

Philipp Schlatter

List of Publications by Year in descending order

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227
papers

9,765
citations

50170

46
h-index

42291

92
g-index

237
all docs

237
docs citations

237
times ranked

4193
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ visualization of large-scale turbulence simulations in Nek5000 with ParaView Catalyst. Journal of Supercomputing, 2022, 78, 3605-3620.	2.4	5
2	Techniques for Turbulence Tripping of Boundary Layers in RANS Simulations. Flow, Turbulence and Combustion, 2022, 108, 661-682.	1.4	6
3	Modeling the Turbulent Wake Behind a Wall-Mounted Square Cylinder. Logic Journal of the IGPL, 2022, 30, 263-276.	1.3	7
4	Applying Bayesian optimization with Gaussian process regression to computational fluid dynamics problems. Journal of Computational Physics, 2022, 449, 110788.	1.9	34
5	Strong Scaling of OpenACC enabled Nek5000 on several GPU based HPC systems. , 2022, , .		6
6	Large-scale and small-scale contribution to the skin friction reduction in a modified turbulent boundary layer by a large-eddy break-up device. Physical Review Fluids, 2022, 7, .	1.0	4
7	An adverse-pressure-gradient turbulent boundary layer with nearly constant up to. Journal of Fluid Mechanics, 2022, 939, .	1.4	15
8	Topology optimization of unsteady flows using the spectral element method. Computers and Fluids, 2022, 239, 105387.	1.3	6
9	Decomposition of the mean friction drag on an NACA4412 airfoil under uniform blowing/suction. Journal of Fluid Mechanics, 2022, 932, .	1.4	13
10	RANS Modelling of a NACA4412 Wake Using Wind Tunnel Measurements. Fluids, 2022, 7, 153.	0.8	4
11	An uncertainty-quantification framework for assessing accuracy, sensitivity, and robustness in computational fluid dynamics. Journal of Computational Science, 2022, 62, 101688.	1.5	7
12	Physics-informed neural networks for solving Reynolds-averaged Navier–Stokes equations. Physics of Fluids, 2022, 34, .	1.6	95
13	Predicting the temporal dynamics of turbulent channels through deep learning. International Journal of Heat and Fluid Flow, 2022, 96, 109010.	1.1	7
14	The skin-friction coefficient of a turbulent boundary layer modified by a large-eddy break-up device. Physics of Fluids, 2021, 33, .	1.6	5
15	UQit: A Python package for uncertainty quantification (UQ) in computational fluid dynamics (CFD). Journal of Open Source Software, 2021, 6, 2871.	2.0	8
16	High-Performance Spectral Element Methods on Field-Programmable Gate Arrays : Implementation, Evaluation, and Future Projection. , 2021, , .		8
17	Interscale transport mechanisms in turbulent boundary layers. Journal of Fluid Mechanics, 2021, 921, .	1.4	23
18	Intense Reynolds-stress events in turbulent ducts. International Journal of Heat and Fluid Flow, 2021, 89, 108802.	1.1	7

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19	Aerodynamic Free-Flight Conditions in Wind Tunnel Modelling through Reduced-Order Wall Inserts. <i>Fluids</i> , 2021, 6, 265.	0.8	3
20	Recurrent neural networks and Koopman-based frameworks for temporal predictions in a low-order model of turbulence. <i>International Journal of Heat and Fluid Flow</i> , 2021, 90, 108816.	1.1	43
21	On numerical uncertainties in scale-resolving simulations of canonical wall turbulence. <i>Computers and Fluids</i> , 2021, 227, 105024.	1.3	12
22	Spanwise-coherent hydrodynamic waves around flat plates and airfoils. <i>Journal of Fluid Mechanics</i> , 2021, 927, .	1.4	14
23	Notes on Percolation Analysis of Sampled Scalar Fields. <i>Mathematics and Visualization</i> , 2021, , 39-54.	0.4	1
24	Flow Structures on a Planar Food and Drug Administration (FDA) Nozzle at Low and Intermediate Reynolds Number. <i>Fluids</i> , 2021, 6, 4.	0.8	6
25	Convolutional-network models to predict wall-bounded turbulence from wall quantities. <i>Journal of Fluid Mechanics</i> , 2021, 928, .	1.4	97
26	Uniform blowing and suction applied to nonuniform adverse-pressure-gradient wing boundary layers. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	12
27	Soft Computing Techniques to Analyze the Turbulent Wake of a Wall-Mounted Square Cylinder. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 577-586.	0.5	4
28	Adaptive mesh refinement for steady flows in Nek5000. <i>Computers and Fluids</i> , 2020, 197, 104352.	1.3	13
29	Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. <i>Experimental Thermal and Fluid Science</i> , 2020, 112, 109975.	1.5	18
30	Direct Numerical Simulations of Bypass Transition over Distributed Roughness. <i>AIAA Journal</i> , 2020, 58, 702-711.	1.5	15
31	Effect of adverse pressure gradients on turbulent wing boundary layers. <i>Journal of Fluid Mechanics</i> , 2020, 883, .	1.4	41
32	Resolvent modelling of near-wall coherent structures in turbulent channel flow. <i>International Journal of Heat and Fluid Flow</i> , 2020, 85, 108662.	1.1	23
33	Spectral proper orthogonal decomposition and resolvent analysis of near-wall coherent structures in turbulent pipe flows. <i>Journal of Fluid Mechanics</i> , 2020, 900, .	1.4	48
34	A description of turbulence intensity profiles for boundary layers with adverse pressure gradient. <i>European Journal of Mechanics, B/Fluids</i> , 2020, 84, 470-477.	1.2	7
35	Near wall coherence in wall-bounded flows and implications for flow control. <i>International Journal of Heat and Fluid Flow</i> , 2020, 86, 108683.	1.1	4
36	Global stability analysis of a 90°-bend pipe flow. <i>International Journal of Heat and Fluid Flow</i> , 2020, 86, 108742.	1.1	12

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37	Parametric dependencies of the yawed wind-turbine wake development. <i>Wind Energy</i> , 2020, 23, 1367-1380.	1.9	11
38	Aerodynamic Effects of Uniform Blowing and Suction on a NACA4412 Airfoil. <i>Flow, Turbulence and Combustion</i> , 2020, 105, 735-759.	1.4	35
39	Prediction of wall-bounded turbulence from wall quantities using convolutional neural networks. <i>Journal of Physics: Conference Series</i> , 2020, 1522, 012022.	0.3	16
40	Coherent structures in turbulent boundary layers over an airfoil. <i>Journal of Physics: Conference Series</i> , 2020, 1522, 012020.	0.3	3
41	Simulation strategies for the Food and Drug Administration nozzle using Nek5000. <i>AIP Advances</i> , 2020, 10, .	0.6	9
42	Critical Point for Bifurcation Cascades and Featureless Turbulence. <i>Physical Review Letters</i> , 2020, 124, 014501.	2.9	9
43	Enabling Adaptive Mesh Refinement for Spectral-Element Simulations of Turbulence Around Wing Sections. <i>Flow, Turbulence and Combustion</i> , 2020, 105, 415-436.	1.4	15
44	Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	17
45	Backflow events under the effect of secondary flow of Prandtl's first kind. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	14
46	Decomposition of the mean friction drag in adverse-pressure-gradient turbulent boundary layers. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	18
47	Comment on "Evolution of wall shear stress with Reynolds number in fully developed turbulent channel flow experiments". <i>Physical Review Fluids</i> , 2020, 5, .	1.0	8
48	Edge manifold as a Lagrangian coherent structure in a high-dimensional state space. <i>Physical Review Research</i> , 2020, 2, .	1.3	11
49	Effects of Different Friction Control Techniques on Turbulence Developing Around Wings. <i>ERCOFTAC Series</i> , 2020, , 305-311.	0.1	0
50	Mesh Optimization Using Dual-Weighted Error Estimators: Application to the Periodic Hill. <i>ERCOFTAC Series</i> , 2020, , 397-403.	0.1	0
51	Power-Spectral Density in Turbulent Boundary Layers on Wings. <i>ERCOFTAC Series</i> , 2020, , 11-16.	0.1	1
52	Non-conforming Elements in Nek5000: Pressure Preconditioning and Parallel Performance. <i>Lecture Notes in Computational Science and Engineering</i> , 2020, , 599-609.	0.1	2
53	Quantification of amplitude modulation in wall-bounded turbulence. <i>Fluid Dynamics Research</i> , 2019, 51, 011408.	0.6	40
54	The influence of thermal boundary conditions on turbulent forced convection pipe flow at two Prandtl numbers. <i>International Journal of Heat and Mass Transfer</i> , 2019, 144, 118601.	2.5	12

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55	OpenACC acceleration for the $ algorithm in Nek5000. Journal of Parallel and Distributed Computing, 2019, 132, 69-78.$	2.7	8
56	Flow organization in the wake of a rib in a turbulent boundary layer with pressure gradient. Experimental Thermal and Fluid Science, 2019, 108, 115-124.	1.5	8
57	The vanishing of strong turbulent fronts in bent pipes. Journal of Fluid Mechanics, 2019, 866, 487-502.	1.4	19
58	The Effect of Lossy Data Compression in Computational Fluid Dynamics Applications: Resilience and Data Postprocessing. ERCOFTAC Series, 2019, , 175-181.	0.1	0
59	On Stability and Transition in Bent Pipes. ERCOFTAC Series, 2019, , 531-536.	0.1	0
60	Transfer functions for flow predictions in wall-bounded turbulence. Journal of Fluid Mechanics, 2019, 864, 708-745.	1.4	26
61	Distributed Percolation Analysis for Turbulent Flows. , 2019, , .		6
62	Edge tracking in spatially developing boundary layer flows. Journal of Fluid Mechanics, 2019, 881, 164-181.	1.4	13
63	Predictions of turbulent shear flows using deep neural networks. Physical Review Fluids, 2019, 4, .	1.0	155
64	Bypass transition delay using oscillations of spanwise wall velocity. Physical Review Fluids, 2019, 4, .	1.0	6
65	Large-Scale Energy in Turbulent Boundary Layers: Reynolds-Number and Pressure-Gradient Effects. Springer Proceedings in Physics, 2019, , 69-74.	0.1	0
66	Characterization of turbulent coherent structures in square duct flow. Journal of Physics: Conference Series, 2018, 1001, 012008.	0.3	11
67	Edge state modulation by mean viscosity gradients. Journal of Fluid Mechanics, 2018, 838, 379-403.	1.4	4
68	Turbulence in the rotating-disk boundary layer investigated through direct numerical simulations. European Journal of Mechanics, B/Fluids, 2018, 70, 6-18.	1.2	20
69	Transition to turbulence in the rotating-disk boundary-layer flow with stationary vortices. Journal of Fluid Mechanics, 2018, 836, 43-71.	1.4	21
70	The three-dimensional structure of swirl-switching in bent pipe flow. Journal of Fluid Mechanics, 2018, 835, 86-101.	1.4	38
71	Topology optimization of heat sinks in a square differentially heated cavity. International Journal of Heat and Fluid Flow, 2018, 74, 36-52.	1.1	10
72	Flow topology of rare back flow events and critical points in turbulent channels and toroidal pipes. Journal of Physics: Conference Series, 2018, 1001, 012002.	0.3	5

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73	Direct numerical simulation of a turbulent 90° bend pipe flow. <i>International Journal of Heat and Fluid Flow</i> , 2018, 73, 199-208.	1.1	33
74	Assessment of uncertainties in hot-wire anemometry and oil-film interferometry measurements for wall-bounded turbulent flows. <i>European Journal of Mechanics, B/Fluids</i> , 2018, 72, 57-73.	1.2	36
75	Lossy Data Compression Effects on Wall-bounded Turbulence: Bounds on Data Reduction. <i>Flow, Turbulence and Combustion</i> , 2018, 101, 365-387.	1.4	7
76	Turbulent rectangular ducts with minimum secondary flow. <i>International Journal of Heat and Fluid Flow</i> , 2018, 72, 317-328.	1.1	12
77	Secondary flow in spanwise-periodic in-phase sinusoidal channels. <i>Journal of Fluid Mechanics</i> , 2018, 851, 288-316.	1.4	16
78	Unsteady aerodynamic effects in small-amplitude pitch oscillations of an airfoil. <i>International Journal of Heat and Fluid Flow</i> , 2018, 71, 378-391.	1.1	30
79	Turbulent boundary layers around wing sections up to $\alpha = 15^\circ$. <i>International Journal of Heat and Fluid Flow</i> , 2018, 72, 86-99.	1.1	89
80	Direct numerical simulation of flow over dissimilar, randomly distributed roughness elements: A systematic study on the effect of surface morphology on turbulence. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	49
81	Secondary flow in turbulent ducts with increasing aspect ratio. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	57
82	Adjoint optimization of natural convection problems: differentially heated cavity. <i>Theoretical and Computational Fluid Dynamics</i> , 2017, 31, 537-553.	0.9	7
83	Characterisation of backflow events over a wing section. <i>Journal of Turbulence</i> , 2017, 18, 170-185.	0.5	32
84	On the identification of well-behaved turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2017, 822, 109-138.	1.4	43
85	Characterisation of the steady, laminar incompressible flow in toroidal pipes covering the entire curvature range. <i>International Journal of Heat and Fluid Flow</i> , 2017, 66, 95-107.	1.1	20
86	High-Order Numerical Simulations of Wind Turbine Wakes. <i>Journal of Physics: Conference Series</i> , 2017, 854, 012025.	0.3	8
87	History effects and near equilibrium in adverse-pressure-gradient turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2017, 820, 667-692.	1.4	105
88	Computing Optimal Forcing Using Laplace Preconditioning. <i>Communications in Computational Physics</i> , 2017, 22, 1508-1532.	0.7	9
89	Reprint of: Influence of corner geometry on the secondary flow in turbulent square ducts. <i>International Journal of Heat and Fluid Flow</i> , 2017, 67, 94-103.	1.1	6
90	Pressure-Gradient Turbulent Boundary Layers Developing Around a Wing Section. <i>Flow, Turbulence and Combustion</i> , 2017, 99, 613-641.	1.4	46

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91	Revisiting History Effects in Adverse-Pressure-Gradient Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 565-587.	1.4	32
92	Turbulent Duct Flow Controlled with Spanwise Wall Oscillations. Flow, Turbulence and Combustion, 2017, 99, 787-806.	1.4	12
93	Influence of corner geometry on the secondary flow in turbulent square ducts. International Journal of Heat and Fluid Flow, 2017, 67, 69-78.	1.1	33
94	Stability and sensitivity of a cross-flow-dominated Falkner-Skan-Cooke boundary layer with discrete surface roughness. Journal of Fluid Mechanics, 2017, 826, 830-850.	1.4	22
95	Adverse-Pressure-Gradient Effects on Turbulent Boundary Layers: Statistics and Flow-Field Organization. Flow, Turbulence and Combustion, 2017, 99, 589-612.	1.4	48
96	Impact simulation and optimisation of elastic fuel tanks reinforced with exoskeleton for aerospace applications. International Journal of Crashworthiness, 2017, 22, 271-293.	1.1	9
97	Simulation of a Large-Eddy-Break-up Device (LEBU) in a Moderate Reynolds Number Turbulent Boundary Layer. Flow, Turbulence and Combustion, 2017, 98, 445-460.	1.4	15
98	Influence of a Large-Eddy-Breakup-Device on the Turbulent Interface of Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 823-835.	1.4	6
99	Linear stability of buffer layer streaks in turbulent channels with variable density and viscosity. Physical Review Fluids, 2017, 2, .	1.0	8
100	Scaling of Adverse-Pressure-Gradient Turbulent Boundary Layers in Near-Equilibrium Conditions. Springer Proceedings in Physics, 2017, , 73-78.	0.1	0
101	Transitional and Turbulent Bent Pipes. Springer Proceedings in Physics, 2017, , 81-87.	0.1	0
102	Identifying Well-Behaved Turbulent Boundary Layers. Springer Proceedings in Physics, 2017, , 67-72.	0.1	0
103	Actuator line simulations of a Joukowski and Tejero rotor using spectral element and finite volume methods. Journal of Physics: Conference Series, 2016, 753, 082011.	0.3	2
104	On determining characteristic length scales in pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012014.	0.3	5
105	Aspect ratio effect on particle transport in turbulent duct flows. Physics of Fluids, 2016, 28, .	1.6	34
106	Global effect of local skin friction drag reduction in spatially developing turbulent boundary layer. Journal of Fluid Mechanics, 2016, 805, 303-321.	1.4	43
107	Large-eddy simulations of adverse pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012012.	0.3	6
108	Edge states as mediators of bypass transition in boundary-layer flows. Journal of Fluid Mechanics, 2016, 801, .	1.4	23

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109	Characterization of the secondary flow in hexagonal ducts. <i>Physics of Fluids</i> , 2016, 28, .	1.6	54
110	On the global nonlinear instability of the rotating-disk flow over a finite domain. <i>Journal of Fluid Mechanics</i> , 2016, 803, 332-355.	1.4	23
111	On determining characteristic length scales in pressure-gradient turbulent boundary layers. <i>Physics of Fluids</i> , 2016, 28, .	1.6	71
112	On Large-Scale Friction Control in Turbulent Wall Flow in Low Reynolds Number Channels. <i>Flow, Turbulence and Combustion</i> , 2016, 97, 811-827.	1.4	21
113	Modal instability of the flow in a toroidal pipe. <i>Journal of Fluid Mechanics</i> , 2016, 792, 894-909.	1.4	28
114	Particle transport in turbulent curved pipe flow. <i>Journal of Fluid Mechanics</i> , 2016, 793, 248-279.	1.4	32
115	Turbulence collapse in a suction boundary layer. <i>Journal of Fluid Mechanics</i> , 2016, 795, 356-379.	1.4	16
116	Direct numerical simulation of the flow around a wing section at moderate Reynolds number. <i>International Journal of Heat and Fluid Flow</i> , 2016, 61, 117-128.	1.1	78
117	Swirl-switching phenomenon in turbulent flow through toroidal pipes. <i>International Journal of Heat and Fluid Flow</i> , 2016, 61, 108-116.	1.1	16
118	On the Strong Scaling of the Spectral Element Solver Nek5000 on Petascale Systems. , 2016, , .		43
119	Convergence of numerical simulations of turbulent wall-bounded flows and mean cross-flow structure of rectangular ducts. <i>Meccanica</i> , 2016, 51, 3025-3042.	1.2	72
120	Parallel performance of h-type Adaptive Mesh Refinement for Nek5000. , 2016, , .		2
121	Drag reduction in spatially developing turbulent boundary layers by spatially intermittent blowing at constant mass-flux. <i>Journal of Turbulence</i> , 2016, 17, 913-929.	0.5	16
122	Linear disturbances in the rotating-disk flow: A comparison between results from simulations, experiments and theory. <i>European Journal of Mechanics, B/Fluids</i> , 2016, 55, 170-181.	1.2	20
123	Simulations of turbulent asymptotic suction boundary layers. <i>Journal of Turbulence</i> , 2016, 17, 157-180.	0.5	26
124	Flow Features in Three-Dimensional Turbulent Duct Flows with Different Aspect Ratios. <i>Springer Proceedings in Physics</i> , 2016, , 123-126.	0.1	0
125	Wall Oscillation Induced Drag Reduction of Turbulent Boundary Layers. <i>Springer Proceedings in Physics</i> , 2016, , 161-165.	0.1	1
126	Temperature Effects in Hot-Wire Measurements on Higher-Order Moments in Wall Turbulence. <i>Springer Proceedings in Physics</i> , 2016, , 185-189.	0.1	0

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127	Bypass transition and spot nucleation in boundary layers. <i>Physical Review Fluids</i> , 2016, 1, .	1.0	29
128	Reynolds number dependence of large-scale friction control in turbulent channel flow. <i>Physical Review Fluids</i> , 2016, 1, .	1.0	22
129	Enhanced secondary motion of the turbulent flow through a porous square duct. <i>Journal of Fluid Mechanics</i> , 2015, 784, 681-693.	1.4	32
130	A comparison of opposition control in turbulent boundary layer and turbulent channel flow. <i>Physics of Fluids</i> , 2015, 27, .	1.6	48
131	Global Stability Analysis of a Roughness Wake in a Falkner–Skan–Cooke Boundary Layer. <i>Procedia IUTAM</i> , 2015, 14, 192-200.	1.2	7
132	Investigations of Stability and Transition of a Jet in Crossflow Using DNS. <i>Fluid Mechanics and Its Applications</i> , 2015, , 7-18.	0.1	2
133	Investigation of the Global Instability of the Rotating-disk Boundary Layer. <i>Procedia IUTAM</i> , 2015, 14, 321-328.	1.2	9
134	Effect of uniform blowing/suction in a turbulent boundary layer at moderate Reynolds number. <i>International Journal of Heat and Fluid Flow</i> , 2015, 55, 132-142.	1.1	89
135	Hairpin vortices in turbulent boundary layers. <i>Physics of Fluids</i> , 2015, 27, .	1.6	64
136	Evidence of sublamina drag naturally occurring in a curved pipe. <i>Physics of Fluids</i> , 2015, 27, .	1.6	14
137	Sources and fluxes of scale energy in the overlap layer of wall turbulence. <i>Journal of Fluid Mechanics</i> , 2015, 771, 407-423.	1.4	26
138	Global linear instability of the rotating-disk flow investigated through simulations. <i>Journal of Fluid Mechanics</i> , 2015, 765, 612-631.	1.4	24
139	Direct numerical simulation of the flow around a wall-mounted square cylinder under various inflow conditions. <i>Journal of Turbulence</i> , 2015, 16, 555-587.	0.5	56
140	On minimum aspect ratio for duct flow facilities and the role of side walls in generating secondary flows. <i>Journal of Turbulence</i> , 2015, 16, 588-606.	0.5	33
141	Particle Velocity and Acceleration in Turbulent Bent Pipe Flows. <i>Flow, Turbulence and Combustion</i> , 2015, 95, 539-559.	1.4	12
142	Global stability and optimal perturbation for a jet in cross-flow. <i>European Journal of Mechanics, B/Fluids</i> , 2015, 49, 438-447.	1.2	24
143	Investigations of Stability and Transition of a Jet in Crossflow Using DNS. <i>ERCOFTAC Series</i> , 2015, , 207-217.	0.1	2
144	Nek5000 with OpenACC. <i>Lecture Notes in Computer Science</i> , 2015, , 57-68.	1.0	4

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145	Turbulent Boundary Layers in Long Computational Domains. ERCOFTAC Series, 2015, , 267-274.	0.1	0
146	Turbulent pipe flow: Statistics, Re -dependence, structures and similarities with channel and boundary layer flows. Journal of Physics: Conference Series, 2014, 506, 012010.	0.3	8
147	Hairpin vortices in turbulent boundary layers. Journal of Physics: Conference Series, 2014, 506, 012008.	0.3	5
148	Secondary instability and tertiary states in rotating plane Couette flow. Journal of Fluid Mechanics, 2014, 761, 27-61.	1.4	11
149	Mutual inductance instability of the tip vortices behind a wind turbine. Journal of Fluid Mechanics, 2014, 755, 705-731.	1.4	132
150	Universality and scaling phenomenology of small-scale turbulence in wall-bounded flows. Physics of Fluids, 2014, 26, .	1.6	10
151	Recurrent Bursts via Linear Processes in Turbulent Environments. Physical Review Letters, 2014, 112, 144502.	2.9	11
152	Simulation and validation of a spatially evolving turbulent boundary layer up to. International Journal of Heat and Fluid Flow, 2014, 47, 57-69.	1.1	148
153	On the near-wall vortical structures at moderate Reynolds numbers. European Journal of Mechanics, B/Fluids, 2014, 48, 75-93.	1.2	62
154	Turbulent Boundary Layers in Long Computational Domains. Springer Proceedings in Physics, 2014, , 91-96.	0.1	0
155	Experiments and Computations of Localized Pressure Gradients with Different History Effects. AIAA Journal, 2014, 52, 368-384.	1.5	30
156	Complexity of localised coherent structures in a boundary-layer flow. European Physical Journal E, 2014, 37, 32.	0.7	17
157	Statistics of Particle Accumulation in Spatially Developing Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2014, 92, 27-40.	1.4	8
158	Aspect ratio effects in turbulent duct flows studied through direct numerical simulation. Journal of Turbulence, 2014, 15, 677-706.	0.5	98
159	The influence of temperature fluctuations on hot-wire measurements in wall-bounded turbulence. Experiments in Fluids, 2014, 55, 1.	1.1	7
160	Role of data uncertainties in identifying the logarithmic region of turbulent boundary layers. Experiments in Fluids, 2014, 55, 1.	1.1	22
161	A new high-order method for the simulation of incompressible wall-bounded turbulent flows. Journal of Computational Physics, 2014, 272, 108-126.	1.9	2
162	A numerical study of the unstratified and stratified Ekman layer. Journal of Fluid Mechanics, 2014, 755, 672-704.	1.4	45

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163	Stability Tools for the Spectral-Element Code Nek5000: Application to Jet-in-Crossflow. Lecture Notes in Computational Science and Engineering, 2014, , 349-359.	0.1	11
164	Preparing Scientific Application Software for Exascale Computing. Lecture Notes in Computer Science, 2013, , 27-42.	1.0	4
165	Stabilization of the Spectral Element Method in Convection Dominated Flows by Recovery of Skew-Symmetry. Journal of Scientific Computing, 2013, 57, 254-277.	1.1	32
166	Evolution of turbulence characteristics from straight to curved pipes. International Journal of Heat and Fluid Flow, 2013, 41, 16-26.	1.1	78
167	Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. Flow, Turbulence and Combustion, 2013, 91, 475-495.	1.4	234
168	Correcting hot-wire spatial resolution effects in third- and fourth-order velocity moments in wall-bounded turbulence. Experiments in Fluids, 2013, 54, 1.	1.1	17
169	Spatial resolution analysis of planar PIV measurements to characterise vortices in turbulent flows. Journal of Turbulence, 2013, 14, 37-66.	0.5	7
170	Localized edge states in the asymptotic suction boundary layer. Journal of Fluid Mechanics, 2013, 717, .	1.4	48
171	Comparison of experiments and simulations for zero pressure gradient turbulent boundary layers at moderate Reynolds numbers. Experiments in Fluids, 2013, 54, 1.	1.1	44
172	Identifying Turbulent Spots in Transitional Boundary Layers. Journal of Turbomachinery, 2013, 135, .	0.9	6
173	Oblique Laminar-Turbulent Interfaces in Plane Shear Flows. Physical Review Letters, 2013, 110, 034502.	2.9	86
174	Rare backflow and extreme wall-normal velocity fluctuations in near-wall turbulence. Physics of Fluids, 2012, 24, .	1.6	89
175	Self-Sustained Localized Structures in a Boundary-Layer Flow. Physical Review Letters, 2012, 108, 044501.	2.9	50
176	Pressure fluctuation in high-Reynolds-number turbulent boundary layer: results from experiments and DNS. Journal of Turbulence, 2012, 13, N50.	0.5	18
177	Turbulent boundary layers at moderate Reynolds numbers: inflow length and tripping effects. Journal of Fluid Mechanics, 2012, 710, 5-34.	1.4	210
178	Coherent structures and dominant frequencies in a turbulent three-dimensional diffuser. Journal of Fluid Mechanics, 2012, 699, 320-351.	1.4	23
179	Bifurcation and stability analysis of a jet in cross-flow: onset of global instability at a low velocity ratio. Journal of Fluid Mechanics, 2012, 696, 94-121.	1.4	48
180	Turbulent Boundary-Layer Flow: Comparing Experiments with DNS. Springer Proceedings in Physics, 2012, , 213-216.	0.1	2

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