José María Matías

List of Publications by Year
in descending order

58 papers	**1,231** citations	279778 **23** h-index	377849 **34** g-index
59 all docs	**59** docs citations	**59** times ranked	**1312** citing authors

#	Article	IF	Citations
1	A Bayesian network analysis of workplace accidents caused by falls from a height. Safety Science, 2009, 47, 206-214.	4.9	112
2	Explaining and predicting workplace accidents using data-mining techniques. Reliability Engineering and System Safety, 2011, 96, 739-747.	8.9	97
3	A machine learning methodology for the analysis of workplace accidents. International Journal of Computer Mathematics, 2008, 85, 559-578.	1.8	48
4	Comparison between ANNs and linear MCP algorithms in the long-term estimation of the cost per kWh produced by a wind turbine at a candidate site: A case study in the Canary Islands. Applied Energy, 2011, 88, 3869-3881.	10.1	48
5	Classification and regression trees (CARTs) for modelling the sorption and retention of heavy metals by soil. Journal of Hazardous Materials, 2009, 167, 615-624.	12.4	47
6	Creating a quality map of a slate deposit using support vector machines. Journal of Computational and Applied Mathematics, 2007, 204, 84-94.	2.0	44
7	Soil Cd, Cr, Cu, Ni, Pb and Zn sorption and retention models using SVM: Variable selection and competitive model. Science of the Total Environment, 2017, 593-594, 508-522.	8.0	42
8	Use of Bayesian networks classifiers for long-term mean wind turbine energy output estimation at a potential wind energy conversion site. Energy Conversion and Management, 2011, 52, 1137-1149.	9.2	41
9	Forecasting Performance of Nonlinear Models for Intraday Stock Returns. Journal of Forecasting, 2012, 31, 172-188.	2.8	39
10	Comparison of indicator kriging, conditional indicator simulation and multiple-point statistics used to model slate deposits. Engineering Geology, 2008, 98, 50-59.	6.3	38
11	Functional statistical techniques applied to vine leaf water content determination. Mathematical and Computer Modelling, 2010, 52, 1116-1122.	2.0	38
12	Performance assessment of five MCP models proposed for the estimation of long-term wind turbine power outputs at a target site using three machine learning techniques. Applied Energy, 2018, 209, 455-477.	10.1	38
13	Comparison of feature selection methods using ANNs in MCP-wind speed methods. A case study. Applied Energy, 2015, 158, 490-507.	10.1	37
14	Comparison of Kriging and Neural Networks With Application to the Exploitation of a Slate Mine. Mathematical Geosciences, 2004, 36, 463-486.	0.9	36
15	A tree regression analysis of factors determining the sorption and retention of heavy metals by soil. Geoderma, 2008, 147, 75-85.	5.1	35
16	IPez: An expert system for the taxonomic identification of fishes based on machine learning techniques. Fisheries Research, 2010, 102, 240-247.	1.7	35
17	Influence of the input layer signals of ANNs on wind power estimation for a target site: A case study. Renewable and Sustainable Energy Reviews, 2011, 15, 1556-1566.	16.4	35
18	Reforestation planning using Bayesian networks. Environmental Modelling and Software, 2009, 24, 1285-1292.	4.5	34

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19	Nonlinearity in Forecasting of High-Frequency Stock Returns. Computational Economics, 2012, 40, 245-264.	2.6	32
20	Comparison of several measure-correlate-predict models using support vector regression techniques to estimate wind power densities. A case study. Energy Conversion and Management, 2017, 140, 334-354.	9.2	28
21	Support vector machines and gradient boosting for graphical estimation of a slate deposit. Stochastic Environmental Research and Risk Assessment, 2004, 18, 309-323.	4.0	26
22	Machine learning techniques applied to the determination of osteoporosis incidence in post-menopausal women. Mathematical and Computer Modelling, 2009, 50, 673-679.	2.0	26
23	Application of Bayesian networks to the evaluation of roofing slate quality. Engineering Geology, 2007, 94, 27-37.	6.3	25
24	Functional classification of ornamental stone using machine learning techniques. Journal of Computational and Applied Mathematics, 2010, 234, 1338-1345.	2.0	24
25	Analysis of the Importance of Oxides and Clays in Cd, Cr, Cu, Ni, Pb and Zn Adsorption and Retention with Regression Trees. PLoS ONE, 2017, 12, e0168523.	2.5	21
26	Machine learning techniques applied to the determination of road suitability for the transportation of dangerous substances. Journal of Hazardous Materials, 2007, 147, 60-66.	12.4	18
27	Boosting GARCH and neural networks for the prediction of heteroskedastic time series. Mathematical and Computer Modelling, 2010, 51, 256-271.	2.0	18
28	Functional experiment design for the analysis of colour changes in granite using new $L^* \ast a^* \ast b^*$. Journal of Com	2.0	18
29	Assessing the viability of underground slate mining by combining an expert system with a GIS. Engineering Geology, 2006, 87, 75-84.	6.3	16
30	Functional support vector machines and generalized linear models for glacier geomorphology analysis. International Journal of Computer Mathematics, 2009, 86, 275-285.	1.8	15
31	Solving the slate tile classification problem using a DAGSVM multiclassification algorithm based on SVM binary classifiers with a one-versus-all approach. Applied Mathematics and Computation, 2014, 230, 464-472.	2.2	14
32	Application of a Hybrid 3D-2D Laser Scanning System to the Characterization of Slate Slabs. Sensors, 2010, 10, 5949-5961.	3.8	13
33	Multi-output Nonparametric Regression. Lecture Notes in Computer Science, 2005, , 288-292.	1.3	12
34	Shape functional optimization with restrictions boosted with machine learning techniques. Journal of Computational and Applied Mathematics, 2010, 234, 2609-2615.	2.0	9
35	Classifying slate tile quality using automated learning techniques. Mathematical and Computer Modelling, 2013, 57, 1716-1721.	2.0	7
36	Risk Communications: Around the World Neural Network Models for Assessing Road Suitability for Dangerous Goods Transport. Human and Ecological Risk Assessment (HERA), 2006, 12, 174-191.	3.4	6

#	ARTICLE	IF	CITATIONS
37	Partially linear support vector machines applied to the prediction of mine slope movements. Mathematical and Computer Modelling, 2010, 51, 206-215.	2.0	6
38	Machine Learning Techniques Applied to the Assessment of GPS Accuracy under the Forest Canopy. Journal of Surveying Engineering, - ASCE, 2011, 137, 140-149.	1.7	6
39	Learning Machines Applied to Potential Forest Distribution. Environmental Management, 2005, 35, 109-120.	2.7	5
40	Regularized Kriging: The Support Vectors Method Applied to Kriging. Lecture Notes in Computer Science, 2003, , 209-216.	1.3	5
41	Functional Pattern Recognition of 3D Laser Scanned Images of Wood-Pulp Chips. Lecture Notes in Computer Science, 2007, , 298-305.	1.3	5
42	Influence of forecasting electricity prices in the optimization of complex hydrothermal systems. Journal of Computational and Applied Mathematics, 2009, 232, 262-274.	2.0	4
43	Machine learning techniques applied to the construction of a new geomechanical quality index. International Journal of Computer Mathematics, 2011, 88, 1830-1838.	1.8	4
44	3D laser scanner: A new method for estimating the dimensions of wood pulp chips. Nordic Pulp and Paper Research Journal, 2006, 21, 342-348.	0.7	4
45	Regularized kriging as a generalization of simple, universal, and bayesian kriging. Stochastic Environmental Research and Risk Assessment, 2006, 20, 243-258.	4.0	3
46	Quality Control of Wood-Pulp Chips Using A 3D Laser Scanner and Functional Pattern Recognition. , 2007, , .		3
47	Assessing the Environmental Impact of Slate Quarrying Using Bayesian Networks and GIS. AIP Conference Proceedings, 2007, , .	0.4	3
48	Determining Noise in an Aggregates Plant Using Functional Statistics. Human and Ecological Risk Assessment (HERA), 2011, 17, 521-533.	3.4	3
49	Analysis of the adsorption and retention models for Cd, Cr, Cu, Ni, Pb, and Zn through neural networks: selection of variables and competitive model. Environmental Science and Pollution Research, 2018, 25, 25551-25564.	5.3	3
50	Forecasting Electricity Prices in an Optimization Hydrothermal Problem. AIP Conference Proceedings, 2007, , .	0.4	1
51	Analysis and study of an automobile rear seat by FEM. International Journal of Computer Mathematics, 2009, 86, 640-664.	1.8	1
52	Slate characterization using 3D laser scanning. , 2012, , .		1
53	Partially Parametric SVM. Lecture Notes in Computer Science, 2005, , 67-75.	1.3	1
54	Managing distribution changes in time series prediction. Journal of Computational and Applied Mathematics, 2006, 191, 206-215.	2.0	0

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55	Mathematical study of the selective removal of different classes of atmospheric aerosols by coagulation, condensation, and gravitational settling, and the health impact. International Journal of Computer Mathematics, 2008, 85, 447-460.	1.8	0
56	Functional ANOVA used to Detect Colour Changes in Granite Following Water-Repellent Treatment. , 2009, , .		0
57	Kaolin Quality Prediction from Samples: A Bayesian Network Approach. , 2009, , .		0
58	On metric-invariant relativistic transformations under anisotropy in the context of special relativity. International Journal of Modern Physics D, 0, , .	2.1	0