Alexandros Alexakis

List of Publications by Year in descending order

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84 papers 2,533 citations

201385 27 h-index 205818 48 g-index

85 all docs 85 docs citations

85 times ranked 1153 citing authors

#	Article	IF	CITATIONS
1	Cascades and transitions in turbulent flows. Physics Reports, 2018, 767-769, 1-101.	10.3	261
2	Shell-to-shell energy transfer in magnetohydrodynamics. I. Steady state turbulence. Physical Review E, 2005, 72, 046301.	0.8	190
3	Scale interactions and scaling laws in rotating flows at moderate Rossby numbers and large Reynolds numbers. Physics of Fluids, 2009, 21, .	1.6	137
4	Shell-to-shell energy transfer in magnetohydrodynamics. II. Kinematic dynamo. Physical Review E, 2005, 72, 046302.	0.8	105
5	Imprint of Large-Scale Flows on Turbulence. Physical Review Letters, 2005, 95, 264503.	2.9	97
6	Large-scale flow effects, energy transfer, and self-similarity on turbulence. Physical Review E, 2006, 74, 016303.	0.8	88
7	Turbulent cascades, transfer, and scale interactions in magnetohydrodynamics. New Journal of Physics, 2007, 9, 298-298.	1.2	84
8	Statistical Equilibria of Large Scales in Dissipative Hydrodynamic Turbulence. Physical Review Letters, 2015, 115, 204501.	2.9	77
9	On the Inverse Cascade of Magnetic Helicity. Astrophysical Journal, 2006, 640, 335-343.	1.6	76
10	Energy transfer in Hall-MHD turbulence: cascades, backscatter, and dynamo action. Journal of Plasma Physics, 2007, 73, 377-401.	0.7	74
11	Critical transitions in thin layer turbulence. Journal of Fluid Mechanics, 2017, 822, 364-385.	1.4	66
12	Nonlocal interactions in hydrodynamic turbulence at high Reynolds numbers: The slow emergence of scaling laws. Physical Review E, 2008, 77, 036306.	0.8	63
13	Helically decomposed turbulence. Journal of Fluid Mechanics, 2017, 812, 752-770.	1.4	57
14	On Heavy Element Enrichment in Classical Novae. Astrophysical Journal, 2004, 602, 931-937.	1.6	56
15	Two-dimensional behavior of three-dimensional magnetohydrodynamic flow with a strong guiding field. Physical Review E, 2011, 84, 056330.	0.8	54
16	On the C/O Enrichment of Nova Ejecta. Astrophysical Journal, 2002, 562, L177-L179.	1.6	52
17	Dynamic anisotropy in MHD turbulence induced by mean magnetic field. Physics of Plasmas, 2017, 24, 022304.	0.7	50
18	On Holmboe's instability for smooth shear and density profiles. Physics of Fluids, 2005, 17, 084103.	1.6	46

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19	Searching for the fastest dynamo: Laminar ABC flows. Physical Review E, 2011, 84, 026321.	0.8	41
20	Anisotropic fluxes and nonlocal interactions in magnetohydrodynamic turbulence. Physical Review E, 2007, 76, 056313.	0.8	39
21	Rotating Taylor–Green flow. Journal of Fluid Mechanics, 2015, 769, 46-78.	1.4	38
22	Discontinuous Transition from Direct to Inverse Cascade in Three-Dimensional Turbulence. Physical Review Letters, 2017, 118, 164501.	2.9	38
23	Condensates in rotating turbulent flows. Journal of Fluid Mechanics, 2018, 841, 434-462.	1.4	38
24	Transition from Wave Turbulence to Dynamical Crumpling in Vibrated Elastic Plates. Physical Review Letters, 2013, 111, 054302.	2.9	34
25	Energy and enstrophy dissipation in steady state 2d turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 359, 652-657.	0.9	33
26	Role of dissipation in flexural wave turbulence: From experimental spectrum to Kolmogorov-Zakharov spectrum. Physical Review E, 2014, 89, 062925.	0.8	30
27	On the edge of an inverse cascade. Physical Review E, 2014, 90, 051003.	0.8	29
28	Structures and dynamics of small scales in decaying magnetohydrodynamic turbulence. Physics of Fluids, $2013, 25, \ldots$	1.6	28
29	Stratified shear flow instabilities at large Richardson numbers. Physics of Fluids, 2009, 21, .	1.6	26
30	Condensates in thin-layer turbulence. Journal of Fluid Mechanics, 2019, 864, 490-518.	1.4	26
31	Shear instability of fluid interfaces: Stability analysis. Physical Review E, 2002, 65, 026313.	0.8	22
32	Critical behavior in the inverse to forward energy transition in two-dimensional magnetohydrodynamic flow. Physical Review E, 2016, 93, 013104.	0.8	21
33	Critical transition in fast-rotating turbulence within highly elongated domains. Journal of Fluid Mechanics, 2020, 899, .	1.4	21
34	Large-Scale Magnetic Fields in Magnetohydrodynamic Turbulence. Physical Review Letters, 2013, 110, 084502.	2.9	20
35	Marginally unstable Holmboe modes. Physics of Fluids, 2007, 19, 054105.	1.6	19
36	On the thermal equilibrium state of large-scaleÂflows. Journal of Fluid Mechanics, 2019, 872, 594-625.	1.4	19

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37	On the nonlinear evolution of wind-driven gravity waves. Physics of Fluids, 2004, 16, 3256-3268.	1.6	18
38	Nonlocal Phenomenology for Anisotropic Magnetohydrodynamic Turbulence. Astrophysical Journal, 2007, 667, L93-L96.	1.6	18
39	Effect of the Lorentz force on on-off dynamo intermittency. Physical Review E, 2008, 77, 056308.	0.8	17
40	THE SIGNATURE OF INITIAL CONDITIONS ON MAGNETOHYDRODYNAMIC TURBULENCE. Astrophysical Journal Letters, 2014, 788, L36.	3.0	16
41	Turbulent cascade, bottleneck, and thermalized spectrum in hyperviscous flows. Physical Review Fluids, 2020, 5, .	1.0	15
42	Self-organisation and non-linear dynamics in driven magnetohydrodynamic turbulent flows. Physics of Fluids, 2015, 27, .	1.6	14
43	Bounds on dissipation in magnetohydrodynamic Couette and Hartmann shear flows. Physics of Plasmas, 2003, 10, 4324-4334.	0.7	13
44	Rare transitions to thin-layer turbulent condensates. Journal of Fluid Mechanics, 2019, 878, 356-369.	1.4	12
45	Phase transitions and flux-loop metastable states in rotating turbulence. Physical Review Fluids, 2020, 5, .	1.0	12
46	Energy fluxes in quasi-equilibrium flows. Journal of Fluid Mechanics, 2020, 884, .	1.4	11
47	Abrupt Transition between Three-Dimensional and Two-Dimensional Quantum Turbulence. Physical Review Letters, 2020, 124, 134501.	2.9	11
48	Effect of helicity on the correlation time of large scales in turbulent flows. Physical Review Fluids, 2017, 2, .	1.0	11
49	Anomalous Exponents at the Onset of an Instability. Physical Review Letters, 2012, 108, 014501.	2.9	10
50	Fate of Alpha Dynamos at Large <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>R</mml:mi><mml:mi></mml:mi></mml:math> . Physical Review Letters, 2016, 117, 205101.	2.9	10
51	Fluctuations of Electrical Conductivity: A New Source for Astrophysical Magnetic Fields. Physical Review Letters, 2016, 116, 161102.	2.9	10
52	Symmetry breaking of decaying magnetohydrodynamic Taylor-Green flows and consequences for universality. Physical Review E, 2013, 88, 063017.	0.8	9
53	Optimal Length Scale for a Turbulent Dynamo. Physical Review Letters, 2016, 116, 074501.	2.9	9
54	Local energy flux of turbulent flows. Physical Review Fluids, 2020, 5, .	1.0	9

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55	Bounds on dissipation in magnetohydrodynamic problems in plane shear geometry. Physics of Plasmas, 2003, 10, 4314-4323.	0.7	8
56	Linear and non-linear features of the Taylor–Green dynamo. Comptes Rendus Physique, 2008, 9, 749-756.	0.3	8
57	Transition to Turbulent Dynamo Saturation. Physical Review Letters, 2017, 119, 204503.	2.9	8
58	Method to measure efficiently rare fluctuations of turbulence intensity for turbulent-laminar transitions in pipe flows. Physical Review E, 2018, 97, 022207.	0.8	8
59	Role of the forcing dimensionality in thin-layer turbulent energy cascades. Physical Review Fluids, 2020, 5, .	1.0	8
60	Weakly nonlinear analysis of wind-driven gravity waves. Journal of Fluid Mechanics, 2004, 503, 171-200.	1.4	7
61	Origins of thekâ^'2spectrum in decaying Taylor-Green magnetohydrodynamic turbulent flows. Physical Review E, 2013, 88, 053014.	0.8	7
62	Do extreme events trigger turbulence decay? – a numerical study of turbulence decay time in pipe flows. Journal of Fluid Mechanics, 2021, 912, .	1.4	7
63	The onset of turbulent rotating dynamos at the low magnetic Prandtl number limit. Journal of Fluid Mechanics, 2017, 822, .	1.4	7
64	Bistability of the large-scale dynamics in quasi-two-dimensional turbulence. Journal of Fluid Mechanics, 2022, 939, .	1.4	7
65	Critical Exponents in Zero Dimensions. Journal of Statistical Physics, 2012, 149, 738-753.	0.5	6
66	Kazantsev model in non-helical 2.5-dimensional flows. Journal of Fluid Mechanics, 2016, 806, 627-648.	1.4	6
67	Lévy on-off intermittency. Physical Review E, 2021, 103, 052115.	0.8	6
68	Large-scale instabilities of helical flows. Physical Review Fluids, 2016, 1, .	1.0	6
69	Three-dimensional instabilities and negative eddy viscosity in thin-layer flows. Physical Review Fluids, 2018, 3, .	1.0	6
70	Energy cascades in rapidly rotating and stratified turbulence within elongated domains. Journal of Fluid Mechanics, 2022, 933, .	1.4	6
71	Bounding the scalar dissipation scale for mixing flows in the presence of sources. Journal of Fluid Mechanics, 2011, 688, 443-460.	1.4	5
72	Nonlinear dynamos at infinite magnetic Prandtl number. Physical Review E, 2011, 83, 036301.	0.8	5

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73	Turbulent 2.5-dimensional dynamos. Journal of Fluid Mechanics, 2016, 799, 246-264.	1.4	5
74	Symmetry breaking in a turbulent environment. Physical Review Fluids, 2021, 6, .	1.0	5
75	Geometric microcanonical theory of two-dimensional truncated Euler flows. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210049.	1.6	5
76	Intermittency of three-dimensional perturbations in a point-vortex model. Physical Review E, 2021, 103, 053102.	0.8	4
77	Mixing by Non-linear Gravity Wave Breaking on a White Dwarf Surface. AIP Conference Proceedings, 2002, , .	0.3	3
78	Planar bifurcation subject to multiplicative noise: Role of symmetry. Physical Review E, 2009, 80, 041134.	0.8	3
79	Effect of fluctuations on mean-field dynamos. Journal of Plasma Physics, 2018, 84, .	0.7	2
80	Dynamics of the Small Scales in Magnetohydrodynamic Turbulence. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 305-312.	0.1	1
81	Scale Interactions and Non-Local Flux in Hydrodynamic Turbulence. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 125-130.	0.1	1
82	î»-Navier–Stokes turbulence. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210243.	1.6	1
83	Onset of Convection on a Pre-Runaway White Dwarf. AIP Conference Proceedings, 2002, , .	0.3	0
84	Mixing at the surface of white dwarf stars. The Fluid Mechanics of Astrophysics and Geophysics, 2005,	0.2	0