Francisco J Jimenez-Hornero

List of Publications by Year
in descending order

64	962	430874	526287
papers	citations	18 h-index	27 g-index

66	66	66	1087
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of DEM resolution on drainage network extraction: A multifractal analysis. Geomorphology, 2015, 241, 243-254.	2.6	76
2	Multifractal analysis of axial maps applied to the study of urban morphology. Computers, Environment and Urban Systems, 2013, 38, 1-10.	7.1	66
3	Applying a simple methodology to assess historical soil erosion in olive orchards. Geomorphology, 2010, 114, 294-302.	2.6	53
4	DiedricAR: a mobile augmented reality system designed for the ubiquitous descriptive geometry learning. Multimedia Tools and Applications, 2016, 75, 9641-9663.	3.9	45
5	Using general-purpose computing on graphics processing units (GPGPU) to accelerate the ordinary kriging algorithm. Computers and Geosciences, 2014, 64, 1-6.	4.2	40
6	Multifractal analysis applied to the study of the accuracy of DEM-based stream derivation. Geomorphology, 2013, 197, 85-95.	2.6	37
7	Exploring the relationship between nitrogen dioxide and ground-level ozone by applying the joint multifractal analysis. Environmental Monitoring and Assessment, 2010, 167, 675-684.	2.7	33
8	Applying multifractality and the self-organized criticality theory to describe the temporal rainfall regimes in Andalusia (southern Spain). Hydrological Processes, 2008, 22, 295-308.	2.6	31
9	Selecting the best IDF model by using the multifractal approach. Hydrological Processes, 2013, 27, 433-443.	2.6	31
10	Influence of urban morphology on total noise pollution: Multifractal description. Science of the Total Environment, 2014, 472, 1-8.	8.0	31
11	Can complex networks describe the urban and rural tropospheric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mrow><mml:mi>O</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow> dynamics?. Chemosphere, 2019, 230, 59-66.	8.2	26
12	Continuous time random walks for analyzing the transport of a passive tracer in a single fissure. Water Resources Research, 2005, 41, .	4.2	23
13	Visibility graphs of ground-level ozone time series: A multifractal analysis. Science of the Total Environment, 2019, 661, 138-147.	8.0	23
14	Joint multifractal description of the relationship between wind patterns and land surface air temperature. Atmospheric Research, 2011, 99, 366-376.	4.1	22
15	Multifractal detrended fluctuation analysis of sheep livestock prices in origin. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 4466-4476.	2.6	21
16	Multifractal analysis of validated wind speed time series. Chaos, 2013, 23, 013133.	2.5	20
17	Multifractal detrended fluctuation analysis of temperature in Spain (1960â€“2019). Physica A: Statistical Mechanics and Its Applications, 2021, 578, 126118.	2.6	19
18	Multifractal analysis application to the characterization of fatty infiltration in Iberian and White pork sirloins. Meat Science, 2013, 93, 723-732.	5.5	18

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19	Multifractal analysis of groundâ€“level ozone concentrations at urban, suburban and rural background monitoring sites in Southwestern Iberian Peninsula. Atmospheric Pollution Research, 2013, 4, 229-237.	3.8	18
20	Proposal for estimating ground-level ozone concentrations at urban areas based on multivariate statistical methods. Atmospheric Environment, 2014, 90, 59-70.	4.1	16
21	Multifractal characterisation of particulate matter (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 677 Td (xmlns:mml= http time series in the Caribbean basin using visibility graphs. Atmospheric Pollution Research, 2021, 12, 109-119.	3.8	16
22	Background PM10 atmosphere: In the seek of a multifractal characterization using complex networks. Journal of Aerosol Science, 2021, 155, 105777.	3.8	16
23	Multifractal analysis as a tool for validating a rainfall model. Hydrological Processes, 2008, 22, 2672-2688.	2.6	15
24	Description of the seasonal pattern in ozone concentration time series by using the strange attractor multifractal formalism. Environmental Monitoring and Assessment, 2010, 160, 229-236.	2.7	15
25	Joint multifractal analysis of the influence of temperature and nitrogen dioxide on tropospheric ozone. Stochastic Environmental Research and Risk Assessment, 2015, 29, 1881-1889.	4.0	15
26	Fractal and multifractal characterization of the scaling geometry of an urban bus-transport network. Computers, Environment and Urban Systems, 2017, 64, 229-238.	7.1	13
27	Joint multifractal analysis of air temperature, relative humidity and reference evapotranspiration in the middle zone of the Guadalquivir river valley. Agricultural and Forest Meteorology, 2019, 278, 107657.	4.8	13
28	Checking complex networks indicators in search of singular episodes of the photochemical smog. Chemosphere, 2020, 241, 125085.	8.2	13
29	Multiplex Visibility Graphs as a complementary tool for describing the relation between ground level O3 and No2. Atmospheric Pollution Research, 2020, 11, 205-212.	3.8	13
30	Obtaining Homogeneous Regions by Determining the Generalized Fractal Dimensions of Validated Daily Rainfall Data Sets. Water Resources Management, 2017, 31, 2333-2348.	3.9	11
31	Wet scavenging process of particulate matter (PM10): A multivariate complex network approach. Atmospheric Pollution Research, 2021, 12, 101095.	3.8	11
32	Multifractal fluctuations of the precipitation in Spain (1960â€“2019). Chaos, Solitons and Fractals, 2022, 157, 111909.	5.1	11
33	Numerical Study of the Natural Airflow in Greenhouses using a Two-dimensional Lattice Model. Biosystems Engineering, 2005, 91, 219-228.	4.3	10
34	Evaluation of linear and nonlinear sediment transport equations using hillslope morphology. Catena, 2005, 64, 272-280.	5.0	10
35	GIS design application for â€œSierra Morena Honeyâ€•designation of origin. Computers and Electronics in Agriculture, 2008, 64, 307-317.	7.7	10
36	The influence of the geometry of idealised porous media on the simulated flow velocity: A multifractal description. Geoderma, 2009, 150, 196-201.	5.1	10

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37	A sliding window-based algorithm for faster transformation of time series into complex networks. Chaos, 2019, 29, 103121.	2.5	9
38	Estimation of the role of obstacles in the downslope soil flow with a simple erosion model: the analytical solution and its approximation with the lattice Boltzmann model. Catena, 2004, 57, 261-275.	5.0	8
39	Modelling the effects of emergent vegetation on an open-channel flow using a lattice model. International Journal for Numerical Methods in Fluids, 2007, 55, 655-672.	1.6	8
40	MULTIFRACTAL DESCRIPTION OF SIMULATED FLOW VELOCITY IN IDEALISED POROUS MEDIA BY USING THE SANDBOX METHOD. Fractals, 2013, 21, 1350006.	3.7	8
41	Simulation of Tracer Dispersion in Porous Media Using Lattice Boltzmann and Random Walk Models. Vadose Zone Journal, 2005, 4, 310-316.	2.2	7
42	Multifractal analysis of flow velocity simulated with the lattice model approach in idealized threeâ€dimensional porous media. Water Resources Research, 2007, 43, .	4.2	6
43	A computer application for teaching and learning approximation and interpolation algorithms of curves. Computer Applications in Engineering Education, 2011, 19, 40-47.	3.4	6
44	The use of the exponentK(q)function to delimit homogeneous regions in regional frequency analysis of extreme annual daily rainfall. Hydrological Processes, 2015, 29, 139-151.	2.6	6
45	A description of water and sediment flow in the presence of obstacles with a two-dimensional, lattice BGK-cellular automata model. Water Resources Research, 2003, 39, .	4.2	5
46	Description of pollutant dispersion in an urban street canyon using a two-dimensional lattice model. Atmospheric Environment, 2007, 41, 221-226.	4.1	5
47	Simulation of longâ€term soil redistribution by tillage using a cellular automata model. Earth Surface Processes and Landforms, 2010, 35, 761-770.	2.5	5
48	Improving graph-based detection of singular events for photochemical smog agents. Chemosphere, 2020, 253, 126660.	8.2	5
49	The geometric characterization of mouldboard plough surfaces by using splines. Soil and Tillage Research, 2011, 112, 98-105.	5.6	4
50	Introducing a geographic information system as computer tool to apply the problemâ€based learning process in public buildings indoor routing. Computer Applications in Engineering Education, 2013, 21, 573-580.	3.4	4
51	Multifractal analysis application to the study of fat and its infiltration in Iberian ham: Influence of racial and feeding factors and type of slicing. Meat Science, 2019, 148, 55-63.	5.5	4
52	Description of sorbing tracers transport in fractured media using the lattice model approach. Journal of Contaminant Hydrology, 2005, 81, 187-204.	3.3	3
53	Description of the Daily Number of Rain-Free Hours Series from a Location in Southern Spain by Using the Multifractal Turbulence Formalism. Journal of Hydrologic Engineering - ASCE, 2008, 13, 987-991.	1.9	3
54	Evaluating a general sediment transport model for linear incisions under field conditions. Earth Surface Processes and Landforms, 2009, 34, 1852-1857.	2.5	3

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55	A Linux cluster of personal computers for the numerical simulation of natural airflows in greenhouses using a lattice model. Computers and Electronics in Agriculture, 2006, 52, 79-89.	7.7	2
56	An educational computer tool for simulating longâ€term soil erosion on agricultural landscapes. Computer Applications in Engineering Education, 2009, 17, 253-262.	3.4	2
57	Evaluation of the temporal scaling variability in forecasting ground-level ozone concentrations obtained from multiple linear regressions. Environmental Monitoring and Assessment, 2013, 185, 3853-3866.	2.7	2
58	Analysis of Air Mean Temperature Anomalies by Using Horizontal Visibility Graphs. Entropy, 2021, 23, 207.	2.2	2
59	Exploring the effects of the vegetation on passive tracer transport by using the multifractal analysis. Geoderma, 2010, 160, 126-130.	5.1	1
60	Digital Image Filtering Optimization Supporting Iberian Ham Quality Prediction. Foods, 2020, 9, 25.	4.3	1
61	MOBILE AUGMENTED REALITY SYSTEM APPLY TO DESCRIPTIVE GEOMETRY LEARNING. EDULEARN Proceedings, 2016, , .	0.0	1
62	Multifractal analysis of passive tracer transport in simulated skimming and wake interference flows. Physics of Fluids, 2007, 19, .	4.0	0
63	Numerical Study of the Transition Regime between the Skimming and Wake Interference Flows in a Water Flume by Using the Lattice-Model Approach. Journal of Hydraulic Engineering, 2008, 134, 274-279.	1.5	0
64	Plane geometry drawing tutorial. DYNA (Colombia), 2014, 81, 20-25.	0.4	0