Alec Torres-Freyermuth

List of Publications by Year
in descending order

64	1,120	331538	414303
papers	citations	21 h-index	32 g-index

68	68	68	957
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wave Climate and Trends for the Gulf of Mexico: A 30-Yr Wave Hindcast. Journal of Climate, 2014, 27, 1619-1632.	1.2	81
2	Numerical modelling of short- and long-wave transformation on a barred beach. Coastal Engineering, 2010, 57, 317-330.	1.7	78
3	Advances in numerical modelling of swash zone dynamics. Coastal Engineering, 2016, 115, 26-41.	1.7	69
4	Wave energy potential assessment in the Caribbean Low Level Jet using wave hindcast information. Applied Energy, 2015, 137, 375-384.	5.1	68
5	Modeling of surf zone processes on a natural beach using Reynoldsâ€Averaged Navierâ€Stokes equations. Journal of Geophysical Research, 2007, 112, .	3.3	62
6	Longshore Sediment Transport on the Northern Coast of the Yucatan Peninsula. Journal of Coastal Research, 2012, 285, 1404-1417.	0.1	54
7	Wave modeling performance in the Gulf of Mexico and Western Caribbean: Wind reanalyses assessment. Applied Ocean Research, 2013, 39, 20-30.	1.8	54
8	Wave-induced extreme water levels in the Puerto Morelos fringing reef lagoon. Natural Hazards and Earth System Sciences, 2012, 12, 3765-3773.	1.5	50
9	On the dynamics of waveâ€mud interaction: A numerical study. Journal of Geophysical Research, 2010, 115, .	3.3	39
10	Effects of reef roughness on wave setup and surf zone currents. Journal of Coastal Research, 2013, 165, 2005-2010.	0.1	38
11	Modeling swashâ€zone hydrodynamics and shear stresses on planar slopes using Reynoldsâ€Averaged Navierâ€“Stokes equations. Journal of Geophysical Research: Oceans, 2013, 118, 1019-1033.	1.0	34
12	An experimental and numerical investigation on waveâ€mud interactions. Journal of Geophysical Research: Oceans, 2013, 118, 1126-1141.	1.0	30
13	Laboratory investigation of pressure gradients induced by plunging breakers. Coastal Engineering, 2011, 58, 722-738.	1.7	29
14	Storm characterization and coastal hazards in the Yucatan Peninsula. Journal of Coastal Research, 2013, 65, 790-795.	0.1	27
15	Run-up parameterization and beach vulnerability assessment on a barrier island: a downscaling approach. Natural Hazards and Earth System Sciences, 2016, 16, 167-180.	1.5	26
16	Field and Numerical Study of Resistance and Resilience on a Sea Breeze Dominated Beach in Yucatan (Mexico). Water (Switzerland), 2018, 10, 1806.	1.2	24
17	Morphodynamics along a micro-tidal sea breeze dominated beach in the vicinity of coastal structures. Marine Geology, 2019, 417, 106013.	0.9	24
18	On the Use of Parametric Wind Models for Wind Wave Modeling under Tropical Cyclones. Water (Switzerland), 2019, 11, 2044.	1.2	24

#	Article	IF	Citations
19	Diagnostic investigation of impulsive pressures induced by plunging breakers impinging on gravel beaches. Coastal Engineering, 2010, 57, 252-266.	1.7	23
20	Nearshore circulation on a sea breeze dominated beach during intense wind events. Continental Shelf Research, 2017, 151, 40-52.	0.9	23
21	On the Role of Climate Change on Wind Waves Generated by Tropical Cyclones in the Gulf of Mexico. Coastal Engineering Journal, 2017, 59, 1740001-1-1740001-32.	0.7	23
22	On the role of infiltration and exfiltration in swash zone boundary layer dynamics. Journal of Geophysical Research: Oceans, 2015, 120, 6329-6350.	1.0	21
23	Estimation of the velocity field induced by plunging breakers in the surf and swash zones. Experiments in Fluids, 2012, 52, 53-68.	1.1	18
24	The second international workshop on swash-zone processes. Coastal Engineering, 2016, 115, 1-7.	1.7	18
25	Runup uncertainty on planar beaches. Ocean Dynamics, 2019, 69, 1359-1371.	0.9	14
26	The role of the reefâ€“dune system in coastal protection in Puerto Morelos (Mexico). Natural Hazards and Earth System Sciences, 2018, 18, 1247-1260.	1.5	13
27	Morphodynamic Response to Low-Crested Detached Breakwaters on a Sea Breeze-Dominated Coast. Water (Switzerland), 2019, 11, 635.	1.2	12
28	Impact of port development on the northern Yucatan Peninsula coastline. Regional Studies in Marine Science, 2021, 45, 101835.	0.4	12
29	On dam-break wave propagation and its implication to sediment erosion. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 205-218.	0.7	11
30	Assessment of coastal flooding and associated hydrodynamic processes on the south-eastern coast of Mexico, during Central American cold surge events. Natural Hazards and Earth System Sciences, 2018, 18, 1681-1701.	1.5	11
31	Spatiotemporal Storm Impact on the Northern Yucatan Coast during Hurricanes and Central American Cold Surge Events. Journal of Marine Science and Engineering, 2020, 8, 2.	1.2	10
32	Sea-land breeze diurnal component and its interaction with a cold front on the coast of Sisal, Yucatan: A case study. Atmospheric Research, 2020, 244, 105051.	1.8	9
33	Numerical study of the flow structure at a swash tip propagating over a rough bed. Coastal Engineering, 2020, 161, 103729.	1.7	9
34	On the runup parameterisation for reef-lined coasts. Ocean Modelling, 2022, 169, 101929.	1.0	9
35	On the role of uncertainty for the study of waveâ€“structure interaction. Coastal Engineering, 2015, 106, 32-41.	1.7	8
36	Wave attenuation over porous seabeds: A numerical study. Ocean Modelling, 2017, 117, 28-40.	1.0	8

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37	On the mechanisms of lowâ€frequency wave attenuation by muddy seabeds. Geophysical Research Letters, 2014, 41, 2870-2875.	1.5	7
38	Variability in Onshore Sediment Transport on a Natural Beach during a Central American Cold Surge Event. Journal of Coastal Research, 2020, 36, 487.	0.1	6
39	CHRONIC BEACH EROSION INDUCED BY COASTAL STRUCTURES IN CHELEM, YUCATÃN. Coastal Engineering Proceedings, 2012, , 125.	0.1	6
40	Experimental and Lagrangian modeling of nonlinear water waves propagation on a sloping bottom. Ocean Engineering, 2013, 64, 36-48.	1.9	5
41	The role of alongshore flows on inner surf and swash zone hydrodynamics on a dissipative beach. Continental Shelf Research, 2020, 201, 104134.	0.9	5
42	Human Impact on the Spatiotemporal Evolution of Beach Resilience on the Northwestern Yucatan Coast. Frontiers in Marine Science, 2021, 8, .	1.2	5
43	Foredune formation and evolution on a prograding sea-breeze dominated beach. Continental Shelf Research, 2021, 226, 104495.	0.9	5
44	Hydrodynamics and sediment transport under a dam-break-driven swash: An experimental study. Coastal Engineering, 2021, 170, 103986.	1.7	5
45	The role of morphodynamics in predicting coastal flooding from storms on a dissipative beach with sea level rise conditions. Natural Hazards and Earth System Sciences, 2022, 22, 713-728.	1.5	5
46	Design and Performance of Permeable Groins on a Low-Energy Natural Beach. Journal of Marine Science and Engineering, 2020, 8, 283.	1.2	3
47	Momentum balance under breaking waves: Closure to discussion by T.E. Baldock of â€˜Laboratory investigation of pressure gradients induced by plunging breakersâ€™. Coastal Engineering, 2012, 68, 96-102.	1.7	1
48	An Engineering Approach for Modeling Hurricane Extreme Waves Using Analytical and Numerical Tools. , 2012, , .		1
49	Numerical Assessment of Tsunami-Structure Interaction (Guerrero, Mexico). Journal of Coastal Research, 2020, 36, .	0.1	1
50	A virtual laboratory for conducting â€œhands-onâ€•experiments on water wave mechanics. Continental Shelf Research, 2022, 243, 104760.	0.9	1
51	MORPHODYNAMIC MODEL TO SIMULATE SHORELINE EVOLUTION AT ANY COASTAL MOUND. Coastal Engineering Proceedings, 2018, , 78.	0.1	0
52	SEASONAL BEACH VARIABILITY ON A SEA-BREEZE DOMINATED BEACH. Coastal Engineering Proceedings, 2018, , 72.	0.1	0
53	Modelado fÃsico y numÃ©rico de la interacciÃ³n de ondas enfocadas con un dique vertical con banqueta baja. Tecnologia Y Ciencias Del Agua, 2021, 12, 111-156.	0.1	0
54	A Depth Estimation System for Laboratory Studies using Video Imagery. American Journal of Environmental Sciences, 2008, 4, 229-237.	0.3	0

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55	MODELLING LOW-FREQUENCY WAVE TRANSFORMATION USING COBRAS-UC. , 2009, , .		0
56	77. ON THE ROLE OF IMPULSIVE PRESSURES INDUCED BY PLUNGING BREAKERS ACTING ON GRAVEL BEACHES. , 2009, , .		0
57	MOMENTUM BALANCE UNDER PLUNGING BREAKERS: THE ROLE OF ADVECTION ON SEDIMENT MOBILIZATION AND TRANSPORT. Coastal Engineering Proceedings, 2011, , 12.	0.1	0
58	NUMERICAL AND EXPERIMENTAL STUDY OF DAM-BREAK FLOOD PROPAGATION AND ITS IMPLICATION TO SEDIMENT EROSION. Coastal Engineering Proceedings, 2012, 1, 7.	0.1	0
59	INTEGRATED STUDY ON THE VELOCITY FIELD INDUCED BY PLUNGING BREAKERS. Coastal Engineering Proceedings, 2012, 1, 27.	0.1	0
60	RUNUP ON A MICRO-TIDAL SEA-BREEZE DOMINATED BEACH. , 2015, , .		0
61	DeterminaciÃ³n de la vida Ãºtil de una protecciÃ³n costera a travÃ©s de la interacciÃ³n oleaje-estructura. Tecnologia Y Ciencias Del Agua, 2018, 09, 01-24.	0.1	0
62	ON THE ASSESMENT OF DETACHED BREAKWATERS ON A SEA-BREEZE DOMINATED BEACH. Coastal Engineering Proceedings, 2018, , 36.	0.1	0
63	FOREDUNE EVOLUTION AT A PROGRADING LOW-ENERGY SEA-BREEZE DOMINATED MICRO-TIDAL BEACH. Coastal Engineering Proceedings, 2020, , 16.	0.1	0
64	MODELING RAPID BEACH CHANGE SURROUNDING A COASTAL STRUCTURE IN OBLIQUE WAVES. Coastal Engineering Proceedings, 2020, , 46.	0.1	0