Michele Mossa

List of Publications by Year in Descending Order

103 papers	1,383 citations	21 h-index	29 g-index
119 ext. papers	1,747 ext. citations	3.2 avg, IF	5.35 L-index

#	Paper	IF	Citations
103	A multi-phase SPH simulation of hydraulic jump oscillations and local scouring processes downstream of bed sills. *Advances in Water Resources*, **2022**, 159, 104097	4.7	1
102	Effects of global warming on Mediterranean coral forests. *Scientific Reports*, **2021**, 11, 20703	4.9	3
101	Turbulent jet through porous obstructions under Coriolis effect: an experimental investigation. *Experiments in Fluids*, **2021**, 62, 1	2.5	
100	Comparison between the Lagrangian and Eulerian Approach for Simulating Regular and Solitary Waves Propagation, Breaking and Run-Up. *Applied Sciences (Switzerland)*, **2021**, 11, 9421	2.6	1
99	Multi-phase simulation of infected respiratory cloud transmission in air. *AIP Advances*, **2021**, 11, 035035	1.5	4
98	Non-Hydrostatic Discontinuous/Continuous Galerkin Model for Wave Propagation, Breaking and Runup. *Computation*, **2021**, 9, 47	2.2	1
97	Hydraulic Jump: A Brief History and Research Challenges. *Water (Switzerland)*, **2021**, 13, 1733	3	1
96	Closure to "New Approach to Predicting Local Scour Downstream of Grade-Control Structure" by M. Ben Meftah and M. Mossa. *Journal of Hydraulic Engineering*, **2021**, 147, 07021008	1.8	
95	Quasi-geostrophic jet-like flow with obstructions. *Journal of Fluid Mechanics*, **2021**, 921,	3.7	1
94	Secondary Currents with Scour Hole at Grade Control Structures. *Water (Switzerland)*, **2021**, 13, 319	3	2
93	Meteorological and hydrodynamic data in the Mar Grande and Mar Piccolo, Italy, of the Coastal Engineering Laboratory (LIC) Survey, winter and summer 2015. *Earth System Science Data*, **2021**, 13, 599-607	10.5	1
92	Investigation on the Reflection Coefficient for Seawalls Protected by a Rubble Mound Structure. *Journal of Marine Science and Engineering*, **2021**, 9, 937	2.4	
91	Coastal vulnerability analysis to support strategies for tackling COVID-19 infection. *Ocean and Coastal Management*, **2021**, 211, 105731	3.9	3
90	Management of Dredging Activities in a Highly Vulnerable Site: Simulation Modelling and Monitoring Activity. *Journal of Marine Science and Engineering*, **2020**, 8, 1020	2.4	4
89	Exploring data from an individual stranding of a Cuvier's beaked whale in the Gulf of Taranto (Northern Ionian Sea, Central-eastern Mediterranean Sea). *Journal of Experimental Marine Biology and Ecology*, **2020**, 533, 151473	2.1	8
88	A mesophotic black coral forest in the Adriatic Sea. *Scientific Reports*, **2020**, 10, 8504	4.9	20
87	Modelling fluid–structure interactions: a survey of methods and experimental verification. *Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics*, **2020**, 173, 159-172	0.3	2

86	Theoretical analysis and numerical simulations of turbulent jets in a wave environment. *Physics of Fluids*, **2020**, 32, 035105	4.4	10
85	On the Need for an Integrated Large-Scale Methodology of Coastal Management: A Methodological Proposal. *Journal of Marine Science and Engineering*, **2020**, 8, 385	2.4	2
84	Performance Assessment of ERA5 Wave Data in a Swell Dominated Region. *Journal of Marine Science and Engineering*, **2020**, 8, 214	2.4	23
83	Detecting sensitive areas in confined shallow basins. *Environmental Modelling and Software*, **2020**, 126, 104659	5.2	7
82	Hydrodynamic Structure with Scour Hole Downstream of Bed Sills. *Water (Switzerland)*, **2020**, 12, 186	3	10
81	New Approach to Predicting Local Scour Downstream of Grade-Control Structure. *Journal of Hydraulic Engineering*, **2020**, 146, 04019058	1.8	11
80	Computational simulation of round thermal jets in an ambient cross flow using a large-scale hydrodynamic model. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2020**, 58, 920-937	1.9	1
79	A Sterescopic System to Measure Water Waves in Laboratories. *Remote Sensing*, **2020**, 12, 2288	5	3
78	Characteristics of breaking vorticity in spilling and plunging waves investigated numerically by SPH. *Environmental Fluid Mechanics*, **2020**, 20, 233-260	2.2	11
77	Characteristics of nonbuoyant jets in a wave environment investigated numerically by SPH. *Environmental Fluid Mechanics*, **2020**, 20, 189-202	2.2	9
76	Numerical investigation of the behaviour of jets in a wave environment. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2020**, 58, 618-627	1.9	7
75	Coastline evolution based on statistical analysis and modeling. *Natural Hazards and Earth System Sciences*, **2019**, 19, 1937-1953	3.9	6
74	Experimental Observations of Turbulent Events in the Surfzone. *Journal of Marine Science and Engineering*, **2019**, 7, 332	2.4	3
73	Experimental Setup and Measuring System to Study Solitary Wave Interaction with Rigid Emergent Vegetation. *Sensors*, **2019**, 19,	3.8	5
72	Monitoring Systems and Numerical Models to Study Coastal Sites. *Sensors*, **2019**, 19,	3.8	13
71	A Combined Approach of Field Data and Earth Observation for Coastal Risk Assessment. *Sensors*, **2019**, 19,	3.8	19
70	SPH numerical investigation of the characteristics of an oscillating hydraulic jump at an abrupt drop. *Journal of Hydrodynamics*, **2018**, 30, 106-113	3.3	17
69	Vertical dense jet in flowing current. *Environmental Fluid Mechanics*, **2018**, 18, 75-96	2.2	16

68	Meteo and Hydrodynamic Measurements to Detect Physical Processes in Confined Shallow Seas. *Sensors*, **2018**, 18,	3.8	8
67	Turbulence Measurement of Vertical Dense Jets in Crossflow. *Water (Switzerland)*, **2018**, 10, 286	3	5
66	Wave Height Attenuation and Flow Resistance Due to Emergent or Near-Emergent Vegetation. *Water (Switzerland)*, **2018**, 10, 402	3	21
65	Experimental investigation on dispersion mechanisms in rigid and flexible vegetated beds. *Advances in Water Resources*, **2018**, 120, 98-113	4.7	23
64	Some Aspects of Turbulent Mixing of Jets in the Marine Environment. *Water (Switzerland)*, **2018**, 10, 522	3	8
63	**2018**,		5
62	How to Define Priorities in Coastal Vulnerability Assessment. *Geosciences (Switzerland)*, **2018**, 8, 415	2.7	22
61	Experimental and Numerical Investigation of Pre-Breaking and Breaking Vorticity within a Plunging Breaker. *Water (Switzerland)*, **2018**, 10, 387	3	11
60	SPH numerical investigation of characteristics of hydraulic jumps. *Environmental Fluid Mechanics*, **2018**, 18, 849-870	2.2	20
59	Synergistic use of an oil drift model and remote sensing observations for oil spill monitoring. *Environmental Science and Pollution Research*, **2017**, 24, 5530-5543	5.1	23
58	Analysis of data characterizing tide and current fluxes in coastal basins. *Hydrology and Earth System Sciences*, **2017**, 21, 3441-3454	5.5	20
57	How vegetation in flows modifies the turbulent mixing and spreading of jets. *Scientific Reports*, **2017**, 7, 6587	4.9	27
56	Enhancing the performance of hazard indexes in assessing hot spots of harbour areas by considering hydrodynamic parameters. *Ecological Indicators*, **2017**, 73, 38-45	5.8	15
55	Investigation of the current circulation offshore Taranto by using field measurements and numerical model **2017**,		9
54	Coastal ocean forecasting with an unstructured grid model in the southern Adriatic and northern Ionian seas. *Natural Hazards and Earth System Sciences*, **2017**, 17, 45-59	3.9	23
53	SPH Modelling of Hydraulic Jump Oscillations at an Abrupt Drop. *Water (Switzerland)*, **2017**, 9, 790	3	22
52	Physical modelling of buoyant effluents discharged into a cross flow **2016**,		3
51	Integration of multitemporal SAR/InSAR techniques and NWM for coastal structures monitoring: Outline of the software system and of an operational service with COSMO-SkyMed data **2016**,		6

50	Rethinking the process of detrainment: jets in obstructed natural flows. *Scientific Reports*, **2016**, 6, 39103	4.9	17
49	SPH numerical investigation of the velocity field and vorticity generation within a hydrofoil-induced spilling breaker. *Environmental Fluid Mechanics*, **2016**, 16, 267-287	2.2	15
48	A laboratory investigation into the influence of a rigid vegetation on the evolution of a round turbulent jet discharged within a cross flow. *Journal of Environmental Management*, **2016**, 173, 105-20	7.9	13
47	A modified log-law of flow velocity distribution in partly obstructed open channels. *Environmental Fluid Mechanics*, **2016**, 16, 453-479	2.2	19
46	Environmental monitoring in the Mar Grande basin (Ionian Sea, Southern Italy). *Environmental Science and Pollution Research*, **2016**, 23, 12662-74	5.1	18
45	Experimental studies on vertical dense jets in a crossflow **2016**,		2
44	Two dimensional Lattice Boltzmann numerical simulation of a buoyant jet **2016**, 996-1002		1
43	Resistance and boundary shear in a partly obstructed channel flow **2016**,		1
42	Marine Rapid Environmental Assessment in the Gulf of Taranto: a multiscale approach. *Natural Hazards and Earth System Sciences*, **2016**, 16, 2623-2639	3.9	14
41	Coastal ocean forecasting with an unstructured-grid model in the Southern Adriatic Northern Ionian Sea **2016**,		4
40	Micrometeorological simulations over a coastal area using CALMET model: Atmosphere monitoring **2016**,		3
39	Semi enclosed basin monitoring and analysis of meteo, wave, tide and current data: Sea monitoring **2016**,		10
38	Use of SHYFEM open source hydrodynamic model for time scales analysis in a semi-enclosed basin **2016**,		2
37	Assessment of hydrodynamics, biochemical parameters and eddy diffusivity in a semi-enclosed Ionian basin. *Deep-Sea Research Part II: Topical Studies in Oceanography*, **2016**, 133, 176-185	2.3	13
36	Partially obstructed channel: Contraction ratio effect on the flow hydrodynamic structure and prediction of the transversal mean velocity profile. *Journal of Hydrology*, **2016**, 542, 87-100	6	14
35	Coastal Observation through Cosmo-SkyMed High-Resolution SAR Images. *Journal of Coastal Research*, **2016**, 75, 795-799	0.6	10
34	Assessment of classical and approximated models estimating regular waves kinematics. *Ocean Engineering*, **2016**, 126, 176-186	3.9	3
33	Analysis of mean velocity and turbulence measurements with ADCPs. *Advances in Water Resources*, **2015**, 81, 172-185	4.7	20

32	Experimental study of a vertical jet in a vegetated crossflow. *Journal of Environmental Management* , **2015**, 164, 19-31	7.9	19
31	Streamwise velocity profiles in coastal currents. *Environmental Fluid Mechanics*, **2014**, 14, 895	2.2	15
30	Analysis of the artificial viscosity in the smoothed particle hydrodynamics modelling of regular waves. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2014**, 52, 836-848	1.9	40
29	Hydrodynamic behavior in the outer shear layer of partly obstructed open channels. *Physics of Fluids*, **2014**, 26, 065102	4.4	29
28	Vegetation effects on vertical jet structures **2014**, 581-588		2
27	3D SPH modelling of hydraulic jump in a very large channel. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2013**, 51, 158-173	1.9	48
26	A laboratory study of irregular shoaling waves. *Experiments in Fluids*, **2013**, 54, 1	2.5	15
25	Prediction of channel flow characteristics through square arrays of emergent cylinders. *Physics of Fluids*, **2013**, 25, 045102	4.4	36
24	Quantitative characterization of marine oil slick by satellite near-infrared imagery and oil drift modelling: the Fun Shai Hai case study. *International Journal of Remote Sensing*, **2013**, 34, 1838-1854	3.1	24
23	Discharge estimation in open channels by means of water level hydrograph analysis. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2010**, 48, 612-619	1.9	12
22	Considerations on shock wave/boundary layer interaction in undular hydraulic jumps in horizontal channels with a very high aspect ratio. *European Journal of Mechanics, B/Fluids*, **2010**, 29, 415-429	2.4	20
21	Numerical modeling of non-hydrostatic free-surface baroclinic flows induced by suspended particles **2010**, 441-446		1
20	The FUNWAVE model application and its validation using laboratory data. *Coastal Engineering*, **2009** , 56, 773-787	4.8	25
19	Experimental study of the flow field with spilling type breaking. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2008**, 46, 81-86	1.9	7
18	Experimental study of recirculating flows generated by lateral shock waves in very large channels. *Environmental Fluid Mechanics*, **2008**, 8, 215-238	2.2	14
17	Analysis of the velocity field in a large rectangular channel with lateral shockwave. *Environmental Fluid Mechanics*, **2007**, 7, 519-536	2.2	18
16	The floods in Bari: What history should have taught. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2007**, 45, 579-594	1.9	16
15	Circulation in a Southern Italy coastal basin: Modelling and field measurements. *Continental Shelf Research*, **2007**, 27, 779-797	2.4	25

14	Field measurements and monitoring of wastewater discharge in sea water. *Estuarine, Coastal and Shelf Science*, **2006**, 68, 509-514	2.9	21
13	Scour holes downstream of bed sills in low-gradient channels. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2006**, 44, 497-509	1.9	55
12	Resistance coefficient in a smooth concentric annular pipe. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2006**, 44, 832-840	1.9	2
11	Experimental study on the hydrodynamics of regular breaking waves. *Coastal Engineering*, **2006**, 53, 99-113	4.8	37
10	The influence of a localised region of turbulence on the structural development of a turbulent, round, buoyant jet. *Fluid Dynamics Research*, **2006**, 38, 683-698	1.2	13
9	Relation of surface roller eddy formation and surface fluctuation in hydraulic jumps. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2005**, 43, 588-592	1.9	5
8	Tailwater level effects on flow conditions at an abrupt drop. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2005**, 43, 217-224	1.9	5
7	Behavior of Nonbuoyant Jets in a Wave Environment. *Journal of Hydraulic Engineering*, **2004**, 130, 704-718	1.8	17
6	Experimental study on the interaction of non-buoyant jets and waves. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2004**, 42, 13-28	1.9	27
5	Tidal current computation in the Mar Piccolo (Taranto) **2004**, 217-224		1
4	Tailwater level effects on flow conditions at an abrupt drop. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2003**, 41, 39-51	1.9	30
3	Wave Hydrodynamics over a Barred Beach **2002**, 1170		2
2	On the oscillating characteristics of hydraulic jumps. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **1999**, 37, 541-558	1.9	55
1	Flow Visualization in Bubbly Two-Phase Hydraulic Jump. *Journal of Fluids Engineering, Transactions of the ASME*, **1998**, 120, 160-165	2.1	70