Esteban Samaniego

List of Publications by Year
in descending order

46 papers	2,008 citations	361296 20 h-index	302012 39 g-index
46 all docs	46 docs citations	46 times ranked	1610 citing authors

#	Article	IF	Citations
1	An energy approach to the solution of partial differential equations in computational mechanics via machine learning: Concepts, implementation and applications. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112790.	3.4	799
2	Discontinuous modelling of shear bands using adaptive meshfree methods. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 641-658.	3.4	141
3	Continuum approach to the numerical simulation of material failure in concrete. International Journal for Numerical and Analytical Methods in Geomechanics, 2004, 28, 609-632.	1.7	125
4	Homogenization of sandwich structures. International Journal for Numerical Methods in Engineering, 2004, 61, 1009-1027.	1.5	88
5	Continuum-discontinuum modelling of shear bands. International Journal for Numerical Methods in Engineering, 2005, 62, 1857-1872.	1.5	81
6	A study on finite elements for capturing strong discontinuities. International Journal for Numerical Methods in Engineering, 2003, 56, 2135-2161.	1.5	66
7	On the numerical stability and mass‑lumping schemes for explicit enriched meshfree methods. International Journal for Numerical Methods in Engineering, 2012, 89, 1009-1027.	1.5	61
8	Rainfall and Cloud Dynamics in the Andes: A Southern Ecuador Case Study. Advances in Meteorology, 2016, 2016, 1-15.	0.6	57
9	Simplified model for predicting impulsive loads on submerged structures to account for fluid-structure interaction. International Journal of Impact Engineering, 2007, 34, 163-177.	2.4	55
10	On the strong discontinuity approach in finite deformation settings. International Journal for Numerical Methods in Engineering, 2003, 56, 1051-1082.	1.5	52
11	A variational approach to the phase field modeling of brittle and ductile fracture. International Journal of Mechanical Sciences, 2018, 144, 502-517.	3.6	48
12	Comparison of Statistical Downscaling Methods for Monthly Total Precipitation: Case Study for the Paute River Basin in Southern Ecuador. Advances in Meteorology, 2016, 2016, 1-13.	0.6	44
13	Evaluation of infilling methods for time series of daily precipitation and temperature: The case of the Ecuadorian Andes. Maskana, 2014, 5, 99-115.	0.5	40
14	Two-Step Downscaling of Trmm 3b43 V7 Precipitation in Contrasting Climatic Regions With Sparse Monitoring: The Case of Ecuador in Tropical South America. Remote Sensing, 2017, 9, 758.	1.8	34
15	Evaluation of downscaled estimates of monthly temperature and precipitation for a Southern Ecuador case study. International Journal of Climatology, 2016, 36, 1244-1255.	1.5	32
16	AES for multiscale localization modeling in granular media. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 2473-2482.	3.4	31
17	Climatology and Teleconnections of Mesoscale Convective Systems in an Andean Basin in Southern Ecuador: The Case of the Paute Basin. Advances in Meteorology, 2018, 2018, 1-13.	0.6	27
18	A phase-field model for ductile fracture with shear bands: A parallel implementation. International Journal of Mechanical Sciences, 2021, 200, 106424.	3.6	25

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19	Spatial functional data analysis for regionalizing precipitation seasonality and intensity in a sparsely monitored region: Unveiling the spatio€temporal dependencies of precipitation in Ecuador. International Journal of Climatology, 2018, 38, 3337-3354.	1.5	24
20	A micromechanics-based variational phase-field model for fracture in geomaterials with brittle-tensile and compressive-ductileÂbehavior. Journal of the Mechanics and Physics of Solids, 2022, 159, 104684.	2.3	23
21	A Simple Circular Cell Method for Multilevel Finite Element Analysis. Journal of Applied Mathematics, 2012, 2012, 1-15.	0.4	20
22	On the modeling of dissipative mechanisms in a ductile softening bar. Journal of Mechanics of Materials and Structures, 2016, 11, 463-490.	0.4	20
23	Phase-field modeling of fracture for quasi-brittle materials. Underground Space (China), 2019, 4, 10-21.	3.4	15
24	Parallel embedded boundary methods for fluid and rigid-body interaction. Computer Methods in Applied Mechanics and Engineering, 2015, 290, 387-419.	3.4	14
25	A staggered approach for the coupling of Cahn€"Hilliard type diffusion and finite strain elasticity. Computational Mechanics, 2016, 57, 339-351.	2.2	14
26	Rainfall monitoring network design using conditioned Latin hypercube sampling and satellite precipitation estimates: An application in the ungauged Ecuadorian Amazon. International Journal of Climatology, 2019, 39, 2209-2226.	1.5	13
27	A causal flow approach for the evaluation of global climate models. International Journal of Climatology, 2020, 40, 4497-4517.	1.5	12
28	The Pacific decadal oscillation modulates the relation of ENSO with the rainfall variability in coast of Ecuador. International Journal of Climatology, 2020, 40, 5801-5812.	1.5	11
29	Evaluating extreme climate indices from CMIP3&5 global climate models and reanalysis data sets: a case study for present climate in the Andes of Ecuador. International Journal of Climatology, 2017, 37, 363-379.	1.5	8
30	Virtual Control Volume Approach to the Study of Climate Causal Flows: Identification of Humidity and Wind Pathways of Influence on Rainfall in Ecuador. Atmosphere, 2020, 11, 848.	1.0	6
31	Finding teleconnections from decomposed rainfall signals using dynamic harmonic regressions: a Tropical Andean case study. Climate Dynamics, 2019, 52, 4643-4670.	1.7	5
32	Isogeometric analysis of insoluble surfactant spreading on a thin film. Computer Methods in Applied Mechanics and Engineering, 2020, 370, 113272.	3.4	4
33	Physics-Informed Neural Network water surface predictability for 1D steady-state open channel cases with different flow types and complex bed profile shapes. Advanced Modeling and Simulation in Engineering Sciences, 2022, 9, .	0.7	3
34	A study of microgrids through cooperative games including the effect of geographical proximity. , 2017, , .		2
35	Variational Modelling of Strain Localization in Solids: A Computational Mechanics Point of View. Archives of Computational Methods in Engineering, 2021, 28, 1183-1203.	6.0	2
36	Smart grids: A multi-scale framework of analysis. , 2017, , .		1

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37	A Variational Merging Approach to the Spatial Description of Environmental Variables. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4027-4044.	1.2	1
38	Local rainfall modelling based on global climate information: A data-based approach. Environmental Modelling and Software, 2020, 131, 104786.	1.9	1
39	Resistance Analysis of Morphologies in Headwater Mountain Streams. Water (Switzerland), 2021, 13, 2207.	1.2	1
40	Exploratory Study of Physic Informed Deep Learning Applied to a Step-Pool for Different Flow Magnitudes. Smart Innovation, Systems and Technologies, 2022, , 275-284.	0.5	1
41	Unidimensional, non-stationary modeling of a high mountain river in southern Ecuador. Maskana, 2018, 9, 67-74.	0.5	1
42	Efecto del refinamiento de la descripciÃ³n de la rugosidad en una aproximaciÃ³n 2D para un rÃo de montaÃ±a: un caso de estudio. Granja, 2021, 33, 92-102.	0.1	0
43	Objective Phenomenological Constitutive Law for Collapse Analyses in Distributed Plasticity Steel-Frame Models. Journal of Structural Engineering, 2021, 147, 04021057.	1.7	0
44	HomogenizaciÃ³n computacional aplicada al estudio de suelos tipo conglomerado del austro ecuatoriano. Maskana, 2010, 1, 31-40.	0.5	0
45	Aplicabilidad de los modelos NAM y DBM para estimar caudales en subcuencas alto andinas de Ecuador. Maskana, 2013, 4, 85-103.	0.5	0
46	SimplificaciÃ³n del proceso complejo de reducciÃ³n de escala de los modelos climÃ¡ticos globales por medio de la aplicaciÃ³n web SDW. Maskana, 2014, 5, 97-105.	0.5	0