Alessandro Toffoli

List of Publications by Year
in descending order

64	2,275	230014	252626
papers	citations	27 h-index	46 g-index

71	71	71	1435
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Forced Migration, Oceanic Humanitarianism, and the Paradox of Danger and Saviour of a Vietnamese Refugee Boat Journey. Historical Journal, 2022, 65, 505-526.	0.2	1
2	Interactions between Irregular Wave Fields and Sea Ice: A Physical Model for Wave Attenuation and Ice Breakup in an Ice Tank. Journal of Physical Oceanography, 2022, 52, 1431-1446.	0.7	15
3	On the Use of a Domain Decomposition Strategy in Obtaining Response Statistics in Non-Gaussian Seas. Fluids, 2021, 6, 28.	0.8	2
4	Wind, waves, and surface currents in the Southern Ocean: observations from the Antarctic Circumnavigation Expedition. Earth System Science Data, 2021, 13, 1189-1209.	3.7	15
5	New Directional Wave Satellite Observations: Towards Improved Wave Forecasts and Climate Description in Southern Ocean. Geophysical Research Letters, 2021, 48, e2020GL091187.	1.5	26
6	A Computational Fluid Dynamics Model for the Small-Scale Dynamics of Wave, Ice Floe and Interstitial Grease Ice Interaction. Fluids, 2021, 6, 176.	0.8	9
7	Predicting the occurrence of rogue waves in the presence of opposing currents with a high-order spectral method. Physical Review Fluids, 2021, 6, .	1.0	7
8	A Physical Model of Wave Attenuation in Pancake Ice. International Journal of Offshore and Polar Engineering, 2021, 31, 263-269.	0.3	10
9	Exploring the coupled ocean and atmosphere system with a data science approach applied to observations from the Antarctic Circumnavigation Expedition. Earth System Dynamics, 2021, 12, 1295-1369.	2.7	12
10	15 Priorities for Wind-Waves Research: An Australian Perspective. Bulletin of the American Meteorological Society, 2020, 101, E446-E461.	1.7	11
11	Ship resistance when operating in floating ice floes: A combined CFD&DEM approach. Marine Structures, 2020, 74, 102817.	1.6	65
12	Fourier amplitude distribution and intermittency in mechanically generated surface gravity waves. Physical Review E, 2020, 102, 013106.	0.8	11
13	Meridional and vertical variations of the water vapour isotopic composition in the marine boundary layer over the Atlantic and Southern Ocean. Atmospheric Chemistry and Physics, 2020, 20, 5811-5835.	1.9	28
14	Drift of Pancake Ice Floes in the Winter Antarctic Marginal Ice Zone During Polar Cyclones. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015418.	1.0	34
15	Water wave transmission and energy dissipation by a floating plate in the presence of overwash. Journal of Fluid Mechanics, 2020, 889, .	1.4	30
16	Priorities for Wind-Waves Research. Bulletin of the American Meteorological Society, 2020, 101, 505-507.	1.7	1
17	Overview of the Antarctic Circumnavigation Expedition: Study of Preindustrial-like Aerosols and Their Climate Effects (ACE-SPACE). Bulletin of the American Meteorological Society, 2019, 100, 2260-2283.	1.7	71
18	Brief communication: Pancake ice floe size distribution during the winter expansion of the Antarctic marginal ice zone. Cryosphere, 2019, 13, 41-48.	1.5	44

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19	Effects of an Explosive Polar Cyclone Crossing the Antarctic Marginal Ice Zone. Geophysical Research Letters, 2019, 46, 5948-5958.	1.5	59
20	Directional soliton and breather beams. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9759-9763.	3.3	17
21	Observation of turbulence and intermittency in wave-induced oscillatory flows. Wave Motion, 2019, 84, 81-89.	1.0	13
22	An experimental comparison of velocities underneath focussed breaking waves. Ocean Engineering, 2018, 155, 201-210.	1.9	39
23	Wave turbulence and intermittency in directional wave fields. Wave Motion, 2018, 83, 94-101.	1.0	14
24	Estimation of Kinetic Energy Dissipation from Breaking Waves in the Wave Crest Region. Journal of Physical Oceanography, 2017, 47, 1145-1150.	0.7	14
25	Experimental and Numerical Models of Wave Reflection and Transmission by an Ice Floe. , 2017, , .		1
26	Three Dimensional Velocity Field Underneath a Breaking Rogue Wave. , 2017, , .		2
27	Wind Generated Rogue Waves in an Annular Wave Flume. Physical Review Letters, 2017, 118, 144503.	2.9	60
28	Reflection and transmission of regular water waves by a thin, floating plate. Wave Motion, 2017, 70, 209-221.	1.0	37
29	The Velocity Field Underneath Linear and Nonlinear Breaking Rogue Waves. , 2016, , .		1
30	Non-Gaussian properties of second-order wave orbital velocity. Coastal Engineering, 2016, 110, 42-49.	1.7	11
31	Modeling the spatial evolutions of nonlinear unidirectional surface gravity waves with fully nonlinear numerical method. Ocean Engineering, 2016, 125, 60-69.	1.9	8
32	Laboratory Experiments on the Effects of a Variable Current Field on the Spectral Geometry of Water Waves. Journal of Physical Oceanography, 2016, 46, 2695-2717.	0.7	11
33	Modelling of the temporal and spatial evolutions of weakly nonlinear random directional waves with the modified nonlinear SchrÃ¶dinger equations. Applied Ocean Research, 2016, 55, 130-140.	1.8	10
34	Occurrence of Extreme Waves in Finite Water Depth. , 2016, , 45-62.		2
35	Rogue Waves in Random Sea States: An Experimental Perspective. Lecture Notes in Physics, 2016, , 179-203.	0.3	1
36	Rogue waves in opposing currents: an experimental study on deterministic and stochastic wave trains. Journal of Fluid Mechanics, 2015, 769, 277-297.	1.4	58

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37	Third-order resonant wave interactions under the influence of background current fields. Journal of Fluid Mechanics, 2015, 784, 51-73.	1.4	22
38	Sea ice floes dissipate the energy of steep ocean waves. Geophysical Research Letters, 2015, 42, 8547-8554.	1.5	53
39	An idealised experimental model of ocean surface wave transmission by an ice floe. Ocean Modelling, 2015, 96, 85-92.	1.0	50
40	Strongly Nonlinear Phenomena in Extreme Waves. , 2015, , .		1
41	The North Sea Andrea storm and numerical simulations. Natural Hazards and Earth System Sciences, 2014, 14, 1407-1415.	1.5	37
42	Modulational instability and wave amplification in finite water depth. Natural Hazards and Earth System Sciences, 2014, 14, 705-711.	1.5	20
43	Occurrence of rogue sea states and consequences for marine structures. Ocean Dynamics, 2014, 64, 1457-1468.	0.9	45
44	Recurrent solutions of the Alber equation initialized by Joint North Sea Wave Project spectra. Journal of Fluid Mechanics, 2013, 719, 314-344.	1.4	30
45	A Semi-Empirical Wave Crest Distribution of Random Directional Wave Fields. , 2012, , .		4
46	On the probability of occurrence of rogue waves. Natural Hazards and Earth System Sciences, 2012, 12, 751-762.	1.5	34
47	Occurrence of extreme waves in three-dimensional mechanically generated wave fields propagating over an oblique current. Natural Hazards and Earth System Sciences, 2011, 11, 895-903.	1.5	34
48	Wave Breaking in Directional Fields. Journal of Physical Oceanography, 2011, 41, 145-156.	0.7	43
49	Triggering Rogue Waves in Opposing Currents. Physical Review Letters, 2011, 107, 184502.	2.9	131
50	Estimating Sea Spray Volume with a Laser Altimeter. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1177-1183.	0.5	17
51	Evolution of weakly nonlinear random directional waves: laboratory experiments and numerical simulations. Journal of Fluid Mechanics, 2010, 664, 313-336.	1.4	143
52	The effect of third-order nonlinearity on statistical properties of random directional waves in finite depth. Nonlinear Processes in Geophysics, 2009, 16, 131-139.	0.6	50
53	Uncertainties of Wind Sea and Swell Prediction From the Torsethaugen Spectrum. , 2009, , .		8
54	Statistical Properties of Directional Ocean Waves: The Role of the Modulational Instability in the Formation of Extreme Events. Physical Review Letters, 2009, 102, 114502.	2.9	206

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55	Statistical properties of mechanically generated surface gravity waves: a laboratory experiment in a three-dimensional wave basin. Journal of Fluid Mechanics, 2009, 627, 235-257.	1.4	170
56	Surface gravity waves from direct numerical simulations of the Euler equations: A comparison with second-order theory. Ocean Engineering, 2008, 35, 367-379.	1.9	64
57	Wave crest and trough distributions in a broad-banded directional wave field. Ocean Engineering, 2008, 35, 1784-1792.	1.9	69
58	Influence of Location and Instrumentation on Wave Group Characteristics. , 2008, , .		0
59	Second-Order Theory and Setup in Surface Gravity Waves: A Comparison with Experimental Data. Journal of Physical Oceanography, 2007, 37, 2726-2739.	0.7	43
60	Wave statistics in unimodal and bimodal seas from a second-order model. European Journal of Mechanics, B/Fluids, 2006, 25, 649-661.	1.2	47
61	Towards the identification of warning criteria: Analysis of a ship accident database. Applied Ocean Research, 2005, 27, 281-291.	1.8	185
62	Investigation of Unexpected Sea-States. , 2004, , .		0
63	Atmospheric drivers of a winter-to-spring Lagrangian sea-ice drift in the Eastern Antarctic marginal ice zone. Journal of Glaciology, 0, , 1-15.	1.1	10
64	Long-Term and Seasonal Variability of Wind and Wave Extremes in the Arctic Ocean. Frontiers in Marine Science, 0, 9, .	1.2	3