate Turbulence modeling using Boosted Regression Trees. , 2015, , .		0
90	Fetal heart rate complexity measures to detect hypoxia. , 2015, , .		2

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91	Effect of interpolation on electroanatomical mapping. , 2015, , .		2
92	Symmetrical Compression Distance for Arrhythmia Discrimination in Cloud-Based Big-Data Services. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1253-1263.	3.9	30
93	Traffic sign segmentation and classification using statistical learning methods. Neurocomputing, 2015, 153, 286-299.	3.5	95
94	Long-term characterization of persistent atrial fibrillation: wave morphology, frequency, and irregularity analysis. Medical and Biological Engineering and Computing, 2014, 52, 1053-1060.	1.6	10
95	Spectrally adapted Mercer kernels for support vector nonuniform interpolation. Signal Processing, 2014, 94, 421-433.	2.1	15
96	Nonparametric Signal Processing Validation in T-Wave Alternans Detection and Estimation. IEEE Transactions on Biomedical Engineering, 2014, 61, 1328-1338.	2.5	17
97	Support vector machines in engineering: an overview. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2014, 4, 234-267.	4.6	137
98	Statistical nonlinear analysis for reliable promotion decision-making. , 2014, 33, 156-168.		3
99	A unified SVM framework for signal estimation. , 2014, 26, 1-20.		14
100	Ontology for Heart Rate Turbulence Domain From The Conceptual Model of SNOMED-CT. IEEE Transactions on Biomedical Engineering, 2013, 60, 1825-1833.	2.5	7
101	Weaning outcome prediction from heterogeneous time series using Normalized Compression Distance and Multidimensional Scaling. Expert Systems With Applications, 2013, 40, 1737-1747.	4.4	6
102	Prognostic Significance of Long-Period Heart Rate Rhythms in Chronic Heart Failure. Circulation Journal, 2012, 76, 2124-2129.	0.7	4
103	On the differential benchmarking of promotional efficiency with machine learning modeling (I): Principles and statistical comparison. Expert Systems With Applications, 2012, 39, 12772-12783.	4.4	13
104	On the differential benchmarking of promotional efficiency with machine learning modelling (II): Practical applications. Expert Systems With Applications, 2012, 39, 12784-12798.	4.4	8
105	Feature selection using support vector machines and bootstrap methods for ventricular fibrillation detection. Expert Systems With Applications, 2012, 39, 1956-1967.	4.4	60
106	Digital recovery of biomedical signals from binary images. Signal Processing, 2012, 92, 43-53.	2.1	10
107	Heart Rate Variability on 7-Day Holter Monitoring Using a Bootstrap Rhythmometric Procedure. IEEE Transactions on Biomedical Engineering, 2010, 57, 1366-1376.	2.5	18
108	Fundamental Frequency and Regularity of Cardiac Electrograms With Fourier Organization Analysis. IEEE Transactions on Biomedical Engineering, 2010, 57, 2168-2177.	2.5	16

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109	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.	0.7	20
110	Spectral analysis of intracardiac electrograms during induced and spontaneous ventricular fibrillation in humans. Europace, 2009, 11, 328-331.	0.7	14
111	Heart Rate Turbulence Denoising Using Support Vector Machines. IEEE Transactions on Biomedical Engineering, 2009, 56, 310-319.	2.5	15
112	Nonparametric Model Comparison and Uncertainty Evaluation for Signal Strength Indoor Location. IEEE Transactions on Mobile Computing, 2009, 8, 1250-1264.	3.9	33
113	Using Support Vector Semiparametric Regression to Estimate the Effects of Pricing on Brand Substitution. International Journal of Market Research, 2008, 50, 533-557.	2.8	6
114	Nonuniform Interpolation of Noisy Signals Using Support Vector Machines. IEEE Transactions on Signal Processing, 2007, 55, 4116-4126.	3.2	32
115	Assessing the impact of temporary retail price discounts intervals using SVM semiparametric regression. International Review of Retail, Distribution and Consumer Research, 2006, 16, 181-197.	1.3	11
116	Using daily store-level data to understand price promotion effects in a semiparametric regression model. Journal of Retailing and Consumer Services, 2006, 13, 193-204.	5.3	30
117	Support vector machines framework for linear signal processing. Signal Processing, 2005, 85, 2316-2326.	2.1	53
118	Support Vector Method for RobustARMA System Identification. IEEE Transactions on Signal Processing, 2004, 52, 155-164.	3.2	116
119	A robust support vector algorithm for nonparametric spectral analysis. IEEE Signal Processing Letters, 2003, 10, 320-323.	2.1	33
120	Discriminating between supraventricular and ventricular tachycardias from EGM onset analysis. IEEE Engineering in Medicine and Biology Magazine, 2002, 21, 16-26.	1.1	30
121	Analysis of Heart Rate Variability Influence on Heart Rate Turbulence Using Boosted Regression Trees in Heart Failure Patients. , 0, , .		0
122	T-Wave Alternans Analysis With Electrocardiographic Imaging. , 0, , .		0
123	Autocorrelation Kernel Support Vector Machines for Doppler Ultrasound M:Mode Images Denoising. , 0, , .		1
124	QRS Fragmentation Index as a New Discriminator for Early Diagnosis of Heart Diseases. , 0, , .		2
125	Auto:Cropping of Phone Camera Color Images to Segment Cardiac Signals in ECG Printouts. , 0, , .		0
126	Clinical Severity of Noise in ECG. , 0, , .		1

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127	Computational Efficiency and Accuracy for QRS Detection Algorithms on Clinical Long Term Multilead Monitoring. , 0, , .		1
128	An Approach to New Methods for Digital Processing on Optical Mapping Sequences and Electrical Mapping. , 0, , .		0
129	Nonuniform Interpolation of Cardiac Navigation Maps Using Support Vector Machines. , 0, , .		0
130	A Quantitative Analysis on the Intracardiac Electrogram Contact During Ventricular Tachycardia Ablation. , 0, , .		0
131	A Group Lasso Based Method for Automatic Physiological Rhythm Analysis. , 0, , .		0