Francisco MartÃ-nez-Ãlvarez

List of Publications by Year
in descending order

82 papers	3,257 citations	147801 31 h-index	155660 55 g-index
89 all docs	89 docs citations	89 times ranked	2678 citing authors

#	Article	IF	Citations
1	Deep Learning for Time Series Forecasting: A Survey. Big Data, 2021, 9, 3-21.	3.4	267
2	A novel deep learning neural network approach for predicting flash flood susceptibility: A case study at a high frequency tropical storm area. Science of the Total Environment, 2020, 701, 134413.	8.0	216
3	Energy Time Series Forecasting Based on Pattern Sequence Similarity. IEEE Transactions on Knowledge and Data Engineering, 2011, 23, 1230-1243.	5.7	193
4	Multi-step forecasting for big data time series based on ensemble learning. Knowledge-Based Systems, 2019, 163, 830-841.	7.1	161
5	Neural networks to predict earthquakes in Chile. Applied Soft Computing Journal, 2013, 13, 1314-1328.	7.2	151
6	Earthquake magnitude prediction in Hindukush region using machine learning techniques. Natural Hazards, 2017, 85, 471-486.	3.4	141
7	A Survey on Data Mining Techniques Applied to Electricity-Related Time Series Forecasting. Energies, 2015, 8, 13162-13193.	3.1	130
8	A novel ensemble modeling approach for the spatial prediction of tropical forest fire susceptibility using LogitBoost machine learning classifier and multi-source geospatial data. Theoretical and Applied Climatology, 2019, 137, 637-653.	2.8	119
9	A scalable approach based on deep learning for big data time series forecasting. Integrated Computer-Aided Engineering, 2018, 25, 335-348.	4.6	94
10	Earthquake prediction model using support vector regressor and hybrid neural networks. PLoS ONE, 2018, 13, e0199004.	2.5	88
11	A comparison of machine learning regression techniques for LiDAR-derived estimation of forest variables. Neurocomputing, 2015, 167, 24-31.	5.9	87
12	Determining the best set of seismicity indicators to predict earthquakes. Two case studies: Chile and the Iberian Peninsula. Knowledge-Based Systems, 2013, 50, 198-210.	7.1	82
13	Big Data Analytics for Discovering Electricity Consumption Patterns in Smart Cities. Energies, 2018, 11, 683.	3.1	79
14	Pattern recognition to forecast seismic time series. Expert Systems With Applications, 2010, 37, 8333-8342.	7.6	74
15	Earthquake prediction in California using regression algorithms and cloud-based big data infrastructure. Computers and Geosciences, 2018, 115, 198-210.	4.2	66
16	Earthquake prediction in seismogenic areas of the Iberian Peninsula based on computational intelligence. Tectonophysics, 2013, 593, 121-134.	2.2	55
17	A fast partitioning algorithm using adaptive Mahalanobis clustering with application to seismic zoning. Computers and Geosciences, 2014, 73, 132-141.	4.2	55
18	Seismic indicators based earthquake predictor system using Genetic Programming and AdaBoost classification. Soil Dynamics and Earthquake Engineering, 2018, 111, 1-7.	3.8	55

#	Article	IF	Citations
19	Mediumâ€“large earthquake magnitude prediction in Tokyo with artificial neural networks. Neural Computing and Applications, 2017, 28, 1043-1055.	5.6	54
20	A novel imputation methodology for time series based on pattern sequence forecasting. Pattern Recognition Letters, 2018, 116, 88-96.	4.2	54
21	A sensitivity study of seismicity indicators in supervised learning to improve earthquake prediction. Knowledge-Based Systems, 2016, 101, 15-30.	7.1	51
22	Mining quantitative association rules based on evolutionary computation and its application to atmospheric pollution. Integrated Computer-Aided Engineering, 2010, 17, 227-242.	4.6	49
23	Big data solar power forecasting based on deep learning and multiple data sources. Expert Systems, 2019, 36, e12394.	4.5	47
24	An evolutionary algorithm to discover quantitative association rules in multidimensional time series. Soft Computing, 2011, 15, 2065-2084.	3.6	42
25	Electricity consumption forecasting based on ensemble deep learning with application to the Algerian market. Energy, 2022, 243, 123060.	8.8	42
26	Big data time series forecasting based on nearest neighbours distributed computing with Spark. Knowledge-Based Systems, 2018, 161, 12-25.	7.1	40
27	Detecting precursory patterns to enhance earthquake prediction in Chile. Computers and Geosciences, 2015, 76, 112-120.	4.2	39
28	A novel hybrid GAâ€“PSO framework for mining quantitative association rules. Soft Computing, 2020, 24, 4645-4666.	3.6	37
29	TriGen: A genetic algorithm to mine triclusters in temporal gene expression data. Neurocomputing, 2014, 132, 42-53.	5.9	36
30	Seismicity analysis and machine learning models for short-term low magnitude seismic activity predictions in Cyprus. Soil Dynamics and Earthquake Engineering, 2020, 130, 105932.	3.8	35
31	MV-kWNN: A novel multivariate and multi-output weighted nearest neighbours algorithm for big data time series forecasting. Neurocomputing, 2019, 353, 56-73.	5.9	34
32	Discovery of motifs to forecast outlier occurrence in time series. Pattern Recognition Letters, 2011, 32, 1652-1665.	4.2	31
33	Seismic activity prediction using computational intelligence techniques in northern Pakistan. Acta Geophysica, 2017, 65, 919-930.	2.0	29
34	PSF: Introduction to R Package for Pattern Sequence Based Forecasting Algorithm. R Journal, 2017, 9, 324.	1.8	28
35	Deformation forecasting of a hydropower dam by hybridizing a long shortâ€term memory deep learning network with the coronavirus optimization algorithm. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 1368-1386.	9.8	26
36	Mapping of seismic parameters of the Iberian Peninsula by means of a geographic information system. Central European Journal of Operations Research, 2018, 26, 739-758.	1.8	24

#	Article	IF	Citations
37	Learning analytics for student modeling in virtual reality training systems: Lineworkers case. Computers and Education, 2020, 151, 103871.	8.3	24
38	Combining pattern sequence similarity with neural networks for forecasting electricity demand time series. , 2013, , .		23
39	A Novel Ensemble Method for Electric Vehicle Power Consumption Forecasting: Application to the Spanish System. IEEE Access, 2019, 7, 120840-120856.	4.2	23
40	A novel methodology to predict urban traffic congestion with ensemble learning. Soft Computing, 2016, 20, 4205-4216.	3.6	21
41	Comparing seismic parameters for different source zone models in the Iberian Peninsula. Tectonophysics, 2017, 717, 449-472.	2.2	21
42	A Nearest Neighbours-Based Algorithm for Big Time Series Data Forecasting. Lecture Notes in Computer Science, 2016, , 174-185.	1.3	20
43	A Novel Hybrid Algorithm to Forecast Functional Time Series Based on Pattern Sequence Similarity with Application to Electricity Demand. Energies, 2019, 12, 94.	3.1	19
44	A Novel Method for Seismogenic Zoning Based on Triclustering: Application to the Iberian Peninsula. Entropy, 2015, 17, 5000-5021.	2.2	18
45	Stability analysis of a slope subject to real accelerograms by finite elements. Application to San Pedro cliff at the Alhambra in Granada. Soil Dynamics and Earthquake Engineering, 2015, 69, 28-45.	3.8	18
46	A New Methodology Based on Imbalanced Classification for Predicting Outliers in Electricity Demand Time Series. Energies, 2016, 9, 752.	3.1	15
47	Improving a multi-objective evolutionary algorithm to discover quantitative association rules. Knowledge and Information Systems, 2016, 49, 481-509.	3.2	15
48	Large Earthquake Magnitude Prediction in Chile with Imbalanced Classifiers and Ensemble Learning. Applied Sciences (Switzerland), 2017, 7, 625.	2.5	15
49	Hybridizing Deep Learning and Neuroevolution: Application to the Spanish Short-Term Electric Energy Consumption Forecasting. Applied Sciences (Switzerland), 2020, 10, 5487.	2.5	15
50	Probabilistic method to select calculation accelerograms based on uniform seismic hazard acceleration response spectra. Soil Dynamics and Earthquake Engineering, 2012, 43, 174-185.	3.8	13
51	Improving Earthquake Prediction with Principal Component Analysis: Application to Chile. Lecture Notes in Computer Science, 2015, , 393-404.	1.3	13
52	Static and Dynamic Ensembles of Neural Networks for Solar Power Forecasting. , 2018, , .		13
53	Obtaining optimal quality measures for quantitative association rules. Neurocomputing, 2016, 176, 36-47.	5.9	11
54	Short Term Earthquake Prediction in Hindukush Region Using Tree Based Ensemble Learning. , 2016, , .		10

#	Article	IF	Citations
55	A novel tree-based algorithm to discover seismic patterns in earthquake catalogs. Computers and Geosciences, 2018, 115, 96-104.	4.2	10
56	Scalable Forecasting Techniques Applied to Big Electricity Time Series. Lecture Notes in Computer Science, 2017, , 165-175.	1.3	9
57	A new big data triclustering approach for extracting three-dimensional patterns in precision agriculture. Neurocomputing, 2022, 500, 268-278.	5.9	9
58	A novel approach to forecast urban surface-level ozone considering heterogeneous locations and limited information. Environmental Modelling and Software, 2018, 110, 52-61.	4.5	8
59	Mahalanobis clustering for the determination of incidence-magnitude seismic parameters for the Iberian Peninsula and the Republic of Croatia. Computers and Geosciences, 2021, 156, 104873.	4.2	8
60	Classification of Gene Expression Profiles: Comparison of K-means and Expectation Maximization Algorithms. , 2008, , .		7
61	Using principal component analysis to improve earthquake magnitude prediction in Japan. Logic Journal of the IGPL, 2017, 25, 949-966.	1.5	7
62	Advanced Machine Learning and Big Data Analytics in Remote Sensing for Natural Hazards Management. Remote Sensing, 2020, 12, 301.	4.0	7
63	Temporal analysis of croatian seismogenic zones to improve earthquake magnitude prediction. Earth Science Informatics, 2017, 10, 303-320.	3.2	6
64	A Comparative Study of Machine Learning Regression Methods on LiDAR Data: A Case Study. Advances in Intelligent Systems and Computing, 2014, , 249-258.	0.6	6
65	Real-Time Big Data Analytics in Smart Cities from LoRa-Based IoT Networks. Advances in Intelligent Systems and Computing, 2020, , 91-100.	0.6	5
66	Analysis of the Impact of Residential Property and Equipment on Building Energy Efficiency and Consumptionâ€"A Data Mining Approach. Applied Sciences (Switzerland), 2020, 10, 3589.	2.5	5
67	Improving Time Series Forecasting by Discovering Frequent Episodes in Sequences. Lecture Notes in Computer Science, 2009, , 357-368.	1.3	4
68	Pattern Recognition in Biological Time Series. Lecture Notes in Computer Science, 2011, , 164-172.	1.3	4
69	Clustering preprocessing to improve time series forecasting. AI Communications, 2011, 24, 97-98.	1.2	3
70	Data Science and Big Data in Energy Forecasting. Energies, 2018, 11, 3224.	3.1	3
71	Discovering Spatio-Temporal Patterns in Precision Agriculture Based on Triclustering. Advances in Intelligent Systems and Computing, 2021, , 226-236.	0.6	3
72	Comparison between Utsu's and Vere-Jones' aftershocks model by means of a computer simulation based on the acceptanceâ€"rejection sampling of von Neumann. Tectonophysics, 2016, 682, 108-119.	2.2	2

#	Article	IF	Citations
73	Recent Advances in Energy Time Series Forecasting. Energies, 2017, 10, 809.	3.1	2
74	Analysis of Student Achievement Scores: A Machine Learning Approach. Advances in Intelligent Systems and Computing, 2020, , 275-284.	0.6	2
75	A Preliminary Study on Deep Transfer Learning Applied to Image Classification for Small Datasets. Advances in Intelligent Systems and Computing, 2021, , 741-750.	0.6	2
76	A Sensitivity Analysis for Quality Measures of Quantitative Association Rules. Lecture Notes in Computer Science, 2013, , 578-587.	1.3	2
77	Using Remote Data Mining on LIDAR and Imagery Fusion Data to Develop Land Cover Maps. Lecture Notes in Computer Science, 2010, , 378-387.	1.3	2
78	Applications of Computational Intelligence in Time Series. Computational Intelligence and Neuroscience, 2017, 2017, 1-2.	1.7	1
79	Fuzzy Clustering Problem. , 2021, , 147-166.		0
80	Mahalanobis Data Clustering. , 2021, , 117-146.		0
81	Searching for an Optimal Partition. , 2021, , 65-100.		0
82	Use of IT in Project-Based Learning Applied to the Subject Surveying in Civil Engineering. Advances in Intelligent Systems and Computing, 2021, , 428-437.	0.6	0