Alberto D Scotti

List of Publications by Year
in descending order

53 papers	2,397 citations	218381 26 h-index	205818 48 g-index
58 all docs	58 docs citations	58 times ranked	1880 citing authors

#	Article	IF	Citations
1	Non-homogeneous analysis of rogue wave probability evolution over a shoal. Journal of Fluid Mechanics, 2022, 939, .	1.4	18
2	On the physical constraints for the exceeding probability of deep water rogue waves. Applied Ocean Research, 2021, 108, 102402.	1.8	9
3	The Rayleigh-Haring-Tayfun distribution of wave heights in deep water. Applied Ocean Research, 2021, 113, 102739.	1.8	9
4	Rogue wave statistics in (2+1) Gaussian seas I: Narrow-banded distribution. Applied Ocean Research, 2020, 99, 102043.	1.8	5
5	Estimating pressure and internal-wave flux from laboratory experiments in focusing internal waves. Experiments in Fluids, 2020, 61, 1.	1.1	11
6	Diagnosing diabatic effects on the available energy of stratified flows in inertial and non-inertial frames. Journal of Fluid Mechanics, 2019, 861, 608-642.	1.4	4
7	Transition and turbulence in horizontal convection: linear stability analysis. Journal of Fluid Mechanics, 2017, 821, 31-58.	1.4	18
8	From Topographic Internal Gravity Waves to Turbulence. Annual Review of Fluid Mechanics, 2017, 49, 195-220.	10.8	66
9	SOMAR-LES: A framework for multi-scale modeling of turbulent stratified oceanic flows. Ocean Modelling, 2017, 120, 101-119.	1.0	15
10	Turbulent horizontal convection at high Schmidt numbers. Physical Review Fluids, 2017, 2, .	1.0	5
11	The Mixing Efficiency of Stratified Turbulent Boundary Layers. Journal of Physical Oceanography, 2016, 46, 3181-3191.	0.7	24
12	Available Potential Energy and the General Circulation: Partitioning Wind, Buoyancy Forcing, and Diapycnal Mixing. Journal of Physical Oceanography, 2015, 45, 1510-1531.	0.7	26
13	The Stratified Ocean Model with Adaptive Refinement (SOMAR). Journal of Computational Physics, 2015, 291, 60-81.	1.9	20
14	The formation and fate of internal waves in the South China Sea. Nature, 2015, 521, 65-69.	13.7	487
15	Biases in Thorpe-Scale Estimates of Turbulence Dissipation. Part II: Energetics Arguments and Turbulence Simulations. Journal of Physical Oceanography, 2015, 45, 2522-2543.	0.7	55
16	Diagnosing mixing in stratified turbulent flows with a locally defined available potential energy. Journal of Fluid Mechanics, 2014, 740, 114-135.	1.4	42
17	Turbulence during the reflection of internal gravity waves at critical and near-critical slopes. Journal of Fluid Mechanics, 2013, 729, 47-68.	1.4	17
18	Is horizontal convection really â€œnon-turbulent?â€• Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	49

#	ARTICLE	IF	CITATIONS
19	<i>Preface</i> Large amplitude internal waves in the coastal ocean. Nonlinear Processes in Geophysics, 2011, 18, 653-655.	0.6	9
20	An efficient method for solving highly anisotropic elliptic equations. Journal of Computational Physics, 2011, 230, 8342-8359.	1.9	8
21	Inviscid critical and near-critical reflection of internal waves in the time domain. Journal of Fluid Mechanics, 2011, 674, 464-488.	1.4	10
22	Large eddy simulation in the ocean. International Journal of Computational Fluid Dynamics, 2010, 24, 393-406.	0.5	10
23	DNS of a Gravity Current Propagating over a Free-Slip Boundary. ERCOFTAC Series, 2010, , 445-450.	0.1	0
24	LES of Pulsating Turbulent Flows over Smooth and Wavy Boundaries. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2010, , 25-36.	0.2	0
25	A numerical study of the frontal region of gravity currents propagating on a free-slip boundary. Theoretical and Computational Fluid Dynamics, 2008, 22, 383-402.	0.9	12
26	An approximated method for the solution of elliptic problems in thin domains: Application to nonlinear internal waves. Ocean Modelling, 2008, 25, 144-153.	1.0	24
27	Shoaling of nonlinear internal waves in Massachusetts Bay. Journal of Geophysical Research, 2008, 113, .	3.3	35
28	Plankton accumulation and transport in propagating nonlinear internal fronts. Journal of Marine Research, 2007, 65, 117-145.	0.3	48
29	Generation and propagation of nonlinear internal waves in Massachusetts Bay. Journal of Geophysical Research, 2007, 112, .	3.3	34
30	An Explicit Family of Probability Measures for Passive Scalar Diffusion in a Random Flow. Journal of Statistical Physics, 2007, 128, 927-968.	0.5	5
31	Turbulent convection of suspended sediments due to flow reversal. Journal of Geophysical Research, 2006, 111, .	3.3	31
32	On the interpretation of energy and energy fluxes of nonlinear internal waves: an example from Massachusetts Bay. Journal of Fluid Mechanics, 2006, 561, 103.	1.4	59
33	Large internal waves in Massachusetts Bay transport sediments offshore. Continental Shelf Research, 2006, 26, 2029-2049.	0.9	70
34	Winter Atmospheric Conditions over the Japan/East Sea: The Structure and Impact of Severe Cold-Air Outbreaks. Oceanography, 2006, 19, 96-109.	0.5	7
35	Direct numerical simulation of turbulent channel flows with boundary roughened with virtual sandpaper. Physics of Fluids, 2006, 18, 031701.	1.6	73
36	A Modified Beam-to-Earth Transformation to Measure Short-Wavelength Internal Waves with an Acoustic Doppler Current Profiler. Journal of Atmospheric and Oceanic Technology, 2005, 22, 583-591.	0.5	31

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37	Orographic effects during winter cold-air outbreaks over the Sea of Japan (East Sea): Results from a shallow-layer model. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 1705-1725.	0.6	5
38	Modeling unsteady turbulent flows over ripples: Reynolds-averaged Navier-Stokes equations (RANS) versus large-eddy simulation (LES). Journal of Geophysical Research, 2004, 109, .	3.3	42
39	Observation of very large and steep internal waves of elevation near the Massachusetts coast. Geophysical Research Letters, 2004, 31, .	1.5	128
40	Entrainment and suspension of sediments into a turbulent flow over ripples. Journal of Turbulence, 2003, 4, .	0.5	44
41	Turbulence Models in Pulsating Flows. AIAA Journal, 2002, 40, 537-544.	1.5	55
42	Turbulence models in pulsating flows. , 2001, , .		3
43	Observations of nonlinear internal waves on the outer New England continental shelf during the summer Shelfbreak Primer study. Journal of Geophysical Research, 2001, 106, 9587-9601.	3.3	110
44	Numerical simulation of pulsating turbulent channel flow. Physics of Fluids, 2001, 13, 1367-1384.	1.6	173
45	Large-Eddy Simulations of Turbulent Flows, from Desktop to Supercomputer. Lecture Notes in Computer Science, 2001, , 551-577.	1.0	7
46	Mean Structure and Dynamics of the Shelfbreak Jet in the Middle Atlantic Bight during Fall and Winter*. Journal of Physical Oceanography, 2001, 31, 2135-2156.	0.7	48
47	A fractal model for large eddy simulation of turbulent flow. Physica D: Nonlinear Phenomena, 1999, 127, 198-232.	1.3	88
48	Fractal Model for Coarse-Grained Nonlinear Partial Differential Equations. Physical Review Letters, 1997, 78, 867-870.	2.9	44
49	Dynamic Smagorinsky model on anisotropic grids. Physics of Fluids, 1997, 9, 1856-1858.	1.6	41
50	Fractal dimension of velocity signals in high-Reynolds-number hydrodynamic turbulence. Physical Review E, 1995, 51, 5594-5608.	0.8	39
51	Generalized Smagorinsky model for anisotropic grids. Physics of Fluids A, Fluid Dynamics, 1993, 5, 2306-2308.	1.6	216
52	Poster: Turbulent Horizontal Convection at High Prandtl Numbers. , 0, , .		1
53	Poster: Internal Wave Focusing Above a Three Dimensional Topography. , 0, , .		1