Thomas Peacock

List of Publications by Year
in descending order

36 papers	1,206 citations	430442 18 h-index	377514 34 g-index
39 all docs	39 docs citations	39 times ranked	1169 citing authors

#	Article	IF	Citations
1	Uncovering the Lagrangian Skeleton of Turbulence. Physical Review Letters, 2007, 98, 144502.	2.9	176
2	Lagrangian coherent structures: The hidden skeleton of fluid flows. Physics Today, 2013, 66, 41-47.	0.3	150
3	Midwater ecosystems must be considered when evaluating environmental risks of deep-sea mining. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17455-17460.	3.3	104
4	Lagrangian based methods for coherent structure detection. Chaos, 2015, 25, 097617.	1.0	75
5	New wave generation. Journal of Fluid Mechanics, 2010, 657, 308-334.	1.4	57
6	Internal tide generation by arbitrary two-dimensional topography. Journal of Fluid Mechanics, 2010, 659, 247-266.	1.4	55
7	Internal wave beam propagation in non-uniform stratifications. Journal of Fluid Mechanics, 2009, 639, 133-152.	1.4	50
8	Visualization of nonlinear effects in reflecting internal wave beams. Physics of Fluids, 2005, 17, 061702.	1.6	49
9	Low-mode internal tide generation by topography: an experimental and numerical investigation. Journal of Fluid Mechanics, 2009, 636, 91-108.	1.4	48
10	Topographic scattering of the low-mode internal tide in the deep ocean. Journal of Geophysical Research: Oceans, 2014, 119, 2165-2182.	1.0	40
11	Extent of impact of deep-sea nodule mining midwater plumes is influenced by sediment loading, turbulence and thresholds. Communications Earth & Environment, 2021, 2, .	2.6	38
12	Impact of windage on ocean surface Lagrangian coherent structures. Environmental Fluid Mechanics, 2017, 17, 473-483.	0.7	35
13	Search and rescue at sea aided by hidden flow structures. Nature Communications, 2020, 11, 2525.	5.8	32
14	Propulsion generated by diffusion-driven flow. Nature Physics, 2010, 6, 516-519.	6.5	30
15	Refining finite-time Lyapunov exponent ridges and the challenges of classifying them. Chaos, 2015, 25, 087410.	1.0	24
16	A laboratory study of low-mode internal tide scattering by finite-amplitude topography. Physics of Fluids, 2009, 21, .	1.6	21
17	Model investigations of discharge plumes generated by deep-sea nodule mining operations. Ocean Engineering, 2019, 172, 684-696.	1.9	21
18	A warm jet in a cold ocean. Nature Communications, 2021, 12, 2418.	5.8	20

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19	Self-Propulsion of Immersed Objects via Natural Convection. Physical Review Letters, 2014, 112, .	2.9	18
20	Gravity currents from moving sources. Journal of Fluid Mechanics, 2021, 924, .	1.4	17
21	Microscale Synthetic Schlieren. Experiments in Fluids, 2006, 42, 41-48.	1.1	15
22	Largeâ€scale, realistic laboratory modeling of M₂ internal tide generation at the Luzon Strait. Geophysical Research Letters, 2013, 40, 5704-5709.	1.5	15
23	Real-time sediment plume modeling in the Southern California bight. , 2018, , .		14
24	Whither the Chukchi Slope Current?. Journal of Physical Oceanography, 2020, 50, 1717-1732.	0.7	13
25	Tracking a Surrogate Hazardous Agent (Rhodamine Dye) in a Coastal Ocean Environment Using In Situ Measurements and Concentration Estimates Derived from Drone Images. Remote Sensing, 2021, 13, 4415.	1.8	13
26	Is Deep-Sea Mining Worth It?. Scientific American, 2018, 318, 72-77.	1.0	12
27	An Optimized-Parameter Spectral Clustering Approach to Coherent Structure Detection in Geophysical Flows. Fluids, 2021, 6, 39.	0.8	11
28	Forcing a planar jet flow using MEMS. Experiments in Fluids, 2004, 37, 22-28.	1.1	10
29	3D Stereoscopic PIV visualization of the axisymmetric conical internal wave field generated by an oscillating sphere. Experiments in Fluids, 2013, 54, 1.	1.1	9
30	Going with (or Against) the Flow. Science, 2008, 320, 1302-1303.	6.0	7
31	Stability of a stratified fluid with a vertically moving sidewall. Journal of Fluid Mechanics, 2008, 609, 305-317.	1.4	6
32	Interference and transmission of spatiotemporally locally forced internal waves in non-uniform stratifications. Journal of Fluid Mechanics, 2019, 866, 350-368.	1.4	4
33	Investigating transport in a tidally driven coral atoll flow using Lagrangian coherent structures. Limnology and Oceanography, 2021, 66, 4017-4027.	1.6	4
34	Effect of crossflow on trapping depths of particle plumes: laboratory experiments and application to the PLUMEX field experiment. Environmental Fluid Mechanics, 2021, 21, 741-757.	0.7	3
35	Uncovering Fine-Scale Wave-Driven Transport Features in a Fringing Coral Reef System via Lagrangian Coherent Structures. Fluids, 2020, 5, 190.	0.8	2
36	Double Diffusion, Shear Instabilities, and Heat Impacts of a Pacific Summer Water Intrusion in the Beaufort Sea. Journal of Physical Oceanography, 2022, 52, 189-203.	0.7	2