# Christopher Davies

List of Publications by Year
in descending order

| 46 papers | 824 citations | 567281 15 h-index | 477307 29 g-index |
|---|---|---|---|
| 50 all docs | 50 docs citations | 50 times ranked | 360 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------| 
| 1 | Control of stationary convective instabilities in the rotating disk boundary layer via time-periodic modulation. Journal of Fluid Mechanics, 2021, 925, . | 3.4 | 3 |
| 2 | An adjoint approach for computing the receptivity of the rotating disc boundary layer to surface roughness. Journal of Fluid Mechanics, 2021, 926, . | 3.4 | 5 |
| 3 | Onset of absolutely unstable behaviour in the Stokes layer: a Floquet approach to the Briggs method. Journal of Fluid Mechanics, 2021, 928, . | 3.4 | 0 |
| 4 | Effects of partial slip on the local-global linear stability of the infinite rotating disk boundary layer. Physics of Fluids, 2020, 32, . | 4.0 | 11 |
| 5 | Linear stability of the flow of a second order fluid past a wedge. Physics of Fluids, 2020, 32, . | 4.0 | 3 |
| 6 | Linear stability eigenmodal analysis for steady and temporally periodic boundary-layer flow configurations using a velocity-vorticity formulation. Journal of Computational Physics, 2020, 409, 109325. | 3.8 | 5 |
| 7 | Numerical simulation of the spatiotemporal development of linear disturbances in Stokes layers: Absolute instability and the effects of high-frequency harmonics. Physical Review Fluids, 2020, 5, . | 2.5 | 3 |
| 8 | Global linear instability of rotating-cone boundary layers in a quiescent medium. Physical Review Fluids, 2019, 4, . | 2.5 | 9 |
| 9 | On the impulse response and global instability development of the infinite rotating-disc boundary layer. Journal of Fluid Mechanics, 2018, 857, 239-269. | 3.4 | 11 |
| 10 | Global stability behaviour for the BEK family of rotating boundary layers. Theoretical and Computational Fluid Dynamics, 2017, 31, 519-536. | 2.2 | 4 |
| 11 | Nonlinear effects on the receptivity of cross-flow in the swept Hiemenz flow. Journal of Fluid Mechanics, 2015, 763, 433-459. | 3.4 | 2 |
| 12 | The Linear Impulse Response for Disturbances in an Oscillatory Stokes Layer. Procedia IUTAM, 2015, 14, 381-384. | 1.2 | 1 |
| 13 | The linear stability of a Stokes layer subjected to high-frequency perturbations. Journal of Fluid Mechanics, 2015, 764, 193-218. | 3.4 | 18 |
| 14 | Evolution of disturbance wavepackets in an oscillatory Stokes layer. Journal of Fluid Mechanics, 2014, 752, 543-571. | 3.4 | 18 |
| 15 | Global stability of the rotating-disc boundary layer with an axial magnetic field. Journal of Fluid Mechanics, 2013, 724, 510-526. | 3.4 | 16 |
| 16 | The linear impulse response for disturbances in an oscillatory stokes layer. , 2013, , . | | 0 |
| 17 | Modelling turbulent skin-friction control using linearized Navier–Stokes equations. Journal of Fluid Mechanics, 2012, 702, 403-414. | 3.4 | 28 |
| 18 | The linear stability of oscillatory Poiseuille flow in channels and pipes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2643-2662. | 2.1 | 22 |

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|---|---------|-----|-----------|
| 19 | Modelling turbulent skin-friction control using linearised Navier-Stokes equations. Journal of Physics: Conference Series, 2011, 318, 042026. | 0.4 | 0 |
| 20 | A high order finite-difference solver for investigation of disturbance development in turbulent boundary layers. Computers and Fluids, 2011, 46, 472-478. | 2.5 | 2 |
| 21 | The effects of mass transfer on the global stability of the rotating-disk boundary layer. Journal of Fluid Mechanics, 2010, 663, 401-433. | 3.4 | 12 |
| 22 | The linear stability of a Stokes layer with an imposed axial magnetic field. Journal of Fluid Mechanics, 2010, 662, 320-328. | 3.4 | 3 |
| 23 | Direct numerical simulations of small disturbances in the classical Stokes layer. Journal of Engineering Mathematics, 2010, 68, 327-338. | 1.2 | 14 |
| 24 | A wave driver theory for vortical waves propagating across junctions with application to those between rigid and compliant walls. Journal of Fluid Mechanics, 2009, 625, 1-46. | 3.4 | 4 |
| 25 | Call for Papers: Special Issue on â€˜Flow in Collapsible Tubes or Over Compliant Surfaces for Biomedical Applicationsâ€™Communications in Numerical Methods in Engineering (CNM). International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 217-217. | 3.3 | 0 |
| 26 | Call for Papers: Special Issue on â€˜Flow in Collapsible Tubes or Over Compliant Surfaces for Biomedical Applicationsâ€™Communications in Numerical Methods in Engineering (CNM). Numerical Linear Algebra With Applications, 2008, 15, 391-391. | 1.6 | 0 |
| 27 | A deterministic model for the sublayer streaks in turbulent boundary layers for application to flow control. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 2419-2441. | 3.4 | 10 |
| 28 | Global stability of the rotating-disk boundary layer. Journal of Engineering Mathematics, 2007, 57, 219-236. | 1.2 | 24 |
| 29 | Is Helmholtz Resonance a Problem for Micro-jet Actuators?. Flow, Turbulence and Combustion, 2007, 78, 205-222. | 2.6 | 16 |
| 30 | An Investigation into the Evolution of Sub-Layer Streaks in Two- and Three-Dimensional Turbulent Boundary Layers. , 2007, , 94-96. | | 0 |
| 31 | KLEBANOFF MODES IN SWEPT BOUNDARY LAYERS. Fluid Mechanics and Its Applications, 2006, , 167-172. | 0.2 | 1 |
| 32 | DISTURBANCE DEVELOPMENT IN BOUNDARY LAYERS OVER COMPLIANT SURFACES. , 2006, , 225-230. | | 3 |
| 33 | Computational Studies of Boundary-Layer Disturbance Development. Solid Mechanics and Its Applications, 2006, , 325-334. | 0.2 | 0 |
| 34 | Numerical simulation of boundary-layer disturbance evolution. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 1109-1118. | 3.4 | 4 |
| 35 | Control of Sublayer Streaks Using Microjet Actuators. AIAA Journal, 2005, 43, 1878-1886. | 2.6 | 21 |
| 36 | Stall, Transition and Turbulence: a Tribute to JDAW (invited). , 2005, , . | | 1 |

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|---|---------|-----|-----------|
| 37 | On the spiking stages in deep transition and unsteady separation. Journal of Engineering Mathematics, 2003, 45, 227-245. | 1.2 | 25 |
| 38 | Global behaviour corresponding to the absolute instability of the rotating-disc boundary layer. Journal of Fluid Mechanics, 2003, 486, 287-329. | 3.4 | 96 |
| 39 | Convective and Absolute Instabilities of Flow Over Compliant Walls. Fluid Mechanics and Its Applications, 2003, , 69-93. | 0.2 | 9 |
| 40 | Numerical Simulation of the Interaction of Microactuators and Boundary Layers. AIAA Journal, 2002, 40, 67-73. | 2.6 | 24 |
| 41 | Wave Propagation in Flows Across Junctions Between Rigid and Flexible Walls. , 2002, , . | | 2 |
| 42 | A Novel Velocity–Vorticity Formulation of the Navier–Stokes Equations with Applications to Boundary Layer Disturbance Evolution. Journal of Computational Physics, 2001, 172, 119-165. | 3.8 | 110 |
| 43 | Progress on the Use of Compliant Walls for Laminar-Flow Control. Journal of Aircraft, 2001, 38, 504-512. | 2.4 | 44 |
| 44 | Numerical simulation of the interaction of MEMS actuators and boundary layers. , 2000, , . | | 2 |
| 45 | Instabilities in a plane channel flow between compliant walls. Journal of Fluid Mechanics, 1997, 352, 205-243. | 3.4 | 128 |
| 46 | Numerical simulation of the evolution of Tollmien–Schlichting waves over finite compliant panels. Journal of Fluid Mechanics, 1997, 335, 361-392. | 3.4 | 108 |