

Jeffrey F Morris

List of Publications by Year in descending order

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136
papers

8,652
citations

41258

49
h-index

46693

89
g-index

140
all docs

140
docs citations

140
times ranked

5090
citing authors

#	ARTICLE	IF	CITATIONS
1	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle K \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -core analysis of shear-thickening suspensions. <i>Physical Review Fluids</i> , 2022, 7, .	1.0	6
2	Discontinuous shear thickening in dense suspensions: Mechanisms, force networks, and fluctuations. , 2022, 3, 100031.		1
3	A particularly unstable film. <i>Journal of Fluid Mechanics</i> , 2022, 944, .	1.4	1
4	Contact angle measurements on cyclopentane hydrates. <i>Chemical Engineering Science</i> , 2021, 229, 116022.	1.9	11
5	Particle motion in pressure-driven suspension flow through a symmetric T-channel. <i>International Journal of Multiphase Flow</i> , 2021, 134, 103447.	1.6	5
6	Shear-induced glass-to-crystal transition in anisotropic clay-like suspensions. <i>Soft Matter</i> , 2021, 17, 3174-3190.	1.2	5
7	Threshold concentration and random collision determine the growth of the huntingtin inclusion from a stable core. <i>Communications Biology</i> , 2021, 4, 971.	2.0	2
8	Shear stress dependence of force networks in 3D dense suspensions. <i>Soft Matter</i> , 2021, 17, 7476-7486.	1.2	9
9	Athermal sediment creep triggered by porous flow. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	5
10	Shear Thickening of Concentrated Suspensions: Recent Developments and Relation to Other Phenomena. <i>Annual Review of Fluid Mechanics</i> , 2020, 52, 121-144.	10.8	113
11	Microstructure of the near-wall layer of filtration-induced colloidal assembly. <i>Soft Matter</i> , 2020, 16, 9726-9737.	1.2	5
12	Rheology discussions: The physics of dense suspensions. <i>Journal of Rheology</i> , 2020, 64, 1501-1524.	1.3	11
13	Correlation function approach for diffusion in confined geometries. <i>Physical Review E</i> , 2020, 102, 022129.	0.8	6
14	Fluctuations at the onset of discontinuous shear thickening in a suspension. <i>Journal of Rheology</i> , 2020, 64, 309-319.	1.3	25
15	Preface: Physics of dense suspensions. <i>Journal of Rheology</i> , 2020, 64, 223-225.	1.3	9
16	Injection time controls the final morphology of nanocrystals during in situ-seeding synthesis of silver nanodisks. <i>CrystEngComm</i> , 2020, 22, 1769-1778.	1.3	2
17	Near-wall dynamics of a neutrally buoyant spherical particle in an axisymmetric stagnation point flow. <i>Journal of Fluid Mechanics</i> , 2020, 892, .	1.4	10
18	Interaction network analysis in shear thickening suspensions. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	32

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19	Particle approach to a stagnation point at a wall: Viscous damping and collision dynamics. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	8
20	Toward a fluid mechanics of suspensions. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	32
21	Effect of inertial migration of particles on flow transitions of a suspension Taylor-Couette flow. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	11
22	Shear jamming and fragility in dense suspensions. <i>Granular Matter</i> , 2019, 21, 1.	1.1	48
23	From Yielding to Shear Jamming in a Cohesive Frictional Suspension. <i>Physical Review Letters</i> , 2019, 122, 098004.	2.9	62
24	Soil granular dynamics on-a-chip: fluidization inception under scrutiny. <i>Lab on A Chip</i> , 2019, 19, 1226-1235.	3.1	10
25	Global topology of contact force networks: Insight into shear thickening suspensions. <i>Physical Review E</i> , 2019, 99, 012607.	0.8	8
26	Suspension flow through an asymmetric T-junction. <i>Journal of Fluid Mechanics</i> , 2018, 844, 247-273.	1.4	9
27	Bidisperse and polydisperse suspension rheology at large solid fraction. <i>Journal of Rheology</i> , 2018, 62, 513-526.	1.3	65
28	A constitutive model for simple shear of dense frictional suspensions. <i>Journal of Rheology</i> , 2018, 62, 457-468.	1.3	150
29	Rheology of Hydrate-Forming Emulsions Stabilized by Surfactant and Hydrophobic Silica Nanoparticles. <i>Energy & Fuels</i> , 2018, 32, 5877-5884.	2.5	27
30	Inertial migration of particles in Taylor-Couette flows. <i>Physics of Fluids</i> , 2018, 30, .	1.6	40
31	Inertial flow transitions of a suspension in Taylor-Couette geometry. <i>Journal of Fluid Mechanics</i> , 2018, 835, 936-969.	1.4	43
32	Shear thickening in concentrated suspensions of smooth spheres in Newtonian suspending fluids. <i>Soft Matter</i> , 2018, 14, 170-184.	1.2	77
33	Microscopic Origin of Frictional Rheology in Dense Suspensions: Correlations in Force Space. <i>Physical Review Letters</i> , 2018, 121, 128002.	2.9	33
34	Pore cross-talk in colloidal filtration. <i>Scientific Reports</i> , 2018, 8, 12460.	1.6	14
35	Lubricated-to-frictional shear thickening scenario in dense suspensions. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	45
36	Simulation of shear thickening in attractive colloidal suspensions. <i>Soft Matter</i> , 2017, 13, 1773-1779.	1.2	53

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37	Unsteady shear flows of colloidal hard-sphere suspensions by dynamic simulation. Journal of Rheology, 2017, 61, 477-501.	1.3	20
38	Microstructural description of shear-thickening suspensions. EPJ Web of Conferences, 2017, 140, 09023.	0.1	2
39	Shear-induced organization of forces in dense suspensions: signatures of discontinuous shear thickening. EPJ Web of Conferences, 2017, 140, 09045.	0.1	5
40	Nonlinear rheology of colloidal suspensions probed by oscillatory shear. Journal of Rheology, 2017, 61, 797-815.	1.3	9
41	Active microrheology of colloidal suspensions: Simulation and microstructural theory. Journal of Rheology, 2016, 60, 733-753.	1.3	18
42	Shear and normal stress measurements in non-Brownian monodisperse and bidisperse suspensions. Journal of Rheology, 2016, 60, 289-296.	1.3	50
43	High-speed trains: in microchannels?. Journal of Fluid Mechanics, 2016, 792, 1-4.	1.4	11
44	Particle transport in laboratory models of bifurcating fractures. Journal of Natural Gas Science and Engineering, 2016, 33, 1169-1180.	2.1	15
45	Rheology of cyclopentane hydrate slurry in a model oil-continuous emulsion. Rheologica Acta, 2016, 55, 235-243.	1.1	49
46	Airflows generated by an impacting drop. Soft Matter, 2016, 12, 3013-3020.	1.2	7
47	Lattice-Boltzmann simulation of inertial particle-laden flow around an obstacle. Physical Review Fluids, 2016, 1, .	1.0	13
48	Nonmonotonic flow curves of shear thickening suspensions. Physical Review E, 2015, 91, 052302.	0.8	72
49	Coalescence-induced jumping of droplet: Inertia and viscosity effects. Physics of Fluids, 2015, 27, .	1.6	80
50	Dynamics of viscous coalescing droplets in a saturated vapor phase. Physics of Fluids, 2015, 27, .	1.6	11
51	Onset of abrasive wear of boundaries in concentrated suspension flow. Tribology International, 2015, 87, 72-81.	3.0	0
52	Packed bed thermal energy storage: A simplified experimentally validated model. Journal of Energy Storage, 2015, 4, 14-23.	3.9	90
53	Discontinuous shear thickening in Brownian suspensions by dynamic simulation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15326-15330.	3.3	150
54	Yield stress measurements of cyclopentane hydrate slurry. Journal of Non-Newtonian Fluid Mechanics, 2015, 220, 116-125.	1.0	64

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55	Lattice Boltzmann simulations of particle-laden liquid bridges: Effects of volume fraction and wettability. <i>International Journal of Multiphase Flow</i> , 2015, 76, 32-46.	1.6	20
56	Topology of pair-sphere trajectories in finite inertia suspension shear flow and its effects on microstructure and rheology. <i>Physics of Fluids</i> , 2015, 27, 043302.	1.6	22
57	Modeling Oilfield Emulsions: Comparison of Cyclopentane Hydrate and Ice. <i>Energy & Fuels</i> , 2015, 29, 6286-6295.	2.5	28
58	Interaction of fluid interfaces with immersed solid particles using the lattice Boltzmann method for liquid-gas particle systems. <i>Journal of Computational Physics</i> , 2015, 283, 453-477.	1.9	44
59	Calorimetric and Rheological Studies on Cyclopentane Hydrate-Forming Water-in-Kerosene Emulsions. <i>Journal of Chemical & Engineering Data</i> , 2015, 60, 362-368.	1.0	25
60	Microstructure and rheology of finite inertia neutrally buoyant suspensions. <i>Journal of Fluid Mechanics</i> , 2014, 749, 431-459.	1.4	47
61	Suspension flow past a cylinder: particle interactions with recirculating wakes. <i>Journal of Fluid Mechanics</i> , 2014, 760, .	1.4	32
62	Experimental results and modeling of energy storage and recovery in a packed bed of alumina particles. <i>Applied Energy</i> , 2014, 119, 521-529.	5.1	102
63	Hydrophobic Particle Effects on Hydrate Crystal Growth at the Water-Oil Interface. <i>Chemistry - an Asian Journal</i> , 2014, 9, 261-267.	1.7	28
64	Shear thickening, frictionless and frictional rheologies in non-Brownian suspensions. <i>Journal of Rheology</i> , 2014, 58, 1693-1724.	1.3	454
65	Rheology of Non-Brownian Suspensions. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2014, 5, 203-228.	3.3	166
66	Sliding flow method for exergically efficient packed bed thermal storage. <i>Applied Thermal Engineering</i> , 2014, 64, 201-208.	3.0	39
67	Nucleation of cyclopentane hydrate by ice studied by morphology and rheology. <i>Chemical Engineering Science</i> , 2014, 116, 497-507.	1.9	46
68	The Essential Role of Frictional Contact in Shear Thickening. <i>Japanese Journal of Multiphase Flow</i> , 2014, 28, 296-303.	0.1	1
69	Colloidal Adsorption at Fluid Interfaces: Regime Crossover from Fast Relaxation to Physical Aging. <i>Physical Review Letters</i> , 2013, 111, 028302.	2.9	58
70	The effect of shear thinning and walls on the sedimentation of a sphere in an elastic fluid under orthogonal shear. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013, 201, 120-129.	1.0	24
71	Simulations of a sphere sedimenting in a viscoelastic fluid with cross shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013, 197, 48-60.	1.0	44
72	Thermal analysis and exergy evaluation of packed bed thermal storage systems. <i>Applied Thermal Engineering</i> , 2013, 52, 255-263.	3.0	96

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73	Hydrodynamically Driven Colloidal Assembly in Dip Coating. <i>Physical Review Letters</i> , 2013, 110, 188302.	2.9	56
74	Salt effects on thermodynamic and rheological properties of hydrate forming emulsions. <i>Chemical Engineering Science</i> , 2013, 95, 148-160.	1.9	74
75	Pair-particle dynamics and microstructure in sheared colloidal suspensions: Simulation and Smoluchowski theory. <i>Physics of Fluids</i> , 2013, 25, .	1.6	20
76	Discontinuous Shear Thickening of Frictional Hard-Sphere Suspensions. <i>Physical Review Letters</i> , 2013, 111, 218301.	2.9	522
77	Effects of Inertia and Viscosity on Single Droplet Deformation in Confined Shear Flow. <i>Communications in Computational Physics</i> , 2013, 13, 706-724.	0.7	24
78	Surfactant Effects on Hydrate Crystallization at the Water–Oil Interface: Hollow-Conical Crystals. <i>Crystal Growth and Design</i> , 2012, 12, 3817-3824.	1.4	88
79	Microstructural theory and the rheology of concentrated colloidal suspensions. <i>Journal of Fluid Mechanics</i> , 2012, 713, 420-452.	1.4	44
80	Effect of repulsive interactions on structure and rheology of sheared colloidal dispersions. <i>Soft Matter</i> , 2012, 8, 4223.	1.2	28
81	Calorimetric investigation of cyclopentane hydrate formation in an emulsion. <i>Chemical Engineering Science</i> , 2012, 68, 481-491.	1.9	52
82	Drop-on-demand drop formation of colloidal suspensions. <i>International Journal of Multiphase Flow</i> , 2012, 38, 17-26.	1.6	34
83	Hydrodynamic and interparticle potential effects on aggregation of colloidal particles. <i>Journal of Colloid and Interface Science</i> , 2012, 368, 86-96.	5.0	43
84	Highly crosslinked poly(dimethylsiloxane) microbeads with uniformly dispersed quantum dot nanocrystals. <i>Journal of Colloid and Interface Science</i> , 2011, 363, 25-33.	5.0	22
85	Particle-pressure-induced self-filtration in concentrated suspensions. <i>Physical Review E</i> , 2010, 82, 010402.	0.8	27
86	Axial and lateral particle ordering in finite Reynolds number channel flows. <i>Physics of Fluids</i> , 2010, 22, .	1.6	121
87	High-shear-rate capillary viscometer for inkjet inks. <i>Review of Scientific Instruments</i> , 2010, 81, 065106.	0.6	26
88	Structural and rheological evolution of silica nanoparticle gels. <i>Soft Matter</i> , 2010, 6, 5425.	1.2	40
89	Rheology of Hydrate Forming Emulsions. <i>Langmuir</i> , 2010, 26, 11699-11704.	1.6	60
90	Breakup of a Liquid Jet Containing Solid Particles: A Singularity Approach. <i>SIAM Journal on Applied Mathematics</i> , 2009, 70, 885-900.	0.8	13

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91	Particle Pressure in a Sheared Suspension: A Bridge from Osmosis to Granular Dilatancy. <i>Physical Review Letters</i> , 2009, 102, 108301.	2.9	91
92	Lateral force on a rigid sphere in large-inertia laminar pipe flow. <i>Journal of Fluid Mechanics</i> , 2009, 621, 59-67.	1.4	103
93	A review of microstructure in concentrated suspensions and its implications for rheology and bulk flow. <i>Rheologica Acta</i> , 2009, 48, 909-923.	1.1	208
94	Uniaxial compression of dense granular materials: Stress distribution and permeability. <i>Journal of Petroleum Science and Engineering</i> , 2009, 65, 193-207.	2.1	10
95	Suspension flow modeling for general geometries. <i>Chemical Engineering Science</i> , 2009, 64, 4597-4610.	1.9	53
96	Ordering transition and structural evolution under shear in Brownian suspensions. <i>Journal of Rheology</i> , 2009, 53, 417-439.	1.3	42
97	Pair-sphere trajectories in finite-Reynolds-number shear flow. <i>Journal of Fluid Mechanics</i> , 2008, 596, 413-435.	1.4	58
98	Transient behavior of electrorheological fluids in shear flow. <i>Journal of Rheology</i> , 2008, 52, 225-241.	1.3	15
99	Particle pressure in sheared Brownian suspensions. <i>Journal of Rheology</i> , 2008, 52, 141-164.	1.3	64
100	Suspension properties at finite Reynolds number from simulated shear flow. <i>Physics of Fluids</i> , 2008, 20, .	1.6	103
101	Extreme velocity fluctuations: transient jamming in concentrated suspension flow. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	0
102	Collective diffusion in sheared colloidal suspensions. <i>Journal of Fluid Mechanics</i> , 2008, 597, 305-341.	1.4	21
103	Hydrodynamic interaction of two particles in confined linear shear flow at finite Reynolds number. <i>Physics of Fluids</i> , 2007, 19, .	1.6	48
104	Development of particle migration in pressure-driven flow of a Brownian suspension. <i>Journal of Fluid Mechanics</i> , 2007, 581, 437-451.	1.4	85
105	Temporally-resolved inkjet drop impaction on surfaces. <i>AIChE Journal</i> , 2007, 53, 2606-2617.	1.8	85
106	Pendant drop thread dynamics of particle-laden liquids. <i>International Journal of Multiphase Flow</i> , 2007, 33, 448-468.	1.6	49
107	TRANSIENT BEHAVIOR OF ELECTORRHEOLOGICAL FLUIDS IN SHEAR FLOW. , 2007, , .		0
108	Visualization of drop-on-demand inkjet: Drop formation and deposition. <i>Review of Scientific Instruments</i> , 2006, 77, 085101.	0.6	127

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109	An experimental study of drop-on-demand drop formation. <i>Physics of Fluids</i> , 2006, 18, 072102.	1.6	303
110	Rotary spray congealing of a suspension: Effect of disk speed and dispersed particle properties. <i>Journal of Microencapsulation</i> , 2006, 23, 793-809.	1.2	25
111	Mechanism for clogging of microchannels. <i>Physical Review E</i> , 2006, 74, 061402.	0.8	215
112	Normal stress-driven migration and axial development in pressure-driven flow of concentrated suspensions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2006, 135, 149-165.	1.0	141
113	Report of the Symposium on Interactions for Dispersed Systems in Newtonian and Viscoelastic Fluids, Guanajuato, Mexico, 2006. <i>Physics of Fluids</i> , 2006, 18, 121501.	1.6	2
114	Triplet correlation in sheared suspensions of Brownian particles. <i>Journal of Chemical Physics</i> , 2006, 124, 204908.	1.2	8
115	Particle-laden Drop Impacting on Solid Surfaces. <i>Journal of Dispersion Science and Technology</i> , 2005, 25, 449-456.	1.3	16
116	Particle migration and free-surface topography in inclined plane flow of a suspension. <i>Journal of Fluid Mechanics</i> , 2005, 538, 309.	1.4	36
117	Inertial migration of rigid spherical particles in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2004, 515, 171-195.	1.4	406
118	Trains of particles in finite-Reynolds-number pipe flow. <i>Physics of Fluids</i> , 2004, 16, 4192-4195.	1.6	95
119	Stationary shear flow around fixed and free bodies at finite Reynolds number. <i>Journal of Fluid Mechanics</i> , 2004, 520, 215-242.	1.4	111
120	An experimental study of particle effects on drop formation. <i>Physics of Fluids</i> , 2004, 16, 1777-1790.	1.6	132
121	Single drop impaction on a solid surface. <i>AIChE Journal</i> , 2003, 49, 2461-2471.	1.8	100
122	Particle migration in pressure-driven flow of a Brownian suspension. <i>Journal of Fluid Mechanics</i> , 2003, 493, 363-378.	1.4	178
123	Structure evolution in electrorheological and magnetorheological suspensions from a continuum perspective. <i>Journal of Applied Physics</i> , 2003, 93, 5769-5779.	1.1	51
124	Film depth and concentration banding in free-surface Couette flow of a suspension. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003, 361, 895-910.	1.6	5
125	A TWO-FLUID MODEL FOR ELECTRO- AND MAGNETORHEOLOGICAL SUSPENSIONS. <i>International Journal of Modern Physics B</i> , 2002, 16, 2669-2675.	1.0	2
126	Microstructure from simulated Brownian suspension flows at large shear rate. <i>Physics of Fluids</i> , 2002, 14, 1920-1937.	1.6	89

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127	Concentration band dynamics in free-surface Couette flow of a suspension. <i>Physics of Fluids</i> , 2002, 14, 1580-1589.	1.6	27
128	Pattern Formation in Flowing Electrorheological Fluids. <i>Physical Review Letters</i> , 2002, 88, 188301.	2.9	43
129	A TWO-FLUID MODEL FOR ELECTRO- AND MAGNETORHEOLOGICAL SUSPENSIONS. , 2002, , .		2
130	Anomalous migration in simulated oscillatory pressure-driven flow of a concentrated suspension. <i>Physics of Fluids</i> , 2001, 13, 2457-2462.	1.6	22
131	Curvilinear flows of noncolloidal suspensions: The role of normal stresses. <i>Journal of Rheology</i> , 1999, 43, 1213-1237.	1.3	400
132	Pressure-driven flow of a suspension: Buoyancy effects. <i>International Journal of Multiphase Flow</i> , 1998, 24, 105-130.	1.6	129
133	Microstructure of strongly sheared suspensions and its impact on rheology and diffusion. <i>Journal of Fluid Mechanics</i> , 1997, 348, 103-139.	1.4	381
134	Self-diffusion in sheared suspensions. <i>Journal of Fluid Mechanics</i> , 1996, 312, 223-252.	1.4	65
135	The pressure moments for two rigid spheres in low-Reynolds-number flow. <i>Physics of Fluids A, Fluid Dynamics</i> , 1993, 5, 2317-2325.	1.6	61
136	Scaling Analysis of Shear Thickening Suspensions. <i>Frontiers in Physics</i> , 0, 10, .	1.0	2