Peter J Diamessis

List of Publications by Year
in descending order

36 papers	773 citations	15 h-index 566801	28 g-index 500791
37 all docs	37 docs citations	37 times ranked	422 citing authors

#	Article	IF	Citations
1	Three-dimensional perspective on a convective instability and transition to turbulence in an internal solitary wave of depression shoaling over gentle slopes. Environmental Fluid Mechanics, 2023, 23, 1015-1035.	0.7	3
2	A high accuracy/resolution spectral element/Fourier–Galerkin method for the simulation of shoaling non-linear internal waves and turbulence in long domains with variable bathymetry. Ocean Modelling, 2022, 176, 102065.	1.0	0
3	Long–Term Observations of Shoaling Internal Solitary Waves in the Northern South China Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017129.	1.0	13
4	On the formulation and implementation of the stress-free boundary condition over deformed bathymetry using a spectral-element-method-based incompressible Navier–Stokes equations solver. Ocean Modelling, 2021, 165, 101834.	1.0	1
5	Formation of Recirculating Cores in Convectively Breaking Internal Solitary Waves of Depression Shoaling over Gentle Slopes in the South China Sea. Journal of Physical Oceanography, 2020, 50, 1137-1157.	0.7	14
6	Self-sustained instability, transition, and turbulence induced by a long separation bubble in the footprint of an internal solitary wave. I. Flow topology. Physical Review Fluids, 2020, 5, .	1.0	8
7	Self-sustained instability, transition, and turbulence induced by a long separation bubble in the footprint of an internal solitary wave. II. Flow statistics. Physical Review Fluids, 2020, 5, .	1.0	1
8	Internal Solitary Waves and Mixing. , 2019, , 533-541.		4
9	Large-scale characteristics of stratified wake turbulence at varying Reynolds number. Physical Review Fluids, 2019, 4, .	1.0	23
10	Experimental study of the initial growth of a localized turbulent patch in a stably stratified fluid. International Journal of Heat and Fluid Flow, 2017, 66, 127-136.	1.1	3
11	Bed failure induced by internal solitary waves. Journal of Geophysical Research: Oceans, 2017, 122, 5468-5485.	1.0	14
12	Surface manifestation of internal waves emitted by submerged localized stratified turbulence. Journal of Fluid Mechanics, 2016, 798, 505-539.	1.4	17
13	Turbulent/non-turbulent interfaces in wakes in stably stratified fluids. Journal of Fluid Mechanics, 2016, 797, .	1.4	42
14	A post-processing technique for stabilizing the discontinuous pressure projection operator in marginally-resolved incompressible inviscid flow. Computers and Fluids, 2016, 139, 120-129.	1.3	20
15	Deflation-accelerated preconditioning of the Poisson–Neumann Schur problem on long domains with a high-order discontinuous element-based collocation method. Journal of Computational Physics, 2016, 313, 209-232.	1.9	4
16	Lagrangian flows within reflecting internal waves at a horizontal free-slip surface. Physics of Fluids, 2015, 27, 126601.	1.6	7
17	Two-dimensional instability of the bottom boundary layer under a solitary wave. Physics of Fluids, 2015, 27, 044101.	1.6	7
18	Nonlinear generation of harmonics through the interaction of an internal wave beam with a model oceanic pycnocline. Dynamics of Atmospheres and Oceans, 2014, 66, 110-137.	0.7	34

#	Article	IF	Citations
19	A spectral quadrilateral multidomain penalty method model for high Reynolds number incompressible stratified flows. International Journal for Numerical Methods in Fluids, 2014, 75, 403-425.	0.9	9
20	The internal gravity wave field emitted by a stably stratified turbulent wake. Journal of Fluid Mechanics, 2013, 720, 104-139.	1.4	71
21	Reflection of an internal gravity wave beam off a horizontal free-slip surface. Physics of Fluids, 2013, 25, .	1.6	21
22	Boundary-layer-separation-driven vortex shedding beneath internal solitary waves of depression. Journal of Fluid Mechanics, 2012, 690, 321-344.	1.4	58
23	High-order discontinuous element-based schemes for the inviscid shallow water equations: Spectral multidomain penalty and discontinuous Galerkin methods. Applied Mathematics and Computation, 2012, 218, 4825-4848.	1.4	7
24	On the generation and evolution of numerically simulated large-amplitude internal gravity wave packets. Theoretical and Computational Fluid Dynamics, 2012, 26, 205-224.	0.9	7
25	A spectral finite element approach to modeling soft solids excited with high-frequency harmonic loads. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 692-698.	3.4	7
26	Similarity scaling and vorticity structure in high-Reynolds-number stably stratified turbulent wakes. Journal of Fluid Mechanics, 2011, 671, 52-95.	1.4	71
27	Spatial characterization of vortical structures and internal waves in a stratified turbulent wake using proper orthogonal decomposition. Physics of Fluids, 2010, 22, .	1.6	17
28	Mass transfer model of nanoparticle-facilitated contaminant transport in saturated porous media. Water Research, 2010, 44, 1028-1037.	5.3	14
29	Effective numerical viscosity in spectral multidomain penalty method-based simulations of localized turbulence. Journal of Computational Physics, 2008, 227, 8145-8164.	1.9	15
30	Numerical Investigation of Solitary Internal Wave-Induced Global Instability in Shallow Water Benthic Boundary Layers. Journal of Physical Oceanography, 2006, 36, 784-812.	0.7	78
31	Self-preservation in stratified momentum wakes. Physics of Fluids, 2006, 18, 106601.	1.6	37
32	A spectral multidomain penalty method model for the simulation of high Reynolds number localized incompressible stratified turbulence. Journal of Computational Physics, 2005, 202, 298-322.	1.9	68
33	The structure and dynamics of overturns in stably stratified homogeneous turbulence. Journal of Fluid Mechanics, 2004, 499, 197-229.	1.4	12
34	Automated Tracking of 3-D Overturn Patches in Direct Numerical Simulation of Stratified Homogeneous Turbulence. Lecture Notes in Computer Science, 2002, , 557-566.	1.0	0
35	Interaction of vorticity, rate-of-strain, and scalar gradient in stratified homogeneous sheared turbulence. Physics of Fluids, 2000, 12, 1166-1188.	1.6	44
36	The interaction of vorticity and rate-of-strain in homogeneous sheared turbulence. Physics of Fluids, 2000, 12, 846-864.	1.6	22