Philipp Schlatter

List of Publications by Year
in descending order

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227 papers	9,765 citations	50276 46 h-index	42399 92 g-index
237 all docs	237 docs citations	237 times ranked	4193 citing authors

#	Article	IF	Citations
1	Spectral analysis of nonlinear flows. Journal of Fluid Mechanics, 2009, 641, 115-127.	3.4	1,592
2	Assessment of direct numerical simulation data of turbulent boundary layers. Journal of Fluid Mechanics, 2010, 659, 116-126.	3.4	690
3	Transition in boundary layers subject to free-stream turbulence. Journal of Fluid Mechanics, 2004, 517, 167-198.	3.4	329
4	Steady solutions of the Navier-Stokes equations by selective frequency damping. Physics of Fluids, 2006, 18, 068102.	4.0	255
5	Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. Flow, Turbulence and Combustion, 2013, 91, 475-495.	2.6	234
6	Turbulent boundary layers up to Reϑ=2500 studied through simulation and experiment. Physics of Fluids, 2009, 21, .	4.0	217
7	Turbulent boundary layers at moderate Reynolds numbers: inflow length and tripping effects. Journal of Fluid Mechanics, 2012, 710, 5-34.	3.4	210
8	Global stability of a jet in crossflow. Journal of Fluid Mechanics, 2009, 624, 33-44.	3.4	194
9	Formation of turbulent patterns near the onset of transition in plane Couette flow. Journal of Fluid Mechanics, 2010, 650, 119-129.	3.4	155
10	Predictions of turbulent shear flows using deep neural networks. Physical Review Fluids, 2019, 4, .	2.5	155
11	Simulation and validation of a spatially evolving turbulent boundary layer up to. International Journal of Heat and Fluid Flow, 2014, 47, 57-69.	2.4	148
12	On streak breakdown in bypass transition. Physics of Fluids, 2008, 20, .	4.0	143
13	Mutual inductance instability of the tip vortices behind a wind turbine. Journal of Fluid Mechanics, 2014, 755, 705-731.	3.4	132
14	LES of transitional flows using the approximate deconvolution model. International Journal of Heat and Fluid Flow, 2004, 25, 549-558.	2.4	124
15	Wall accumulation and spatial localization in particle-laden wall flows. Journal of Fluid Mechanics, 2012, 699, 50-78.	3.4	123
16	Simulations of spatially evolving turbulent boundary layers up to. International Journal of Heat and Fluid Flow, 2010, 31, 251-261.	2.4	120
17	Quantifying the interaction between large and small scales in wall-bounded turbulent flows: A note of caution. Physics of Fluids, 2010, 22, .	4.0	110
18	History effects and near equilibrium in adverse-pressure-gradient turbulent boundary layers. Journal of Fluid Mechanics, 2017, 820, 667-692.	3.4	105

#	Article	IF	Citations
19	On the fluctuating wall-shear stress in zero pressure-gradient turbulent boundary layer flows. Physics of Fluids, 2011, 23, .	4.0	101
20	Aspect ratio effects in turbulent duct flows studied through direct numerical simulation. Journal of Turbulence, 2014, 15, 677-706.	1.4	98
21	Convolutional-network models to predict wall-bounded turbulence from wall quantities. Journal of Fluid Mechanics, 2021, 928, .	3.4	97
22	Physics-informed neural networks for solving Reynolds-averaged Navierâ€“Stokes equations. Physics of Fluids, 2022, 34, .	4.0	95
23	Rare backflow and extreme wall-normal velocity fluctuations in near-wall turbulence. Physics of Fluids, 2012, 24, .	4.0	89
24	Effect of uniform blowing/suction in a turbulent boundary layer at moderate Reynolds number. International Journal of Heat and Fluid Flow, 2015, 55, 132-142.	2.4	89
25	Turbulent boundary layers around wing sections up to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mi>R</mml:mi><mml:msub><mml:mi>e</mml:mi><mml:mi>c</mml:mi></mml:msub><mml:mo> International Journal of Heat and Fluid Flow, 2018, 72, 86-99.	2.4	89
26	Oblique Laminar-Turbulent Interfaces in Plane Shear Flows. Physical Review Letters, 2013, 110, 034502.	7.8	86
27	Evolution of turbulence characteristics from straight to curved pipes. International Journal of Heat and Fluid Flow, 2013, 41, 16-26.	2.4	78
28	Direct numerical simulation of the flow around a wing section at moderate Reynolds number. International Journal of Heat and Fluid Flow, 2016, 61, 117-128.	2.4	78
29	Turbulentâ€“laminar coexistence in wall flows with Coriolis, buoyancy or Lorentz forces. Journal of Fluid Mechanics, 2012, 704, 137-172.	3.4	72
30	Convergence of numerical simulations of turbulent wall-bounded flows and mean cross-flow structure of rectangular ducts. Meccanica, 2016, 51, 3025-3042.	2.0	72
31	On determining characteristic length scales in pressure-gradient turbulent boundary layers. Physics of Fluids, 2016, 28, .	4.0	71
32	Direct numerical simulation of separated flow in a three-dimensional diffuser. Journal of Fluid Mechanics, 2010, 650, 307-318.	3.4	70
33	Localized edge states in plane Couette flow. Physics of Fluids, 2009, 21, .	4.0	68
34	Hairpin vortices in turbulent boundary layers. Physics of Fluids, 2015, 27, .	4.0	64
35	On the near-wall vortical structures at moderate Reynolds numbers. European Journal of Mechanics, B/Fluids, 2014, 48, 75-93.	2.5	62
36	DNS of a spatially developing turbulent boundary layer with passive scalar transport. International Journal of Heat and Fluid Flow, 2009, 30, 916-929.	2.4	60

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37	Secondary flow in turbulent ducts with increasing aspect ratio. Physical Review Fluids, 2018, 3, .	2.5	57
38	Direct numerical simulation of the flow around a wall-mounted square cylinder under various inflow conditions. Journal of Turbulence, 2015, 16, 555-587.	1.4	56
39	Characterization of the secondary flow in hexagonal ducts. Physics of Fluids, 2016, 28, .	4.0	54
40	Self-Sustained Localized Structures in a Boundary-Layer Flow. Physical Review Letters, 2012, 108, 044501.	7.8	50
41	A low-dissipative, scale-selective discretization scheme for the Navierâ€“Stokes equations. Computers and Fluids, 2012, 70, 195-205.	2.5	49
42	Direct numerical simulation of flow over dissimilar, randomly distributed roughness elements: A systematic study on the effect of surface morphology on turbulence. Physical Review Fluids, 2018, 3, .	2.5	49
43	High-pass filtered eddy-viscosity models for large-eddy simulations of transitional and turbulent flow. Physics of Fluids, 2005, 17, 065103.	4.0	48
44	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.	3.4	48
45	Localized edge states in the asymptotic suction boundary layer. Journal of Fluid Mechanics, 2013, 717, .	3.4	48
46	A comparison of opposition control in turbulent boundary layer and turbulent channel flow. Physics of Fluids, 2015, 27, .	4.0	48
47	Adverse-Pressure-Gradient Effects on Turbulent Boundary Layers: Statistics and Flow-Field Organization. Flow, Turbulence and Combustion, 2017, 99, 589-612.	2.6	48
48	Spectral proper orthogonal decomposition and resolvent analysis of near-wall coherent structures in turbulent pipe flows. Journal of Fluid Mechanics, 2020, 900, .	3.4	48
49	A method to estimate turbulence intensity and transverse Taylor microscale in turbulent flows from spatially averaged hot-wire data. Experiments in Fluids, 2011, 51, 693-700.	2.4	47
50	Pressure-Gradient Turbulent Boundary Layers Developing Around a Wing Section. Flow, Turbulence and Combustion, 2017, 99, 613-641.	2.6	46
51	The viscous sublayer revisitedâ€“exploiting self-similarity to determine the wall position and friction velocity. Experiments in Fluids, 2011, 51, 271-280.	2.4	45
52	A numerical study of the unstratified and stratified Ekman layer. Journal of Fluid Mechanics, 2014, 755, 672-704.	3.4	45
53	Comparison of experiments and simulations for zero pressure gradient turbulent boundary layers at moderate Reynolds numbers. Experiments in Fluids, 2013, 54, 1.	2.4	44
54	Global effect of local skin friction dragÂreduction in spatially developing turbulent boundary layer. Journal of Fluid Mechanics, 2016, 805, 303-321.	3.4	43

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55	On the Strong Scaling of the Spectral Element Solver Nek5000 on Petascale Systems. , 2016, , .		43
56	On the identification of well-behaved turbulentÂboundaryÂlayers. Journal of Fluid Mechanics, 2017, 822, 109-138.	3.4	43
57	Recurrent neural networks and Koopman-based frameworks for temporal predictions in a low-order model of turbulence. International Journal of Heat and Fluid Flow, 2021, 90, 108816.	2.4	43
58	Effect of adverse pressure gradients on turbulent wing boundary layers. Journal of Fluid Mechanics, 2020, 883, .	3.4	41
59	Quantification of amplitude modulation in wall-bounded turbulence. Fluid Dynamics Research, 2019, 51, 011408.	1.3	40
60	DNS and LES of estimation and control of transition in boundary layers subject to free-stream turbulence. International Journal of Heat and Fluid Flow, 2008, 29, 841-855.	2.4	38
61	Self-sustained global oscillations in a jet in crossflow. Theoretical and Computational Fluid Dynamics, 2011, 25, 129-146.	2.2	38
62	The three-dimensional structure of swirl-switching in bent pipe flow. Journal of Fluid Mechanics, 2018, 835, 86-101.	3.4	38
63	A windowing method for periodic inflow/outflow boundary treatment of non-periodic flows. Journal of Computational Physics, 2005, 206, 505-535.	3.8	36
64	Assessment of uncertainties in hot-wire anemometry and oil-film interferometry measurements for wall-bounded turbulent flows. European Journal of Mechanics, B/Fluids, 2018, 72, 57-73.	2.5	36
65	Self-similar transport of inertial particles in a turbulent boundary layer. Journal of Fluid Mechanics, 2012, 706, 584-596.	3.4	35
66	Aerodynamic Effects of Uniform Blowing and Suction on a NACA4412 Airfoil. Flow, Turbulence and Combustion, 2020, 105, 735-759.	2.6	35
67	Aspect ratio effect on particle transport in turbulent duct flows. Physics of Fluids, 2016, 28, .	4.0	34
68	Applying Bayesian optimization with Gaussian process regression to computational fluid dynamics problems. Journal of Computational Physics, 2022, 449, 110788.	3.8	34
69	On minimum aspect ratio for duct flow facilities and the role of side walls in generating secondary flows. Journal of Turbulence, 2015, 16, 588-606.	1.4	33
70	Influence of corner geometry on the secondary flow in turbulent square ducts. International Journal of Heat and Fluid Flow, 2017, 67, 69-78.	2.4	33
71	Direct numerical simulation of a turbulent 90Â° bend pipe flow. International Journal of Heat and Fluid Flow, 2018, 73, 199-208.	2.4	33
72	Stabilization of the Spectral Element Method in Convection Dominated Flows by Recovery of Skew-Symmetry. Journal of Scientific Computing, 2013, 57, 254-277.	2.3	32

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73	Enhanced secondary motion of the turbulent flow through a porous square duct. Journal of Fluid Mechanics, 2015, 784, 681-693.	3.4	32
74	Particle transport in turbulent curved pipe flow. Journal of Fluid Mechanics, 2016, 793, 248-279.	3.4	32
75	Characterisation of backflow events over a wing section. Journal of Turbulence, 2017, 18, 170-185.	1.4	32
76	Revisiting History Effects in Adverse-Pressure-Gradient Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 565-587.	2.6	32
77	Experiments and Computations of Localized Pressure Gradients with Different History Effects. AIAA Journal, 2014, 52, 368-384.	2.6	30
78	Unsteady aerodynamic effects in small-amplitude pitch oscillations of an airfoil. International Journal of Heat and Fluid Flow, 2018, 71, 378-391.	2.4	30
79	Bypass transition and spot nucleation in boundary layers. Physical Review Fluids, 2016, 1, .	2.5	29
80	Large Scale Accumulation Patterns of Inertial Particles in Wall-Bounded Turbulent Flow. Flow, Turbulence and Combustion, 2011, 86, 519-532.	2.6	28
81	Modal instability of the flow in a toroidal pipe. Journal of Fluid Mechanics, 2016, 792, 894-909.	3.4	28
82	Effects of modelling, resolution and anisotropy of subgrid-scales on large eddy simulations of channel flow. Journal of Turbulence, 2011, 12, N10.	1.4	27
83	Large-eddy simulation of spatial transition in plane channel flow. Journal of Turbulence, 2006, 7, N33.	1.4	26
84	Sources and fluxes of scale energy in the overlap layer of wall turbulence. Journal of Fluid Mechanics, 2015, 771, 407-423.	3.4	26
85	Simulations of turbulent asymptotic suction boundary layers. Journal of Turbulence, 2016, 17, 157-180.	1.4	26
86	Transfer functions for flow predictions in wall-bounded turbulence. Journal of Fluid Mechanics, 2019, 864, 708-745.	3.4	26
87	Global linear and nonlinear stability of viscous confined plane wakes with co-flow. Journal of Fluid Mechanics, 2011, 675, 397-434.	3.4	25
88	Stochastic and deterministic motion of a laminar-turbulent front in a spanwisely extended Couette flow. Physical Review E, 2011, 84, 066315.	2.1	24
89	Global linear instability of the rotating-disk flow investigated through simulations. Journal of Fluid Mechanics, 2015, 765, 612-631.	3.4	24
90	Global stability and optimal perturbation for a jet in cross-flow. European Journal of Mechanics, B/Fluids, 2015, 49, 438-447.	2.5	24

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91	Coherent structures and dominant frequencies in a turbulent three-dimensional diffuser. Journal of Fluid Mechanics, 2012, 699, 320-351.	3.4	23
92	Edge states as mediators of bypass transition in boundary-layer flows. Journal of Fluid Mechanics, 2016, 801, .	3.4	23
93	On the global nonlinear instability of the rotating-disk flow over a finite domain. Journal of Fluid Mechanics, 2016, 803, 332-355.	3.4	23
94	Resolvent modelling of near-wall coherent structures in turbulent channel flow. International Journal of Heat and Fluid Flow, 2020, 85, 108662.	2.4	23
95	Interscale transport mechanisms in turbulent boundary layers. Journal of Fluid Mechanics, 2021, 921, .	3.4	23
96	Role of data uncertainties in identifying the logarithmic region of turbulent boundary layers. Experiments in Fluids, 2014, 55, 1.	2.4	22
97	Stability and sensitivity of a cross-flow-dominated Falknerâ€“Skanâ€“Cooke boundary layer with discrete surface roughness. Journal of Fluid Mechanics, 2017, 826, 830-850.	3.4	22
98	Reynolds number dependence of large-scale friction control in turbulent channel flow. Physical Review Fluids, 2016, 1, .	2.5	22
99	On Large-Scale Friction Control in Turbulent Wall Flow in Low Reynolds Number Channels. Flow, Turbulence and Combustion, 2016, 97, 811-827.	2.6	21
100	Transition to turbulence in the rotating-disk boundary-layer flow with stationary vortices. Journal of Fluid Mechanics, 2018, 836, 43-71.	3.4	21
101	Numerical study of the stabilisation of boundary-layer disturbances by finite amplitude streaks. International Journal of Flow Control, 2010, 2, 259-288.	0.4	21
102	Linear disturbances in the rotating-disk flow: A comparison between results from simulations, experiments and theory. European Journal of Mechanics, B/Fluids, 2016, 55, 170-181.	2.5	20
103	Characterisation of the steady, laminar incompressible flow in toroidal pipes covering the entire curvature range. International Journal of Heat and Fluid Flow, 2017, 66, 95-107.	2.4	20
104	Turbulence in the rotating-disk boundary layer investigated through direct numerical simulations. European Journal of Mechanics, B/Fluids, 2018, 70, 6-18.	2.5	20
105	Simulations of Turbulent Flow in a Plane Asymmetric Diffuser. Flow, Turbulence and Combustion, 2007, 79, 275-306.	2.6	19
106	The vanishing of strong turbulent fronts in bent pipes. Journal of Fluid Mechanics, 2019, 866, 487-502.	3.4	19
107	Pressure fluctuation in high-Reynolds-number turbulent boundary layer: results from experiments and DNS. Journal of Turbulence, 2012, 13, N50.	1.4	18
108	Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. Experimental Thermal and Fluid Science, 2020, 112, 109975.	2.7	18

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109	Decomposition of the mean friction drag in adverse-pressure-gradient turbulent boundary layers. Physical Review Fluids, 2020, 5, .	2.5	18
110	Correcting hot-wire spatial resolution effects in third- and fourth-order velocity moments in wall-bounded turbulence. Experiments in Fluids, 2013, 54, 1.	2.4	17
111	Complexity of localised coherent structures in a boundary-layer flow. European Physical Journal E, 2014, 37, 32.	1.6	17
112	Investigation of Blowing and Suction for Turbulent Flow Control on Airfoils. AIAA Journal, 0, , 1-15.	2.6	17
113	Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. Physical Review Fluids, 2020, 5, .	2.5	17
114	Turbulence collapse in a suction boundary layer. Journal of Fluid Mechanics, 2016, 795, 356-379.	3.4	16
115	Swirl-switching phenomenon in turbulent flow through toroidal pipes. International Journal of Heat and Fluid Flow, 2016, 61, 108-116.	2.4	16
116	Drag reduction in spatially developing turbulent boundary layers by spatially intermittent blowing at constant mass-flux. Journal of Turbulence, 2016, 17, 913-929.	1.4	16
117	Secondary flow in spanwise-periodic in-phase sinusoidal channels. Journal of Fluid Mechanics, 2018, 851, 288-316.	3.4	16
118	Prediction of wall-bounded turbulence from wall quantities using convolutional neural networks. Journal of Physics: Conference Series, 2020, 1522, 012022.	0.4	16
119	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.	2.6	15
120	Direct Numerical Simulations of Bypass Transition over Distributed Roughness. AIAA Journal, 2020, 58, 702-711.	2.6	15
121	Enabling Adaptive Mesh Refinement for Spectral-Element Simulations of Turbulence Around Wing Sections. Flow, Turbulence and Combustion, 2020, 105, 415-436.	2.6	15
122	An adverse-pressure-gradient turbulent boundary layer with nearly constant up to. Journal of Fluid Mechanics, 2022, 939, .	3.4	15
123	Evidence of sublaminar drag naturally occurring in a curved pipe. Physics of Fluids, 2015, 27, .	4.0	14
124	Spanwise-coherent hydrodynamic waves around flat plates and airfoils. Journal of Fluid Mechanics, 2021, 927, .	3.4	14
125	Backflow events under the effect of secondary flow of Prandtl's first kind. Physical Review Fluids, 2020, 5, .	2.5	14
126	Edge tracking in spatially developing boundary layer flows. Journal of Fluid Mechanics, 2019, 881, 164-181.	3.4	13

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127	Adaptive mesh refinement for steady flows in Nek5000. Computers and Fluids, 2020, 197, 104352.	2.5	13
128	Decomposition of the mean friction drag on an NACA4412 airfoil under uniform blowing/suction. Journal of Fluid Mechanics, 2022, 932, .	3.4	13
129	Particle Velocity and Acceleration in Turbulent Bent Pipe Flows. Flow, Turbulence and Combustion, 2015, 95, 539-559.	2.6	12
130	Turbulent Duct Flow Controlled with Spanwise Wall Oscillations. Flow, Turbulence and Combustion, 2017, 99, 787-806.	2.6	12
131	Turbulent rectangular ducts with minimum secondary flow. International Journal of Heat and Fluid Flow, 2018, 72, 317-328.	2.4	12
132	The influence of thermal boundary conditions on turbulent forced convection pipe flow at two Prandtl numbers. International Journal of Heat and Mass Transfer, 2019, 144, 118601.	4.8	12
133	Global stability analysis of a 90Â°-bend pipe flow. International Journal of Heat and Fluid Flow, 2020, 86, 108742.	2.4	12
134	On numerical uncertainties in scale-resolving simulations of canonical wall turbulence. Computers and Fluids, 2021, 227, 105024.	2.5	12
135	Uniform blowing and suction applied to nonuniform adverse-pressure-gradient wing boundary layers. Physical Review Fluids, 2021, 6, .	2.5	12
136	Turbulent asymptotic suction boundary layers studied by simulation. Journal of Physics: Conference Series, 2011, 318, 022020.	0.4	11
137	Secondary instability and tertiary states in rotating plane Couette flow. Journal of Fluid Mechanics, 2014, 761, 27-61.	3.4	11
138	Recurrent Bursts via Linear Processes in Turbulent Environments. Physical Review Letters, 2014, 112, 144502.	7.8	11
139	Characterization of turbulent coherent structures in square duct flow. Journal of Physics: Conference Series, 2018, 1001, 012008.	0.4	11
140	Parametric dependencies of the yawed windâ€turbine wake development. Wind Energy, 2020, 23, 1367-1380.	4.2	11
141	Stability Tools for the Spectral-Element Code Nek5000: Application to Jet-in-Crossflow. Lecture Notes in Computational Science and Engineering, 2014, , 349-359.	0.3	11
142	Edge manifold as a Lagrangian coherent structure in a high-dimensional state space. Physical Review Research, 2020, 2, .	3.6	11
143	Simulations of heat transfer in a boundary layer subject to free-stream turbulence. Journal of Turbulence, 2010, 11, N45.	1.4	10
144	Universality and scaling phenomenology of small-scale turbulence in wall-bounded flows. Physics of Fluids, 2014, 26, .	4.0	10

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145	Topology optimization of heat sinks in a square differentially heated cavity. International Journal of Heat and Fluid Flow, 2018, 74, 36-52.	2.4	10
146	Evaluation of high-pass filtered eddy-viscosity models for large-eddy simulation of turbulent flows. Journal of Turbulence, 2005, 6, N5.	1.4	9
147	Investigation of the Global Instability of the Rotating-disk Boundary Layer. Procedia IUTAM, 2015, 14, 321-328.	1.2	9
148	Computing Optimal Forcing Using Laplace Preconditioning. Communications in Computational Physics, 2017, 22, 1508-1532.	1.7	9
149	Impact simulation and optimisation of elastic fuel tanks reinforced with exoskeleton for aerospace applications. International Journal of Crashworthiness, 2017, 22, 271-293.	1.9	9
150	Simulation strategies for the Food and Drug Administration nozzle using Nek5000. AIP Advances, 2020, 10, .	1.3	9
151	Critical Point for Bifurcation Cascades and Featureless Turbulence. Physical Review Letters, 2020, 124, 014501.	7.8	9
152	Turbulent pipe flow: Statistics,Re-dependence, structures and similarities with channel and boundary layer flows. Journal of Physics: Conference Series, 2014, 506, 012010.	0.4	8
153	Statistics of Particle Accumulation in Spatially Developing Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2014, 92, 27-40.	2.6	8
154	High-Order Numerical Simulations of Wind Turbine Wakes. Journal of Physics: Conference Series, 2017, 854, 012025.	0.4	8
155	OpenACC acceleration for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e251" altimg="si5.svg"><mml:mrow><mml:msub><mml:mrow><mml:mi>P</mml:mi></mml:mrow><mml:mrow><mml:mi>N</mml:mi></mml:m algorithm in Nek5000. Journal of Parallel and Distributed Computing, 2019, 132, 69-78.	4.1	8
156	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.	2.7	8
157	UQit: A Python package for uncertainty quantification (UQ) in computational fluid dynamics (CFD). Journal of Open Source Software, 2021, 6, 2871.	4.6	8
158	High-Performance Spectral Element Methods on Field-Programmable Gate Arrays : Implementation, Evaluation, and Future Projection. , 2021, , .		8
159	Linear stability of buffer layer streaks in turbulent channels with variable density and viscosity. Physical Review Fluids, 2017, 2, .	2.5	8
160	Comment on â€œEvolution of wall shear stress with Reynolds number in fully developed turbulent channel flow experimentsâ€• Physical Review Fluids, 2020, 5, .	2.5	8
161	Spatial resolution analysis of planar PIV measurements to characterise vortices in turbulent flows. Journal of Turbulence, 2013, 14, 37-66.	1.4	7
162	The influence of temperature fluctuations on hot-wire measurements in wall-bounded turbulence. Experiments in Fluids, 2014, 55, 1.	2.4	7

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163	Global Stability Analysis of a Roughness Wake in a Falknerâ€“Skanâ€“Cooke Boundary Layer. Procedia IUTAM, 2015, 14, 192-200.	1.2	7
164	Adjoint optimization of natural convection problems: differentially heated cavity. Theoretical and Computational Fluid Dynamics, 2017, 31, 537-553.	2.2	7
165	Lossy Data Compression Effects on Wall-bounded Turbulence: Bounds on Data Reduction. Flow, Turbulence and Combustion, 2018, 101, 365-387.	2.6	7
166	A description of turbulence intensity profiles for boundary layers with adverse pressure gradient. European Journal of Mechanics, B/Fluids, 2020, 84, 470-477.	2.5	7
167	Intense Reynolds-stress events in turbulent ducts. International Journal of Heat and Fluid Flow, 2021, 89, 108802.	2.4	7
168	Modeling the Turbulent Wake Behind a Wall-Mounted Square Cylinder. Logic Journal of the IGPL, 2022, 30, 263-276.	1.5	7
169	An uncertainty-quantification framework for assessing accuracy, sensitivity, and robustness in computational fluid dynamics. Journal of Computational Science, 2022, 62, 101688.	2.9	7
170	Predicting the temporal dynamics of turbulent channels through deep learning. International Journal of Heat and Fluid Flow, 2022, 96, 109010.	2.4	7
171	Large-Eddy Simulations of Subharmonic Transition in a Supersonic Boundary Layer. AIAA Journal, 2007, 45, 1019-1027.	2.6	6
172	Identifying Turbulent Spots in Transitional Boundary Layers. Journal of Turbomachinery, 2013, 135, .	1.7	6
173	Large-eddy simulations of adverse pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012012.	0.4	6
174	Reprint of: Influence of corner geometry on the secondary flow in turbulent square ducts. International Journal of Heat and Fluid Flow, 2017, 67, 94-103.	2.4	6
175	Influence of a Large-Eddy-Breakup-Device on the Turbulent Interface of Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 823-835.	2.6	6
176	Distributed Percolation Analysis for Turbulent Flows. , 2019, , .		6
177	Techniques for Turbulence Tripping of Boundary Layers in RANS Simulations. Flow, Turbulence and Combustion, 2022, 108, 661-682.	2.6	6
178	Bypass transition delay using oscillations of spanwise wall velocity. Physical Review Fluids, 2019, 4, .	2.5	6
179	Flow Structures on a Planar Food and Drug Administration (FDA) Nozzle at Low and Intermediate Reynolds Number. Fluids, 2021, 6, 4.	1.7	6
180	Strong Scaling of OpenACC enabled Nek5000 on several GPU based HPC systems. , 2022, , .		6

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181	Topology optimization of unsteady flows using the spectral element method. Computers and Fluids, 2022, 239, 105387.	2.5	6
182	Hairpin vortices in turbulent boundary layers. Journal of Physics: Conference Series, 2014, 506, 012008.	0.4	5
183	On determining characteristic length scales in pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012014.	0.4	5
184	Flow topology of rare back flow events and critical points in turbulent channels and toroidal pipes. Journal of Physics: Conference Series, 2018, 1001, 012002.	0.4	5
185	The skin-friction coefficient of a turbulent boundary layer modified by a large-eddy break-up device. Physics of Fluids, 2021, 33, .	4.0	5
186	In situ visualization of large-scale turbulence simulations in Nek5000 with ParaView Catalyst. Journal of Supercomputing, 2022, 78, 3605-3620.	3.6	5
187	Inflow length and tripping effects in turbulent boundary layers. Journal of Physics: Conference Series, 2011, 318, 022018.	0.4	4
188	A vorticity stretching diagnostic for turbulent and transitional flows. Theoretical and Computational Fluid Dynamics, 2012, 26, 485-499.	2.2	4
189	Preparing Scientific Application Software for Exascale Computing. Lecture Notes in Computer Science, 2013, , 27-42.	1.3	4
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