Lyazid

List of Publications by Year
in descending order

135 papers	2,591 citations	201575 27 h-index	223716 46 g-index
143 all docs	143 docs citations	143 times ranked	1246 citing authors

#	Article	IF	Citations
1	Direct numerical simulations of turbulent channel flow with transverse square bars on one wall. Journal of Fluid Mechanics, 2003, 491, 229-238.	1.4	325
2	Effects of initial conditions in decaying turbulence generated by passive grids. Journal of Fluid Mechanics, 2007, 585, 395-420.	1.4	155
3	The turbulent boundary layer over transverse square cavities. Journal of Fluid Mechanics, 1999, 395, 271-294.	1.4	136
4	Investigation of flow around a pair of side-by-side square cylinders using the lattice Boltzmann method. Computers and Fluids, 2006, 35, 1093-1107.	1.3	130
5	Structure of turbulent channel flow with square bars on one wall. International Journal of Heat and Fluid Flow, 2004, 25, 384-392.	1.1	116
6	Simulation of gas flow in microchannels with a sudden expansion or contraction. Journal of Fluid Mechanics, 2005, 530, 135-144.	1.4	74
7	Reynolds stress anisotropy of turbulent rough wall layers. Experiments in Fluids, 2002, 33, 31-37.	1.1	67
8	Lattice-Boltzmann simulation of grid-generated turbulence. Journal of Fluid Mechanics, 2006, 552, 13.	1.4	55
9	A turbulent boundary layer over a two-dimensional rough wall. Experiments in Fluids, 2007, 44, 37-47.	1.1	54
10	Low-Reynolds-number effects in a turbulent boundary layer. Experiments in Fluids, 1995, 19, 61-68.	1.1	49
11	Effect of initial conditions on decaying grid turbulence at low R Î». Experiments in Fluids, 2005, 39, 865-874.	1.1	46
12	Boundedness of the velocity derivative skewness in various turbulent flows. Journal of Fluid Mechanics, 2015, 781, 727-744.	1.4	41
13	Anisotropy of the dissipation tensor in a turbulent boundary layer. Physics of Fluids, 1994, 6, 2475-2479.	1.6	40
14	Power law of decaying homogeneous isotropic turbulence at low Reynolds number. Physical Review E, 2006, 73, 066304.	0.8	38
15	Heat transfer in a turbulent channel flow with square bars or circular rods on one wall. Journal of Fluid Mechanics, 2015, 776, 512-530.	1.4	38
16	Consequences of self-preservation on the axis of a turbulent round jet. Journal of Fluid Mechanics, 2014, 748, .	1.4	36
17	Laminar boundary layer over riblets. Physics of Fluids, 1994, 6, 2993-2999.	1.6	33
18	LDA measurements in a turbulent boundary layer over a d-type rough wall. Experiments in Fluids, 1994, 16, 323-329.	1.1	32

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19	Self-preservation of rough-wall turbulent boundary layers. European Journal of Mechanics, B/Fluids, 2001, 20, 591-602.	1.2	31
20	Influence of localised wall suction on the anisotropy of the Reynolds stress tensor in a turbulent boundary layer. Experiments in Fluids, 2004, 37, 187-193.	1.1	31
21	Collapse of the turbulent dissipative range on Kolmogorov scales. Physics of Fluids, 2014, 26, .	1.6	31
22	Combined influence of the Reynolds number and localised wall suction on a turbulent boundary layer. Experiments in Fluids, 2003, 35, 199-206.	1.1	30
23	Power-law exponent in the transition period of decay in grid turbulence. Journal of Fluid Mechanics, 2015, 779, 544-555.	1.4	29
24	Small scale turbulence and the finite Reynolds number effect. Physics of Fluids, 2017, 29, .	1.6	29
25	Simulation of gas flow in microchannels with a single bend. Computers and Fluids, 2009, 38, 1629-1637.	1.3	28
26	On the normalized dissipation parameter in decaying turbulence. Journal of Fluid Mechanics, 2017, 817, 61-79.	1.4	28
27	LDA measurements in low Reynolds number turbulent boundary layer. Experiments in Fluids, 1993, 14, 280-288.	1.1	27
28	Finite Reynolds number effect on the scaling range behaviour of turbulent longitudinal velocity structure functions. Journal of Fluid Mechanics, 2017, 820, 341-369.	1.4	26
29	A spectral chart method for estimating the mean turbulent kinetic energy dissipation rate. Experiments in Fluids, 2012, 53, 1005-1013.	1.1	24
30	Transport equation for the mean turbulent energy dissipation rate on the centreline of a fully developed channel flow. Journal of Fluid Mechanics, 2015, 777, 151-177.	1.4	23
31	Finite Reynolds number effect and the 4/5 law. Physical Review Fluids, 2019, 4, .	1.0	22
32	Microfluidic characteristics of a multi-holed baffle plate micro-reactor. International Journal of Heat and Fluid Flow, 2006, 27, 1069-1077.	1.1	21
33	Transport equation for the isotropic turbulent energy dissipation rate in the far-wake of a circular cylinder. Journal of Fluid Mechanics, 2015, 784, 109-129.	1.4	21
34	Reappraisal of the velocity derivative flatness factor in various turbulent flows. Journal of Fluid Mechanics, 2018, 847, 244-265.	1.4	20
35	Experimental study of flow characteristics of an oblique impinging jet. Experiments in Fluids, 2020, 61, 1.	1.1	20
36	Velocity and Passive Scalar Characteristics in a Round Jet with Grids at the Nozzle Exit. Flow, Turbulence and Combustion, 2004, 72, 199-218.	1.4	19

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37	Momentum and heat transport in a three-dimensional transitional wake of a heated square cylinder. Journal of Fluid Mechanics, 2009, 640, 109-129.	1.4	19
38	KÃ¡rmÃ¡n-Howarth closure equation on the basis of a universal eddy viscosity. Physical Review E, 2013, 88, 011003.	0.8	19
39	Complete self-preservation on the axis of a turbulent round jet. Journal of Fluid Mechanics, 2016, 790, 57-70.	1.4	18
40	Laser Doppler anemometer measurements of turbulent boundary layer over a riblet surface. AIAA Journal, 1996, 34, 1007-1012.	1.5	17
41	On the anisotropy of a low-Reynolds-number grid turbulence. Journal of Fluid Mechanics, 2012, 702, 332-353.	1.4	17
42	On the destruction coefficients for slightly heated decaying grid turbulence. International Journal of Heat and Fluid Flow, 2013, 43, 129-136.	1.1	17
43	A general self-preservation analysis for decaying homogeneous isotropic turbulence. Journal of Fluid Mechanics, 2015, 773, 345-365.	1.4	17
44	Complete self-preservation along the axis of a circular cylinder far wake. Journal of Fluid Mechanics, 2016, 786, 253-274.	1.4	17
45	Advantages of using a power law in a low R Î¸ turbulent boundary layer. Experiments in Fluids, 1997, 22, 348-350.	1.1	16
46	Invariants for slightly heated decaying grid turbulence. Journal of Fluid Mechanics, 2013, 727, 379-406.	1.4	15
47	Breakdown of Kolmogorov's first similarity hypothesis in grid turbulence. Journal of Turbulence, 2014, 15, 596-610.	0.5	15
48	Drag of a turbulent boundary layer with transverse 2D circular rods on the wall. Experiments in Fluids, 2015, 56, 1.	1.1	15
49	Self-preservation in a zero pressure gradient rough-wall turbulent boundary layer. Journal of Fluid Mechanics, 2016, 788, 57-69.	1.4	15
50	Relationship between temporal and spatial averages in grid turbulence. Journal of Fluid Mechanics, 2013, 730, 593-606.	1.4	14
51	Comparison between velocity- and vorticity-based POD methods in a turbulent wake. Experiments in Fluids, 2015, 56, 1.	1.1	14
52	Can a turbulent boundary layer become independent of the Reynolds number?. Journal of Fluid Mechanics, 2018, 851, 1-22.	1.4	14
53	Scale invariance in finite Reynolds number homogeneous isotropic turbulence. Journal of Fluid Mechanics, 2019, 864, 244-272.	1.4	14
54	Numerical investigation of laminar mixing in a coaxial microreactor. Journal of Fluid Mechanics, 2006, 568, 223.	1.4	13

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55	Skewness and flatness factors of the longitudinal velocity derivative in wall-bounded flows. Physical Review Fluids, 2017, 2, .	1.0	13
56	Numerical and experimental investigation of the laminar boundary layer over riblets. Flow, Turbulence and Combustion, 1989, 46, 263-270.	0.2	11
57	Calculation of the effect of concentrated wall suction on a turbulent boundary layer using a second-order moment closure. International Journal of Heat and Fluid Flow, 2001, 22, 487-494.	1.1	11
58	Structure of a turbulent crossbar near-wake studied by means of lattice Boltzmann simulation. Physical Review E, 2008, 77, 036310.	0.8	11
59	Effect of a small axisymmetric contraction on grid turbulence. Experiments in Fluids, 2010, 49, 3-10.	1.1	11
60	Statistics of the turbulent kinetic energy dissipation rate and its surrogates in a square cylinder wake flow. Physics of Fluids, 2014, 26, .	1.6	11
61	Streamwise evolution of a high-Schmidt-number passive scalar in a turbulent plane wake. Experiments in Fluids, 2001, 31, 186-192.	1.1	10
62	Guidelines for Modeling a 2D Rough Wall Channel Flow. Flow, Turbulence and Combustion, 2006, 77, 41-57.	1.4	10
63	Transport equation for the mean turbulent energy dissipation rate in low- grid turbulence. Journal of Fluid Mechanics, 2014, 747, 288-315.	1.4	10
64	A velocity defect chart method for estimating the friction velocity in turbulent boundary layers. Fluid Dynamics Research, 2019, 51, 045502.	0.6	10
65	Roughness effect in an initially laminar channel flow. Journal of Fluid Mechanics, 2020, 892, .	1.4	10
66	Self-preservation relation to the Kolmogorov similarity hypotheses. Physical Review Fluids, 2017, 2, .	1.0	10
67	A new equivalent sand grain roughness relation for two-dimensional rough wall turbulent boundary layers. Journal of Fluid Mechanics, 2022, 940, .	1.4	10
68	Scaling range of velocity and passive scalar spectra in grid turbulence. Physics of Fluids, 2012, 24, .	1.6	9
69	Scaling of the turbulent energy dissipation correlation function. Journal of Fluid Mechanics, 2020, 891, .	1.4	9
70	High resolution conformal mesh computations for V, U or L groove riblets in laminar and turbulent boundary layers. Fluid Mechanics and Its Applications, 1991, , 65-92.	0.1	9
71	Modeling of the Reynolds Stress Transport Equation. AIAA Journal, 1997, 35, 450-455.	1.5	7
72	Influence of localised double suction on a turbulent boundary layer. Journal of Fluids and Structures, 2007, 23, 787-798.	1.5	7

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73	Anisotropy measurements in the boundary layer over a flat plate with suction. Experimental Thermal and Fluid Science, 2009, 33, 1106-1111.	1.5	7
74	Behaviour of the energy dissipation coefficient in a rough wall turbulent boundary layer. Experiments in Fluids, 2018, 59, 1.	1.1	7
75	Can small-scale turbulence approach a quasi-universal state?. Physical Review Fluids, 2019, 4, .	1.0	7
76	Riblet modelling using a second-moment closure. Flow, Turbulence and Combustion, 1995, 54, 249-266.	0.2	6
77	A note on the velocity derivative flatness factor in decaying HIT. Physics of Fluids, 2017, 29, 051702.	1.6	6
78	Reynolds number effect on the velocity derivative flatness factor. Journal of Fluid Mechanics, 2018, 856, 426-443.	1.4	6
79	Effects of wall suction on a 2D rough wall turbulent boundary layer. Experiments in Fluids, 2019, 60, 1.	1.1	6
80	Assessment of large-scale forcing in isotropic turbulence using a closed KÃ¡rmÃ¡nâ€"Howarth equation. Physics of Fluids, 2020, 32, 055104.	1.6	6
81	Spatial resolution effects on measurements in a rough wall turbulent boundary layer. Experiments in Fluids, 2021, 62, 1.	1.1	6
82	Study of the interaction of two decaying grid-generated turbulent flows. Physics of Fluids, 2021, 33, 095122.	1.6	6
83	Flow characterization in the uphill region of pulsed oblique round jet. Physics of Fluids, 2022, 34, .	1.6	6
84	Riblet flow calculation with a low Reynolds number Îº - Îµ model. Flow, Turbulence and Combustion, 1993, 50, 267-282.	0.2	5
85	Characteristics of fluorescein dye and temperature fluctuations in a turbulent near-wake. Experiments in Fluids, 2000, 28, 462-470.	1.1	5
86	Decay of passive-scalar fluctuations in slightly stretched grid turbulence. Experiments in Fluids, 2012, 53, 909-923.	1.1	5
87	Effect of Mesh Grids on the Turbulent Mixing Layer of an Axisymmetric Jet. Heat Transfer Engineering, 2013, 34, 1216-1225.	1.2	5
88	On self-preservation and log-similarity in a slightly heated axisymmetric mixing layer. Physics of Fluids, 2014, 26, 075106.	1.6	5
89	Reynolds number effect on the response of a rough wall turbulent boundary layer to local wall suction. Journal of Fluid Mechanics, 2021, 916, .	1.4	5
90	Bypass transition mechanism in a rough wall channel flow. Physical Review Fluids, 2018, 3, .	1.0	5

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91	Approach to the 4/3 law for turbulent pipe and channel flows examined through a reformulated scale-by-scale energy budget. Journal of Fluid Mechanics, 2022, 931, .	1.4	5
92	Outer turbulent boundary layer similarities for different 2D surface roughnesses at matched Reynolds number. International Journal of Heat and Fluid Flow, 2022, 94, 108940.	1.1	5
93	The measurement of in a turbulent boundary layer over a riblet surface. International Journal of Heat and Fluid Flow, 1997, 18, 183-187.	1.1	4
94	LIF based detection of low-speed streaks. Experiments in Fluids, 2004, 36, 600-603.	1.1	4
95	Scale-by-scale energy budget in a turbulent boundary layer over a rough wall. International Journal of Heat and Fluid Flow, 2015, 55, 2-8.	1.1	4
96	Mathematical constraints on the scaling exponents in the inertial range of fluid turbulence. Physics of Fluids, 2021, 33, .	1.6	4
97	Combined effect of roughness and suction on heat transfer in a laminar channel flow. International Communications in Heat and Mass Transfer, 2021, 126, 105377.	2.9	4
98	Dynamics of wall jet flow under external pulsation. Physics of Fluids, 2021, 33, 095103.	1.6	4
99	Riblet flow calculation with a low Reynolds number k - Îµ model. Fluid Mechanics and Its Applications, 1993, , 267-282.	0.1	4
100	Study of a rough-wall turbulent boundary layer under pressure gradient. Journal of Fluid Mechanics, 2022, 938, .	1.4	4
101	Response of mean turbulent energy dissipation rate and spectra to concentrated wall suction. Experiments in Fluids, 2007, 44, 159-165.	1.1	3
102	Use of PIV to highlight possible errors in hot-wire Reynolds stress data over a 2D rough wall. Experiments in Fluids, 2014, 55, 1.	1.1	3
103	Secondary vortex street in the intermediate wake of a circular cylinder. Experiments in Fluids, 2018, 59, 1.	1.1	3
104	Estimation of mean turbulent kinetic energy and temperature variance dissipation rates using a spectral chart method. Physics of Fluids, 2020, 32, 055109.	1.6	3
105	Effect of pulsation on the wall jet flow in the near region of an impinging jet. Experiments in Fluids, 2021, 62, 1.	1.1	3
106	Modeling the third-order velocity structure function in the scaling range at finite Reynolds numbers. Journal of Mathematical Physics, 2021, 62, 083102.	0.5	3
107	Low Reynolds Number Effects on the Inner Region of a Turbulent Boundary Layer. , 1996, , 3-15.		3
108	KÃ¡rmÃ¡nâ€"Howarth solutions of homogeneous isotropic turbulence. Journal of Fluid Mechanics, 2022, 932, .	1.4	3

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109	Near-field measurements and development of a new boundary layer over a flat plate with localized suction. Experiments in Fluids, 2010, 48, 747-762.	1.1	2
110	The Effects of Magnetic Field on the Fluid Flow through a Rotating Straight Duct with Large Aspect Ratio. Procedia Engineering, 2013, 56, 239-244.	1.2	2
111	Boundedness of the mixed velocity-temperature derivative skewness in homogeneous isotropic turbulence. Physics of Fluids, 2016, 28, 095102.	1.6	2
112	Towards local isotropy of higher-order statistics in the intermediate wake. Experiments in Fluids, 2016, 57, 1.	1.1	2
113	Sensitivity analysis of the second and third-order velocity structure functions to the Reynolds number in decaying and forced isotropic turbulence using the EDQNM model. European Journal of Mechanics, B/Fluids, 2021, 88, 229-242.	1.2	2
114	Effect of Riblets on either Fully Developed Boundary Layers or Internal Flows in Laminar Regime. Fluid Mechanics and Its Applications, 1990, , 141-157.	0.1	2
115	Modeling of the Reynolds stress transport equation. AIAA Journal, 1997, 35, 450-455.	1.5	2
116	Spanwise vorticity measurements in a perturbed boundary layer. Experiments in Fluids, 2005, 39, 152-155.	1.1	1
117	Examination of anisotropy of the small-scale motion in a perturbed low Reynolds number turbulent boundary layer. Experimental Thermal and Fluid Science, 2007, 32, 309-315.	1.5	1
118	Spectrum of a passive scalar in stretched grid turbulence at low Reynolds numbers. Journal of Physics: Conference Series, 2011, 318, 052046.	0.3	1
119	Effects of Low Reynolds Number on Decay Exponent in Grid Turbulence. Procedia Engineering, 2014, 90, 327-332.	1.2	1
120	Empirical Correlations for Slightly Heated Decaying Passive-Grid Turbulence. Heat Transfer Engineering, 2014, 35, 1482-1490.	1.2	1
121	The lattice Boltzmann method and the problem of turbulence. AIP Conference Proceedings, 2015, , .	0.3	1
122	K41 Versus K62: Recent Developments. Lecture Notes in Mechanical Engineering, 2019, , 3-14.	0.3	1
123	An empirical expression for on the axis of a slightly heated turbulent round jet. Journal of Fluid Mechanics, 2019, 867, 392-413.	1.4	1
124	POD Analysis of the Near-Wall Region of a Rough Wall Turbulent Boundary Layer. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 49-54.	0.1	1
125	Transport equations for the normalized <i>n</i>th-order moments of velocity derivatives in grid turbulence. Journal of Fluid Mechanics, 2022, 930, .	1.4	1
126	Interaction Between Wakes Shed by Two Side-by-Side Square Cylinders. , 2005, , .		0

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127	Lattice Boltzmann Simulation of Pulsed Jet inÂT-Shaped Micromixer. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 167-174.	0.1	0
128	Momentum and scalar transport in a localised synthetic turbulence in a channel flow with a short contraction. Journal of Physics: Conference Series, 2011, 318, 052047.	0.3	0
129	CALCULATION OF A LOW-SHEAR TURBULENT BOUNDARY LAYER USING A SECOND-MOMENT ORDER CLOSURE. , 2002, , 413-422.		0
130	Effect of a 2-D Rough Wall on the Anisotropy of a Turbulent Channel Flow. , 2005, , 207-216.		0
131	Destruction coefficients for mean dissipation rates in grid turbulence. , 2012, , .		0
132	Turbulent crossbar wake with passive scalar. Symposium on Turbulence, Heat and Mass Transfer. , 2012, , .		0
133	Turbulent Kinetic Energy Budget in the Far Field of a Square Cylinder Wake. Lecture Notes in Mechanical Engineering, 2016, , 169-174.	0.3	0
134	Towards Local Isotropy of Higher Order Statistics in Wakes. Springer Proceedings in Physics, 2016, , 119-124.	0.1	0
135	Near-Wake Decaying Turbulence Behind a Cross-bar. , 2007, , 633-635.		0