AdriÃ¡n Lozano-DurÃ¡n

List of Publications by Year
in descending order

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44 papers	1,743 citations	331670 21 h-index	315739 38 g-index
44 all docs	44 docs citations	44 times ranked	907 citing authors

#	Article	IF	Citations
1	Performance of Wall-Modeled LES with Boundary-Layer-Conforming Grids for External Aerodynamics. AIAA Journal, 2022, 60, 747-766.	2.6	21
2	Assessment of information-theoretic-based control of turbulent flow separation of an aircraft in stall. , 2022, , .		0
3	Amplitude and wall-normal distance variation of small scales in turbulent boundary layers. Physical Review Fluids, 2022, 7, .	2.5	4
4	Flow Control in Wings and Discovery of Novel Approaches via Deep Reinforcement Learning. Fluids, 2022, 7, 62.	1.7	29
5	Information-Theoretic Approach for Subgrid-Scale Modeling for High-Speed Compressible Wall Turbulence. , 2022, , .		0
6	Information-theoretic formulation of dynamical systems: Causality, modeling, and control. Physical Review Research, 2022, 4, .	3.6	13
7	Effect of Wall Boundary Conditions on a Wall-Modeled Large-Eddy Simulation in a Finite-Difference Framework. Fluids, 2021, 6, 112.	1.7	18
8	Nonlinear mechanism of the self-sustaining process in the buffer and logarithmic layer of wall-bounded flows. Journal of Fluid Mechanics, 2021, 914, .	3.4	13
9	Cause-and-effect of linear mechanisms sustaining wall turbulence. Journal of Fluid Mechanics, 2021, 914, .	3.4	23
10	Wall-Modeled Large-Eddy Simulation of Turbulent Boundary Layers with Mean-Flow Three-Dimensionality. AIAA Journal, 2021, 59, 1707-1717.	2.6	9
11	Information transfer between turbulent boundary layers and porous media. Journal of Fluid Mechanics, 2021, 920, .	3.4	13
12	Intense Reynolds-stress events in turbulent ducts. International Journal of Heat and Fluid Flow, 2021, 89, 108802.	2.4	7
13	Causality of energy-containing eddies in wallÂturbulence. Journal of Fluid Mechanics, 2020, 882, .	3.4	34
14	Resolvent-based estimation of spaceâ€“time flowÂstatistics. Journal of Fluid Mechanics, 2020, 883, .	3.4	66
15	Non-equilibrium three-dimensional boundary layers at moderate Reynolds numbers. Journal of Fluid Mechanics, 2020, 883, .	3.4	34
16	On the structure of streamwise wall-shear stress fluctuations in turbulent channel flows. Journal of Fluid Mechanics, 2020, 903, .	3.4	24
17	Prediction of trailing edge separation on the NASA Juncture Flow using wall-modeled LES. , 2020, , .		13
18	Alternative physics to understand wall turbulence: Navierâ€“Stokes equations with modified linear dynamics. Journal of Physics: Conference Series, 2020, 1522, 012003.	0.4	0

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19	On the structure of streamwise wall-shear stress fluctuations in turbulent channel flows. Journal of Physics: Conference Series, 2020, 1522, 012010.	0.4	1
20	Active flow control for external aerodynamics: from micro air vehicles to a full aircraft in stall. Journal of Physics: Conference Series, 2020, 1522, 012017.	0.4	5
21	Uncovering Townsendâ€™s wall-attached eddies in low-Reynolds-number wall turbulence. Journal of Fluid Mechanics, 2020, 889, .	3.4	23
22	The coherent structure of the kinetic energy transfer in shear turbulence. Journal of Fluid Mechanics, 2020, 892, .	3.4	23
23	Effect of a weak current on wind-generated waves in the wrinkle regime. Physical Review Fluids, 2020, 5, .	2.5	4
24	Turbulent windprint on a liquid surface. Journal of Fluid Mechanics, 2019, 873, 1020-1054.	3.4	18
25	The Turbulence Cascade in Physical Space. ERCOFTAC Series, 2019, , 45-50.	0.1	0
26	Identity of attached eddies in turbulent channel flows with bidimensional empirical mode decomposition. Journal of Fluid Mechanics, 2019, 870, 1037-1071.	3.4	48
27	Error scaling of large-eddy simulation in the outer region of wall-bounded turbulence. Journal of Computational Physics, 2019, 392, 532-555.	3.8	25
28	Characteristic scales of Townsendâ€™s wall-attached eddies. Journal of Fluid Mechanics, 2019, 868, 698-725.	3.4	35
29	Dynamic slip wall model for large-eddyÂsimulation. Journal of Fluid Mechanics, 2019, 859, 400-432.	3.4	80
30	Turbulence intensities in large-eddy simulation of wall-bounded flows. Physical Review Fluids, 2018, 3, .	2.5	54
31	Modeling boundary-layer transition in direct and large-eddy simulations using parabolized stability equations. Physical Review Fluids, 2018, 3, .	2.5	34
32	Mandala-inspired representation of the turbulent energy cascade. Physical Review Fluids, 2018, 3, 100505.	2.5	2
33	Wall turbulence with constrained energy extraction from the mean flow. , 2018, 2018, 209-220.		0
34	Coherent structures in statistically stationary homogeneous shear turbulence. Journal of Fluid Mechanics, 2017, 816, 167-208.	3.4	65
35	Transitionalâ€“turbulent spots and turbulentâ€“turbulent spots in boundary layers. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5292-E5299.	7.1	85
36	A multifractal model for the momentum transfer process in wall-bounded flows. Journal of Fluid Mechanics, 2017, 824, .	3.4	27

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37	Algorithm 964. ACM Transactions on Mathematical Software, 2016, 42, 1-19.	2.9	11
38	A statistical state dynamics-based study of the structure and mechanism of large-scale motions in plane Poiseuille flow. Journal of Fluid Mechanics, 2016, 809, 290-315.	3.4	44
39	Multiscale analysis of the topological invariants in the logarithmic region of turbulent channels at a friction Reynolds number of 932. Journal of Fluid Mechanics, 2016, 803, 356-394.	3.4	41
40	Numerically accurate computation of the conditional trajectories of the topological invariants in turbulent flows. Journal of Computational Physics, 2015, 295, 805-814.	3.8	10
41	Time-resolved evolution of coherent structures in turbulent channels: characterization of eddiesÂand cascades. Journal of Fluid Mechanics, 2014, 759, 432-471.	3.4	172
42	Effect of the computational domain on direct simulations of turbulent channels up to ReÏ„ = 4200. Physics of Fluids, 2014, 26, .	4.0	318
43	Aspect ratio effects in turbulent duct flows studied through direct numerical simulation. Journal of Turbulence, 2014, 15, 677-706.	1.4	98
44	The three-dimensional structure of momentum transfer in turbulent channels. Journal of Fluid Mechanics, 2012, 694, 100-130.	3.4	199