Helge Andersson

List of Publications by Year
in descending order

167 papers	5,020 citations	101543 36 h-index	106344 65 g-index
167 all docs	167 docs citations	167 times ranked	2270 citing authors

#	Article	IF	Citations
1	Slip flow past a stretching surface. Acta Mechanica, 2002, 158, 121-125.	2.1	362
2	Direct simulations of low-Reynolds-number turbulent flow in a rotating channel. Journal of Fluid Mechanics, 1993, 256, 163-197.	3.4	360
3	MHD flow of a viscoelastic fluid past a stretching surface. Acta Mechanica, 1992, 95, 227-230.	2.1	353
4	Heat transfer in a liquid film on an unsteady stretching surface. International Journal of Heat and Mass Transfer, 2000, 43, 69-74.	4.8	344
5	An investigation of turbulent plane Couette flow at low Reynolds numbers. Journal of Fluid Mechanics, 1995, 286, 291-325.	3.4	174
6	An experimental and numerical study of channel flow with rough walls. Journal of Fluid Mechanics, 2005, 530, 327-352.	3.4	171
7	Flow of a heated ferrofluid over a stretching sheet in the presence of a magnetic dipole. Acta Mechanica, 1998, 128, 39-47.	2.1	166
8	Dynamics of prolate ellipsoidal particles in a turbulent channel flow. Physics of Fluids, 2008, 20, .	4.0	139
9	DNS of turbulent flow in a rod-roughened channel. International Journal of Heat and Fluid Flow, 2004, 25, 373-383.	2.4	110
10	Turbulence modulation and drag reduction by spherical particles. Physics of Fluids, 2010, 22, .	4.0	108
11	Flow of a power-law fluid over a rotating disk revisited. Fluid Dynamics Research, 2001, 28, 75-88.	1.3	86
12	Interphasial energy transfer and particle dissipation in particle-laden wall turbulence. Journal of Fluid Mechanics, 2013, 715, 32-59.	3.4	83
13	Rotation of Nonspherical Particles in Turbulent Channel Flow. Physical Review Letters, 2015, 115, 244501.	7.8	83
14	Numerical simulation of the turbulent wake behind a normal flat plate. International Journal of Heat and Fluid Flow, 2009, 30, 1037-1043.	2.4	78
15	Effects of surface irregularities on flow resistance in differently shaped arterial stenoses. Journal of Biomechanics, 2000, 33, 1257-1262.	2.1	74
16	Turbulent plane Couette flow subject to strong system rotation. Journal of Fluid Mechanics, 1997, 347, 289-314.	3.4	73
17	Orientation and rotation of inertial disk particles in wall turbulence. Journal of Fluid Mechanics, 2015, 766, .	3.4	67
18	Effects of slip and heat transfer analysis of flow over an unsteady stretching surface. Heat and Mass Transfer, 2009, 45, 1447-1452.	2.1	62

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19	Slip velocity of rigid fibers in turbulent channel flow. Physics of Fluids, 2014, 26, .	4.0	57
20	Turbulent flow between a rotating and a stationary disk. Journal of Fluid Mechanics, 2001, 426, 297-326.	3.4	48
21	Sakiadis flow with variable fluid properties revisited. International Journal of Engineering Science, 2007, 45, 554-561.	5.0	48
22	On the performance of the moment approximation for the numerical computation of fiber stress in turbulent channel flow. Physics of Fluids, 2007, 19, 035102.	4.0	47
23	Axisymmetric stagnation-point flow over a lubricated surface. Acta Mechanica, 2007, 194, 1-10.	2.1	46
24	Stokes number effects on particle slip velocity in wall-bounded turbulence and implications for dispersion models. Physics of Fluids, 2012, 24, .	4.0	44
25	Torque-coupling and particleâ€“turbulence interactions. Journal of Fluid Mechanics, 2012, 696, 319-329.	3.4	44
26	Shape effects on dynamics of inertia-free spheroids in wall turbulence. Physics of Fluids, 2015, 27, .	4.0	44
27	On the relative rotational motion between rigid fibers and fluid in turbulent channel flow. Physics of Fluids, 2016, 28, .	4.0	43
28	Hybrid nanofluid flow past a stretching/shrinking sheet with thermal radiation and mass transpiration. Chinese Journal of Physics, 2022, 75, 152-168.	3.9	43
29	Slip flow over a lubricated rotating disk. International Journal of Heat and Fluid Flow, 2006, 27, 329-335.	2.4	42
30	Two-layered model of blood flow through stenosed arteries. Acta Mechanica, 1996, 117, 221-228.	2.1	41
31	Generation of inflow data for inhomogeneous turbulence. Theoretical and Computational Fluid Dynamics, 2004, 18, 371-389.	2.2	40
32	Turbulent wake behind a curved circular cylinder. Journal of Fluid Mechanics, 2014, 742, 192-229.	3.4	40
33	The stress generated by non-Brownian fibers in turbulent channel flow simulations. Physics of Fluids, 2007, 19, 115107.	4.0	39
34	A VoronoÃ¯ analysis of preferential concentration in a vertical channel flow. Physics of Fluids, 2013, 25, .	4.0	39
35	The structure of turbulence in a rod-roughened channel. International Journal of Heat and Fluid Flow, 2006, 27, 65-79.	2.4	37
36	Why spheroids orient preferentially in near-wall turbulence. Journal of Fluid Mechanics, 2016, 807, 221-234.	3.4	37

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37	Vortex shedding in flow past an inclined flat plate at high incidence. Physics of Fluids, 2012, 24, .	4.0	36
38	LES of open rotorâ€"stator flow. International Journal of Heat and Fluid Flow, 2006, 27, 551-557.	2.4	33
39	Cellular vortex shedding behind a tapered circular cylinder. Physics of Fluids, 2009, 21, .	4.0	31
40	On the peculiar structure of a helical wake vortex behind an inclined prolate spheroid. Journal of Fluid Mechanics, 2016, 801, 1-12.	3.4	29
41	Forces and torques on a prolate spheroid: low-Reynolds-number and attack angle effects. Acta Mechanica, 2019, 230, 431-447.	2.1	29
42	A new set-up for PIV measurements in rotating turbulent duct flows. Flow Measurement and Instrumentation, 2011, 22, 71-80.	2.0	28
43	The transitional wake behind an inclined prolate spheroid. Physics of Fluids, 2015, 27, .	4.0	28
44	Fibre-induced drag reduction. Journal of Fluid Mechanics, 2008, 602, 209-218.	3.4	27
45	Crossflow past a prolate spheroid at Reynolds number of 10000. Journal of Fluid Mechanics, 2010, 659, 365-374.	3.4	26
46	On heat transfer in BoÂ¨dewadt flow. International Journal of Heat and Mass Transfer, 2017, 112, 1057-1061.	4.8	26
47	On particle spin in two-way coupled turbulent channel flow simulations. Physics of Fluids, 2011, 23, .	4.0	25
48	Finite-length effects on dynamical behavior of rod-like particles in wall-bounded turbulent flow. International Journal of Multiphase Flow, 2015, 76, 13-21.	3.4	25
49	DNS of backwardâ€facing step flow with fully turbulent inflow. International Journal for Numerical Methods in Fluids, 2010, 64, 777-792.	1.6	23
50	The laminar wake behind a 6:1 prolate spheroid at 45Â° incidence angle. Physics of Fluids, 2014, 26, .	4.0	23
51	Wakes behind a prolate spheroid in crossflow. Journal of Fluid Mechanics, 2012, 701, 98-136.	3.4	22
52	On fiber behavior in turbulent vertical channel flow. Chemical Engineering Science, 2016, 153, 75-86.	3.8	22
53	Mapping spheroid rotation modes in turbulent channel flow: effects of shear, turbulence and particle inertia. Journal of Fluid Mechanics, 2019, 876, 19-54.	3.4	22
54	Cellular vortex shedding in the wake of a tapered plate. Journal of Fluid Mechanics, 2008, 617, 355-379.	3.4	21

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55	On the Anisotropic Vorticity in Turbulent Channel Flows. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	21
56	Turbulent flow over a backward-facing step. Part 1. Effects of anti-cyclonic system rotation. Journal of Fluid Mechanics, 2010, 665, 382-417.	3.4	20
57	On rotational dynamics of inertial disks in creeping shear flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 157-162.	2.1	20
58	Roughness effects in turbulent channel flow. Progress in Computational Fluid Dynamics, 2006, 6, 1.	0.2	19
59	Particle image velocimetry measurements of massively separated turbulent flows with rotation. Physics of Fluids, 2011, 23, .	4.0	18
60	Turbulence statistics in a rotating ribbed channel. International Journal of Heat and Fluid Flow, 2015, 51, 29-41.	2.4	18
61	Dynamics of disk-like particles in turbulent vertical channel flow. International Journal of Multiphase Flow, 2017, 96, 86-100.	3.4	18
62	Direct-mode interactions in the wake behind a stepped cylinder. Physics of Fluids, 2002, 14, 1548-1551.	4.0	17
63	Large eddy simulations of the turbulent flow between a rotating and a stationary disk. Zeitschrift Fur Angewandte Mathematik Und Physik, 2004, 55, 268-281.	1.4	17
64	Three-dimensional VoronoÃ¯ analysis of preferential concentration of spheroidal particles in wall turbulence. Physics of Fluids, 2018, 30, .	4.0	17
65	Chaotic rotation of inertial spheroids in oscillating shear flow. Physics of Fluids, 2013, 25, .	4.0	16
66	Antisymmetric vortex interactions in the wake behind a step cylinder. Physics of Fluids, 2017, 29, 101704.	4.0	16
67	Inertial torque on a small spheroid in a stationary uniform flow. Physical Review Fluids, 2021, 6, .	2.5	16
68	Direct numerical simulation of two opposing wall jets. Physics of Fluids, 2005, 17, 055109.	4.0	15
69	Anisotropic particles in turbulence: status and outlook. Acta Mechanica, 2013, 224, 2219-2223.	2.1	15
70	Vortex dislocation mechanisms in the near wake of a step cylinder. Journal of Fluid Mechanics, 2020, 891, .	3.4	15
71	On inertial effects of long fibers in wall turbulence: fiber orientation and fiber stresses. Acta Mechanica, 2013, 224, 2375-2384.	2.1	14
72	Gravity Effects on Fiber Dynamics in Wall Turbulence. Flow, Turbulence and Combustion, 2016, 97, 1095-1110.	2.6	14

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73	Oblique and cellular vortex shedding behind a circular cylinder in a bidirectional shear flow. Physics of Fluids, 2010, 22, .	4.0	13
74	Three-dimensional wake transition behind an inclined flat plate. Physics of Fluids, 2012, 24, .	4.0	13
75	Floquet stability analysis of the wake of an inclined flat plate. Physics of Fluids, 2013, 25, .	4.0	13
76	Clustering of inertial spheres in evolving Taylorâ€"Green vortex flow. Physics of Fluids, 2020, 32, 043306.	4.0	12
77	Reduced-basis modeling of turbulent plane channel flow. Computers and Fluids, 2006, 35, 189-207.	2.5	11
78	Inflow conditions for inhomogeneous turbulent flows. International Journal for Numerical Methods in Fluids, 2009, 60, 227-235.	1.6	11
79	Influence of spanwise no-slip boundary conditions on the flow around a cylinder. Computers and Fluids, 2017, 156, 48-57.	2.5	11
80	Influence of the quiescent core on tracer spheroidal particle dynamics in turbulent channel flow. Journal of Turbulence, 2019, 20, 424-438.	1.4	11
81	Turbulent wake behind a concave curved cylinder. Journal of Fluid Mechanics, 2019, 878, 663-699.	3.4	11
82	An integral model based on slender body theory, with applications to curved rigid fibers. Physics of Fluids, 2021, 33, .	4.0	11
83	Wake behind a concave curved cylinder. Physical Review Fluids, 2018, 3, .	2.5	11
84	Passive directors in turbulence. Physical Review Fluids, 2019, 4, .	2.5	11
85	START-UP FLOW IN A PIPE FOLLOWING THE SUDDEN IMPOSITION OF A CONSTANT FLOW RATE. Chemical Engineering Communications, 1992, 112, 121-133.	2.6	10
86	Statistics of numerically generated turbulence. Acta Applicandae Mathematicae, 1992, 26, 293-314.	1.0	10
87	Slip-flow boundary conditions for non-Newtonian lubrication layers. Fluid Dynamics Research, 1999, 24, 211-217.	1.3	10
88	Steady viscous flow past a tapered cylinder. Acta Mechanica, 2009, 206, 53-57.	2.1	10
89	Mass transfer to blood flowing through arterial stenosis. Zeitschrift Fur Angewandte Mathematik Und Physik, 2009, 60, 299-323.	1.4	10
90	Asymmetries in an obstructed turbulent channel flow. Physics of Fluids, 2010, 22, .	4.0	10

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91	Novel features of a fully developed mixing-layer between co-flowing laminar and turbulent Couette flows. Physics of Fluids, 2014, 26, 031703.	4.0	10
92	Shear flow of a Newtonian fluid over a quiescent generalized Newtonian fluid. Meccanica, 2017, 52, 903-914.	2.0	10
93	Mean shear versus orientation isotropy: effects on inertialess spheroidsâ€™ rotation mode in wallÂturbulence. Journal of Fluid Mechanics, 2018, 844, 796-816.	3.4	10
94	Bow shock clustering in particle-laden wetted cylinder flow. International Journal of Multiphase Flow, 2020, 130, 103332.	3.4	10
95	Turbulent channel flow of generalized Newtonian fluids at a low Reynolds number. Journal of Fluid Mechanics, 2021, 908, .	3.4	10
96	Vortex system around a step cylinder in a turbulent flow field. Physics of Fluids, 2021, 33, .	4.0	10
97	On the stabilizing effect of the Coriolis force on the turbulent wake of a normal flat plate. Physics of Fluids, 2009, 21, 095104.	4.0	9
98	End-wall effects on vortex shedding in planar shear flow over a circular cylinder. Computers and Fluids, 2011, 42, 102-107.	2.5	9
99	On oblique and parallel shedding behind an inclined plate. Physics of Fluids, 2013, 25, 054101.	4.0	9
100	Clusters and coherent voids in particle-laden wake flow. International Journal of Multiphase Flow, 2021, 141, 103678.	3.4	9
101	Spin-up in a semicircular cylinder. International Journal for Numerical Methods in Fluids, 1992, 15, 503-524.	1.6	8
102	Cellular vortex shedding in the wake of a tapered plate at low Reynolds number. Physics of Fluids, 2009, 21, .	4.0	8
103	DNS of swirling turbulent pipe flow. International Journal for Numerical Methods in Fluids, 2010, 64, 945-972.	1.6	8
104	Preferential particle concentration in wall-bounded turbulence with zero skin friction. Physics of Fluids, 2017, 29, .	4.0	8
105	Turbulent wake behind side-by-side flat plates: computational study of interference effects. Journal of Fluid Mechanics, 2018, 855, 1040-1073.	3.4	8
106	High-order overset grid method for detecting particle impaction on a cylinder in a cross flow. International Journal of Computational Fluid Dynamics, 2019, 33, 43-58.	1.2	8
107	Treatment of solid objects in the Pencil Code using an immersed boundary method and overset grids. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 35-57.	1.2	8
108	Diameter ratio effects in the wake flow of single step cylinders. Physics of Fluids, 2020, 32, 093603.	4.0	8

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109	Kinetic energy balance in turbulent particle-laden channel flow. Physics of Fluids, 2020, 32, .	4.0	8
110	Alignment of slender fibers and thin disks induced by coherent structures of wall turbulence. International Journal of Multiphase Flow, 2021, 145, 103837.	3.4	8
111	On the stability of MHD flow of a viscoelastic fluid past a stretching sheet. Acta Mechanica, 1998, 130, 143-146.	2.1	7
112	Coherence and Reynolds stresses in the turbulent wake behind a curved circular cylinder. Journal of Turbulence, 2014, 15, 883-904.	1.4	7
113	Large-eddy simulation of cross-flow around ship sections. Journal of Marine Science and Technology, 2016, 21, 552-566.	2.9	7
114	Numerical investigation of free-stream turbulence effects on the transition-in-wake state of flow past a circular cylinder. Journal of Turbulence, 2018, 19, 252-273.	1.4	7
115	Effects of shear-thinning rheology on near-wall turbulent structures. Journal of Fluid Mechanics, 2021, 925, .	3.4	7
116	Slip-Flow over Lubricated Surfaces. Flow, Turbulence and Combustion, 2004, 73, 77-93.	2.6	6
117	Turbulence in a threeâ€dimensional wallâ€bounded shear flow. International Journal for Numerical Methods in Fluids, 2010, 62, 875-905.	1.6	6
118	Numerical Simulation of Turbulent Pipe Flow Through an Abrupt Axisymmetric Constriction. Flow, Turbulence and Combustion, 2013, 91, 1-18.	2.6	6
119	Boundary layers due to shear flow over a still fluid: A direct integration approach. Applied Mathematics and Computation, 2014, 242, 856-862.	2.2	6
120	On wall-normal motions of inertial spheroids in vertical turbulent channel flows. Acta Mechanica, 2018, 229, 2947-2965.	2.1	6
121	Particle segregation in turbulent Couetteâ€"Poiseuille flow with vanishing wall shear. International Journal of Multiphase Flow, 2018, 98, 45-55.	3.4	6
122	Turbulence statistics in an open rotorâ€"stator configuration. Physics of Fluids, 2002, 14, 1137-1145.	4.0	5
123	The generic skin-friction pattern underneath coherent near-wall structures. Fluid Dynamics Research, 2004, 34, 167-174.	1.3	5
124	On the drag reduction mechanism in a lubricated turbulent channel flow. International Journal of Heat and Fluid Flow, 2004, 25, 618-624.	2.4	5
125	Flow past a normal flat plate undergoing inline oscillations. Physics of Fluids, 2012, 24, 093603.	4.0	5
126	Investigation of the Flow Around Two Interacting Ship-Like Sections. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	5

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127	Near-Wake of an Inclined 6:1 Spheroid at Reynolds Number 4000. AIAA Journal, 2019, 57, 1364-1372.	2.6	5
128	Effects of the quiescent core in turbulent channel flow on transport and clustering of inertial particles. International Journal of Multiphase Flow, 2021, 140, 103627.	3.4	5
129	Numerical investigation on the flow around an inclined prolate spheroid. Physics of Fluids, 2021, 33, .	4.0	5
130	Effect of Entrance Region on Laminar Startup Flow in Pipes. Journal of Applied Mechanics, Transactions ASME, 1988, 55, 482-486.	2.2	4
131	Analysis of vortex splitting characteristics in the wake of an inclined flat plate using Hilbertâ€“Huang transform. Acta Mechanica, 2015, 226, 1085-1104.	2.1	4
132	Orientation and rotation dynamics of triaxial ellipsoidal tracers in wall turbulence. Physics of Fluids, 2016, 28, .	4.0	4
133	Three-dimensional instabilities in oscillatory flow past elliptic cylinders. Journal of Fluid Mechanics, 2016, 798, 371-397.	3.4	4
134	Preferential orientation of tracer spheroids in turbulent channel flow. Theoretical and Applied Mechanics Letters, 2019, 9, 212-214.	2.8	4
135	Alignment and rotation of spheroids in unsteady vortex flow. Physics of Fluids, 2021, 33, 033310.	4.0	4
136	LES and DNS of symmetrically roughened turbulent channel flows. Acta Mechanica, 2021, 232, 4951-4968.	2.1	4
137	COMPUTATION OF THE INLET WALL JET IN A RECTANGULAR ENCLOSURE. International Journal of Computational Fluid Dynamics, 1993, 1, 217-232.	1.2	3
138	Turbulence in a skewed threeâ€dimensional wallâ€bounded shear flow: effect of mean vorticity on structure modification. International Journal for Numerical Methods in Fluids, 2012, 69, 1299-1325.	1.6	3
139	Revolving flow of a fluid-particle suspension with suction. AEJ - Alexandria Engineering Journal, 2018, 57, 2567-2572.	6.4	3
140	A novel approach to rigid spheroid models in viscous flows using operator splitting methods. Numerical Algorithms, 2019, 81, 1423-1441.	1.9	3
141	Role of Transient Characteristics in Fish Trajectory Modeling. Sustainability, 2020, 12, 6765.	3.2	3
142	Computational geometric methods for preferential clustering of particle suspensions. Journal of Computational Physics, 2022, 448, 110725.	3.8	3
143	Instabilities in the Wake of an Inclined Prolate Spheroid. Computational Methods in Applied Sciences (Springer), 2019, , 311-352.	0.3	3
144	Scale-dependent particle clustering in transitional wake flow. Journal of Fluid Mechanics, 2022, 940, .	3.4	3

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145	Reduced basis simulations as a tool for generating turbulent inlet-data for two opposing jets. International Journal for Numerical Methods in Fluids, 2005, 47, 1115-1122.	1.6	2
146	Direct numerical simulation of turbulent flow past a T-beam. Journal of Turbulence, 2011, 12, N21.	1.4	2
147	Statistics of Particle Suspensions in Turbulent Channel Flow. Communications in Computational Physics, 2012, 11, 1311-1322.	1.7	2
148	Statistical Flow Properties in the Turbulent Wake of a Tapered Flat Plate Placed Normal to the Free-stream. Flow, Turbulence and Combustion, 2013, 91, 805-826.	2.6	2
149	Numerical and Experimental Study of the Flow Around Two Ship Sections Side-by-Side. , 2014, , .		2
150	Mechanisms of particle clustering in Gaussian and non-Gaussian synthetic turbulence. Physical Review E, 2014, 90, 043005.	2.1	2
151	Low-frequency oscillations in flow past an inclined prolate spheroid. International Journal of Heat and Fluid Flow, 2019, 78, 108421.	2.4	2
152	Preferential orientation of tracer spheroids in evolving Taylorâ€“Green vortex flow. Physics of Fluids, 2022, 34, .	4.0	2
153	Discussion: â€œOn Laminar Thin-Film Flow Along a Vertical Wallâ€•(Roy, T. R., 1984, ASME J. Appl. Mech., 51,) Tj ETQq1 1 0.784314 rgB	2.2	1
154	Simulating turbulent Dean flow in Cartesian coordinates. International Journal for Numerical Methods in Fluids, 2009, 60, 263-274.	1.6	1
155	Comment on â€œUnsteady flow of a second grade fluid film over an unsteady stretching sheetâ€•[Math. Comput. Modelling 48 (2008) 518â€“526]. Mathematical and Computer Modelling, 2010, 52, 1706-1707.	2.0	1
156	Numerical investigations of turbulent flow characteristics in helically finned pipe. Physics of Fluids, 2011, 23, 125106.	4.0	1
157	Numerical investigations of laminar flow characteristics in helically finned pipes. Acta Mechanica, 2011, 222, 321-330.	2.1	1
158	Experimental and Numerical Study of the Flow Around a Semi-Submerged Rectangular Cylinder. , 2012, , .		1
159	Turbulent wake behind two intersecting flat plates. International Journal of Heat and Fluid Flow, 2016, 62, 482-498.	2.4	1
160	Turbulent wake behind a T-shaped plate: Comparison with a cross-shaped plate. International Journal of Heat and Fluid Flow, 2017, 65, 127-140.	2.4	1
161	A note on buoyancy effects in von K $$acute{a}$$ a Â´rm $$acute{a}$$ a Â´. Zeitschrift Fur Angewandte Mathematik Und Physik, 2018, 69, 1.	1.4	1
162			1

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163	Different topologies of natural vortex dislocations in Mode A wake. Physics of Fluids, 2022, 34, .	4.0	1
164	Flow Around Curved Tandem Cylinders. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	1.5	1
165	On the drag reduction mechanism in a lubricated turbulent channel flow. International Journal of Heat and Fluid Flow, 2004, 25, 618-618.	2.4	0
166	The structure of turbulence in rotating rough-channel flows. International Journal of Heat and Fluid Flow, 2022, 95, 108956.	2.4	0
167	Characteristics of the wake of an inclined prolate spheroid in uniform shear flow. Physics of Fluids, 2022, 34, 053604.	4.0	0