

Philipp Schlatter

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

224
papers

6,666
citations

40
h-index

75
g-index

237
ext. papers

8,283
ext. citations

2.5
avg, IF

6.36
L-index

#	Paper	IF	Citations
224	In situ visualization of large-scale turbulence simulations in Nek5000 with ParaView Catalyst.. <i>Journal of Supercomputing</i> , 2022 , 78, 3605-3620	2.5	1
223	Topology optimization of unsteady flows using the spectral element method. <i>Computers and Fluids</i> , 2022 , 239, 105387	2.8	0
222	RANS Modelling of a NACA4412 Wake Using Wind Tunnel Measurements. <i>Fluids</i> , 2022 , 7, 153	1.6	0
221	An uncertainty-quantification framework for assessing accuracy, sensitivity, and robustness in computational fluid dynamics. <i>Journal of Computational Science</i> , 2022 , 62, 101688	3.4	
220	Flow Structures on a Planar Food and Drug Administration (FDA) Nozzle at Low and Intermediate Reynolds Number. <i>Fluids</i> , 2021 , 6, 4	1.6	1
219	Convolutional-network models to predict wall-bounded turbulence from wall quantities. <i>Journal of Fluid Mechanics</i> , 2021 , 928,	3.7	21
218	Applying Bayesian Optimization with Gaussian Process Regression to Computational Fluid Dynamics Problems. <i>Journal of Computational Physics</i> , 2021 , 110788	4.1	5
217	The skin-friction coefficient of a turbulent boundary layer modified by a large-eddy break-up device. <i>Physics of Fluids</i> , 2021 , 33, 035153	4.4	1
216	UQit: A Python package for uncertainty quantification (UQ) in computational fluid dynamics (CFD). <i>Journal of Open Source Software</i> , 2021 , 6, 2871	5.2	2
215	High-Performance Spectral Element Methods on Field-Programmable Gate Arrays : Implementation, Evaluation, and Future Projection 2021 ,		3
214	Interscale transport mechanisms in turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2021 , 921,	3.7	4
213	Intense Reynolds-stress events in turbulent ducts. <i>International Journal of Heat and Fluid Flow</i> , 2021 , 89, 108802	2.4	1
212	Aerodynamic Free-Flight Conditions in Wind Tunnel Modelling through Reduced-Order Wall Inserts. <i>Fluids</i> , 2021 , 6, 265	1.6	3
211	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	2.4	13
210	On numerical uncertainties in scale-resolving simulations of canonical wall turbulence. <i>Computers and Fluids</i> , 2021 , 227, 105024	2.8	3
209	Notes on Percolation Analysis of Sampled Scalar Fields. <i>Mathematics and Visualization</i> , 2021 , 39-54	0.6	
208	Global stability analysis of a 90° bend pipe flow. <i>International Journal of Heat and Fluid Flow</i> , 2020 , 86, 108742	2.4	5

207	Parametric dependencies of the yawed wind-turbine wake development. <i>Wind Energy</i> , 2020 , 23, 1367-1380	3.0	3
206	Aerodynamic Effects of Uniform Blowing and Suction on a NACA4412 Airfoil. <i>Flow, Turbulence and Combustion</i> , 2020 , 105, 735-759	2.5	18
205	Prediction of wall-bounded turbulence from wall quantities using convolutional neural networks. <i>Journal of Physics: Conference Series</i> , 2020 , 1522, 012022	0.3	13
204	Coherent structures in turbulent boundary layers over an airfoil. <i>Journal of Physics: Conference Series</i> , 2020 , 1522, 012020	0.3	2
203	Simulation strategies for the Food and Drug Administration nozzle using Nek5000. <i>AIP Advances</i> , 2020 , 10, 025033	1.5	6
202	Critical Point for Bifurcation Cascades and Featureless Turbulence. <i>Physical Review Letters</i> , 2020 , 124, 014501	7.4	7
201	Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	7
200	Backflow events under the effect of secondary flow of Prandtl's first kind. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	5
199	Decomposition of the mean friction drag in adverse-pressure-gradient turbulent boundary layers. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	8
198	Comment on Evolution of wall shear stress with Reynolds number in fully developed turbulent channel flow experiments. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	6
197	Edge manifold as a Lagrangian coherent structure in a high-dimensional state space. <i>Physical Review Research</i> , 2020 , 2,	3.9	2
196	Power-Spectral Density in Turbulent Boundary Layers on Wings. <i>ERCOFTAC Series</i> , 2020 , 11-16	0.1	
195	Non-conforming Elements in Nek5000: Pressure Preconditioning and Parallel Performance. <i>Lecture Notes in Computational Science and Engineering</i> , 2020 , 599-609	0.3	
194	Effects of Different Friction Control Techniques on Turbulence Developing Around Wings. <i>ERCOFTAC Series</i> , 2020 , 305-311	0.1	
193	Performance of Preconditioners for Large-Scale Simulations Using Nek5000. <i>Lecture Notes in Computational Science and Engineering</i> , 2020 , 263-272	0.3	0
192	Mesh Optimization Using Dual-Weighted Error Estimators: Application to the Periodic Hill. <i>ERCOFTAC Series</i> , 2020 , 397-403	0.1	
191	Enabling Adaptive Mesh Refinement for Spectral-Element Simulations of Turbulence Around Wing Sections. <i>Flow, Turbulence and Combustion</i> , 2020 , 105, 415-436	2.5	6
190	Adaptive mesh refinement for steady flows in Nek5000. <i>Computers and Fluids</i> , 2020 , 197, 104352	2.8	4

189	Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. <i>Experimental Thermal and Fluid Science</i> , 2020 , 112, 109975	3	7
188	Direct Numerical Simulations of Bypass Transition over Distributed Roughness. <i>AIAA Journal</i> , 2020 , 58, 702-711	2.1	6
187	Effect of adverse pressure gradients on turbulent wing boundary layers. <i>Journal of Fluid Mechanics</i> , 2020 , 883,	3.7	15
186	Resolvent modelling of near-wall coherent structures in turbulent channel flow. <i>International Journal of Heat and Fluid Flow</i> , 2020 , 85, 108662	2.4	8
185	Spectral proper orthogonal decomposition and resolvent analysis of near-wall coherent structures in turbulent pipe flows. <i>Journal of Fluid Mechanics</i> , 2020 , 900,	3.7	15
184	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	2.4	2
183	Near wall coherence in wall-bounded flows and implications for flow control. <i>International Journal of Heat and Fluid Flow</i> , 2020 , 86, 108683	2.4	1
182	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	0.4	0
181	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	4.9	5
180	OpenACC acceleration for the PNP-2 algorithm in Nek5000. <i>Journal of Parallel and Distributed Computing</i> , 2019 , 132, 69-78	4.4	4
179	Flow organization in the wake of a rib in a turbulent boundary layer with pressure gradient. <i>Experimental Thermal and Fluid Science</i> , 2019 , 108, 115-124	3	5
178	The vanishing of strong turbulent fronts in bent pipes. <i>Journal of Fluid Mechanics</i> , 2019 , 866, 487-502	3.7	12
177	The Effect of Lossy Data Compression in Computational Fluid Dynamics Applications: Resilience and Data Postprocessing. <i>ERCOFTAC Series</i> , 2019 , 175-181	0.1	
176	On Stability and Transition in Bent Pipes. <i>ERCOFTAC Series</i> , 2019 , 531-536	0.1	
175	Transfer functions for flow predictions in wall-bounded turbulence. <i>Journal of Fluid Mechanics</i> , 2019 , 864, 708-745	3.7	15
174	Quantification of amplitude modulation in wall-bounded turbulence. <i>Fluid Dynamics Research</i> , 2019 , 51, 011408	1.2	25
173	Predictions of turbulent shear flows using deep neural networks. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	86
172	Bypass transition delay using oscillations of spanwise wall velocity. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	4

171	Large-Scale Energy in Turbulent Boundary Layers: Reynolds-Number and Pressure-Gradient Effects. <i>Springer Proceedings in Physics</i> , 2019 , 69-74	0.2	
170	Towards Adaptive Mesh Refinement for the Spectral Element Solver Nek5000. <i>ERCOFTAC Series</i> , 2019 , 9-15	0.1	3
169	Distributed Percolation Analysis for Turbulent Flows 2019 ,		4
168	Edge tracking in spatially developing boundary layer flows. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 164-183	3.7	7
167	Characterization of turbulent coherent structures in square duct flow. <i>Journal of Physics: Conference Series</i> , 2018 , 1001, 012008	0.3	9
166	Edge state modulation by mean viscosity gradients. <i>Journal of Fluid Mechanics</i> , 2018 , 838, 379-403	3.7	2
165	Turbulence in the rotating-disk boundary layer investigated through direct numerical simulations. <i>European Journal of Mechanics, B/Fluids</i> , 2018 , 70, 6-18	2.4	14
164	Transition to turbulence in the rotating-disk boundary-layer flow with stationary vortices. <i>Journal of Fluid Mechanics</i> , 2018 , 836, 43-71	3.7	13
163	Secondary flow in spanwise-periodic in-phase sinusoidal channels. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 288-316	3.7	12
162	Unsteady aerodynamic effects in small-amplitude pitch oscillations of an airfoil. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 71, 378-391	2.4	21
161	Turbulent boundary layers around wing sections up to $Re_c=1,000,000$. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 72, 86-99	2.4	50
160	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,	2.8	24
159	Secondary flow in turbulent ducts with increasing aspect ratio. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	43
158	The three-dimensional structure of swirl-switching in bent pipe flow. <i>Journal of Fluid Mechanics</i> , 2018 , 835, 86-101	3.7	23
157	Topology optimization of heat sinks in a square differentially heated cavity. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 74, 36-52	2.4	5
156	Flow topology of rare back flow events and critical points in turbulent channels and toroidal pipes. <i>Journal of Physics: Conference Series</i> , 2018 , 1001, 012002	0.3	4
155	Direct numerical simulation of a turbulent 90° bend pipe flow. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 73, 199-208	2.4	19
154	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	2.4	30

153	Lossy Data Compression Effects on Wall-bounded Turbulence: Bounds on Data Reduction. <i>Flow, Turbulence and Combustion</i> , 2018 , 101, 365-387	2.5	2
152	Turbulent rectangular ducts with minimum secondary flow. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 72, 317-328	2.4	9
151	Adjoint optimization of natural convection problems: differentially heated cavity. <i>Theoretical and Computational Fluid Dynamics</i> , 2017 , 31, 537-553	2.3	5
150	Characterisation of backflow events over a wing section. <i>Journal of Turbulence</i> , 2017 , 18, 170-185	2.1	25
149	On the identification of well-behaved turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2017 , 822, 109-138	3.7	33
148	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	2.4	14
147	High-Order Numerical Simulations of Wind Turbine Wakes. <i>Journal of Physics: Conference Series</i> , 2017 , 854, 012025	0.3	6
146	History effects and near equilibrium in adverse-pressure-gradient turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2017 , 820, 667-692	3.7	63
145	Computing Optimal Forcing Using Laplace Preconditioning. <i>Communications in Computational Physics</i> , 2017 , 22, 1508-1532	2.4	4
144	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	2.4	4
143	Pressure-Gradient Turbulent Boundary Layers Developing Around a Wing Section. <i>Flow, Turbulence and Combustion</i> , 2017 , 99, 613-641	2.5	32
142	Revisiting History Effects in Adverse-Pressure-Gradient Turbulent Boundary Layers. <i>Flow, Turbulence and Combustion</i> , 2017 , 99, 565-587	2.5	25
141	Turbulent Duct Flow Controlled with Spanwise Wall Oscillations. <i>Flow, Turbulence and Combustion</i> , 2017 , 99, 787-806	2.5	9
140	Influence of corner geometry on the secondary flow in turbulent square ducts. <i>International Journal of Heat and Fluid Flow</i> , 2017 , 67, 69-78	2.4	23
139	Stability and sensitivity of a cross-flow-dominated Falkner-Skan-Cooke boundary layer with discrete surface roughness. <i>Journal of Fluid Mechanics</i> , 2017 , 826, 830-850	3.7	9
138	Adverse-Pressure-Gradient Effects on Turbulent Boundary Layers: Statistics and Flow-Field Organization. <i>Flow, Turbulence and Combustion</i> , 2017 , 99, 589-612	2.5	31
137	Impact simulation and optimisation of elastic fuel tanks reinforced with exoskeleton for aerospace applications. <i>International Journal of Crashworthiness</i> , 2017 , 22, 271-293	1	5
136	Simulation of a Large-Eddy-Break-up Device (LEBU) in a Moderate Reynolds Number Turbulent Boundary Layer. <i>Flow, Turbulence and Combustion</i> , 2017 , 98, 445-460	2.5	10

135	Influence of a Large-Eddy-Breakup-Device on the Turbulent Interface of Boundary Layers. <i>Flow, Turbulence and Combustion</i> , 2017 , 99, 823-835	2.5	6
134	Linear stability of buffer layer streaks in turbulent channels with variable density and viscosity. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	4
133	Scaling of Adverse-Pressure-Gradient Turbulent Boundary Layers in Near-Equilibrium Conditions. <i>Springer Proceedings in Physics</i> , 2017 , 73-78	0.2	
132	Transitional and Turbulent Bent Pipes. <i>Springer Proceedings in Physics</i> , 2017 , 81-87	0.2	
131	Identifying Well-Behaved Turbulent Boundary Layers. <i>Springer Proceedings in Physics</i> , 2017 , 67-72	0.2	
130	Convergence of numerical simulations of turbulent wall-bounded flows and mean cross-flow structure of rectangular ducts. <i>Meccanica</i> , 2016 , 51, 3025-3042	2.1	53
129	Parallel performance of h-type Adaptive Mesh Refinement for Nek5000 2016 ,		1
128	Characterization of the Massively Separated Wake Behind a Square Cylinder by Means of Direct Numerical Simulation. <i>Springer Proceedings in Physics</i> , 2016 , 259-266	0.2	
127	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	2.1	7
126	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	2.4	17
125	Simulations of turbulent asymptotic suction boundary layers. <i>Journal of Turbulence</i> , 2016 , 17, 157-180	2.1	19
124	Flow Features in Three-Dimensional Turbulent Duct Flows with Different Aspect Ratios. <i>Springer Proceedings in Physics</i> , 2016 , 123-126	0.2	
123	Wall Oscillation Induced Drag Reduction of Turbulent Boundary Layers. <i>Springer Proceedings in Physics</i> , 2016 , 161-165	0.2	1
122	Turbulent Asymptotic Suction Boundary Layers: Effect of Domain Size and Development Time. <i>Springer Proceedings in Physics</i> , 2016 , 173-177	0.2	
121	Temperature Effects in Hot-Wire Measurements on Higher-Order Moments in Wall Turbulence. <i>Springer Proceedings in Physics</i> , 2016 , 185-189	0.2	
120	A New High-Order Method for Simulating Turbulent Pipe Flow. <i>Springer Proceedings in Physics</i> , 2016 , 211-215	0.2	
119	Bypass transition and spot nucleation in boundary layers. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	21
118	Reynolds number dependence of large-scale friction control in turbulent channel flow. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	15

117	On Minimum Aspect Ratio for Experimental Duct Flow Facilities. <i>ERCOFTAC Series</i> , 2016 , 201-211	0.1	
116	Actuator line simulations of a Joukowsky and Tjeborg rotor using spectral element and finite volume methods. <i>Journal of Physics: Conference Series</i> , 2016 , 753, 082011	0.3	2
115	On determining characteristic length scales in pressure gradient turbulent boundary layers. <i>Journal of Physics: Conference Series</i> , 2016 , 708, 012014	0.3	5
114	Aspect ratio effect on particle transport in turbulent duct flows. <i>Physics of Fluids</i> , 2016 , 28, 115103	4.4	21
113	Global effect of local skin friction drag reduction in spatially developing turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2016 , 805, 303-321	3.7	26
112	Large-eddy simulations of adverse pressure gradient turbulent boundary layers. <i>Journal of Physics: Conference Series</i> , 2016 , 708, 012012	0.3	2
111	Edge states as mediators of bypass transition in boundary-layer flows. <i>Journal of Fluid Mechanics</i> , 2016 , 801,	3.7	18
110	Characterization of the secondary flow in hexagonal ducts. <i>Physics of Fluids</i> , 2016 , 28, 125101	4.4	41
109	On the global nonlinear instability of the rotating-disk flow over a finite domain. <i>Journal of Fluid Mechanics</i> , 2016 , 803, 332-355	3.7	15
108	On determining characteristic length scales in pressure-gradient turbulent boundary layers. <i>Physics of Fluids</i> , 2016 , 28, 055101	4.4	45
107	On Large-Scale Friction Control in Turbulent Wall Flow in Low Reynolds Number Channels. <i>Flow, Turbulence and Combustion</i> , 2016 , 97, 811-827	2.5	15
106	Modal instability of the flow in a toroidal pipe. <i>Journal of Fluid Mechanics</i> , 2016 , 792, 894-909	3.7	21
105	Particle transport in turbulent curved pipe flow. <i>Journal of Fluid Mechanics</i> , 2016 , 793, 248-279	3.7	24
104	Turbulence collapse in a suction boundary layer. <i>Journal of Fluid Mechanics</i> , 2016 , 795, 356-379	3.7	13
103	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	2.4	57
102	Swirl-switching phenomenon in turbulent flow through toroidal pipes. <i>International Journal of Heat and Fluid Flow</i> , 2016 , 61, 108-116	2.4	11
101	On the Strong Scaling of the Spectral Element Solver Nek5000 on Petascale Systems 2016 ,		23
100	Investigation of the Global Instability of the Rotating-disk Boundary Layer. <i>Procedia IUTAM</i> , 2015 , 14, 321-328		8

99	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	2.4	54
98	Hairpin vortices in turbulent boundary layers. <i>Physics of Fluids</i> , 2015 , 27, 025108	4.4	47
97	Evidence of sublaminal drag naturally occurring in a curved pipe. <i>Physics of Fluids</i> , 2015 , 27, 035105	4.4	10
96	Sources and fluxes of scale energy in the overlap layer of wall turbulence. <i>Journal of Fluid Mechanics</i> , 2015 , 771, 407-423	3.7	19
95	Global linear instability of the rotating-disk flow investigated through simulations. <i>Journal of Fluid Mechanics</i> , 2015 , 765, 612-631	3.7	17
94	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	2.1	44
93	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	2.1	26
92	Particle Velocity and Acceleration in Turbulent Bent Pipe Flows. <i>Flow, Turbulence and Combustion</i> , 2015 , 95, 539-559	2.5	10
91	Global stability and optimal perturbation for a jet in cross-flow. <i>European Journal of Mechanics, B/Fluids</i> , 2015 , 49, 438-447	2.4	16
90	Enhanced secondary motion of the turbulent flow through a porous square duct. <i>Journal of Fluid Mechanics</i> , 2015 , 784, 681-693	3.7	28
89	A comparison of opposition control in turbulent boundary layer and turbulent channel flow. <i>Physics of Fluids</i> , 2015 , 27, 075101	4.4	29
88	Global Stability Analysis of a Roughness Wake in a Falkner-Skan-Cooke Boundary Layer. <i>Procedia IUTAM</i> , 2015 , 14, 192-200		2
87	Investigations of Stability and Transition of a Jet in Crossflow Using DNS. <i>Fluid Mechanics and Its Applications</i> , 2015 , 7-18	0.2	2
86	Investigations of Stability and Transition of a Jet in Crossflow Using DNS. <i>ERCOfTAC Series</i> , 2015 , 207-217	1.1	2
85	Nek5000 with OpenACC. <i>Lecture Notes in Computer Science</i> , 2015 , 57-68	0.9	2
84	Turbulent Boundary Layers in Long Computational Domains. <i>ERCOfTAC Series</i> , 2015 , 267-274	0.1	
83	Universality and scaling phenomenology of small-scale turbulence in wall-bounded flows. <i>Physics of Fluids</i> , 2014 , 26, 035107	4.4	9
82	Recurrent bursts via linear processes in turbulent environments. <i>Physical Review Letters</i> , 2014 , 112, 144502	0.2	9

81	Simulation and validation of a spatially evolving turbulent boundary layer up to. <i>International Journal of Heat and Fluid Flow</i> , 2014 , 47, 57-69	2.4	106
80	On the near-wall vortical structures at moderate Reynolds numbers. <i>European Journal of Mechanics, B/Fluids</i> , 2014 , 48, 75-93	2.4	45
79	Turbulent Boundary Layers in Long Computational Domains. <i>Springer Proceedings in Physics</i> , 2014 , 91-96	0.2	
78	Experiments and Computations of Localized Pressure Gradients with Different History Effects. <i>AIAA Journal</i> , 2014 , 52, 368-384	2.1	24
77	Complexity of localised coherent structures in a boundary-layer flow. <i>European Physical Journal E</i> , 2014 , 37, 32	1.5	13
76	Statistics of Particle Accumulation in Spatially Developing Turbulent Boundary Layers. <i>Flow, Turbulence and Combustion</i> , 2014 , 92, 27-40	2.5	6
75	Aspect ratio effects in turbulent duct flows studied through direct numerical simulation. <i>Journal of Turbulence</i> , 2014 , 15, 677-706	2.1	74
74	The influence of temperature fluctuations on hot-wire measurements in wall-bounded turbulence. <i>Experiments in Fluids</i> , 2014 , 55, 1	2.5	5
73	Role of data uncertainties in identifying the logarithmic region of turbulent boundary layers. <i>Experiments in Fluids</i> , 2014 , 55, 1	2.5	18
72	A new high-order method for the simulation of incompressible wall-bounded turbulent flows. <i>Journal of Computational Physics</i> , 2014 , 272, 108-126	4.1	2
71	A numerical study of the unstratified and stratified Ekman layer. <i>Journal of Fluid Mechanics</i> , 2014 , 755, 672-704	3.7	31
70	Turbulent pipe flow: Statistics, Re-dependence, structures and similarities with channel and boundary layer flows. <i>Journal of Physics: Conference Series</i> , 2014 , 506, 012010	0.3	7
69	Hairpin vortices in turbulent boundary layers. <i>Journal of Physics: Conference Series</i> , 2014 , 506, 012008	0.3	4
68	Secondary instability and tertiary states in rotating plane Couette flow. <i>Journal of Fluid Mechanics</i> , 2014 , 761, 27-61	3.7	9
67	Mutual inductance instability of the tip vortices behind a wind turbine. <i>Journal of Fluid Mechanics</i> , 2014 , 755, 705-731	3.7	88
66	Stability Tools for the Spectral-Element Code Nek5000: Application to Jet-in-Crossflow. <i>Lecture Notes in Computational Science and Engineering</i> , 2014 , 349-359	0.3	9
65	Preparing Scientific Application Software for Exascale Computing. <i>Lecture Notes in Computer Science</i> , 2013 , 27-42	0.9	3
64	Stabilization of the Spectral Element Method in Convection Dominated Flows by Recovery of Skew-Symmetry. <i>Journal of Scientific Computing</i> , 2013 , 57, 254-277	2.3	20

63	Evolution of turbulence characteristics from straight to curved pipes. <i>International Journal of Heat and Fluid Flow</i> , 2013 , 41, 16-26	2.4	53
62	Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. <i>Flow, Turbulence and Combustion</i> , 2013 , 91, 475-495	2.5	169
61	Correcting hot-wire spatial resolution effects in third- and fourth-order velocity moments in wall-bounded turbulence. <i>Experiments in Fluids</i> , 2013 , 54, 1	2.5	14
60	Spatial resolution analysis of planar PIV measurements to characterise vortices in turbulent flows. <i>Journal of Turbulence</i> , 2013 , 14, 37-66	2.1	5
59	Localized edge states in the asymptotic suction boundary layer. <i>Journal of Fluid Mechanics</i> , 2013 , 717,	3.7	40
58	Comparison of experiments and simulations for zero pressure gradient turbulent boundary layers at moderate Reynolds numbers. <i>Experiments in Fluids</i> , 2013 , 54, 1	2.5	37
57	Identifying Turbulent Spots in Transitional Boundary Layers. <i>Journal of Turbomachinery</i> , 2013 , 135,	1.8	5
56	Oblique laminar-turbulent interfaces in plane shear flows. <i>Physical Review Letters</i> , 2013 , 110, 034502	7.4	71
55	Coherent structures and dominant frequencies in a turbulent three-dimensional diffuser. <i>Journal of Fluid Mechanics</i> , 2012 , 699, 320-351	3.7	16
54	Bifurcation and stability analysis of a jet in cross-flow: onset of global instability at a low velocity ratio. <i>Journal of Fluid Mechanics</i> , 2012 , 696, 94-121	3.7	38
53	Turbulent Boundary-Layer Flow: Comparing Experiments with DNS. <i>Springer Proceedings in Physics</i> , 2012 , 213-216	0.2	1
52	A vorticity stretching diagnostic for turbulent and transitional flows. <i>Theoretical and Computational Fluid Dynamics</i> , 2012 , 26, 485-499	2.3	4
51	Self-similar transport of inertial particles in a turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2012 , 706, 584-596	3.7	27
50	Turbulent-laminar coexistence in wall flows with Coriolis, buoyancy or Lorentz forces. <i>Journal of Fluid Mechanics</i> , 2012 , 704, 137-172	3.7	58
49	A low-dissipative, scale-selective discretization scheme for the Navier-Stokes equations. <i>Computers and Fluids</i> , 2012 , 70, 195-205	2.8	38
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