# José María Matías

## List of Publications by Year
## in descending order

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|---|---|---|---|
| **58**<br>papers | **1,231**<br>citations | 279798<br>**23**<br>h-index | 377865<br>**34**<br>g-index |
| **59**<br>all docs | **59**<br>docs citations | **59**<br>times ranked | **1312**<br>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 $L^* a^* b^*$. 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 |

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|---|---------|-----|-----------|
| 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 |