Helge Andersson

List of Publications by Year
in descending order

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Version: 2024-02-01

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	Computational geometric methods for preferential clustering of particle suspensions. Journal of Computational Physics, 2022, 448, 110725.	3.8	3
2	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
3	Different topologies of natural vortex dislocations in Mode A wake. Physics of Fluids, 2022, 34, .	4.0	1
4	Preferential orientation of tracer spheroids in evolving Taylorâ€“Green vortex flow. Physics of Fluids, 2022, 34, .	4.0	2
5	Scale-dependent particle clustering in transitional wake flow. Journal of Fluid Mechanics, 2022, 940, .	3.4	3
6	The structure of turbulence in rotating rough-channel flows. International Journal of Heat and Fluid Flow, 2022, 95, 108956.	2.4	0
7	Characteristics of the wake of an inclined prolate spheroid in uniform shear flow. Physics of Fluids, 2022, 34, 053604.	4.0	0
8	Flow Around Curved Tandem Cylinders. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	1.5	1
9	Turbulent channel flow of generalized Newtonian fluids at a low Reynolds number. Journal of Fluid Mechanics, 2021, 908, .	3.4	10
10	Inertial torque on a small spheroid in a stationary uniform flow. Physical Review Fluids, 2021, 6, .	2.5	16
11	Alignment and rotation of spheroids in unsteady vortex flow. Physics of Fluids, 2021, 33, 033310.	4.0	4
12	An integral model based on slender body theory, with applications to curved rigid fibers. Physics of Fluids, 2021, 33, .	4.0	11
13	Vortex system around a step cylinder in a turbulent flow field. Physics of Fluids, 2021, 33, .	4.0	10
14	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
15	Numerical investigation on the flow around an inclined prolate spheroid. Physics of Fluids, 2021, 33, .	4.0	5
16	Effects of shear-thinning rheology on near-wall turbulent structures. Journal of Fluid Mechanics, 2021, 925, .	3.4	7
17	Clusters and coherent voids in particle-laden wake flow. International Journal of Multiphase Flow, 2021, 141, 103678.	3.4	9
18	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

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19	LES and DNS of symmetrically roughened turbulent channel flows. Acta Mechanica, 2021, 232, 4951-4968.	2.1	4
20	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
21	Diameter ratio effects in the wake flow of single step cylinders. Physics of Fluids, 2020, 32, 093603.	4.0	8
22	Kinetic energy balance in turbulent particle-laden channel flow. Physics of Fluids, 2020, 32, .	4.0	8
23	Role of Transient Characteristics in Fish Trajectory Modeling. Sustainability, 2020, 12, 6765.	3.2	3
24	Bow shock clustering in particle-laden wetted cylinder flow. International Journal of Multiphase Flow, 2020, 130, 103332.	3.4	10
25	Vortex dislocation mechanisms in the near wake of a step cylinder. Journal of Fluid Mechanics, 2020, 891, .	3.4	15
26	Clustering of inertial spheres in evolving Taylorâ€“Green vortex flow. Physics of Fluids, 2020, 32, 043306.	4.0	12
27	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
28	Preferential orientation of tracer spheroids in turbulent channel flow. Theoretical and Applied Mechanics Letters, 2019, 9, 212-214.	2.8	4
29	Influence of the quiescent core on tracer spheroidal particle dynamics in turbulent channel flow. Journal of Turbulence, 2019, 20, 424-438.	1.4	11
30	Turbulent wake behind a concave curved cylinder. Journal of Fluid Mechanics, 2019, 878, 663-699.	3.4	11
31	Low-frequency oscillations in flow past an inclined prolate spheroid. International Journal of Heat and Fluid Flow, 2019, 78, 108421.	2.4	2
32	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
33	Near-Wake of an Inclined 6:1 Spheroid at Reynolds Number 4000. AIAA Journal, 2019, 57, 1364-1372.	2.6	5
34	Forces and torques on a prolate spheroid: low-Reynolds-number and attack angle effects. Acta Mechanica, 2019, 230, 431-447.	2.1	29
35	A novel approach to rigid spheroid models in viscous flows using operator splitting methods. Numerical Algorithms, 2019, 81, 1423-1441.	1.9	3
36	Instabilities in the Wake of an Inclined Prolate Spheroid. Computational Methods in Applied Sciences (Springer), 2019, , 311-352.	0.3	3

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37	Passive directors in turbulence. Physical Review Fluids, 2019, 4, .	2.5	11
38	Mean shear versus orientation isotropy: effects on inertialess spheroidsâ€™ rotation mode in wallÂturbulence. Journal of Fluid Mechanics, 2018, 844, 796-816.	3.4	10
39	On wall-normal motions of inertial spheroids in vertical turbulent channel flows. Acta Mechanica, 2018, 229, 2947-2965.	2.1	6
40	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
41	Revolving flow of a fluid-particle suspension with suction. AEJ - Alexandria Engineering Journal, 2018, 57, 2567-2572.	6.4	3
42	Particle segregation in turbulent Couetteâ€“Poiseuille flow with vanishing wall shear. International Journal of Multiphase Flow, 2018, 98, 45-55.	3.4	6
43	Turbulent wake behind side-by-side flat plates: computational study of interference effects. Journal of Fluid Mechanics, 2018, 855, 1040-1073.	3.4	8
44	Three-dimensional VoronoÃ¯ analysis of preferential concentration of spheroidal particles in wall turbulence. Physics of Fluids, 2018, 30, .	4.0	17
45	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
46	Wake behind a concave curved cylinder. Physical Review Fluids, 2018, 3, .	2.5	11
47	Shear flow of a Newtonian fluid over a quiescent generalized Newtonian fluid. Meccanica, 2017, 52, 903-914.	2.0	10
48	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
49	On heat transfer in BoÂ¨dewadt flow. International Journal of Heat and Mass Transfer, 2017, 112, 1057-1061.	4.8	26
50	Preferential particle concentration in wall-bounded turbulence with zero skin friction. Physics of Fluids, 2017, 29, .	4.0	8
51	Dynamics of disk-like particles in turbulent vertical channel flow. International Journal of Multiphase Flow, 2017, 96, 86-100.	3.4	18
52	Influence of spanwise no-slip boundary conditions on the flow around a cylinder. Computers and Fluids, 2017, 156, 48-57.	2.5	11
53	Antisymmetric vortex interactions in the wake behind a step cylinder. Physics of Fluids, 2017, 29, 101704.	4.0	16
54	On the relative rotational motion between rigid fibers and fluid in turbulent channel flow. Physics of Fluids, 2016, 28, .	4.0	43

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55	Orientation and rotation dynamics of triaxial ellipsoidal tracers in wall turbulence. Physics of Fluids, 2016, 28, .	4.0	4
56	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
57	Three-dimensional instabilities in oscillatory flow past elliptic cylinders. Journal of Fluid Mechanics, 2016, 798, 371-397.	3.4	4
58	Why spheroids orient preferentially in near-wall turbulence. Journal of Fluid Mechanics, 2016, 807, 221-234.	3.4	37
59	Turbulent wake behind two intersecting flat plates. International Journal of Heat and Fluid Flow, 2016, 62, 482-498.	2.4	1
60	On fiber behavior in turbulent vertical channel flow. Chemical Engineering Science, 2016, 153, 75-86.	3.8	22
61	Gravity Effects on Fiber Dynamics in Wall Turbulence. Flow, Turbulence and Combustion, 2016, 97, 1095-1110.	2.6	14
62	Large-eddy simulation of cross-flow around ship sections. Journal of Marine Science and Technology, 2016, 21, 552-566.	2.9	7
63	Rotation of Nonspherical Particles in Turbulent Channel Flow. Physical Review Letters, 2015, 115, 244501.	7.8	83
64	The transitional wake behind an inclined prolate spheroid. Physics of Fluids, 2015, 27, .	4.0	28
65	Shape effects on dynamics of inertia-free spheroids in wall turbulence. Physics of Fluids, 2015, 27, .	4.0	44
66	On the Anisotropic Vorticity in Turbulent Channel Flows. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	21
67	Investigation of the Flow Around Two Interacting Ship-Like Sections. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	5
68	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
69	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
70	Orientation and rotation of inertial disk particles in wall turbulence. Journal of Fluid Mechanics, 2015, 766, .	3.4	67
71	Turbulence statistics in a rotating ribbed channel. International Journal of Heat and Fluid Flow, 2015, 51, 29-41.	2.4	18
72	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

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73	Coherence and Reynolds stresses in the turbulent wake behind a curved circular cylinder. Journal of Turbulence, 2014, 15, 883-904.	1.4	7
74	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
75	The laminar wake behind a 6:1 prolate spheroid at 45Â° incidence angle. Physics of Fluids, 2014, 26, .	4.0	23
76	Numerical and Experimental Study of the Flow Around Two Ship Sections Side-by-Side. , 2014, , .		2
77	Mechanisms of particle clustering in Gaussian and non-Gaussian synthetic turbulence. Physical Review E, 2014, 90, 043005.	2.1	2
78	Turbulent wake behind a curved circular cylinder. Journal of Fluid Mechanics, 2014, 742, 192-229.	3.4	40
79	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
80	Slip velocity of rigid fibers in turbulent channel flow. Physics of Fluids, 2014, 26, .	4.0	57
81	Numerical Simulation of Turbulent Pipe Flow Through an Abrupt Axisymmetric Constriction. Flow, Turbulence and Combustion, 2013, 91, 1-18.	2.6	6
82	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
83	Floquet stability analysis of the wake of an inclined flat plate. Physics of Fluids, 2013, 25, .	4.0	13
84	Anisotropic particles in turbulence: status and outlook. Acta Mechanica, 2013, 224, 2219-2223.	2.1	15
85	On inertial effects of long fibers in wall turbulence: fiber orientation and fiber stresses. Acta Mechanica, 2013, 224, 2375-2384.	2.1	14
86	On oblique and parallel shedding behind an inclined plate. Physics of Fluids, 2013, 25, 054101.	4.0	9
87	Chaotic rotation of inertial spheroids in oscillating shear flow. Physics of Fluids, 2013, 25, .	4.0	16
88	A VoronoÃ¯ analysis of preferential concentration in a vertical channel flow. Physics of Fluids, 2013, 25, .	4.0	39
89	Interphasial energy transfer and particle dissipation in particle-laden wall turbulence. Journal of Fluid Mechanics, 2013, 715, 32-59.	3.4	83
90	Vortex shedding in flow past an inclined flat plate at high incidence. Physics of Fluids, 2012, 24, .	4.0	36

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91	Stokes number effects on particle slip velocity in wall-bounded turbulence and implications for dispersion models. Physics of Fluids, 2012, 24, .	4.0	44
92	Three-dimensional wake transition behind an inclined flat plate. Physics of Fluids, 2012, 24, .	4.0	13
93	Experimental and Numerical Study of the Flow Around a Semi-Submerged Rectangular Cylinder. , 2012, , .		1
94	Statistics of Particle Suspensions in Turbulent Channel Flow. Communications in Computational Physics, 2012, 11, 1311-1322.	1.7	2
95	Torque-coupling and particleâ€“turbulence interactions. Journal of Fluid Mechanics, 2012, 696, 319-329.	3.4	44
96	Flow past a normal flat plate undergoing inline oscillations. Physics of Fluids, 2012, 24, 093603.	4.0	5
97	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
98	Wakes behind a prolate spheroid in crossflow. Journal of Fluid Mechanics, 2012, 701, 98-136.	3.4	22
99	Numerical investigations of turbulent flow characteristics in helically finned pipe. Physics of Fluids, 2011, 23, 125106.	4.0	1
100	On particle spin in two-way coupled turbulent channel flow simulations. Physics of Fluids, 2011, 23, .	4.0	25
101	Direct numerical simulation of turbulent flow past a T-beam. Journal of Turbulence, 2011, 12, N21.	1.4	2
102	Numerical investigations of laminar flow characteristics in helically finned pipes. Acta Mechanica, 2011, 222, 321-330.	2.1	1
103	A new set-up for PIV measurements in rotating turbulent duct flows. Flow Measurement and Instrumentation, 2011, 22, 71-80.	2.0	28
104	End-wall effects on vortex shedding in planar shear flow over a circular cylinder. Computers and Fluids, 2011, 42, 102-107.	2.5	9
105	Particle image velocimetry measurements of massively separated turbulent flows with rotation. Physics of Fluids, 2011, 23, .	4.0	18
106	Turbulence in a threeâ€dimensional wallâ€bounded shear flow. International Journal for Numerical Methods in Fluids, 2010, 62, 875-905.	1.6	6
107	DNS of backwardâ€facing step flow with fully turbulent inflow. International Journal for Numerical Methods in Fluids, 2010, 64, 777-792.	1.6	23
108	DNS of swirling turbulent pipe flow. International Journal for Numerical Methods in Fluids, 2010, 64, 945-972.	1.6	8

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109	Crossflow past a prolate spheroid at Reynolds number of 10000. Journal of Fluid Mechanics, 2010, 659, 365-374.	3.4	26
110	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
111	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
112	Turbulence modulation and drag reduction by spherical particles. Physics of Fluids, 2010, 22, .	4.0	108
113	Asymmetries in an obstructed turbulent channel flow. Physics of Fluids, 2010, 22, .	4.0	10
114	Oblique and cellular vortex shedding behind a circular cylinder in a bidirectional shear flow. Physics of Fluids, 2010, 22, .	4.0	13
115	Cellular vortex shedding in the wake of a tapered plate at low Reynolds number. Physics of Fluids, 2009, 21, .	4.0	8
116	Cellular vortex shedding behind a tapered circular cylinder. Physics of Fluids, 2009, 21, .	4.0	31
117	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
118	Inflow conditions for inhomogeneous turbulent flows. International Journal for Numerical Methods in Fluids, 2009, 60, 227-235.	1.6	11
119	Simulating turbulent Dean flow in Cartesian coordinates. International Journal for Numerical Methods in Fluids, 2009, 60, 263-274.	1.6	1
120	Steady viscous flow past a tapered cylinder. Acta Mechanica, 2009, 206, 53-57.	2.1	10
121	Mass transfer to blood flowing through arterial stenosis. Zeitschrift Fur Angewandte Mathematik Und Physik, 2009, 60, 299-323.	1.4	10
122	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
123	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
124	Fibre-induced drag reduction. Journal of Fluid Mechanics, 2008, 602, 209-218.	3.4	27
125	Dynamics of prolate ellipsoidal particles in a turbulent channel flow. Physics of Fluids, 2008, 20, .	4.0	139
126	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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127	The stress generated by non-Brownian fibers in turbulent channel flow simulations. Physics of Fluids, 2007, 19, 115107.	4.0	39
128	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
129	Sakiadis flow with variable fluid properties revisited. International Journal of Engineering Science, 2007, 45, 554-561.	5.0	48
130	Axisymmetric stagnation-point flow over a lubricated surface. Acta Mechanica, 2007, 194, 1-10.	2.1	46
131	Roughness effects in turbulent channel flow. Progress in Computational Fluid Dynamics, 2006, 6, 1.	0.2	19
132	The structure of turbulence in a rod-roughened channel. International Journal of Heat and Fluid Flow, 2006, 27, 65-79.	2.4	37
133	Slip flow over a lubricated rotating disk. International Journal of Heat and Fluid Flow, 2006, 27, 329-335.	2.4	42
134	LES of open rotorâ€“stator flow. International Journal of Heat and Fluid Flow, 2006, 27, 551-557.	2.4	33
135	Reduced-basis modeling of turbulent plane channel flow. Computers and Fluids, 2006, 35, 189-207.	2.5	11
136	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
137	Direct numerical simulation of two opposing wall jets. Physics of Fluids, 2005, 17, 055109.	4.0	15
138	An experimental and numerical study of channel flow with rough walls. Journal of Fluid Mechanics, 2005, 530, 327-352.	3.4	171
139	Slip-Flow over Lubricated Surfaces. Flow, Turbulence and Combustion, 2004, 73, 77-93.	2.6	6
140	The generic skin-friction pattern underneath coherent near-wall structures. Fluid Dynamics Research, 2004, 34, 167-174.	1.3	5
141	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
142	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
143	Generation of inflow data for inhomogeneous turbulence. Theoretical and Computational Fluid Dynamics, 2004, 18, 371-389.	2.2	40
144	DNS of turbulent flow in a rod-roughened channel. International Journal of Heat and Fluid Flow, 2004, 25, 373-383.	2.4	110

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145	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
146	Turbulence statistics in an open rotorâ€“stator configuration. Physics of Fluids, 2002, 14, 1137-1145.	4.0	5
147	Direct-mode interactions in the wake behind a stepped cylinder. Physics of Fluids, 2002, 14, 1548-1551.	4.0	17
148	Slip flow past a stretching surface. Acta Mechanica, 2002, 158, 121-125.	2.1	362
149	Flow of a power-law fluid over a rotating disk revisited. Fluid Dynamics Research, 2001, 28, 75-88.	1.3	86
150	Turbulent flow between a rotating and a stationary disk. Journal of Fluid Mechanics, 2001, 426, 297-326.	3.4	48
151	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
152	Effects of surface irregularities on flow resistance in differently shaped arterial stenoses. Journal of Biomechanics, 2000, 33, 1257-1262.	2.1	74
153	Slip-flow boundary conditions for non-Newtonian lubrication layers. Fluid Dynamics Research, 1999, 24, 211-217.	1.3	10
154	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
155	On the stability of MHD flow of a viscoelastic fluid past a stretching sheet. Acta Mechanica, 1998, 130, 143-146.	2.1	7
156	Turbulent plane Couette flow subject to strong system rotation. Journal of Fluid Mechanics, 1997, 347, 289-314.	3.4	73
157	Two-layered model of blood flow through stenosed arteries. Acta Mechanica, 1996, 117, 221-228.	2.1	41
158	An investigation of turbulent plane Couette flow at low Reynolds numbers. Journal of Fluid Mechanics, 1995, 286, 291-325.	3.4	174
159	Direct simulations of low-Reynolds-number turbulent flow in a rotating channel. Journal of Fluid Mechanics, 1993, 256, 163-197.	3.4	360
160	COMPUTATION OF THE INLET WALL JET IN A RECTANGULAR ENCLOSURE. International Journal of Computational Fluid Dynamics, 1993, 1, 217-232.	1.2	3
161	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
162	Statistics of numerically generated turbulence. Acta Applicandae Mathematicae, 1992, 26, 293-314.	1.0	10

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163	MHD flow of a viscoelastic fluid past a stretching surface. Acta Mechanica, 1992, 95, 227-230.	2.1	353
164	Spin-up in a semicircular cylinder. International Journal for Numerical Methods in Fluids, 1992, 15, 503-524.	1.6	8
165	Effect of Entrance Region on Laminar Startup Flow in Pipes. Journal of Applied Mechanics, Transactions ASME, 1988, 55, 482-486.	2.2	4
166	Discussion: â€œOn Laminar Thin-Film Flow Along a Vertical Wallâ€•(Roy, T. R., 1984, ASME J. Appl. Mech., 51,) Tj ETQq0 0 0 rgBT /Overlo	2.2	1
167			1