Gareth H Mckinley

List of Publications by Year
in descending order

344	35,054	2675 95	4015 176
papers	citations	h-index	g-index

353	353	353	23535
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Designing Superoleophobic Surfaces. Science, 2007, 318, 1618-1622.	12.6	2,610
2	Superhydrophobic Carbon Nanotube Forests. Nano Letters, 2003, 3, 1701-1705.	9.1	1,527
3	A review of nonlinear oscillatory shear tests: Analysis and application of large amplitude oscillatory shear (LAOS). Progress in Polymer Science, 2011, 36, 1697-1753.	24.7	1,109
4	Robust omniphobic surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18200-18205.	7.1	1,015
5	Droplet mobility on lubricant-impregnated surfaces. Soft Matter, 2013, 9, 1772-1780.	2.7	810
6	New measures for characterizing nonlinear viscoelasticity in large amplitude oscillatory shear. Journal of Rheology, 2008, 52, 1427-1458.	2.6	787
7	Relationships between Water Wettability and Ice Adhesion. ACS Applied Materials & Interfaces, 2010, 2, 3100-3110.	8.0	655
8	A modified Cassieâ€“Baxter relationship to explain contact angle hysteresis and anisotropy on non-wetting textured surfaces. Journal of Colloid and Interface Science, 2009, 339, 208-216.	9.4	477
9	Elasto-capillary thinning and breakup of model elastic liquids. Journal of Rheology, 2001, 45, 115-138.	2.6	443
10	FILAMENT-STRETCHINGRHEOMETRY OFCOMPLEXFLUIDS. Annual Review of Fluid Mechanics, 2002, 34, 375-415.	25.0	422
11	Nanotextured Silica Surfaces with Robust Superhydrophobicity and Omnidirectional Broadband Supertransmissivity. ACS Nano, 2012, 6, 3789-3799.	14.6	378
12	Enhanced thermal conductivity and viscosity of copper nanoparticles in ethylene glycol nanofluid. Journal of Applied Physics, 2008, 103, .	2.5	367
13	Exploiting Topographical Texture To Impart Icephobicity. ACS Nano, 2010, 4, 7048-7052.	14.6	355
14	Fabrics with Tunable Oleophobicity. Advanced Materials, 2009, 21, 2190-2195.	21.0	351
15	Helicobacter pylori moves through mucus by reducing mucin viscoelasticity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14321-14326.	7.1	347
16	Optimal Design of Permeable Fiber Network Structures for Fog Harvesting. Langmuir, 2013, 29, 13269-13277.	3.5	330
17	High-performance elastomeric nanocomposites via solvent-exchange processing. Nature Materials, 2007, 6, 76-83.	27.5	318
18	Shear-Thinning Nanocomposite Hydrogels for the Treatment of Hemorrhage. ACS Nano, 2014, 8, 9833-9842.	14.6	318

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19	Drop formation and breakup of low viscosity elastic fluids: Effects of molecular weight and concentration. Physics of Fluids, 2006, 18, 043101.	4.0	317
20	Inductively Heated Shape Memory Polymer for the Magnetic Actuation of Medical Devices. IEEE Transactions on Biomedical Engineering, 2006, 53, 2075-2083.	4.2	313
21	Design Parameters for Superhydrophobicity and Superoleophobicity. MRS Bulletin, 2008, 33, 752-758.	3.5	308
22	Anti-fatigue-fracture hydrogels. Science Advances, 2019, 5, eaau8528.	10.3	305
23	How to extract the Newtonian viscosity from capillary breakup measurements in a filament rheometer. Journal of Rheology, 2000, 44, 653-670.	2.6	304
24	The inertio-elastic planar entry flow of low-viscosity elastic fluids in micro-fabricated geometries. Journal of Non-Newtonian Fluid Mechanics, 2005, 129, 1-22.	2.4	297
25	Elastic Instability and Curved Streamlines. Physical Review Letters, 1996, 77, 2459-2462.	7.8	292
26	Capillary Break-up Rheometry of Low-Viscosity Elastic Fluids. Applied Rheology, 2005, 15, 12-27.	5.2	283
27	Formation of beads-on-a-string structures during break-up of viscoelastic filaments. Nature Physics, 2010, 6, 625-631.	16.7	274
28	Large amplitude oscillatory shear of pseudoplastic and elastoviscoplastic materials. Rheologica Acta, 2010, 49, 191-212.	2.4	273
29	Durable and scalable icephobic surfaces: similarities and distinctions from superhydrophobic surfaces. Soft Matter, 2016, 12, 1938-1963.	2.7	272
30	Rheology of Gastric Mucin Exhibits a pH-Dependent Solâ''Gel Transition. Biomacromolecules, 2007, 8, 1580-1586.	5.4	250
31	Rheological and geometric scaling of purely elastic flow instabilities. Journal of Non-Newtonian Fluid Mechanics, 1996, 67, 19-47.	2.4	247
32	How dilute are dilute solutions in extensional flows?. Journal of Rheology, 2006, 50, 849-881.	2.6	242
33	The beads-on-string structure of viscoelastic threads. Journal of Fluid Mechanics, 2006, 556, 283.	3.4	222
34	Rheology and Dynamics of Associative Polymers in Shear and Extension:Â Theory and Experiments. Macromolecules, 2006, 39, 1981-1999.	4.8	219
35	Role of the elasticity number in the entry flow of dilute polymer solutions in micro-fabricated contraction geometries. Journal of Non-Newtonian Fluid Mechanics, 2007, 143, 170-191.	2.4	219
36	Describing and prescribing the constitutive response of yield stress fluids using large amplitude oscillatory shear stress (LAOStress). Journal of Rheology, 2013, 57, 27-70.	2.6	218

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37	Study of Factors Governing Oilâ€“Water Separation Process Using TiO₂ Films Prepared by Spray Deposition of Nanoparticle Dispersions. ACS Applied Materials & Interfaces, 2014, 6, 13422-13429.	8.0	217
38	Definitions of entanglement spacing and time constants in the tube model. Journal of Rheology, 2003, 47, 809-818.	2.6	216
39	Microfluidic rheometry. Mechanics Research Communications, 2009, 36, 110-120.	1.8	213
40	Thermomechanical Properties of Poly(methyl methacrylate)s Containing Tethered and Untethered Polyhedral Oligomeric Silsesquioxanes. Macromolecules, 2004, 37, 8992-9004.	4.8	209
41	High shear rate viscometry. Rheologica Acta, 2008, 47, 621-642.	2.4	208
42	Measuring the transient extensional rheology of polyethylene melts using the SER universal testing platform. Journal of Rheology, 2005, 49, 585-606.	2.6	203
43	Polysulfide Flow Batteries Enabled by Percolating Nanoscale Conductor Networks. Nano Letters, 2014, 14, 2210-2218.	9.1	201
44	Rheological fingerprinting of gastropod pedal mucus and synthetic complex fluids for biomimicking adhesive locomotion. Soft Matter, 2007, 3, 634.	2.7	192
45	Power-law rheology in the bulk and at the interface: quasi-properties and fractional constitutive equations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120284.	2.1	191
46	A comprehensive constitutive law for waxy crude oil: a thixotropic yield stress fluid. Soft Matter, 2014, 10, 6619-6644.	2.7	183
47	Solution spraying of poly(methyl methacrylate) blends to fabricate microtextured, superoleophobic surfaces. Polymer, 2011, 52, 3209-3218.	3.8	179
48	Metal-coordination: using one of nature's tricks to control soft material mechanics. Journal of Materials Chemistry B, 2014, 2, 2467-2472.	5.8	178
49	The axisymmetric contractionâ€“expansion: the role of extensional rheology on vortex growth dynamics and the enhanced pressure drop. Journal of Non-Newtonian Fluid Mechanics, 2001, 98, 33-63.	2.4	174
50	Inertio-elastic focusing of bioparticles in microchannels at high throughput. Nature Communications, 2014, 5, 4120.	12.8	173
51	Dropwise Condensation of Low Surface Tension Fluids on Omniphobic Surfaces. Scientific Reports, 2014, 4, 4158.	3.3	173
52	Nonlinear dynamics of viscoelastic flow in axisymmetric abrupt contractions. Journal of Fluid Mechanics, 1991, 223, 411.	3.4	167
53	Toughened poly(methyl methacrylate) nanocomposites by incorporating polyhedral oligomeric silsesquioxanes. Polymer, 2006, 47, 299-309.	3.8	164
54	Wolfgang von Ohnesorge. Physics of Fluids, 2011, 23, .	4.0	163

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55	Modeling the rheology of polyisobutylene solutions. Journal of Rheology, 1990, 34, 705-748.	2.6	162
56	Rheology of globular proteins: apparent yield stress, high shear rate viscosity and interfacial viscoelasticity of bovine serum albumin solutions. Soft Matter, 2011, 7, 5150.	2.7	160
57	Extensional Rheometry of Entangled Solutions. Macromolecules, 2002, 35, 10131-10148.	4.8	154
58	Shear and Extensional Rheology of Cellulose/Ionic Liquid Solutions. Biomacromolecules, 2012, 13, 1688-1699.	5.4	154
59	Miscibility and viscoelastic properties of acrylic polyhedral oligomeric silsesquioxaneâ€“poly(methyl) Tj ETQq1 1 0.784314 rgBT /Over	3.8	150
60	Marangoni convection in droplets on superhydrophobic surfaces. Journal of Fluid Mechanics, 2009, 624, 101-123.	3.4	149
61	Power law gels at finite strains: The nonlinear rheology of gluten gels. Journal of Rheology, 2008, 52, 417-449.	2.6	146
62	Sustainable Drag Reduction in Turbulent Taylor-Couette Flows by Depositing Sprayable Superhydrophobic Surfaces. Physical Review Letters, 2015, 114, 014501.	7.8	145
63	The role of end-effects on measurements of extensional viscosity in filament stretching rheometers. Journal of Non-Newtonian Fluid Mechanics, 1996, 64, 229-267.	2.4	144
64	An interlaboratory comparison of measurements from filament-stretching rheometers using common test fluids. Journal of Rheology, 2001, 45, 83-114.	2.6	142
65	Complex Fluids and Hydraulic Fracturing. Annual Review of Chemical and Biomolecular Engineering, 2016, 7, 415-453.	6.8	141
66	Elongational viscosity of monodisperse and bidisperse polystyrene melts. Journal of Rheology, 2006, 50, 453-476.	2.6	139
67	Icephobic Surfaces Induced by Interfacial Nonfrozen Water. ACS Applied Materials & Interfaces, 2017, 9, 4202-4214.	8.0	138
68	Observations on the elastic instability in cone-and-plate and parallel-plate flows of a polyisobutylene Boger fluid. Journal of Non-Newtonian Fluid Mechanics, 1991, 40, 201-229.	2.4	137
69	Controlling the Location and Spatial Extent of Nanobubbles Using Hydrophobically Nanopatterned Surfaces. Nano Letters, 2005, 5, 1751-1756.	9.1	135
70	Large amplitude oscillatory shear flow of gluten dough: A model power-law gel. Journal of Rheology, 2011, 55, 627-654.	2.6	135
71	Iterated stretching and multiple beads-on-a-string phenomena in dilute solutions of highly extensible flexible polymers. Physics of Fluids, 2005, 17, 071704.	4.0	134
72	Iterated stretching, extensional rheology and formation of beads-on-a-string structures in polymer solutions. Journal of Non-Newtonian Fluid Mechanics, 2006, 137, 137-148.	2.4	134

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73	A network scission model for wormlike micellar solutions. Journal of Non-Newtonian Fluid Mechanics, 2007, 144, 122-139.	2.4	133
74	Relaxation of dilute polymer solutions following extensional flow1Dedicated to the memory of Professor Gianni Astarita.1. Journal of Non-Newtonian Fluid Mechanics, 1998, 76, 79-110.	2.4	132
75	Extensional flow of a polystyrene Boger fluid through a 4â€ˆ:â€ˆ1â€ˆ:â€ˆ4 axisymmetric contraction/expansion. Journal of Non-Newtonian Fluid Mechanics, 1999, 86, 61-88.	2.4	131
76	Stress relaxation and elastic decohesion of viscoelastic polymer solutions in extensional flow. Journal of Non-Newtonian Fluid Mechanics, 1996, 67, 49-76.	2.4	130
77	Nonlinear shear and extensional flow dynamics of wormlike surfactant solutions. Journal of Non-Newtonian Fluid Mechanics, 2006, 133, 73-90.	2.4	129
78	Scale Dependence of Omniphobic Mesh Surfaces. Langmuir, 2010, 26, 4027-4035.	3.5	129
79	Drag reduction for viscous laminar flow on spray-coated non-wetting surfaces. Soft Matter, 2013, 9, 5691.	2.7	127
80	On secondary loops in LAOS via self-intersection of Lissajousâ€“Bowditch curves. Rheologica Acta, 2010, 49, 213-219.	2.4	126
81	The ConsidÃ¨re condition and rapid stretching of linear and branched polymer melts. Journal of Rheology, 1999, 43, 1195-1212.	2.6	123
82	A Rheological Study of the Association and Dynamics of MUC5AC Gels. Biomacromolecules, 2017, 18, 3654-3664.	5.4	122
83	The normal stress behaviour of suspensions with viscoelastic matrix fluids. Rheologica Acta, 2002, 41, 61-76.	2.4	120
84	Fiber coating with surfactant solutions. Physics of Fluids, 2002, 14, 4055-4068.	4.0	119
85	Assessing the Accuracy of Contact Angle Measurements for Sessile Drops on Liquid-Repellent Surfaces. Langmuir, 2011, 27, 13582-13589.	3.5	119
86	The wake instability in viscoelastic flow past confined circular cylinders. Philosophical Transactions of the Royal Society: Physical and Engineering Sciences, 1993, 344, 265-304.	1.0	117
87	An experimental investigation of negative wakes behind spheres settling in a shear-thinning viscoelastic fluid. Rheologica Acta, 1998, 37, 307-327.	2.4	117
88	Optimized Cross-Slot Flow Geometry for Microfluidic Extensional Rheometry. Physical Review Letters, 2012, 109, 128301.	7.8	116
89	Microfluidic extensional rheometry using a hyperbolic contraction geometry. Rheologica Acta, 2013, 52, 529-546.	2.4	113
90	Viscous flow through microfabricated hyperbolic contractions. Experiments in Fluids, 2007, 43, 437-451.	2.4	111

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91	Studying the effects of elongational properties on atomization of weakly viscoelastic solutions using Rayleigh Ohnesorge Jetting Extensional Rheometry (ROJER). Journal of Non-Newtonian Fluid Mechanics, 2015, 222, 171-189.	2.4	109
92	Microscopic and Macroscopic Structure of the Precursor Layer in Spreading Viscous Drops. Physical Review Letters, 2003, 91, 196104.	7.8	107
93	Numerical simulation of extensional deformations of viscoelastic liquid bridges in filament stretching devices. Journal of Non-Newtonian Fluid Mechanics, 1998, 74, 47-88.	2.4	106
94	Rheology of joint fluid in total knee arthroplasty patients. Journal of Orthopaedic Research, 2002, 20, 1157-1163.	2.3	98
95	Ex vivo rheology of spider silk. Journal of Experimental Biology, 2006, 209, 4355-4362.	1.7	97
96	Dynamics of particle migration in channel flow of viscoelastic fluids. Journal of Fluid Mechanics, 2015, 785, 486-505.	3.4	96
97	Extensional rheology and elastic instabilities of a wormlike micellar solution in a microfluidic cross-slot device. Soft Matter, 2012, 8, 536-555.	2.7	95
98	Spiral instabilities in the flow of highly elastic fluids between rotating parallel disks. Journal of Fluid Mechanics, 1994, 271, 173-218.	3.4	93
99	Sustained drag reduction in a turbulent flow using a low-temperature Leidenfrost surface. Science Advances, 2016, 2, e1600686.	10.3	92
100	Evaporatively-driven Marangoni instabilities of volatile liquid films spreading on thermally conductive substrates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 206, 409-423.	4.7	91
101	Dynamics of bead formation, filament thinning and breakup in weakly viscoelastic jets. Journal of Fluid Mechanics, 2010, 665, 46-56.	3.4	90
102	Simulations of extensional flow in microrheometric devices. Microfluidics and Nanofluidics, 2008, 5, 809-826.	2.2	89
103	Ultrathin high-resolution flexographic printing using nanoporous stamps. Science Advances, 2016, 2, e1601660.	10.3	89
104	Visible light guided manipulation of liquid wettability on photoresponsive surfaces. Nature Communications, 2017, 8, 14968.	12.8	89
105	Dispersity and spinnability: Why highly polydisperse polymer solutions are desirable for electrospinning. Polymer, 2014, 55, 4920-4931.	3.8	88
106	Linker-free grafting of fluorinated polymeric cross-linked network bilayers for durable reduction of ice adhesion. Materials Horizons, 2015, 2, 91-99.	12.2	88
107	A fractional K-BKZ constitutive formulation for describing the nonlinear rheology of multiscale complex fluids. Journal of Rheology, 2014, 58, 1751-1788.	2.6	86
108	Extensional stress growth and stress relaxation in entangled polymer solutions. Journal of Rheology, 2003, 47, 269-290.	2.6	83

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109	High-resolution velocity measurement in the inner part of turbulent boundary layers over super-hydrophobic surfaces. Journal of Fluid Mechanics, 2016, 801, 670-703.	3.4	83
110	The rheology of aqueous solutions of ethyl hydroxy-ethyl cellulose (EHEC) and its hydrophobically modified analogue (hmEHEC): extensional flow response in capillary break-up, jetting (ROJER) and in a cross-slot extensional rheometer. Soft Matter, 2015, 11, 3251-3270.	2.7	82
111	The sedimentation of a sphere through an elastic fluid. Part 1. Steady motion. Journal of Non-Newtonian Fluid Mechanics, 1995, 60, 225-257.	2.4	81
112	Elastic instabilities in planar elongational flow of monodisperse polymer solutions. Scientific Reports, 2016, 6, 33029.	3.3	80
113	Extensional deformation, stress relaxation and necking failure of viscoelastic filaments. Journal of Non-Newtonian Fluid Mechanics, 1998, 79, 469-501.	2.4	79
114	Mapping thixo-elasto-visco-plastic behavior. Rheologica Acta, 2017, 56, 195-210.	2.4	79
115	Surface Tension of Seawater. Journal of Physical and Chemical Reference Data, 2014, 43, .	4.2	78
116	Biphasic Electrode Suspensions for Liâ€Ion Semiâ€solid Flow Cells with High Energy Density, Fast Charge Transport, and Lowâ€Dissipation Flow. Advanced Energy Materials, 2015, 5, 1500535.	19.5	76
117	Superoleophobic Surfaces through Control of Sprayed-on Stochastic Topography. Langmuir, 2012, 28, 9834-9841.	3.5	75
118	Multifunctional Inverted Nanocone Arrays for Nonâ€Wetting, Selfâ€Cleaning Transparent Surface with High Mechanical Robustness. Small, 2014, 10, 2487-2494.	10.0	75
119	Thermokinematic memory and the thixotropic elasto-viscoplasticity of waxy crude oils. Journal of Rheology, 2017, 61, 427-454.	2.6	75
120	Gap-dependent microrheometry of complex liquids. Journal of Non-Newtonian Fluid Mechanics, 2004, 124, 1-10.	2.4	74
121	Investigating the stability of viscoelastic stagnation flows in T-shaped microchannels. Journal of Non-Newtonian Fluid Mechanics, 2009, 163, 9-24.	2.4	73
122	Wormlike micellar solutions: II. Comparison between experimental data and scission model predictions. Journal of Rheology, 2010, 54, 881-913.	2.6	73
123	Elastic Turbulence in Shear Banding Wormlike Micelles. Physical Review Letters, 2010, 104, 178303.	7.8	73
124	Rheo-PIV Analysis of the Yielding and Flow of Model Waxy Crude Oils. Energy & Fuels, 2011, 25, 3040-3052.	5.1	72
125	Hydrate-phobic surfaces: fundamental studies in clathrate hydrate adhesion reduction. Physical Chemistry Chemical Physics, 2012, 14, 6013.	2.8	72
126	Scaling in pinch-off of generalized Newtonian fluids. Journal of Non-Newtonian Fluid Mechanics, 2003, 113, 1-27.	2.4	69

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127	Size dependence of microprobe dynamics during gelation of a discotic colloidal clay. Journal of Rheology, 2011, 55, 273-299.	2.6	69
128	Extensional flow of hyaluronic acid solutions in an optimized microfluidic cross-slot device. Biomicrofluidics, 2013, 7, 044108.	2.4	68
129	Extensional deformation of Newtonian liquid bridges. Physics of Fluids, 1996, 8, 2568-2579.	4.0	67
130	Nonlinear viscoelastic biomaterials: meaningful characterization and engineering inspiration. Integrative and Comparative Biology, 2009, 49, 40-50.	2.0	67
131	Interfacial viscoelasticity, yielding and creep ringing of globular proteinâ€“surfactant mixtures. Soft Matter, 2011, 7, 7623.	2.7	64
132	Stagnation point flow of wormlike micellar solutions in a microfluidic cross-slot device: Effects of surfactant concentration and ionic environment. Physical Review E, 2012, 85, 031502.	2.1	64
133	Time-resolved dynamics of the yielding transition in soft materials. Journal of Non-Newtonian Fluid Mechanics, 2019, 264, 117-134.	2.4	64
134	Cervical Mucus Properties Stratify Risk for Preterm Birth. PLoS ONE, 2013, 8, e69528.	2.5	63
135	Fog Water Collection Effectiveness: Mesh Intercomparisons. Aerosol and Air Quality Research, 2018, 18, 270-283.	2.1	63
136	Thermal Annealing Treatment to Achieve Switchable and Reversible Oleophobicity on Fabrics. Langmuir, 2009, 25, 13625-13632.	3.5	62
137	Dynamics of weakly strain-hardening fluids in filament stretching devices. Journal of Non-Newtonian Fluid Mechanics, 2000, 89, 1-43.	2.4	61
138	Modeling the inhomogeneous response and formation of shear bands in steady and transient flows of entangled liquids. Journal of Rheology, 2008, 52, 591-623.	2.6	61
139	Preferential Association of Segment Blocks in Polyurethane Nanocomposites. Macromolecules, 2006, 39, 7030-7036.	4.8	60
140	Carbon Nanotubeâ€“Magnetite Composites, With Applications to Developing Unique Magnetorheological Fluids. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 429-437.	1.5	60
141	â€˜Gobbling dropsâ€™: the jettingâ€“dripping transition in flows of polymer solutions. Journal of Fluid Mechanics, 2009, 636, 5-40.	3.4	60
142	In situ mechanical reinforcement of polymer hydrogels via metal-coordinated crosslink mineralization. Nature Communications, 2021, 12, 667.	12.8	60
143	Microstructural Rearrangements and their Rheological Implications in a Model Thixotropic Elastoviscoplastic Fluid. Physical Review Letters, 2017, 118, 048003.	7.8	59
144	Influence of textural statistics on drag reduction by scalable, randomly rough superhydrophobic surfaces in turbulent flow. Physics of Fluids, 2019, 31, .	4.0	59

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145	Report on the VIIIth international workshop on numerical methods in viscoelastic flows. Journal of Non-Newtonian Fluid Mechanics, 1994, 52, 407-413.	2.4	58
146	Tribo-Rheometry: From Gap-Dependent Rheology to Tribology. Tribology Letters, 2004, 17, 327-335.	2.6	58
147	Fluoroalkylated Silicon-Containing Surfacesâ^'Estimation of Solid-Surface Energy. ACS Applied Materials & Interfaces, 2010, 2, 3544-3554.	8.0	58
148	Flow field visualization of entangled polybutadiene solutions under nonlinear viscoelastic flow conditions. Journal of Rheology, 2013, 57, 1411-1428.	2.6	57
149	Ligament Mediated Fragmentation of Viscoelastic Liquids. Physical Review Letters, 2016, 117, 154502.	7.8	57
150	Fabrication and Wettability Study of WO3 Coated Photocatalytic Membrane for Oil-Water Separation: A Comparative Study with ZnO Coated Membrane. Scientific Reports, 2017, 7, 1686.	3.3	57
151	Characteristics of Electrorheological Responses in an Emulsion System. Journal of Colloid and Interface Science, 1997, 195, 101-113.	9.4	56
152	Shear-banding in surfactant wormlike micelles: elastic instabilities and wall slip. Soft Matter, 2012, 8, 2535.	2.7	56
153	Simultaneous Rheoelectric Measurements of Strongly Conductive Complex Fluids. Physical Review Applied, 2016, 6, .	3.8	56
154	The unsteady motion of a sphere in a viscoelastic fluid. Journal of Rheology, 1994, 38, 377-403.	2.6	55
155	Sedimentation of a sphere near a plane wall: weak non-Newtonian and inertial effects. Journal of Non-Newtonian Fluid Mechanics, 1996, 63, 201-233.	2.4	55
156	Nonlinear microrheology of an aging, yield stress fluid using magnetic tweezers. Soft Matter, 2011, 7, 9933.	2.7	55
157	Microrheometry of sub-nanolitre biopolymer samples: non-Newtonian flow phenomena of carnivorous plant mucilage. Soft Matter, 2011, 7, 10889.	2.7	54
158	Self-similar spiral instabilities in elastic flows between a cone and a plate. Journal of Fluid Mechanics, 1995, 285, 123.	3.4	53
159	Hydrodynamics control shear-induced pattern formation in attractive suspensions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12193-12198.	7.1	53
160	Experimental investigation of nanofluid shear and longitudinal viscosities. Applied Physics Letters, 2008, 92, 244107.	3.3	52
161	Using filament stretching rheometry to predict strand formation and "processability" in adhesives and other non-Newtonian fluids. Rheologica Acta, 2000, 39, 321-337.	2.4	51
162	Adaptive energy-absorbing materials using field-responsive fluid-impregnated cellular solids. Smart Materials and Structures, 2007, 16, 106-113.	3.5	51

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163	Cavity flows of elastic liquids: Two-dimensional flows. Physics of Fluids, 1997, 9, 3123-3140.	4.0	50
164	Deficiencies of FENE dumbbell models in describing the rapid stretching of dilute polymer solutions. Journal of Rheology, 2001, 45, 721-758.	2.6	50
165	Quantitative prediction of the viscoelastic instability in cone-and-plate flow of a Boger fluid using a multi-mode Giesekus model. Journal of Non-Newtonian Fluid Mechanics, 1994, 54, 351-377.	2.4	49
166	Rheo-PIV of a shear-banding wormlike micellar solution under large amplitude oscillatory shear. Rheologica Acta, 2012, 51, 395-411.	2.4	49
167	Quantification of feather structure, wettability and resistance to liquid penetration. Journal of the Royal Society Interface, 2014, 11, 20140287.	3.4	49
168	Drag reduction using wrinkled surfaces in high Reynolds number laminar boundary layer flows. Physics of Fluids, 2017, 29, .	4.0	49
169	Describing the firmness, springiness and rubberiness of food gels using fractional calculus. Part I: Theoretical framework. Food Hydrocolloids, 2017, 62, 311-324.	10.7	48
170	A comparison of the stress and birefringence growth of dilute, semi-dilute and concentrated polymer solutions in uniaxial extensional flows. Journal of Non-Newtonian Fluid Mechanics, 2002, 108, 275-290.	2.4	47
171	The flexure-based microgap rheometer (FMR). Journal of Rheology, 2006, 50, 883-905.	2.6	47
172	Probing shear-banding transitions of the VCM model for entangled wormlike micellar solutions using large amplitude oscillatory shear (LAOS) deformations. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1462-1472.	2.4	47
173	Interplay between elastic instabilities and shear-banding: three categories of Taylorâ€“Couette flows and beyond. Soft Matter, 2012, 8, 10072.	2.7	47
174	Scalable and durable polymeric icephobic and hydrate-phobic coatings. Soft Matter, 2018, 14, 3443-3454.	2.7	47
175	Plastron Regeneration on Submerged Superhydrophobic Surfaces Using In Situ Gas Generation by Chemical Reaction. ACS Applied Materials & Interfaces, 2018, 10, 33684-33692.	8.0	47
176	On the measured current in electrospinning. Journal of Applied Physics, 2010, 107, 044306.	2.5	46
177	Examination of wettability and surface energy in fluorodecyl POSS/polymer blends. Soft Matter, 2011, 7, 10122.	2.7	46
178	Spatially resolved quantitative rheo-optics of complex fluids in a microfluidic device. Journal of Rheology, 2011, 55, 1127-1159.	2.6	46
179	Investigation into the Formation and Adhesion of Cyclopentane Hydrates on Mechanically Robust Vapor-Deposited Polymeric Coatings. Langmuir, 2015, 31, 6186-6196.	3.5	46
180	Stable Wettability Control of Nanoporous Microstructures by iCVD Coating of Carbon Nanotubes. ACS Applied Materials & Interfaces, 2017, 9, 43287-43299.	8.0	46

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181	Extensional flow of wormlike micellar solutions. Chemical Engineering Science, 2009, 64, 4588-4596.	3.8	43
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