# Philipp Schlatter

List of Publications by Year
in descending order



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|---|---|---|---|
| 227 papers | 9,765 citations | 50276<br>46 h-index | 42399<br>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. | 3.6 | 5 |
| 2 | Techniques for Turbulence Tripping of Boundary Layers in RANS Simulations. Flow, Turbulence and Combustion, 2022, 108, 661-682. | 2.6 | 6 |
| 3 | Modeling the Turbulent Wake Behind a Wall-Mounted Square Cylinder. Logic Journal of the IGPL, 2022, 30, 263-276. | 1.5 | 7 |
| 4 | Applying Bayesian optimization with Gaussian process regression to computational fluid dynamics problems. Journal of Computational Physics, 2022, 449, 110788. | 3.8 | 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, . | 2.5 | 4 |
| 7 | An adverse-pressure-gradient turbulent boundary layer with nearly constant up to. Journal of Fluid Mechanics, 2022, 939, . | 3.4 | 15 |
| 8 | Topology optimization of unsteady flows using the spectral element method. Computers and Fluids, 2022, 239, 105387. | 2.5 | 6 |
| 9 | Decomposition of the mean friction drag on an NACA4412 airfoil under uniform blowing/suction. Journal of Fluid Mechanics, 2022, 932, . | 3.4 | 13 |
| 10 | RANS Modelling of a NACA4412 Wake Using Wind Tunnel Measurements. Fluids, 2022, 7, 153. | 1.7 | 4 |
| 11 | An uncertainty-quantification framework for assessing accuracy, sensitivity, and robustness in computational fluid dynamics. Journal of Computational Science, 2022, 62, 101688. | 2.9 | 7 |
| 12 | Physics-informed neural networks for solving Reynolds-averaged Navierâ€"Stokes equations. Physics of Fluids, 2022, 34, . | 4.0 | 95 |
| 13 | Predicting the temporal dynamics of turbulent channels through deep learning. International Journal of Heat and Fluid Flow, 2022, 96, 109010. | 2.4 | 7 |
| 14 | 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 |
| 15 | UQit: A Python package for uncertainty quantification (UQ) in computational fluid dynamics (CFD). Journal of Open Source Software, 2021, 6, 2871. | 4.6 | 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, . | 3.4 | 23 |
| 18 | Intense Reynolds-stress events in turbulent ducts. International Journal of Heat and Fluid Flow, 2021, 89, 108802. | 2.4 | 7 |

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| 19 | Aerodynamic Free-Flight Conditions in Wind Tunnel Modelling through Reduced-Order Wall Inserts. Fluids, 2021, 6, 265. | 1.7 | 3 |
| 20 | 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 |
| 21 | On numerical uncertainties in scale-resolving simulations of canonical wall turbulence. Computers and Fluids, 2021, 227, 105024. | 2.5 | 12 |
| 22 | Spanwise-coherent hydrodynamic waves around flat plates and airfoils. Journal of Fluid Mechanics, 2021, 927, . | 3.4 | 14 |
| 23 | Notes on Percolation Analysis of Sampled Scalar Fields. Mathematics and Visualization, 2021, , 39-54. | 0.6 | 1 |
| 24 | Flow Structures on a Planar Food and Drug Administration (FDA) Nozzle at Low and Intermediate Reynolds Number. Fluids, 2021, 6, 4. | 1.7 | 6 |
| 25 | Convolutional-network models to predict wall-bounded turbulence from wall quantities. Journal of Fluid Mechanics, 2021, 928, . | 3.4 | 97 |
| 26 | Uniform blowing and suction applied to nonuniform adverse-pressure-gradient wing boundary layers. Physical Review Fluids, 2021, 6, . | 2.5 | 12 |
| 27 | Soft Computing Techniques to Analyze the Turbulent Wake of a Wall-Mounted Square Cylinder. Advances in Intelligent Systems and Computing, 2020, , 577-586. | 0.6 | 4 |
| 28 | Adaptive mesh refinement for steady flows in Nek5000. Computers and Fluids, 2020, 197, 104352. | 2.5 | 13 |
| 29 | Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. Experimental Thermal and Fluid Science, 2020, 112, 109975. | 2.7 | 18 |
| 30 | Direct Numerical Simulations of Bypass Transition over Distributed Roughness. AIAA Journal, 2020, 58, 702-711. | 2.6 | 15 |
| 31 | Effect of adverse pressure gradients on turbulent wing boundary layers. Journal of Fluid Mechanics, 2020, 883, . | 3.4 | 41 |
| 32 | Resolvent modelling of near-wall coherent structures in turbulent channel flow. International Journal of Heat and Fluid Flow, 2020, 85, 108662. | 2.4 | 23 |
| 33 | 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 |
| 34 | 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 |
| 35 | Near wall coherence in wall-bounded flows and implications for flow control. International Journal of Heat and Fluid Flow, 2020, 86, 108683. | 2.4 | 4 |
| 36 | Global stability analysis of a 90Â°-bend pipe flow. International Journal of Heat and Fluid Flow, 2020, 86, 108742. | 2.4 | 12 |

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| 37 | Parametric dependencies of the yawed windâ€turbine wake development. Wind Energy, 2020, 23, 1367-1380. | 4.2 | 11 |
| 38 | Aerodynamic Effects of Uniform Blowing and Suction on a NACA4412 Airfoil. Flow, Turbulence and Combustion, 2020, 105, 735-759. | 2.6 | 35 |
| 39 | Prediction of wall-bounded turbulence from wall quantities using convolutional neural networks. Journal of Physics: Conference Series, 2020, 1522, 012022. | 0.4 | 16 |
| 40 | Coherent structures in turbulent boundary layers over an airfoil. Journal of Physics: Conference Series, 2020, 1522, 012020. | 0.4 | 3 |
| 41 | Simulation strategies for the Food and Drug Administration nozzle using Nek5000. AIP Advances, 2020, 10, . | 1.3 | 9 |
| 42 | Critical Point for Bifurcation Cascades and Featureless Turbulence. Physical Review Letters, 2020, 124, 014501. | 7.8 | 9 |
| 43 | Enabling Adaptive Mesh Refinement for Spectral-Element Simulations of Turbulence Around Wing Sections. Flow, Turbulence and Combustion, 2020, 105, 415-436. | 2.6 | 15 |
| 44 | Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. Physical Review Fluids, 2020, 5, . | 2.5 | 17 |
| 45 | Backflow events under the effect of secondary flow of Prandtl's first kind. Physical Review Fluids, 2020, 5, . | 2.5 | 14 |
| 46 | Decomposition of the mean friction drag in adverse-pressure-gradient turbulent boundary layers. Physical Review Fluids, 2020, 5, . | 2.5 | 18 |
| 47 | 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 |
| 48 | Edge manifold as a Lagrangian coherent structure in a high-dimensional state space. Physical Review Research, 2020, 2, . | 3.6 | 11 |
| 49 | Effects of Different Friction Control Techniques on Turbulence Developing Around Wings. ERCOFTAC Series, 2020, , 305-311. | 0.1 | 0 |
| 50 | Mesh Optimization Using Dual-Weighted Error Estimators: Application to the Periodic Hill. ERCOFTAC Series, 2020, , 397-403. | 0.1 | 0 |
| 51 | Power-Spectral Density in Turbulent Boundary Layers on Wings. ERCOFTAC Series, 2020, , 11-16. | 0.1 | 1 |
| 52 | Non-conforming Elements in Nek5000: Pressure Preconditioning and Parallel Performance. Lecture Notes in Computational Science and Engineering, 2020, , 599-609. | 0.3 | 2 |
| 53 | Quantification of amplitude modulation in wall-bounded turbulence. Fluid Dynamics Research, 2019, 51, 011408. | 1.3 | 40 |
| 54 | 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 |

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| 55 | 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></m algorithm in Nek5000. Journal of Parallel and Distributed Computing, 2019, 132, 69-78. | 4.1 | 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. | 2.7 | 8 |
| 57 | The vanishing of strong turbulent fronts in bent pipes. Journal of Fluid Mechanics, 2019, 866, 487-502. | 3.4 | 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. | 3.4 | 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. | 3.4 | 13 |
| 63 | Predictions of turbulent shear flows using deep neural networks. Physical Review Fluids, 2019, 4, . | 2.5 | 155 |
| 64 | Bypass transition delay using oscillations of spanwise wall velocity. Physical Review Fluids, 2019, 4, . | 2.5 | 6 |
| 65 | Large-Scale Energy in Turbulent Boundary Layers: Reynolds-Number and Pressure-Gradient Effects. Springer Proceedings in Physics, 2019, , 69-74. | 0.2 | 0 |
| 66 | Characterization of turbulent coherent structures in square duct flow. Journal of Physics: Conference Series, 2018, 1001, 012008. | 0.4 | 11 |
| 67 | Edge state modulation by mean viscosity gradients. Journal of Fluid Mechanics, 2018, 838, 379-403. | 3.4 | 4 |
| 68 | Turbulence in the rotating-disk boundary layer investigated through direct numerical simulations. European Journal of Mechanics, B/Fluids, 2018, 70, 6-18. | 2.5 | 20 |
| 69 | Transition to turbulence in the rotating-disk boundary-layer flow with stationary vortices. Journal of Fluid Mechanics, 2018, 836, 43-71. | 3.4 | 21 |
| 70 | The three-dimensional structure of swirl-switching in bent pipe flow. Journal of Fluid Mechanics, 2018, 835, 86-101. | 3.4 | 38 |
| 71 | Topology optimization of heat sinks in a square differentially heated cavity. International Journal of Heat and Fluid Flow, 2018, 74, 36-52. | 2.4 | 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. | 0.4 | 5 |

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| 73 | Direct numerical simulation of a turbulent 90Â° bend pipe flow. International Journal of Heat and Fluid Flow, 2018, 73, 199-208. | 2.4 | 33 |
| 74 | 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 |
| 75 | Lossy Data Compression Effects on Wall-bounded Turbulence: Bounds on Data Reduction. Flow, Turbulence and Combustion, 2018, 101, 365-387. | 2.6 | 7 |
| 76 | Turbulent rectangular ducts with minimum secondary flow. International Journal of Heat and Fluid Flow, 2018, 72, 317-328. | 2.4 | 12 |
| 77 | Secondary flow in spanwise-periodic in-phase sinusoidal channels. Journal of Fluid Mechanics, 2018, 851, 288-316. | 3.4 | 16 |
| 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 | 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 |
| 80 | 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 |
| 81 | Secondary flow in turbulent ducts with increasing aspect ratio. Physical Review Fluids, 2018, 3, . | 2.5 | 57 |
| 82 | Adjoint optimization of natural convection problems: differentially heated cavity. Theoretical and Computational Fluid Dynamics, 2017, 31, 537-553. | 2.2 | 7 |
| 83 | Characterisation of backflow events over a wing section. Journal of Turbulence, 2017, 18, 170-185. | 1.4 | 32 |
| 84 | On the identification of well-behaved turbulentÂboundaryÂlayers. Journal of Fluid Mechanics, 2017, 822, 109-138. | 3.4 | 43 |
| 85 | 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 |
| 86 | High-Order Numerical Simulations of Wind Turbine Wakes. Journal of Physics: Conference Series, 2017, 854, 012025. | 0.4 | 8 |
| 87 | History effects and near equilibrium in adverse-pressure-gradient turbulent boundary layers. Journal of Fluid Mechanics, 2017, 820, 667-692. | 3.4 | 105 |
| 88 | Computing Optimal Forcing Using Laplace Preconditioning. Communications in Computational Physics, 2017, 22, 1508-1532. | 1.7 | 9 |
| 89 | 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 |
| 90 | Pressure-Gradient Turbulent Boundary Layers Developing Around a Wing Section. Flow, Turbulence and Combustion, 2017, 99, 613-641. | 2.6 | 46 |

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| 91 | Revisiting History Effects in Adverse-Pressure-Gradient Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 565-587. | 2.6 | 32 |
| 92 | Turbulent Duct Flow Controlled with Spanwise Wall Oscillations. Flow, Turbulence and Combustion, 2017, 99, 787-806. | 2.6 | 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. | 2.4 | 33 |
| 94 | 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 |
| 95 | Adverse-Pressure-Gradient Effects on Turbulent Boundary Layers: Statistics and Flow-Field Organization. Flow, Turbulence and Combustion, 2017, 99, 589-612. | 2.6 | 48 |
| 96 | Impact simulation and optimisation of elastic fuel tanks reinforced with exoskeleton for aerospace applications. International Journal of Crashworthiness, 2017, 22, 271-293. | 1.9 | 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. | 2.6 | 15 |
| 98 | 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 |
| 99 | Linear stability of buffer layer streaks in turbulent channels with variable density and viscosity. Physical Review Fluids, 2017, 2, . | 2.5 | 8 |
| 100 | Scaling of Adverse-Pressure-Gradient Turbulent Boundary Layers in Near-Equilibrium Conditions. Springer Proceedings in Physics, 2017, , 73-78. | 0.2 | 0 |
| 101 | Transitional and Turbulent Bent Pipes. Springer Proceedings in Physics, 2017, , 81-87. | 0.2 | 0 |
| 102 | Identifying Well-Behaved Turbulent Boundary Layers. Springer Proceedings in Physics, 2017, , 67-72. | 0.2 | 0 |
| 103 | Actuator line simulations of a Joukowsky and TjÃ¦reborg rotor using spectral element and finite volume methods. Journal of Physics: Conference Series, 2016, 753, 082011. | 0.4 | 2 |
| 104 | On determining characteristic length scales in pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012014. | 0.4 | 5 |
| 105 | Aspect ratio effect on particle transport in turbulent duct flows. Physics of Fluids, 2016, 28, . | 4.0 | 34 |
| 106 | Global effect of local skin friction dragÂreduction in spatially developing turbulent boundary layer. Journal of Fluid Mechanics, 2016, 805, 303-321. | 3.4 | 43 |
| 107 | Large-eddy simulations of adverse pressure gradient turbulent boundary layers. Journal of Physics: Conference Series, 2016, 708, 012012. | 0.4 | 6 |
| 108 | Edge states as mediators of bypass transition in boundary-layer flows. Journal of Fluid Mechanics, 2016, 801, . | 3.4 | 23 |

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| 109 | Characterization of the secondary flow in hexagonal ducts. Physics of Fluids, 2016, 28, . | 4.0 | 54 |
| 110 | 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 |
| 111 | On determining characteristic length scales in pressure-gradient turbulent boundary layers. Physics of Fluids, 2016, 28, . | 4.0 | 71 |
| 112 | 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 |
| 113 | Modal instability of the flow in a toroidal pipe. Journal of Fluid Mechanics, 2016, 792, 894-909. | 3.4 | 28 |
| 114 | Particle transport in turbulent curved pipe flow. Journal of Fluid Mechanics, 2016, 793, 248-279. | 3.4 | 32 |
| 115 | Turbulence collapse in a suction boundary layer. Journal of Fluid Mechanics, 2016, 795, 356-379. | 3.4 | 16 |
| 116 | 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 |
| 117 | Swirl-switching phenomenon in turbulent flow through toroidal pipes. International Journal of Heat and Fluid Flow, 2016, 61, 108-116. | 2.4 | 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. Meccanica, 2016, 51, 3025-3042. | 2.0 | 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. Journal of Turbulence, 2016, 17, 913-929. | 1.4 | 16 |
| 122 | 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 |
| 123 | Simulations of turbulent asymptotic suction boundary layers. Journal of Turbulence, 2016, 17, 157-180. | 1.4 | 26 |
| 124 | Flow Features in Three-Dimensional Turbulent Duct Flows with Different Aspect Ratios. Springer Proceedings in Physics, 2016, , 123-126. | 0.2 | 0 |
| 125 | Wall Oscillation Induced Drag Reduction of Turbulent Boundary Layers. Springer Proceedings in Physics, 2016, , 161-165. | 0.2 | 1 |
| 126 | Temperature Effects in Hot-Wire Measurements on Higher-Order Moments in Wall Turbulence. Springer Proceedings in Physics, 2016, , 185-189. | 0.2 | 0 |

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| 127 | Bypass transition and spot nucleation in boundary layers. Physical Review Fluids, 2016, 1, . | 2.5 | 29 |
| 128 | Reynolds number dependence of large-scale friction control in turbulent channel flow. Physical Review Fluids, 2016, 1, . | 2.5 | 22 |
| 129 | Enhanced secondary motion of the turbulent flow through a porous square duct. Journal of Fluid Mechanics, 2015, 784, 681-693. | 3.4 | 32 |
| 130 | A comparison of opposition control in turbulent boundary layer and turbulent channel flow. Physics of Fluids, 2015, 27, . | 4.0 | 48 |
| 131 | Global Stability Analysis of a Roughness Wake in a Falknerâ€“Skanâ€“Cooke Boundary Layer. Procedia IUTAM, 2015, 14, 192-200. | 1.2 | 7 |
| 132 | Investigations of Stability and Transition ofÂaÂJetÂin Crossflow Using DNS. Fluid Mechanics and Its Applications, 2015, , 7-18. | 0.2 | 2 |
| 133 | Investigation of the Global Instability of the Rotating-disk Boundary Layer. Procedia IUTAM, 2015, 14, 321-328. | 1.2 | 9 |
| 134 | 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 |
| 135 | Hairpin vortices in turbulent boundary layers. Physics of Fluids, 2015, 27, . | 4.0 | 64 |
| 136 | Evidence of sublaminar drag naturally occurring in a curved pipe. Physics of Fluids, 2015, 27, . | 4.0 | 14 |
| 137 | Sources and fluxes of scale energy in the overlap layer of wall turbulence. Journal of Fluid Mechanics, 2015, 771, 407-423. | 3.4 | 26 |
| 138 | Global linear instability of the rotating-disk flow investigated through simulations. Journal of Fluid Mechanics, 2015, 765, 612-631. | 3.4 | 24 |
| 139 | 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 |
| 140 | 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 |
| 141 | Particle Velocity and Acceleration in Turbulent Bent Pipe Flows. Flow, Turbulence and Combustion, 2015, 95, 539-559. | 2.6 | 12 |
| 142 | Global stability and optimal perturbation for a jet in cross-flow. European Journal of Mechanics, B/Fluids, 2015, 49, 438-447. | 2.5 | 24 |
| 143 | Investigations of Stability and Transition of a Jet in Crossflow Using DNS. ERCOFTAC Series, 2015, , 207-217. | 0.1 | 2 |
| 144 | Nek5000 with OpenACC. Lecture Notes in Computer Science, 2015, , 57-68. | 1.3 | 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,<i>Re</i>-dependence, structures and similarities with channel and boundary layer flows. Journal of Physics: Conference Series, 2014, 506, 012010. | 0.4 | 8 |
| 147 | Hairpin vortices in turbulent boundary layers. Journal of Physics: Conference Series, 2014, 506, 012008. | 0.4 | 5 |
| 148 | Secondary instability and tertiary states in rotating plane Couette flow. Journal of Fluid Mechanics, 2014, 761, 27-61. | 3.4 | 11 |
| 149 | Mutual inductance instability of the tip vortices behind a wind turbine. Journal of Fluid Mechanics, 2014, 755, 705-731. | 3.4 | 132 |
| 150 | Universality and scaling phenomenology of small-scale turbulence in wall-bounded flows. Physics of Fluids, 2014, 26, . | 4.0 | 10 |
| 151 | Recurrent Bursts via Linear Processes in Turbulent Environments. Physical Review Letters, 2014, 112, 144502. | 7.8 | 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. | 2.4 | 148 |
| 153 | On the near-wall vortical structures at moderate Reynolds numbers. European Journal of Mechanics, B/Fluids, 2014, 48, 75-93. | 2.5 | 62 |
| 154 | Turbulent Boundary Layers in Long Computational Domains. Springer Proceedings in Physics, 2014, , 91-96. | 0.2 | 0 |
| 155 | Experiments and Computations of Localized Pressure Gradients with Different History Effects. AIAA Journal, 2014, 52, 368-384. | 2.6 | 30 |
| 156 | Complexity of localised coherent structures in a boundary-layer flow. European Physical Journal E, 2014, 37, 32. | 1.6 | 17 |
| 157 | Statistics of Particle Accumulation in Spatially Developing Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2014, 92, 27-40. | 2.6 | 8 |
| 158 | Aspect ratio effects in turbulent duct flows studied through direct numerical simulation. Journal of Turbulence, 2014, 15, 677-706. | 1.4 | 98 |
| 159 | The influence of temperature fluctuations on hot-wire measurements in wall-bounded turbulence. Experiments in Fluids, 2014, 55, 1. | 2.4 | 7 |
| 160 | Role of data uncertainties in identifying the logarithmic region of turbulent boundary layers. Experiments in Fluids, 2014, 55, 1. | 2.4 | 22 |
| 161 | A new high-order method for the simulation of incompressible wall-bounded turbulent flows. Journal of Computational Physics, 2014, 272, 108-126. | 3.8 | 2 |
| 162 | A numerical study of the unstratified and stratified Ekman layer. Journal of Fluid Mechanics, 2014, 755, 672-704. | 3.4 | 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. | 0.3 | 11 |
| 164 | Preparing Scientific Application Software for Exascale Computing. Lecture Notes in Computer Science, 2013, , 27-42. | 1.3 | 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. | 2.3 | 32 |
| 166 | Evolution of turbulence characteristics from straight to curved pipes. International Journal of Heat and Fluid Flow, 2013, 41, 16-26. | 2.4 | 78 |
| 167 | Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. Flow, Turbulence and Combustion, 2013, 91, 475-495. | 2.6 | 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. | 2.4 | 17 |
| 169 | Spatial resolution analysis of planar PIV measurements to characterise vortices in turbulent flows. Journal of Turbulence, 2013, 14, 37-66. | 1.4 | 7 |
| 170 | Localized edge states in the asymptotic suction boundary layer. Journal of Fluid Mechanics, 2013, 717, . | 3.4 | 48 |
| 171 | Comparison of experiments and simulations for zero pressure gradient turbulent boundary layers at moderate Reynolds numbers. Experiments in Fluids, 2013, 54, 1. | 2.4 | 44 |
| 172 | Identifying Turbulent Spots in Transitional Boundary Layers. Journal of Turbomachinery, 2013, 135, . | 1.7 | 6 |
| 173 | Oblique Laminar-Turbulent Interfaces in Plane Shear Flows. Physical Review Letters, 2013, 110, 034502. | 7.8 | 86 |
| 174 | Rare backflow and extreme wall-normal velocity fluctuations in near-wall turbulence. Physics of Fluids, 2012, 24, . | 4.0 | 89 |
| 175 | Self-Sustained Localized Structures in a Boundary-Layer Flow. Physical Review Letters, 2012, 108, 044501. | 7.8 | 50 |
| 176 | Pressure fluctuation in high-Reynolds-number turbulent boundary layer: results from experiments and DNS. Journal of Turbulence, 2012, 13, N50. | 1.4 | 18 |
| 177 | Turbulent boundary layers at moderate Reynolds numbers: inflow length and tripping effects. Journal of Fluid Mechanics, 2012, 710, 5-34. | 3.4 | 210 |
| 178 | Coherent structures and dominant frequencies in a turbulent three-dimensional diffuser. Journal of Fluid Mechanics, 2012, 699, 320-351. | 3.4 | 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. | 3.4 | 48 |
| 180 | Turbulent Boundary-Layer Flow: Comparing Experiments with DNS. Springer Proceedings in Physics, 2012, , 213-216. | 0.2 | 2 |

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