Jorge Macias

List of Publications by Year
in descending order

58 papers	1,263 citations	394421 19 h-index	377865 34 g-index
84 all docs	84 docs citations	84 times ranked	1109 citing authors

#	Article	IF	Citations
1	The Sensitivity of Tsunami Impact to Earthquake Source Parameters and Manning Friction in High-Resolution Inundation Simulations. Frontiers in Earth Science, 2022, 9, .	1.8	10
2	Validation and inter-comparison of models for landslide tsunami generation. Ocean Modelling, 2022, 170, 101943.	2.4	18
3	Enabling dynamic and intelligent workflows for HPC, data analytics, and AI convergence. Future Generation Computer Systems, 2022, 134, 414-429.	7.5	17
4	Pseudo-Probabilistic Design for High-Resolution Tsunami Simulations in the Southwestern Spanish Coast. GeoHazards, 2022, 3, 294-322.	1.4	0
5	Use of Neural Networks for Tsunami Maximum Height and Arrival Time Predictions. GeoHazards, 2022, 3, 323-344.	1.4	4
6	Analysis of Faster-Than-Real-Time (FTRT) Tsunami Simulations for the Spanish Tsunami Warning System for the Atlantic. GeoHazards, 2022, 3, 371-394.	1.4	1
7	Multilayer-HySEA model validation for landslide-generated tsunamis â€“ Part 1: Rigid slides. Natural Hazards and Earth System Sciences, 2021, 21, 775-789.	3.6	11
8	Multilayer-HySEA model validation for landslide-generated tsunamis â€“ PartÂ2: Granular slides. Natural Hazards and Earth System Sciences, 2021, 21, 791-805.	3.6	10
9	The Making of the NEAM Tsunami Hazard Model 2018 (NEAMTHM18). Frontiers in Earth Science, 2021, 8, .	1.8	50
10	Testing Tsunami Inundation Maps for Evacuation Planning in Italy. Frontiers in Earth Science, 2021, 9, .	1.8	16
11	Probabilistic Tsunami Hazard and Risk Analysis: A Review of Research Gaps. Frontiers in Earth Science, 2021, 9, .	1.8	65
12	Modeling Tsunamis Generated by Submarine Landslides at Stromboli Volcano (Aeolian Islands, Italy): A Numerical Benchmark Study. Frontiers in Earth Science, 2021, 9, .	1.8	17
13	Offshore Geological Hazards: Charting the Course of Progress and Future Directions. Oceans, 2021, 2, 393-428.	1.3	11
14	Tsunami generation potential of a strike-slip fault tip in the westernmost Mediterranean. Scientific Reports, 2021, 11, 16253.	3.3	7
15	Probabilistic tsunami forecasting for early warning. Nature Communications, 2021, 12, 5677.	12.8	37
16	Tsunami-HySEA: A Numerical Model Developed for Tsunami Early Warning Systems (TEWS). SEMA SIMAI Springer Series, 2021, , 209-226.	0.7	2
17	The Influence of Depthâ€Varying Elastic Properties of the Upper Plate on Megathrust Earthquake Rupture Dynamics and Tsunamigenesis. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022328.	3.4	10
18	An extreme wave event in eastern YucatÃ¡n, Mexico: Evidence of a palaeotsunami event during the Mayan times. Sedimentology, 2020, 67, 1481-1504.	3.1	6

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19	Performance assessment of Tsunami-HySEA model for NTHMP tsunami currents benchmarking. Field cases. Ocean Modelling, 2020, 152, 101645.	2.4	22
20	Probabilistic Tsunami Hazard Analysis: High Performance Computing for Massive Scale Inundation Simulations. Frontiers in Earth Science, 2020, 8, .	1.8	28
21	Performance assessment of the Tsunami-HySEA model for NTHMP tsunami currents benchmarking. Laboratory data. Coastal Engineering, 2020, 158, 103667.	4.0	24
22	The Lituya Bay landslide-generated mega-tsunami â€“ numerical simulation and sensitivity analysis. Natural Hazards and Earth System Sciences, 2019, 19, 369-388.	3.6	24
23	Urgent Tsunami Computing. , 2019, , .		16
24	A REVIEW ON HIGH ORDER WELL-BALANCED PATH-CONSERVATIVE FINITE VOLUME SCHEMES FOR GEOPHYSICAL FLOWS. , 2019, , .		0
25	Nations Work Together to Size Up Caribbean Tsunami Hazards. Eos, 2018, 99, .	0.1	0
26	Inter-model analysis of tsunami-induced coastal currents. Ocean Modelling, 2017, 114, 14-32.	2.4	79
27	Performance Benchmarking of Tsunami-HySEA Model for NTHMPâ€™s Inundation Mapping Activities. Pure and Applied Geophysics, 2017, 174, 3147-3183.	1.9	52
28	Prodeltaic Undulations and Hyperpycnal Flows (II): Evolutionary Trends. , 2017, , 113-120.		0
29	Prodeltaic Undulations and Hyperpycnal Flows (I): Morphological Observations. , 2017, , 107-112.		1
30	Fast evaluation of tsunami scenarios: uncertainty assessment for a Mediterranean Sea database. Natural Hazards and Earth System Sciences, 2016, 16, 2593-2602.	3.6	26
31	Comparison and Computational Performance of Tsunami-HySEA and MOST Models for LANTEX 2013 Scenario: Impact Assessment on Puerto Rico Coasts. Pure and Applied Geophysics, 2016, 173, 3973-3997.	1.9	21
32	Uncertainty quantification in tsunami modeling using multi-level Monte Carlo finite volume method. Journal of Mathematics in Industry, 2016, 6, .	1.2	4
33	Comparison and Computational Performance of Tsunami-HySEA and MOST Models for LANTEX 2013 Scenario: Impact Assessment on Puerto Rico Coasts. Pageoph Topical Volumes, 2016, , 3973-3997.	0.2	3
34	The Al-Borani submarine landslide and associated tsunami. A modelling approach. Marine Geology, 2015, 361, 79-95.	2.1	44
35	Spatial variability of prodeltaic undulations on the Guadalfeo River prodelta: support to the genetic interpretation as hyperpycnal flow deposits. Marine Geophysical Researches, 2015, 36, 309-333.	1.2	18
36	Submarine deltaic geometries linked to steep, mountainous drainage basins in the northern shelf of the Alboran Sea: Filling the gaps in the spectrum of deltaic deposition. Geomorphology, 2015, 232, 125-144.	2.6	17

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37	Modeling the biogeochemical seasonal cycle in the Strait of Gibraltar. Journal of Marine Systems, 2014, 139, 348-361.	2.1	3
38	Six thousand years of coastline evolution in the Guadalfeo deltaic system (southern Iberian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 T	2.6	39
39	Advanced recognition of explosives in traces on polymer surfaces using LIBS and supervised learning classifiers. Analytica Chimica Acta, 2014, 806, 107-116.	5.4	44
40	Recognition of explosives fingerprints on objects for courier services using machine learning methods and laser-induced breakdown spectroscopy. Talanta, 2013, 110, 108-117.	5.5	39
41	New chemometrics in laser-induced breakdown spectroscopy for recognizing explosive residues. Journal of Analytical Atomic Spectrometry, 2012, 27, 2111.	3.0	38
42	IFCP Riemann solver. , 2012, , 237-244.		1
43	Spatial variability of surficial sediments on the northern shelf of the Alboran Sea: the effects of hydrodynamic forcing and supply of sediment by rivers. Journal of Iberian Geology, 2011, 37, .	1.3	15
44	Analyzing the tidal-related origin of subinertial flows through the Strait of Gibraltar. Journal of Geophysical Research, 2010, 115, .	3.3	2
45	Realistic Applications of a Tidal 2d Two-Layer Shallow Water Model to the Strait of Gibraltar. , 2009, , .		2
46	Improved FVM for two-layer shallow-water models: Application to the Strait of Gibraltar. Advances in Engineering Software, 2007, 38, 386-398.	3.8	17
47	The numerical treatment of wet/dry fronts in shallow flows: application to one-layer and two-layer systems. Mathematical and Computer Modelling, 2005, 42, 419-439.	2.0	108
48	Numerical simulation of two-layer shallow water flows through channels with irregular geometry. Journal of Computational Physics, 2004, 195, 202-235.	3.8	84
49	Numerical simulation in oceanography. applications to the Alboran Sea and the Strait of Gibraltar. , 2004, , 75-98.		0
50	Simulation of Internal Waves in the Strait of Gibraltar Using a Two-layer Shallow-water Model. , 2003, , 529-534.		0
51	On the convergence of the BermÃºdez-Moreno algorithm with constant parameters. Numerische Mathematik, 2002, 92, 113-128.	1.9	15
52	AQ-scheme for a class of systems of coupled conservation laws with source term. Application to a two-layer 1-D shallow water system. ESAIM: Mathematical Modelling and Numerical Analysis, 2001, 35, 107-127.	1.9	132
53	Duality methods with an automatic choice of parameters Application to shallow water equations in conservative form. Numerische Mathematik, 2001, 89, 161-189.	1.9	14
54	An incomplete LU-based family of preconditioners for numerical resolution of a shallow water system using a duality methodâ€"applications. Applied Mathematics Letters, 2001, 14, 651-656.	2.7	2

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55	A multivariate intercomparison between three oceanic GCMs using observed current and thermocline depth anomalies in the tropical Pacific during 1985â€“1992. Journal of Marine Systems, 2000, 24, 249-275.	2.1	8
56	A basic reference state suitable for anomaly-coupled ocean-atmosphere climate models. Applied Mathematics Letters, 1999, 12, 21-24.	2.7	2
57	Improvement and generalization of a finite element shallow-water solver to multi-layer systems. International Journal for Numerical Methods in Fluids, 1999, 31, 1037-1059.	1.6	18
58	Improvement and generalization of a finite element shallowâ€water solver to multiâ€layer systems. International Journal for Numerical Methods in Fluids, 1999, 31, 1037-1059.	1.6	0