

Rob J Poole

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124
papers

3,116
citations

34
h-index

48
g-index

142
ext. papers

3,615
ext. citations

3.4
avg, IF

5.62
L-index

#	Paper	IF	Citations
124	Viscoelastic simulations using the closed-form Adaptive Length Scale (ALS-C) model. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2022 , 104776	2.7	1
123	On the similarities of the sPTT and FENE-P models for polymeric fluids 2022 , 100015		
122	On the similarities between the simplified Phan-Thien-Tanner model and the finitely extensible nonlinear elastic dumbbell (Peterlin closure) model in simple and complex flows. <i>Physics of Fluids</i> , 2022 , 34, 033110	4.4	2
121	Highlighting the need for high-speed imaging in capillary breakup extensional rheometry. <i>Measurement Science and Technology</i> , 2021 , 32, 095301	2	2
120	Stabilization of purely elastic instabilities in cross-slot geometries. <i>Journal of Fluid Mechanics</i> , 2021 , 922,	3.7	1
119	Energetic motions in turbulent partially filled pipe flow. <i>Physics of Fluids</i> , 2021 , 33, 025101	4.4	6
118	Viscoelastic fluid flow in microporous media. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2021 , 296, 104638	3.7	1
117	Periodic fluctuations of streamwise vortices in inertia-dominated intersecting flows. <i>Physics of Fluids</i> , 2021 , 33, 014106	4.4	5
116	Comment on Bejan's flow visualization of buoyancy-driven flow of a hydromagnetic Casson fluid from an isothermal wavy surface [Phys. Fluids 33(9), 093113 (2021)]. <i>Physics of Fluids</i> , 2021 , 33, 129101	4.4	0
115	Low- and High-Drag Intermittencies in Turbulent Channel Flows. <i>Entropy</i> , 2020 , 22,	2.8	4
114	Controlling the properties of the micellar and gel phase by varying the counterion in functionalised-dipeptide systems. <i>Chemical Communications</i> , 2020 , 56, 4094-4097	5.8	15
113	Investigating channel flow using wall shear stress signals at transitional Reynolds numbers. <i>International Journal of Heat and Fluid Flow</i> , 2020 , 82, 108525	2.4	5
112	Viscoelastic fluid flow simulations in the e-VROCTM geometry. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2020 , 278, 104222	2.7	8
111	GO CaBER: Capillary breakup and steady-shear experiments on aqueous graphene oxide (GO) suspensions. <i>Journal of Rheology</i> , 2020 , 64, 81-93	4.1	7
110	A viscoelastic two-phase solver using a phase-field approach. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2020 , 284, 104364	2.7	3
109	Heat Transfer of Power-Law Fluids in Plane Couette-Boiseuille Flows with Viscous Dissipation. <i>Heat Transfer Engineering</i> , 2020 , 41, 1189-1207	1.7	4
108	3D printing with 2D colloids: designing rheology protocols to predict 'printability' of soft-materials. <i>Soft Matter</i> , 2019 , 15, 1444-1456	3.6	50

107	An experimental investigation into spatiotemporal intermittencies in turbulent channel flow close to transition. <i>Experiments in Fluids</i> , 2019 , 60, 1	2.5	8
106	Entry Length Requirements for Two- and Three-Dimensional Laminar Couette-Poiseuille Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2019 , 141,	2.1	1
105	Three-dimensional viscoelastic instabilities in microchannels. <i>Journal of Fluid Mechanics</i> , 2019 , 870, 1-4	3.7	9
104	Secondary flows of viscoelastic fluids in serpentine microchannels. <i>Microfluidics and Nanofluidics</i> , 2019 , 23, 1	2.8	16
103	Inertial instabilities in a microfluidic mixing-separating device. <i>Physics of Fluids</i> , 2019 , 31, 074101	4.4	6
102	Minimizing recalibration using a non-linear regression technique for thermal anemometry. <i>Experiments in Fluids</i> , 2019 , 60, 1	2.5	4
101	Control of a purely elastic symmetry-breaking flow instability in cross-slot geometries. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 1123-1157	3.7	13
100	Turbulent duct flow with polymers. <i>Journal of Fluid Mechanics</i> , 2019 , 859, 1057-1083	3.7	21
99	Evaluating the resilience of superhydrophobic materials using the slip-length concept. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4458-4465	13	11
98	Elastic modifications of an inertial instability in a 3D cross-slot. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2018 , 262, 12-24	2.7	10
97	Heat Transfer of Bingham Fluids in an Annular Duct with Viscous Dissipation. <i>Heat Transfer Engineering</i> , 2018 , 39, 1749-1765	1.7	3
96	Partially filled pipes: experiments in laminar and turbulent flow. <i>Journal of Fluid Mechanics</i> , 2018 , 848, 467-507	3.7	11
95	Viscoelastic drops moving on hydrophilic and superhydrophobic surfaces. <i>Journal of Colloid and Interface Science</i> , 2018 , 513, 53-61	9.3	16
94	Secondary flows due to finite aspect ratio in inertialess viscoelastic Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2018 , 857, 823-850	3.7	7
93	Vortex breakdown in swirling pipe flow of fluids with shear-dependent viscosity. <i>Physics of Fluids</i> , 2018 , 30, 114107	4.4	4
92	Nonlinear Effects in Multicomponent Supramolecular Hydrogels. <i>Langmuir</i> , 2017 , 33, 2387-2395	4	40
91	Heat transfer enhancement in a cross-slot micro-geometry. <i>International Journal of Thermal Sciences</i> , 2017 , 121, 249-265	4.1	15
90	Turbulent drag reduction by polymer additives in parallel-shear flows. <i>Journal of Fluid Mechanics</i> , 2017 , 827,	3.7	31

89	Opening a Can of Worm(-like Micelle)s: The Effect of Temperature of Solutions of Functionalized Dipeptides. <i>Angewandte Chemie</i> , 2017 , 129, 10603-10606	3.6	23
88	Inertioelastic Flow Instability at a Stagnation Point. <i>Physical Review X</i> , 2017 , 7,	9.1	19
87	Opening a Can of Worm(-like Micelle)s: The Effect of Temperature of Solutions of Functionalized Dipeptides. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 10467-10470	16.4	40
86	Experimental evidence of symmetry-breaking supercritical transition in pipe flow of shear-thinning fluids. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	10
85	Low-drag events in transitional wall-bounded turbulence. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	20
84	Bundling of elastic filaments induced by hydrodynamic interactions. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	30
83	The stabilizing effect of shear thinning on the onset of purely elastic instabilities in serpentine microflows. <i>Soft Matter</i> , 2016 , 12, 6167-75	3.6	30
82	Tricritical spiral vortex instability in cross-slot flow. <i>Physical Review E</i> , 2016 , 93, 031101	2.4	35
81	Influence of channel aspect ratio on the onset of purely-elastic flow instabilities in three-dimensional planar cross-slots. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016 , 227, 65-79	2.7	20
80	Type IIIb Endoleak and Relining: A Mathematical Model of Distraction Forces. <i>Journal of Endovascular Therapy</i> , 2016 , 23, 297-301	2.5	12
79	Numerical investigation of steady-state laminar natural convection of power-law fluids in square cross-sectioned cylindrical annular cavity with differentially-heated vertical walls. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016 , 26, 85-107	4.5	6
78	Experimental investigation of the impact of elastic turbulence on heat transfer in a serpentine channel. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016 , 231, 68-78	2.7	40
77	The influence of blade pitch angle on the performance of a model horizontal axis tidal stream turbine operating under wavecurrent interaction. <i>Energy</i> , 2016 , 102, 166-175	7.9	22
76	Elastic instabilities in parallel shear flows of a viscoelastic shear-thinning liquid. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	12
75	Sliding viscoelastic drops on slippery surfaces. <i>Applied Physics Letters</i> , 2016 , 108, 241602	3.4	8
74	Experiments on low-Reynolds-number turbulent flow through a square duct. <i>Journal of Fluid Mechanics</i> , 2016 , 798, 398-410	3.7	14
73	Lid-driven cavity flow of viscoelastic liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016 , 234, 129-138	3.7	28
72	Enhancing heat transfer at the micro-scale using elastic turbulence. <i>Theoretical and Applied Mechanics Letters</i> , 2015 , 5, 103-106	1.8	28

71	Development of emulsification resistant heavier-than-water tamponades using high molecular weight silicone oil polymers. <i>Journal of Biomaterials Applications</i> , 2015 , 30, 212-20	2.9	10
70	Effects of aspect ratio on laminar Rayleigh-Bénard convection of power-law fluids in rectangular enclosures: A numerical investigation. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 91, 1292-1307	4.9	24
69	Effects of aspect ratio on natural convection of Bingham fluids in rectangular enclosures with differentially heated horizontal walls heated from below. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 80, 727-736	4.9	23
68	Numerical and experimental investigation of heat transfer and fluid flow characteristics in a micro-scale serpentine channel. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 88, 790-802	4.9	51
67	Laminar Natural Convection of Bingham Fluids in Inclined Differentially Heated Square Enclosures Subjected to Uniform Wall Temperatures. <i>Journal of Heat Transfer</i> , 2015 , 137,	1.8	7
66	NUMERICAL INVESTIGATION OF BOUNDARY CONDITION EFFECTS ON LAMINAR NATURAL CONVECTION OF POWER LAW FLUIDS IN SQUARE CROSS-SECTIONAL CYLINDRICAL ANNULAR SPACE WITH DIFFERENTIALLY HEATED VERTICAL WALLS. <i>Computational Thermal Sciences</i> , 2015 , 7, 261-282	1.9	4
65	A symmetry-breaking inertial bifurcation in a cross-slot flow. <i>Computers and Fluids</i> , 2014 , 93, 91-99	2.8	8
64	The effects of wave-current interaction on the performance of a model horizontal axis tidal turbine. <i>International Journal of Marine Energy</i> , 2014 , 8, 17-35		41
63	Serpentine channels: micro-rheometers for fluid relaxation times. <i>Lab on A Chip</i> , 2014 , 14, 351-8	7.2	50
62	Boundary Condition Effects on Laminar Natural Convection of Power-Law Fluids in a Square Enclosure Heated from below with Differentially Heated Horizontal Walls. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 456-473	3.9	13
61	Closure technique after carotid endarterectomy influences local hemodynamics. <i>Journal of Vascular Surgery</i> , 2014 , 60, 418-27	3.5	34
60	Near-wake characteristics of a model horizontal axis tidal stream turbine. <i>Renewable Energy</i> , 2014 , 63, 222-235	8.1	74
59	Influences of Boundary Conditions on Laminar Natural Convection of Bingham Fluids in Rectangular Enclosures With Differentially Heated Side Walls. <i>Heat Transfer Engineering</i> , 2014 , 35, 822-849	1.7	16
58	Controlling vortex breakdown in swirling pipe flows: Experiments and simulations. <i>Physics of Fluids</i> , 2014 , 26, 053602	4.4	17
57	Computational fluid dynamic analysis of the effect of morphologic features on distraction forces in fenestrated stent grafts. <i>Journal of Vascular Surgery</i> , 2014 , 60, 1648-56.e1	3.5	6
56	Symmetry-breaking Bifurcations in T-channel Flows: Effects of Fluid Viscoelasticity. <i>Procedia Engineering</i> , 2014 , 79, 28-34		5
55	A new viscoelastic benchmark flow: Stationary bifurcation in a cross-slot. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014 , 214, 57-68	2.7	27
54	Numerical Predictions of Momentum and Heat Transfer Characteristics from a Heated Sphere in Yield-Stress Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 6848-6861	3.9	33

53	Laminar forced convection heat transfer from a heated square cylinder in a Bingham plastic fluid. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 56, 625-639	4.9	34
52	Laminar natural convection of power-law fluids in a square enclosure submitted from below to a uniform heat flux density. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013 , 199, 80-95	2.7	27
51	Aspect ratio and boundary conditions effects on laminar natural convection of power-law fluids in a rectangular enclosure with differentially heated side walls. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 60, 722-738	4.9	31
50	Viscoelastic secondary flows in serpentine channels. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013 , 201, 10-16	2.7	34
49	Bifurcation in a T-channel junction: Effects of aspect ratio and shear-thinning. <i>Chemical Engineering Science</i> , 2013 , 104, 839-848	4.4	40
48	Effect of Shear-Thinning Behavior on Heat Transfer from a Heated Sphere in Yield-Stress Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 13490-13504	3.9	30
47	The concept of aortic replacement based on computational fluid dynamic analysis: patient-directed aortic replacement. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2013 , 16, 583-8	1.8	9
46	On creeping flow of a Bingham plastic fluid past a square cylinder. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2012 , 171-172, 17-30	2.7	32
45	Laminar Rayleigh-BBard convection of yield stress fluids in a square enclosure. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2012 , 171-172, 83-96	2.7	61
44	Emulsification using elastic turbulence. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2012 , 177-178, 15-18	2.7	17
43	Geometric scaling of a purely elastic flow instability in serpentine channels. <i>Journal of Fluid Mechanics</i> , 2012 , 712, 203-218	3.7	61
42	Non-dimensional scaling of tidal stream turbines. <i>Energy</i> , 2012 , 44, 820-829	7.9	71
41	Influences of boundary conditions on laminar natural convection in rectangular enclosures with differentially heated side walls. <i>International Journal of Heat and Fluid Flow</i> , 2012 , 33, 131-146	2.4	41
40	Laminar Natural Convection of Power-Law Fluids in a Square Enclosure With Differentially Heated Sidewalls Subjected to Constant Wall Heat Flux. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	25
39	BOUNDARY CONDITION EFFECTS ON NATURAL CONVECTION OF BINGHAM FLUIDS IN A SQUARE ENCLOSURE WITH DIFFERENTIALLY HEATED HORIZONTAL WALLS. <i>Computational Thermal Sciences</i> , 2012 , 4, 77-97	1.9	17
38	Laminar Natural Convection of Bingham Fluids in a Square Enclosure with Vertical Walls Subjected to Constant Heat Flux. <i>Numerical Heat Transfer; Part A: Applications</i> , 2011 , 60, 381-409	2.3	24
37	Viscoelastic flows in mixing-separating cells. <i>Journal of Engineering Mathematics</i> , 2011 , 71, 3-13	1.2	9
36	Laminar natural convection of power-law fluids in a square enclosure with differentially heated side walls subjected to constant temperatures. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011 , 166, 1049-1063	2.7	127

35	Aspect ratio effects in laminar natural convection of Bingham fluids in rectangular enclosures with differentially heated side walls. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011 , 166, 208-230	2.7	64
34	Drag Reduction of Biopolymer Flows. <i>Journal of Applied Sciences</i> , 2011 , 11, 1544-1551	0.3	4
33	Development Length Requirements for Fully Developed Laminar Pipe Flow of Yield Stress Fluids. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2010 , 132,	2.1	27
32	Development-Length Requirements for Fully Developed Laminar Flow in Concentric Annuli. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2010 , 132,	2.1	14
31	Laminar natural convection of Bingham fluids in a square enclosure with differentially heated side walls. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010 , 165, 901-913	2.7	123
30	Laminar, transitional and turbulent annular flow of drag-reducing polymer solutions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010 , 165, 1357-1372	2.7	40
29	Mathematical modeling in cardiac surgery: helping clinical trials answer the question. <i>Seminars in Cardiothoracic and Vascular Anesthesia</i> , 2009 , 13, 81-6	1.4	3
28	On extensibility effects in the cross-slot flow bifurcation. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 156, 58-69	2.7	54
27	Turbulent flow of viscoelastic shear-thinning liquids through a rectangular duct: Quantification of turbulence anisotropy. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 160, 2-10	2.7	44
26	Purely elastic flow asymmetries in flow-focusing devices. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 160, 31-39	2.7	38
25	Velocity overshoots in gradual contraction flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 160, 47-54	2.7	9
24	Asymmetry in transitional pipe flow of drag-reducing polymer solutions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 161, 19-29	2.7	19
23	Turbulent pipe flow of a drag-reducing rigid rod-like polymer solution. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 161, 86-93	2.7	38
22	The effect of expansion ratio for creeping expansion flows of UCM fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 163, 35-44	2.7	19
21	Ascending aortic curvature as an independent risk factor for type A dissection, and ascending aortic aneurysm formation: a mathematical model. <i>European Journal of Cardio-thoracic Surgery</i> , 2008 , 33, 995-1001	3	70
20	Flow produced in a conical container by a rotating endwall. <i>International Journal of Heat and Fluid Flow</i> , 2007 , 28, 1418-1428	2.4	21
19	Bifurcation phenomena in viscoelastic flows through a symmetric 1:4 expansion. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007 , 141, 1-17	2.7	34
18	Plane sudden expansion flows of viscoelastic liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007 , 146, 79-91	2.7	34

17	Divergent flow in contractions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007 , 144, 140-148	2.7	46
16	Laminar flow of a viscoelastic shear-thinning liquid over a backward-facing step preceded by a gradual contraction. <i>Physics of Fluids</i> , 2007 , 19, 093101	4.4	14
15	Development-Length Requirements for Fully Developed Laminar Pipe Flow of Inelastic Non-Newtonian Liquids. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2007 , 129, 1281-1287	2.1	71
14	Purely elastic flow asymmetries. <i>Physical Review Letters</i> , 2007 , 99, 164503	7.4	148
13	Turbulent flow of viscoelastic shear-thinning liquids through a rectangular duct 2007 , 328-330		
12	Influence of outlet geometry on strongly swirling turbulent flow through a circular tube. <i>Physics of Fluids</i> , 2006 , 18, 125103	4.4	27
11	Laminar flow of a viscoelastic shear-thinning liquid through a plane sudden expansion preceded by a gradual contraction. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005 , 461, 3827-3845	2.4	15
10	Asymmetry in the turbulent flow of a viscoelastic liquid through an axisymmetric sudden expansion. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2005 , 125, 61-70	2.7	5
9	Observations of asymmetrical flow behaviour in transitional pipe flow of yield-stress and other shear-thinning liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2005 , 127, 143-155	2.7	61
8	Freezing as a Storage Process for Aqueous Polymer Solutions. <i>Applied Rheology</i> , 2005 , 15, 90-97	1.2	6
7	Turbulent flow of viscoelastic liquids through an axisymmetric sudden expansion. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2004 , 117, 25-46	2.7	34
6	Turbulent flow of non-Newtonian liquids over a backward-facing step. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003 , 109, 193-230	2.7	26
5	Turbulent flow of non-Newtonian liquids over a backward-facing step: Part I. A thixotropic and shear-thinning liquid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003 , 109, 177-191	2.7	9
4	Turbulent flow of a viscoelastic shear-thinning liquid through a plane sudden expansion of modest aspect ratio. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003 , 112, 1-26	2.7	14
3	Turbulent flow through a plane sudden expansion of modest aspect ratio. <i>Physics of Fluids</i> , 2002 , 14, 3641-3654	4.4	28
2	On the reproducibility of the rheology of shear-thinning liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001 , 97, 99-124	2.7	84
1	Heat Transfer in Laminar Flow of a Herschel-Bulkley Fluid between Parallel Plates. <i>Heat Transfer Engineering</i> , 1-22	1.7	1