Celestino Ordóñez

List of Publications by Year
in descending order

		185998	223531
121 papers	**2,637** citations	**28** h-index	**46** g-index
123 all docs	**123** docs citations	**123** times ranked	**2758** citing authors

#	Article	IF	Citations
1	Automatic Assessment of Individual Stem Shape Parameters in Forest Stands from TLS Point Clouds: Application in Pinus pinaster. Forests, 2022, 13, 431.	0.9	2
2	Nonparametric location–scale model for the joint forecasting of SO_2 and NO_x pollution episodes. Stochastic Environmental Research and Risk Assessment, 2021, 35, 231-244.	1.9	1
3	Modelling energy performance using a new hybrid DE/MARS–based approach for fossil-fuel thermal power stations. Environmental Science and Pollution Research, 2021, 28, 4417-4429.	2.7	0
4	A Distance Correlation Approach for Optimum Multiscale Selection in 3D Point Cloud Classification. Mathematics, 2021, 9, 1328.	1.1	7
5	An algorithm for the automatic parametrization of wood volume equations from Terrestrial Laser Scanning point clouds: application in <i>Pinus pinaster</i>. GIScience and Remote Sensing, 2021, 58, 1130-1150.	2.4	3
6	Influence of the Number and Spatial Distribution of Ground Control Points in the Accuracy of UAV-SfM DEMs: An Approach Based on Generalized Additive Models. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 10618-10627.	2.7	8
7	Estimating Fuel Loads and Structural Characteristics of Shrub Communities by Using Terrestrial Laser Scanning. Remote Sensing, 2020, 12, 3704.	1.8	13
8	Real–time tomographic reconstructor based on convolutional neural networks for solar observation. Mathematical Methods in the Applied Sciences, 2020, 43, 8032-8041.	1.2	6
9	Functional Location-Scale Model to Forecast Bivariate Pollution Episodes. Mathematics, 2020, 8, 941.	1.1	0
10	Evaluating Lightning–Caused Fire Occurrence Using Spatial Generalized Additive Models: A Case Study in Central Spain. Risk Analysis, 2020, 40, 1418-1437.	1.5	13
11	A hybrid ARIMA–SVM model for the study of the remaining useful life of aircraft engines. Journal of Computational and Applied Mathematics, 2019, 346, 184-191.	1.1	147
12	Multiscale Supervised Classification of Point Clouds with Urban and Forest Applications. Sensors, 2019, 19, 4523.	2.1	11
13	Predicting pollution incidents through semiparametric quantile regression models. Stochastic Environmental Research and Risk Assessment, 2019, 33, 673-685.	1.9	3
14	Predictive model of gas consumption and air emissions of a lime kiln in a kraft process using the ABC/MARS-based technique. International Journal of Advanced Manufacturing Technology, 2019, 100, 1549-1562.	1.5	5
15	Managing Heterogeneity in Time Series Prediction. , 2019, , 366-369.		1
16	Large scale semi-automatic detection of forest roads from low density LiDAR data on steep terrain in Northern Spain. IForest, 2019, 12, 366-374.	0.5	13
17	Automatic dendrometry: Tree detection, tree height and diameter estimation using terrestrial laser scanning. International Journal of Applied Earth Observation and Geoinformation, 2018, 69, 164-174.	1.4	77
18	Determining optimum wavelengths for leaf water content estimation from reflectance: A distance correlation approach. Chemometrics and Intelligent Laboratory Systems, 2018, 173, 41-50.	1.8	5

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19	Geographically Weighted Principal Components Analysis to assess diffuse pollution sources of soil heavy metal: Application to rough mountain areas in Northwest Spain. Geoderma, 2018, 311, 120-129.	2.3	69
20	Leaf water content estimation by functional linear regression of field spectroscopy data. Biosystems Engineering, 2018, 165, 36-46.	1.9	29
21	Detection of Outliers in Pollutant Emissions from the Soto de Ribera Coal-Fired Plant Using Functional Data Analysis: A Case Study in Northern Spain. Proceedings (mdpi), 2018, 2, .	0.2	1
22	Accuracy of Unmanned Aerial Vehicle (UAV) and SfM Photogrammetry Survey as a Function of the Number and Location of Ground Control Points Used. Remote Sensing, 2018, 10, 1606.	1.8	237
23	Cyanotoxin level prediction in a reservoir using gradient boosted regression trees: a case study. Environmental Science and Pollution Research, 2018, 25, 22658-22671.	2.7	12
24	Detection of human vital signs in hazardous environments by means of video magnification. PLoS ONE, 2018, 13, e0195290.	1.1	10
25	Comparing Terrestrial Laser Scanning (TLS) and Wearable Laser Scanning (WLS) for Individual Tree Modeling at Plot Level. Remote Sensing, 2018, 10, 540.	1.8	99
26	Assessing planar asymmetries in shipbuilding from point clouds. Measurement: Journal of the International Measurement Confederation, 2017, 100, 252-261.	2.5	3
27	Analyzing coastal environments by means of functional data analysis. Sedimentary Geology, 2017, 357, 99-108.	1.0	6
28	An algorithm for optimizing terrestrial laser scanning in tunnels. Automation in Construction, 2017, 83, 163-168.	4.8	18
29	Vineyard zone delineation by cluster classification based on annual grape and vine characteristics. Precision Agriculture, 2017, 18, 525-573.	3.1	7
30	Detecting imperceptible movements in structures by means of video magnification. , 2017, , .		0
31	Missing data imputation of questionnaires by means of genetic algorithms with different fitness functions. Journal of Computational and Applied Mathematics, 2017, 311, 704-717.	1.1	52
32	Testing spatial heterogeneity in geographically weighted principal components analysis. International Journal of Geographical Information Science, 2017, 31, 676-693.	2.2	7
33	Automatic Detection and Classification of Pole-Like Objects for Urban Cartography Using Mobile Laser Scanning Data. Sensors, 2017, 17, 1465.	2.1	37
34	Hybrid ABC Optimized MARS-Based Modeling of the Milling Tool Wear from Milling Run Experimental Data. Materials, 2016, 9, 82.	1.3	10
35	A New Predictive Model Based on the ABC Optimized Multivariate Adaptive Regression Splines Approach for Predicting the Remaining Useful Life in Aircraft Engines. Energies, 2016, 9, 409.	1.6	7
36	Morphological Operations to Extract Urban Curbs in 3D MLS Point Clouds. ISPRS International Journal of Geo-Information, 2016, 5, 93.	1.4	19

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37	Hard-Rock Stability Analysis for Span Design in Entry-Type Excavations with Learning Classifiers. Materials, 2016, 9, 531.	1.3	32
38	An Algorithm for Automatic Road Asphalt Edge Delineation from Mobile Laser Scanner Data Using the Line Clouds Concept. Remote Sensing, 2016, 8, 740.	1.8	29
39	Forecasting SO_2 pollution incidents by means of quantile curves based on additive models. Environmetrics, 2016, 27, 147-157.	0.6	6
40	Automatic road edge detection from Mobile Laser Scanning (MLS). , 2016, , .		0
41	Biophysical and lightning characteristics drive lightning-induced fire occurrence in the central plateau of the Iberian Peninsula. Agricultural and Forest Meteorology, 2016, 225, 36-47.	1.9	31
42	Deformation analysis in tunnels through curve clustering. Applied Mathematical Modelling, 2016, 40, 1325-1332.	2.2	4
43	Stability analysis of a tunnel using LIDAR data and the keyblock method. Bulletin of Engineering Geology and the Environment, 2016, 75, 469-483.	1.6	6
44	Room Design for Underground Slate Workings: Analysis of Safety Factors for Keyblocks. Rock Mechanics and Rock Engineering, 2016, 49, 1107-1113.	2.6	2
45	Sediment particle size distributions apportionment by means of functional cluster analysis (FCA). Catena, 2016, 137, 31-36.	2.2	9
46	Detection and magnification of bridge displacements using video images. Proceedings of SPIE, 2016, , .	0.8	0
47	A study of the roughness and curvature in 3D point clouds to extract vertical and horizontal surfaces. , 2015, , .		0
48	Automatic Detection and Classification of Pole-Like Objects in Urban Point Cloud Data Using an Anomaly Detection Algorithm. Remote Sensing, 2015, 7, 12680-12703.	1.8	62
49	Element enrichment factor calculation using grain-size distribution and functional data regression. Chemosphere, 2015, 119, 1192-1199.	4.2	10
50	An approach to detect and delineate street curbs from MLS 3D point cloud data. Automation in Construction, 2015, 51, 103-112.	4.8	50
51	Mobile Laser Scanner data for automatic surface detection based on line arrangement. Automation in Construction, 2015, 58, 28-37.	4.8	21
52	PM10 modeling in the Oviedo urban area (Northern Spain) by using multivariate adaptive regression splines. , 2014, , .		0
53	An algorithm for automatic detection of pole-like street furniture objects from Mobile Laser Scanner point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 87, 47-56.	4.9	148
54	Predicting SO2 pollution incidents by means of additive models with optimum variable selection. Atmospheric Environment, 2014, 95, 151-157.	1.9	2

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55	Thermal analysis of a stoneware panel covering radiators. Applied Energy, 2014, 131, 248-256.	5.1	15
56	A statistical method for geometry inspection from point clouds. Applied Mathematics and Computation, 2014, 242, 562-568.	1.4	3
57	Origin, patterns and anthropogenic accumulation of potentially toxic elements (PTEs) in surface sediments of the Avilés estuary (Asturias, northern Spain). Marine Pollution Bulletin, 2014, 86, 530-538.	2.3	29
58	Point cloud comparison under uncertainty. Application to beam bridge measurement with terrestrial laser scanning. Measurement: Journal of the International Measurement Confederation, 2014, 51, 259-264.	2.5	14
59	Analysis of the influence of range and angle of incidence of terrestrial laser scanning measurements on tunnel inspection. Tunnelling and Underground Space Technology, 2014, 43, 133-139.	3.0	29
60	Geometric optimization of trough collectors using terrestrial laser scanning: Feasibility analysis using a new statistical assessment method. Measurement: Journal of the International Measurement Confederation, 2014, 47, 92-99.	2.5	7
61	Using Hyperspectral Spectrometry and Functional Models to Characterize Vine-Leaf Composition. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2610-2618.	2.7	35
62	Functional data analysis as a tool to correlate textural and geochemical data. Applied Mathematics and Computation, 2013, 223, 476-482.	1.4	6
63	Analysis of the influence of forestry environments on the accuracy of GPS measurements by means of recurrent neural networks. Mathematical and Computer Modelling, 2013, 57, 2016-2023.	2.0	10
64	Functional outlier detection in grain-size distribution curves of detrital sediments. Sedimentary Geology, 2013, 297, 31-37.	1.0	4
65	Measurement planning for circular cross-section tunnels using terrestrial laser scanning. Automation in Construction, 2013, 31, 1-9.	4.8	67
66	A Bootstrap-Based Covariate Selection Method for Modeling the Risk of Lightning-Induced Fires at a Local Scale: A Case Study in Northwest Spain. Human and Ecological Risk Assessment (HERA), 2013, 19, 254-267.	1.7	0
67	Forecasting SO_2 Pollution Incidents by means of Elman Artificial Neural Networks and ARIMA Models. Abstract and Applied Analysis, 2013, 2013, 1-6.	0.3	22
68	A mathematical algorithm for dimensional control of tunnels using topographic profiles. International Journal of Computer Mathematics, 2013, 90, 2072-2078.	1.0	2
69	Validating The Supporting Structure of A Parabolic Solar Collector Using Close Range Photogrammetry. Photogrammetric Record, 2013, 28, 211-226.	0.4	4
70	Comparison of GPS observations made in a forestry setting using functional data analysis. International Journal of Computer Mathematics, 2012, 89, 402-408.	1.0	8
71	Variable selection in regression models used to analyse Global Positioning System accuracy in forest environments. Applied Mathematics and Computation, 2012, 219, 2220-2230.	1.4	1
72	Support vector machines and neural networks used to evaluate paper manufactured using Eucalyptus globulus. Applied Mathematical Modelling, 2012, 36, 6137-6145.	2.2	44

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73	Estimating intercept factor of a parabolic solar trough collector with new supporting structure using off-the-shelf photogrammetric equipment. Applied Energy, 2012, 92, 815-821.	5.1	47
74	Using model-based geostatistics to predict lightning-caused wildfires. Environmental Modelling and Software, 2012, 29, 44-50.	1.9	25
75	Determining vine leaf water stress by functional data analysis. International Journal of Computer Mathematics, 2011, 88, 1941-1948.	1.0	1
76	Non-contact 3D Measurement of Buildings through Close Range Photogrammetry and a Laser Distance Meter. Photogrammetric Engineering and Remote Sensing, 2011, 77, 805-811.	0.3	11
77	Functional experiment design for the analysis of colour changes in granite using new <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si114.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>L</mml:mi></mml:mrow><mml:mrow><mml:mo>âˆ—</mml:mo></mml:mrow></mml:msup><mml:mi mathvariant="normal" width="0.16667em" /><mml:msup><mml:mrow><mml:mi>a</mml:mi></mml:mrow><mml:mrow><mml:mo>âˆ—</mml:mo></mml:mrow></mml:msup><mml:mi mathvariant="normal" width="0.16667em" /><mml:msup><mml:mrow><mml:mi>b</mml:mi></mml:mrow></mml:mrow></mml:msup><mml:mi. Journal of Com	1.1	18
78	Analysis of the influence of forest environments on the accuracy of GPS measurements by using genetic algorithms. Mathematical and Computer Modelling, 2011, 54, 1829-1834.	2.0	24
79	A Methodology for the Inventory of Historical Infrastructures: Documentation, Current State, and Influencing Factors. International Journal of Architectural Heritage, 2011, 5, 629-646.	1.7	10
80	Detection of Outliers in GPS Measurements by Using Functional-Data Analysis. Journal of Surveying Engineering, - ASCE, 2011, 137, 150-155.	1.0	10
81	Machine Learning Techniques Applied to the Assessment of GPS Accuracy under the Forest Canopy. Journal of Surveying Engineering, - ASCE, 2011, 137, 140-149.	1.0	6
82	Determining Noise in an Aggregates Plant Using Functional Statistics. Human and Ecological Risk Assessment (HERA), 2011, 17, 521-533.	1.7	3
83	Intercomparison Exercise for Gases Emitted by a Cement Industry in Spain: A Functional Data Approach. Journal of the Air and Waste Management Association, 2011, 61, 135-141.	0.9	8
84	Assessment of the instability hazard of a granite boulder. Natural Hazards, 2010, 53, 77-95.	1.6	20
85	Partially linear support vector machines applied to the prediction of mine slope movements. Mathematical and Computer Modelling, 2010, 51, 206-215.	2.0	6
86	Functional statistical techniques applied to vine leaf water content determination. Mathematical and Computer Modelling, 2010, 52, 1116-1122.	2.0	38
87	A software program for semi-automated measurement of building faÃ§ades. Measurement: Journal of the International Measurement Confederation, 2010, 43, 1197-1206.	2.5	4
88	Measuring building faÃ§ades with a low-cost close-range photogrammetry system. Automation in Construction, 2010, 19, 742-749.	4.8	47
89	Identification of Granite Varieties from Colour Spectrum Data. Sensors, 2010, 10, 8572-8584.	2.1	17
90	Application of Close Range Photogrammetry to Deck Measurement in Recreational Ships. Sensors, 2009, 9, 6991-7002.	2.1	12

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91	Reforestation planning using Bayesian networks. Environmental Modelling and Software, 2009, 24, 1285-1292.	1.9	34
92	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
93	Study of posterolateral lumbar arthrodesis by means of a finite element model. Mathematical and Computer Modelling, 2009, 50, 680-694.	2.0	2
94	FEM modeling of structures based on close range digital photogrammetry. Automation in Construction, 2009, 18, 559-569.	4.8	59
95	Terrestrial laser scanning used to determine the geometry of a granite boulder for stability analysis purposes. Geomorphology, 2009, 106, 271-277.	1.1	72
96	Functional support vector machines and generalized linear models for glacier geomorphology analysis. International Journal of Computer Mathematics, 2009, 86, 275-285.	1.0	15
97	Comparison of indicator kriging, conditional indicator simulation and multiple-point statistics used to model slate deposits. Engineering Geology, 2008, 98, 50-59.	2.9	38
98	Evaluation of the reserve of a granite deposit by fuzzy kriging. Engineering Geology, 2008, 99, 23-30.	2.9	16
99	Two photogrammetric methods for measuring flat elements in buildings under construction. Automation in Construction, 2008, 17, 517-525.	4.8	17
100	Flat elements on buildings using close-range photogrammetry and laser distance measurement. Optics and Lasers in Engineering, 2008, 46, 541-545.	2.0	15
101	A combined single range and single image device for low‐cost measurement of building façade features. Photogrammetric Record, 2008, 23, 228-240.	0.4	11
102	Calibration of a Photogrammetric System for Semiautomatic Measurement: CaM-DisT$^®$. Key Engineering Materials, 2007, 364-366, 259-264.	0.4	0
103	Damage Quantification and Monitoring in Masonry Monuments through Digital Photogrammetry. Key Engineering Materials, 2007, 347, 291-296.	0.4	6
104	Assessing the Environmental Impact of Slate Quarrying Using Bayesian Networks and GIS. AIP Conference Proceedings, 2007, , .	0.3	3
105	Analysis of dust pollution in slate and granite transformation plants. Environmental Progress, 2007, 26, 178-187.	0.8	4
106	Creating a quality map of a slate deposit using support vector machines. Journal of Computational and Applied Mathematics, 2007, 204, 84-94.	1.1	44
107	Machine learning techniques applied to the determination of road suitability for the transportation of dangerous substances. Journal of Hazardous Materials, 2007, 147, 60-66.	6.5	18
108	Low-cost documentation of traditional agro-industrial buildings by close-range photogrammetry. Building and Environment, 2007, 42, 1817-1827.	3.0	42

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109	Documentation for the Preservation of Traditional agro-industrial buildings in N.W. Spain using simple close range photogrammetry. Survey Review, 2006, 38, 525-540.	0.7	6
110	Methods for documenting historical agro-industrial buildings: a comparative study and a simple photogrammetric method. Journal of Cultural Heritage, 2006, 7, 350-354.	1.5	48
111	Fuzzy expert system for economic zonation of an ornamental slate deposit. Engineering Geology, 2006, 84, 220-228.	2.9	20
112	Assessing the viability of underground slate mining by combining an expert system with a GIS. Engineering Geology, 2006, 87, 75-84.	2.9	16
113	Managing distribution changes in time series prediction. Journal of Computational and Applied Mathematics, 2006, 191, 206-215.	1.1	0
114	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.	1.7	6
115	Evaluation of the resources of a slate deposit using indicator kriging. Engineering Geology, 2005, 81, 407-418.	2.9	15
116	Control of structural problems in cultural heritage monuments using close-range photogrammetry and computer methods. Computers and Structures, 2005, 83, 1754-1766.	2.4	86
117	Learning Machines Applied to Potential Forest Distribution. Environmental Management, 2005, 35, 109-120.	1.2	5
118	Variography for Model Selection in Local Polynomial Regression with Spatial Data. Mathematical Modelling and Algorithms, 2005, 4, 237-252.	0.5	0
119	Design and planning for slate mining using optimisation algorithms. Engineering Geology, 2004, 73, 93-103.	2.9	21
120	A Conceptual Model for Analyzing the Risks Involved in the Transportation of Hazardous Goods: Implementation in a Geographic Information System. Human and Ecological Risk Assessment (HERA), 2003, 9, 857-873.	1.7	23
121	Geostatistical study of the feldspar content and quality of a granite deposit. Engineering Geology, 2002, 65, 285-292.	2.9	12