Basile Gallet

List of Publications by Year
in descending order

Version: 2024-02-01

35 papers	782 citations	516561 16 h-index	501076 28 g-index
35 all docs	35 docs citations	35 times ranked	498 citing authors

#	Article	IF	Citations
1	Dynamo regimes and transitions in the VKS experiment. European Physical Journal B, 2010, 77, 459-468.	0.6	70
2	Direct and inverse energy cascades in a forced rotating turbulence experiment. Physics of Fluids, 2014, 26, .	1.6	57
3	Radiative heating achieves the ultimate regime of thermal convection. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8937-8941.	3.3	56
4	Transition to the ultimate regime in a radiatively driven convection experiment. Journal of Fluid Mechanics, 2019, 861, .	1.4	48
5	Exact two-dimensionalization of rapidly rotating large-Reynolds-number flows. Journal of Fluid Mechanics, 2015, 783, 412-447.	1.4	44
6	Reversals of a large-scale field generated over a turbulent background. Geophysical and Astrophysical Fluid Dynamics, 2012, 106, 468-492.	0.4	43
7	Refraction of swell by surface currents. Journal of Marine Research, 2014, 72, 105-126.	0.3	41
8	Exact two-dimensionalization of low-magnetic-Reynolds-number flows subject to a strong magnetic field. Journal of Fluid Mechanics, 2015, 773, 154-177.	1.4	41
9	Disentangling inertial waves from eddy turbulence in a forced rotating-turbulence experiment. Physical Review E, 2015, 91, 043016.	0.8	37
10	A two-dimensional vortex condensate at high Reynolds number. Journal of Fluid Mechanics, 2013, 715, 359-388.	1.4	33
11	Scale-dependent cyclone-anticyclone asymmetry in a forced rotating turbulence experiment. Physics of Fluids, 2014, 26, 035108.	1.6	33
12	Quantitative Experimental Observation of Weak Inertial-Wave Turbulence. Physical Review Letters, 2020, 125, 254502.	2.9	32
13	Shortcut to Geostrophy in Wave-Driven Rotating Turbulence: The Quartetic Instability. Physical Review Letters, 2020, 124, 124501.	2.9	28
14	Bistability between a stationary and an oscillatory dynamo in a turbulent flow of liquid sodium. Journal of Fluid Mechanics, 2009, 641, 217-226.	1.4	25
15	Influence of an external magnetic field on forced turbulence in a swirling flow of liquid metal. Physics of Fluids, 2009, 21, .	1.6	23
16	The vortex gas scaling regime of baroclinic turbulence. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4491-4497.	3.3	19
17	Near-resonant instability of geostrophic modes: beyond Greenspan's theorem. Journal of Fluid Mechanics, 2020, 900, .	1.4	16
18	Convection driven by internal heat sources and sinks: Heat transport beyond the mixing-length or â€œultimateâ€•scaling regime. Physical Review Fluids, 2019, 4, .	1.0	16

#	Article	IF	Citations
19	Experimental Observation of Spatially Localized Dynamo Magnetic Fields. Physical Review Letters, 2012, 108, 144501.	2.9	14
20	Turbulent drag in a rotating frame. Journal of Fluid Mechanics, 2016, 794, .	1.4	14
21	Spatial variations of magnetic permeability as a source of dynamo action. Journal of Fluid Mechanics, 2013, 727, 161-190.	1.4	13
22	Experimental observation of the geostrophic turbulence regime of rapidly rotating convection. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
23	A Quantitative Scaling Theory for Meridional Heat Transport in Planetary Atmospheres and Oceans. AGU Advances, 2021, 2, e2020AV000362.	2.3	12
24	On the role of the Prandtl number in convection driven by heat sources and sinks. Journal of Fluid Mechanics, 2020, 900, .	1.4	9
25	Onset of three-dimensionality in rapidly rotating turbulent flows. Journal of Fluid Mechanics, 2020, 901, .	1.4	9
26	Dynamo action due to spatially dependent magnetic permeability. Europhysics Letters, 2012, 97, 69001.	0.7	8
27	Transition to Turbulent Dynamo Saturation. Physical Review Letters, 2017, 119, 204503.	2.9	8
28	Enhanced dynamo growth in nonhomogeneous conducting fluids. Physical Review E, 2021, 104, 015110.	0.8	4
29	Oscillatory instability of interacting grains in a turbulent flow. Europhysics Letters, 2009, 87, 54004.	0.7	3
30	Drifting patterns as field reversals. Europhysics Letters, 2015, 112, 54007.	0.7	3
31	Dynamo saturation down to vanishing viscosity: strong-field and inertial scaling regimes. Journal of Fluid Mechanics, 2019, 864, 971-994.	1.4	3
32	Velocity-informed upper bounds on the convective heat transport induced by internal heat sources and sinks. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210034.	1.6	3
33	Near-Inertial Waves and Turbulence Driven by the Growth of Swell. Journal of Physical Oceanography, 2021, 51, 1337-1351.	0.7	2
34	Inverse cascade suppression and shear-layer formation in magnetohydrodynamic turbulence subject to a guide field and misaligned rotation. Journal of Fluid Mechanics, 2022, 935, .	1.4	2
35	Surface-wave Doppler velocimetry in a liquid metal: Inferring the bifurcations of the subsurface flow. Europhysics Letters, 2017, 119, 24001.	0.7	0