Bernhard Scheichl

List of Publications by Year
in descending order

39 papers	182 citations	1040056 9 h-index	1199594 12 g-index
40 all docs	40 docs citations	40 times ranked	88 citing authors

#	Article	IF	Citations
1	Break-away separation for high turbulence intensity and large Reynolds number. Journal of Fluid Mechanics, 2011, 670, 260-300.	3.4	21
2	Turbulent Marginal Separation and the Turbulent Goldstein Problem. AIAA Journal, 2007, 45, 20-36.	2.6	18
3	A novel view on lubricant flow undergoing cavitation in sintered journal bearings. Tribology International, 2015, 88, 189-208.	5.9	17
4	Laminar spread of a circular liquid jet impinging axially on a rotating disc. Journal of Fluid Mechanics, 2019, 864, 449-489.	3.4	12
5	Developed liquid film passing a trailing edge under the action of gravity and capillarity. Journal of Fluid Mechanics, 2018, 850, 924-953.	3.4	11
6	â€œHow turbulentâ€•is the boundary layer separating from a bluff body for arbitrarily large Reynolds numbers?. Acta Mechanica, 2008, 201, 131-151.	2.1	10
7	On turbulent separation. Journal of Engineering Mathematics, 2010, 68, 373-400.	1.2	10
8	Surface tension and energy conservation in a moving fluid. Physical Review Fluids, 2021, 6, .	2.5	10
9	Asymptotic theory of turbulent bluff-body separation: A novel shear layer scaling deduced from an investigation of the unsteady motion. Journal of Fluids and Structures, 2008, 24, 1326-1338.	3.4	9
10	On turbulent marginal boundary layer separation: how the half-power law supersedes the logarithmic law of the wall. International Journal of Computing Science and Mathematics, 2007, 1, 343.	0.3	8
11	Experimental Validation of the Simulated Steady-State Behavior of Porous Journal Bearings1. Journal of Tribology, 2016, 138, .	1.9	8
12	High-Reynolds-Number Asymptotics of Turbulent Boundary Layers. Lecture Notes in Computational Science and Engineering, 2009, , 3-22.	0.3	6
13	Non-unique turbulent boundary layer flows having a moderately large velocity defect: a rational extension of the classical asymptotic theory. Theoretical and Computational Fluid Dynamics, 2013, 27, 735-766.	2.2	5
14	Computational Fluid Dynamics Model to Improve Sucker Rod Pump Operating Mode. , 2020, , .		4
15	Level of Turbulence Intensity Associated with Bluff-Body Separation for Large Values of the Reynolds Number. , 2008, , .		3
16	Modelling the Doctor Blade-Roller Tribosystem for Improving the Cleaning Performance During Paper Production. Tribology Letters, 2013, 51, 199-205.	2.6	3
17	Transient Thermalâ€Stress Analysis of Steel Slag Pots: Impact of the Solidifyingâ€Slag Layer on Heat Transfer and Wear. Steel Research International, 2016, 87, 720-732.	1.8	3
18	Developed liquid film passing a smoothed and wedge-shaped trailing edge: small-scale analysis and the â€˜teapot effectâ€™ at large Reynolds numbers. Journal of Fluid Mechanics, 2021, 926, .	3.4	3

#	Article	IF	Citations
19	A note on the far-asymptotics of Helmholtzâ€“Kirchhoff flows. Theoretical and Computational Fluid Dynamics, 2014, 28, 377-384.	2.2	2
20	Time-mean Turbulent Shear Flows: Classical Modelling â€” Asymptotic Analysis â€” New Perspectives. , 2016, , 71-108.		2
21	A bio-inspired method for direct measurement of local wall shear rates with micrometer localization using the multimeric protein von Willebrand factor as sensor molecule. Biomicrofluidics, 2017, 11, 044117.	2.4	2
22	On transcritical states in viscous flow passing the edge of a horizontal plate. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 663-664.	0.2	2
23	Evolution of a Boundary Layer from Laminar Stagnation-Point Flow towards Turbulent Separation. Springer Proceedings in Physics, 2009, , 187-190.	0.2	2
24	A Uniformly Valid Theory of Turbulent Separation. Springer Proceedings in Physics, 2012, , 85-89.	0.2	2
25	Turbulent shear-layer scaling in the limit of infinite Reynolds number derived from the unsteady equations of motion. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4090011-4090012.	0.2	1
26	Nonlinear effects due to cavitation in self-lubricated bearings. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 581-582.	0.2	1
27	Gross separation approaching a blunt trailing edge as the turbulence intensity increases. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140001.	3.4	1
28	Development of a mechanical model of doctor bladeâ€“press roll tribosystem with aim to optimise cleaning performance: numerical predictions and first experimental verification. Tribology - Materials, Surfaces and Interfaces, 2014, 8, 41-47.	1.4	1
29	Simulation-aided identification of mid-cycle valve closure in a down-hole pump. Journal of Fluids and Structures, 2019, 91, 102774.	3.4	1
30	Modern Aspects of High-Reynolds-Number Asymptotics of Turbulent Boundary Layers. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 221-246.	0.6	1
31	Time-mean description of turbulent bluff-body separation in the high-Reynolds-number limit. Springer Proceedings in Physics, 2009, , 577-580.	0.2	1
32	On turbulence in hydrodynamic lubrication and in ground effect. Journal of Physics: Conference Series, 2011, 318, 032035.	0.4	0
33	On the Euler stage of turbulent separation near the trailing edge of a bluff body. , 2013, , .		0
34	Receptivity and non-uniqueness of turbulent boundary layer flows. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 481-482.	0.2	0
35	Choking and hydraulic jumps in laminar flow. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900489.	0.2	0
36	A New Computational Fluid Dynamics Model To Optimize Sucker Rod Pump Operation and Design. SPE Production and Operations, 2021, 36, 359-367.	0.6	0

#	Article	IF	Citations
37	On the Delay and Inviscid Nature of Turbulent Break-Away Separation in the High-Re Limit. Lecture Notes in Computational Science and Engineering, 2015, , 257-268.	0.3	0
38	Centred Splash of a Vertical Jet on a Horizontal Rotating Disc: Recent Findings and Resolving Controversies Over the Hydraulic Jump. Lecture Notes in Computational Science and Engineering, 2020, , 201-213.	0.3	0
39	Improved calculations of waterfalls and weir flows. Journal of Fluid Mechanics, 2022, 941, .	3.4	0