Marcel Zijlema

List of Publications by Year
in descending order

42 papers	3,929 citations	236833 25 h-index	276775 41 g-index
44 all docs	44 docs citations	44 times ranked	2305 citing authors

#	Article	IF	Citations
1	SWAN SurfBeat-1D. Coastal Engineering, 2022, 172, 104068.	1.7	10
2	On the Efficiency of Staggered C-Grid Discretization for the Inviscid Shallow Water Equations from the Perspective of Nonstandard Calculus. Mathematics, 2022, 10, 1387.	1.1	0
3	Accuracy aspects of conventional discretization methods for scalar transport with nonzero divergence velocity field arising from the energy balance equation. International Journal for Numerical Methods in Fluids, 2021, 93, 1419-1434.	0.9	2
4	Physics-Capturing Discretizations for Spectral Wind-Wave Models. Fluids, 2021, 6, 52.	0.8	1
5	Free Infragravity Waves in the North Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017368.	1.0	7
6	An efficient method to calculate depth-integrated, phase-averaged momentum balances in non-hydrostatic models. Ocean Modelling, 2021, 165, 101846.	1.0	5
7	Modelling statistical wave interferences over shear currents. Journal of Fluid Mechanics, 2020, 891, .	1.4	9
8	The role of the Rankine-Hugoniot relations in staggered finite difference schemes for the shallow water equations. Computers and Fluids, 2019, 192, 104274.	1.3	8
9	Internal Wave Generation in a Non-Hydrostatic Wave Model. Water (Switzerland), 2019, 11, 986.	1.2	7
10	Mechanisms of the 40â€“70 Day Variability in the Yucatan Channel Volume Transport. Journal of Geophysical Research: Oceans, 2018, 123, 1286-1300.	1.0	7
11	An axisymmetric non-hydrostatic model for double-diffusive water systems. Geoscientific Model Development, 2018, 11, 521-540.	1.3	1
12	Efficient and robust wave overtopping estimation for impermeable coastal structures in shallow foreshores using SWASH. Coastal Engineering, 2017, 122, 108-123.	1.7	66
13	Efficient non-hydrostatic modelling of 3D wave-induced currents using a subgrid approach. Ocean Modelling, 2017, 116, 118-133.	1.0	25
14	Simulating waves and their interactions with a restrained ship using a non-hydrostatic wave-flow model. Coastal Engineering, 2016, 114, 119-136.	1.7	32
15	Threeâ€dimensional dense distributed temperature sensing for measuring layered thermohaline systems. Water Resources Research, 2016, 52, 6656-6670.	1.7	11
16	Infragravityâ€wave dynamics in a barred coastal region, a numerical study. Journal of Geophysical Research: Oceans, 2015, 120, 4068-4089.	1.0	63
17	Scaling depth-induced wave-breaking in two-dimensional spectral wave models. Ocean Modelling, 2015, 87, 30-47.	1.0	36
18	Non-hydrostatic modelling of infragravity waves under laboratory conditions. Coastal Engineering, 2014, 85, 30-42.	1.7	76

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19	A Discontinuous Galerkin Coupled Wave Propagation/Circulation Model. Journal of Scientific Computing, 2014, 59, 334-370.	1.1	3
20	Depth-induced wave breaking in a non-hydrostatic, near-shore wave model. Coastal Engineering, 2013, 76, 1-16.	1.7	173
21	Limiters for spectral propagation velocities in SWAN. Ocean Modelling, 2013, 70, 85-102.	1.0	42
22	Gulf of Mexico hurricane wave simulations using SWAN: Bulk formulaâ€based drag coefficient sensitivity for Hurricane Ike. Journal of Geophysical Research: Oceans, 2013, 118, 3916-3938.	1.0	56
23	Hindcast and validation of Hurricane Ike (2008) waves, forerunner, and storm surge. Journal of Geophysical Research: Oceans, 2013, 118, 4424-4460.	1.0	145
24	Performance of the Unstructured-Mesh, SWAN+ADCIRC Model in Computing Hurricane Waves and Surge. Journal of Scientific Computing, 2012, 52, 468-497.	1.1	273
25	Wave dissipation by vegetation with layer schematization in SWAN. Coastal Engineering, 2012, 59, 64-71.	1.7	197
26	Bottom friction and wind drag for wave models. Coastal Engineering, 2012, 65, 19-26.	1.7	165
27	SWASH: An operational public domain code for simulating wave fields and rapidly varied flows in coastal waters. Coastal Engineering, 2011, 58, 992-1012.	1.7	505
28	Modeling hurricane waves and storm surge using integrally-coupled, scalable computations. Coastal Engineering, 2011, 58, 45-65.	1.7	495
29	SWAN-Mud: Engineering Model for Mud-Induced Wave Damping. Journal of Hydraulic Engineering, 2011, 137, 959-975.	0.7	27
30	Hurricane Gustav (2008) Waves and Storm Surge: Hindcast, Synoptic Analysis, and Validation in Southern Louisiana. Monthly Weather Review, 2011, 139, 2488-2522.	0.5	218
31	Computation of wind-wave spectra in coastal waters with SWAN on unstructured grids. Coastal Engineering, 2010, 57, 267-277.	1.7	251
32	Nonâ€hydrostatic 3D free surface layerâ€structured finite volume model for short wave propagation. International Journal for Numerical Methods in Fluids, 2009, 61, 382-410.	0.9	17
33	Efficient computation of surf zone waves using the nonlinear shallow water equations with non-hydrostatic pressure. Coastal Engineering, 2008, 55, 780-790.	1.7	171
34	Nonlinear saturation-based whitecapping dissipation in SWAN for deep and shallow water. Coastal Engineering, 2007, 54, 151-170.	1.7	220
35	On convergence behaviour and numerical accuracy in stationary SWAN simulations of nearshore wind wave spectra. Coastal Engineering, 2005, 52, 237-256.	1.7	76
36	Further experiences with computing non-hydrostatic free-surface flows involving water waves. International Journal for Numerical Methods in Fluids, 2005, 48, 169-197.	0.9	143

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37	An accurate and efficient finite-difference algorithm for non-hydrostatic free-surface flow with application to wave propagation. International Journal for Numerical Methods in Fluids, 2003, 43, 1-23.	0.9	278
38	Higher-Order Flux-Limiting Schemes for the Finite Volume Computation of Incompressible Flow. International Journal of Computational Fluid Dynamics, 1998, 9, 89-109.	0.5	18
39	Computation of turbulent flow in general domains. Mathematics and Computers in Simulation, 1997, 44, 369-385.	2.4	2
40	ON THE CONSTRUCTION OF A THIRD-ORDER ACCURATE MONOTONE CONVECTION SCHEME WITH APPLICATION TO TURBULENT FLOWS IN GENERAL DOMAINS. International Journal for Numerical Methods in Fluids, 1996, 22, 619-641.	0.9	30
41	Finite volume computation of incompressible turbulent flows in general co-ordinates on staggered grids. International Journal for Numerical Methods in Fluids, 1995, 20, 621-640.	0.9	33
42	Invariant discretization of the k-Ïµ model in general co-ordinates for prediction of turbulent flow in complicated geometries. Computers and Fluids, 1995, 24, 209-225.	1.3	25