Alessandra S Lanotte

List of Publications by Year
in descending order

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77	5,606	117625	74163
papers	citations	34 h-index	75 g-index

83	83	83	2681
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Particles and fields in fluid turbulence. Reviews of Modern Physics, 2001, 73, 913-975.	45.6	1,079
2	Acceleration of rain initiation by cloud turbulence. Nature, 2002, 419, 151-154.	27.8	533
3	Intermittent Distribution of Inertial Particles in Turbulent Flows. Physical Review Letters, 2001, 86, 2790-2793.	7.8	300
4	Superballistic flow of viscous electron fluid through graphene constrictions. Nature Physics, 2017, 13, 1182-1185.	16.7	288
5	Heavy Particle Concentration in Turbulence at Dissipative and Inertial Scales. Physical Review Letters, 2007, 98, 084502.	7.8	283
6	Acceleration statistics of heavy particles in turbulence. Journal of Fluid Mechanics, 2006, 550, 349.	3.4	211
7	Multifractal Statistics of Lagrangian Velocity and Acceleration in Turbulence. Physical Review Letters, 2004, 93, 064502.	7.8	192
8	Conformal invariance in two-dimensional turbulence. Nature Physics, 2006, 2, 124-128.	16.7	154
9	Universal Intermittent Properties of Particle Trajectories in Highly Turbulent Flows. Physical Review Letters, 2008, 100, 254504.	7.8	145
10	Upscale energy transfer in thick turbulent fluidÂlayers. Nature Physics, 2011, 7, 321-324.	16.7	139
11	Particle trapping in three-dimensional fully developed turbulence. Physics of Fluids, 2005, 17, 021701.	4.0	132
12	Intermittency of Burgers' Turbulence. Physical Review Letters, 1997, 78, 1452-1455.	7.8	108
13	Universality and Saturation of Intermittency in Passive Scalar Turbulence. Physical Review Letters, 2000, 84, 2385-2388.	7.8	103
14	Intermittency in the velocity distribution of heavy particles in turbulence. Journal of Fluid Mechanics, 2010, 646, 527-536.	3.4	103
15	Spectrally condensed turbulence in thin layers. Physics of Fluids, 2009, 21, .	4.0	99
16	Fronts in passive scalar turbulence. Physics of Fluids, 2001, 13, 1768-1783.	4.0	91
17	Turbulent pair dispersion of inertial particles. Journal of Fluid Mechanics, 2010, 645, 497-528.	3.4	81
18	Lagrangian structure functions in turbulence: A quantitative comparison between experiment and direct numerical simulation. Physics of Fluids, 2008, 20, .	4.0	74

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19	Flightâ€“crash events in turbulence. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7558-7563.	7.1	72
20	Floater clustering in a standing wave. Nature, 2005, 435, 1045-1046.	27.8	69
21	Persistence of small-scale anisotropies and anomalous scaling in a model of magnetohydrodynamics turbulence. Physical Review E, 2000, 61, 6586-6605.	2.1	67
22	Dynamics and statistics of heavy particles in turbulent flows. Journal of Turbulence, 2006, 7, N36.	1.4	67
23	Cloud Droplet Growth by Condensation in Homogeneous Isotropic Turbulence. Journals of the Atmospheric Sciences, 2009, 66, 1685-1697.	1.7	66
24	New relations for correlation functions in Navierâ€“Stokes turbulence. Journal of Fluid Mechanics, 2010, 644, 465-472.	3.4	55
25	Anisotropic nonperturbative zero modes for passively advected magnetic fields. Physical Review E, 1999, 60, R3483-R3486.	2.1	53
26	Droplet condensation in turbulent flows. Europhysics Letters, 2005, 70, 775-781.	2.0	50
27	Nonuniversality of the Scaling Exponents of a Passive Scalar Convected by a Random Flow. Physical Review Letters, 1996, 76, 3707-3710.	7.8	47
28	On Lagrangian single-particle statistics. Physics of Fluids, 2012, 24, 055102.	4.0	46
29	Turbulence on a Fractal Fourier Set. Physical Review Letters, 2015, 115, 264502.	7.8	43
30	The Role of Hydrodynamic Processes on Anchovy Eggs and Larvae Distribution in the Sicily Channel (Mediterranean Sea): A Case Study for the 2004 Data Set. PLoS ONE, 2015, 10, e0123213.	2.5	37
31	Numerical simulations of aggregate breakup in bounded and unbounded turbulent flows. Journal of Fluid Mechanics, 2015, 766, 104-128.	3.4	36
32	Single-Point Velocity Distribution in Turbulence. Physical Review Letters, 1997, 79, 4159-4161.	7.8	35
33	Large-scale dynamo produced by negative magnetic eddy diffusivities. Geophysical and Astrophysical Fluid Dynamics, 1999, 91, 131-146.	1.2	35
34	Effects of vortex filaments on the velocity of tracers and heavy particles in turbulence. Physics of Fluids, 2006, 18, 081702.	4.0	35
35	Effects of Forcing in Three-Dimensional Turbulent Flows. Physical Review Letters, 2004, 92, 094503.	7.8	34
36	Anomalous and dimensional scaling in anisotropic turbulence. Physical Review E, 2002, 66, 056306.	2.1	33

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37	The decay of homogeneous anisotropic turbulence. Physics of Fluids, 2003, 15, 2105-2112.	4.0	33
38	Breakup of small aggregates driven by turbulent hydrodynamical stress. Physical Review E, 2012, 85, 025301.	2.1	32
39	Lagrangian simulations and interannual variability of anchovy egg and larva dispersal in the Sicily Channel. Journal of Geophysical Research: Oceans, 2014, 119, 1306-1323.	2.6	31
40	Acceleration and vortex filaments in turbulence. Journal of Turbulence, 2005, 6, N15.	1.4	29
41	Lagrangian and Eulerian descriptions of inertial particles in random flows. Journal of Turbulence, 2007, 8, N16.	1.4	28
42	Flux correlations in supersonic isothermal turbulence. Journal of Fluid Mechanics, 2012, 713, 482-490.	3.4	28
43	Anomalous scaling and universality in hydrodynamic systems with power-law forcing. New Journal of Physics, 2004, 6, 37-37.	2.9	26
44	Lagrangian statistics for Navierâ€“Stokes turbulence under Fourier-mode reduction: fractal and homogeneous decimations. New Journal of Physics, 2016, 18, 113047.	2.9	26
45	Internal stresses and breakup of rigid isostatic aggregates in homogeneous and isotropic turbulence. Journal of Fluid Mechanics, 2014, 755, 365-396.	3.4	25
46	Intermittency in the relative separations of tracers and of heavy particles in turbulent flows. Journal of Fluid Mechanics, 2014, 757, 550-572.	3.4	23
47	Could waves mix the ocean?. Journal of Fluid Mechanics, 2009, 638, 1-4.	3.4	20
48	Inverse Statistics of Smooth Signals: The Case of Two Dimensional Turbulence. Physical Review Letters, 2001, 87, 124501.	7.8	19
49	Inverse velocity statistics in two-dimensional turbulence. Physics of Fluids, 2003, 15, 1012-1020.	4.0	18
50	Active and passive scalar intermittent statistics in turbulent atmospheric convection. Physica D: Nonlinear Phenomena, 2012, 241, 251-259.	2.8	18
51	Three-point correlation function of a scalar mixed by an almost smooth random velocity field. Physical Review E, 1997, 55, R4881-R4884.	2.1	17
52	Passive scalar intermittency in compressible flow. Physical Review E, 1999, 60, R1138-R1141.	2.1	17
53	Introduction to Focus Issue: Two-Dimensional Turbulence. Physics of Fluids, 2017, 29, .	4.0	17
54	An accurate and efficient Lagrangian sub-grid model. Physics of Fluids, 2014, 26, 095101.	4.0	15

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55	Large-scale properties of passive scalar advection. Physics of Fluids, 1999, 11, 2269-2279.	4.0	14
56	Lagrangian statistics in fully developed turbulence. Journal of Turbulence, 2006, 7, N6.	1.4	14
57	On the vortex dynamics in fractal Fourier turbulence. European Physical Journal E, 2016, 39, 49.	1.6	14
58	Two complementary descriptions of intermittency. Physical Review E, 1998, 57, R1231-R1234.	2.1	13
59	Nodal patterns of floaters in surface waves. European Physical Journal: Special Topics, 2007, 145, 125-136.	2.6	13
60	Theoretical and numerical study of highly anisotropic turbulent flows. European Journal of Mechanics, B/Fluids, 2004, 23, 401-414.	2.5	12
61	A new assessment of the second-order moment of Lagrangian velocity increments in turbulence. Journal of Turbulence, 2013, 14, 34-48.	1.4	12
62	Pair and multi-particle dispersion in numerical simulations of convective boundary layer turbulence. Physics of Fluids, 2014, 26, .	4.0	11
63	Anisotropies and Universality of Buoyancy-Dominated Turbulent Fluctuations: A Large-Eddy Simulation Study. Journals of the Atmospheric Sciences, 2007, 64, 2642-2656.	1.7	10
64	Statistical behaviour of isotropic and anisotropic fluctuations in homogeneous turbulence. Physica D: Nonlinear Phenomena, 2008, 237, 1969-1975.	2.8	10
65	Scalar Turbulence in Convective Boundary Layers by Changing the Entrainment Flux. Journals of the Atmospheric Sciences, 2013, 70, 248-265.	1.7	10
66	Enhancement of Parametric Effects in Polariton Waveguides Induced by Dipolar Interactions. Physical Review Letters, 2021, 126, 137401.	7.8	9
67	Viscous Instanton for Burgers' Turbulence. International Journal of Modern Physics B, 1997, 11, 3223-3245.	2.0	8
68	Coherent structures in random shell models for passive scalar advection. Physical Review E, 1999, 60, R6299-R6302.	2.1	8
69	Universality of anisotropic turbulence. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 194-200.	2.6	7
70	Response of shearâ€activated nanotherapeutic particles in a clotâ€obstructed blood vessel by <scp>CFDâ€DEM</scp> simulations. Canadian Journal of Chemical Engineering, 2022, 100, 3562-3574.	1.7	7
71	Dynamics of a Vortex Lattice in an Expanding Polariton Quantum Fluid. Physical Review Letters, 2021, 127, 047401.	7.8	5
72	THEORY OF RANDOM ADVECTION IN TWO DIMENSIONS. International Journal of Modern Physics B, 1996, 10, 2273-2309.	2.0	4

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73	Effects of vertical shear in modelling horizontal oceanic dispersion. Ocean Science, 2016, 12, 207-216.	3.4	4
74	Nodal lines in turbulence. European Physical Journal: Special Topics, 2007, 145, 211-216.	2.6	1
75	The role of subsidence in a weakly unstable marine boundary layer: a case study. Nonlinear Processes in Geophysics, 2014, 21, 489-501.	1.3	1
76	The hysteresis cycle of concentration in a solution droplet under changing humidity. EPJ Applied Physics, 2014, 67, 11101.	0.7	0
77	Heavy Particle Clustering in Turbulent Flows. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 79-84.	0.2	0