Francesco Macchione

List of Publications by Year
in descending order

22 papers	854 citations	471061 17 h-index	676716 22 g-index
22 all docs	22 docs citations	22 times ranked	810 citing authors

#	Article	IF	Citations
1	Terrestrial and airborne laser scanning and 2-D modelling for 3-D flood hazard maps in urban areas: new opportunities and perspectives. Environmental Modelling and Software, 2021, 135, 104889.	1.9	35
2	Roughnessâ€Based Method for Simulating Hydraulic Consequences of Both Woody Debris Clogging and Breakage at Bridges in Basinâ€Scale Flood Modeling. Water Resources Research, 2021, 57, e2021WR030485.	1.7	7
3	Is local flood hazard assessment in urban areas significantly influenced by the physical complexity of the hydrodynamic inundation model?. Journal of Hydrology, 2020, 580, 124231.	2.3	73
4	A spectral analysis approach for the a priori generation of computational grids in the 2-D hydrodynamic-based runoff simulations at a basin scale. Journal of Hydrology, 2020, 582, 124508.	2.3	32
5	Discharge coefficients for specific grated inlets. Influence of the Froude number. Urban Water Journal, 2020, 17, 656-668.	1.0	16
6	Performances of the New HEC-RAS Version 5 for 2-D Hydrodynamic-Based Rainfall-Runoff Simulations at Basin Scale: Comparison with a State-of-the Art Model. Water (Switzerland), 2020, 12, 2326.	1.2	54
7	Hydraulic Characterization of River Networks Based on Flow Patterns Simulated by 2â€D Shallow Water Modeling: Scaling Properties, Multifractal Interpretation, and Perspectives for Channel Heads Detection. Water Resources Research, 2019, 55, 7717-7752.	1.7	25
8	Extracting quantitative data from non-conventional information for the hydraulic reconstruction of past urban flood events. A case study. Journal of Hydrology, 2019, 576, 443-465.	2.3	38
9	Moving to 3-D flood hazard maps for enhancing risk communication. Environmental Modelling and Software, 2019, 111, 510-522.	1.9	63
10	Visual Risk Communication of Urban Flooding in 3D Environments Based on Terrestrial Laser Scanning. Green Energy and Technology, 2019, , 783-787.	0.4	2
11	A comparative analysis of 3-D representations of urban flood map in virtual environments for hazard communication purposes. E3S Web of Conferences, 2018, 40, 06037.	0.2	5
12	Performances and limitations of the diffusive approximation of the 2-d shallow water equations for flood simulation in urban and rural areas. Applied Numerical Mathematics, 2017, 116, 141-156.	1.2	54
13	Dam breach modelling: influence on downstream water levels and a proposal of a physically based module for flood propagation software. Journal of Hydroinformatics, 2016, 18, 615-633.	1.1	19
14	The Power Function for Representing the Reservoir Rating Curve: Morphological Meaning and Suitability for Dam Breach Modelling. Water Resources Management, 2016, 30, 4861-4881.	1.9	3
15	Enhancing river model set-up for 2-D dynamic flood modelling. Environmental Modelling and Software, 2015, 67, 89-107.	1.9	118
16	Flood mapping using LIDAR DEM. Limitations of the 1-D modeling highlighted by the 2-D approach. Natural Hazards, 2015, 77, 181-204.	1.6	72
17	Formulas for the Peak Discharge from Breached Earthfill Dams. Journal of Hydraulic Engineering, 2014, 140, 56-67.	0.7	21
18	A storm event watershed model for surface runoff based on 2D fully dynamic wave equations. Hydrological Processes, 2013, 27, 554-569.	1.1	68

#	Article	IF	Citations
19	Analysis of One-Dimensional Modelling for Flood Routing in Compound Channels. Water Resources Management, 2012, 26, 1065-1087.	1.9	27
20	Model for Predicting Floods due to Earthen Dam Breaching. II: Comparison with Other Methods and Predictive Use. Journal of Hydraulic Engineering, 2008, 134, 1697-1707.	0.7	24
21	Model for Predicting Floods due to Earthen Dam Breaching. I: Formulation and Evaluation. Journal of Hydraulic Engineering, 2008, 134, 1688-1696.	0.7	59
22	Practical Aspects in Comparing Shock-Capturing Schemes for Dam Break Problems. Journal of Hydraulic Engineering, 2003, 129, 187-195.	0.7	39