

Thomas G Mason

List of Publications by Year in descending order

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78
papers

4,434
citations

201674

27
h-index

102487

66
g-index

80
all docs

80
docs citations

80
times ranked

4704
citing authors

#	ARTICLE	IF	CITATIONS
1	Curvature-assisted self-assembly of Brownian squares on cylindrical surfaces. Journal of Colloid and Interface Science, 2022, 605, 863-870.	9.4	5
2	Self-motion and heterogeneous droplet dynamics in moderately attractive dense emulsions. Journal of Physics Condensed Matter, 2021, 33, 175101.	1.8	2
3	Brownian lithographic polymers of steric lock-and-key colloidal linkages. Science Advances, 2021, 7, eabg3678.	10.3	2
4	Phase behavior of rotationally asymmetric Brownian kites containing 90° internal angles*. Chinese Physics B, 2021, 30, 124701.	1.4	1
5	Depletion torques between anisotropic colloidal particles. Journal of Chemical Physics, 2021, 155, 144903.	3.0	2
6	Emergent tetratic order in crowded systems of rotationally asymmetric hard kite particles. Nature Communications, 2020, 11, 2064.	12.8	19
7	Diffusing wave microrheology of strongly attractive dense emulsions. Physical Review E, 2020, 102, 062610.	2.1	6
8	Long-wavelength fluctuations and anomalous dynamics in 2-dimensional liquids. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22977-22982.	7.1	18
9	Band-collision gel electrophoresis. Nature Communications, 2019, 10, 3631.	12.8	10
10	Diffusing wave microrheology of highly scattering concentrated monodisperse emulsions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7766-7771.	7.1	23
11	Phase behavior of two-dimensional Brownian systems of corner-rounded hexagons. Physical Review Materials, 2019, 3, .	2.4	14
12	Dynamics in two-dimensional glassy systems of crowded Penrose kites. Physical Review Materials, 2019, 3, .	2.4	7
13	Influence of ionic constituents and electrical conductivity on the propagation of charged nanoscale objects in passivated gel electrophoresis. Electrophoresis, 2018, 39, 394-405.	2.4	6
14	Vibrational Modes and Dynamic Heterogeneity in a Near-Equilibrium 2D Glass of Colloidal Kites. Physical Review Letters, 2018, 121, 228003.	7.8	8
15	A Brownian quasi-crystal of pre-assembled colloidal Penrose tiles. Nature, 2018, 561, 94-99.	27.8	24
16	Surfactant Partitioning in Nanoemulsions. Langmuir, 2018, 34, 10309-10320.	3.5	5
17	Assembly of colloidal particles in solution. Reports on Progress in Physics, 2018, 81, 126601.	20.1	51
18	Microscopic signatures of yielding in concentrated nanoemulsions under large-amplitude oscillatory shear. Physical Review Materials, 2018, 2, .	2.4	19

#	ARTICLE	IF	CITATIONS
19	Dimer crystallization of chiral proteoids. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 7167-7175.	2.8	8
20	The liquid-glass-jamming transition in disordered ionic nanoemulsions. <i>Scientific Reports</i> , 2017, 7, 13879.	3.3	13
21	Advances and challenges in the rheology of concentrated emulsions and nanoemulsions. <i>Advances in Colloid and Interface Science</i> , 2017, 247, 397-412.	14.7	81
22	Treatment of Acidified Blood Using Reduced Osmolarity Mixed-Base Solutions. <i>Frontiers in Physiology</i> , 2016, 7, 625.	2.8	3
23	Lock-and-key dimerization in dense Brownian systems of hard annular sector particles. <i>Physical Review E</i> , 2016, 94, 022124.	2.1	7
24	Dynamical and structural signatures of the glass transition in emulsions. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016, 2016, 094003.	2.3	20
25	Structure and Conductivity of Semiconducting Polymer Hydrogels. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6215-6224.	2.6	14
26	Local collective motion analysis for multi-probe dynamic imaging and microrheology. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 305201.	1.8	5
27	Entropic, electrostatic, and interfacial regimes in concentrated disordered ionic emulsions. <i>Rheologica Acta</i> , 2016, 55, 683-697.	2.4	19
28	The physical origins of transit time measurements for rapid, single cell mechanotyping. <i>Lab on A Chip</i> , 2016, 16, 3330-3339.	6.0	61
29	Separating nanoparticles by surface charge group using pH-controlled passivated gel electrophoresis. <i>Soft Materials</i> , 2016, 14, 204-209.	1.7	10
30	Propagation and Separation of Charged Colloids by Cylindrical Passivated Gel Electrophoresis. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6160-6165.	2.6	3
31	Colloidal Lock-and-Key Dimerization Reactions of Hard Annular Sector Particles Controlled by Osmotic Pressure. <i>Journal of the American Chemical Society</i> , 2015, 137, 15308-15314.	13.7	22
32	Structure of marginally jammed polydisperse packings of frictionless spheres. <i>Physical Review E</i> , 2015, 91, 032302.	2.1	16
33	Shape-designed frustration by local polymorphism in a near-equilibrium colloidal glass. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12063-12068.	7.1	36
34	Self-organized chiral colloidal crystals of Brownian square crosses. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 152101.	1.8	12
35	Random walks of colloidal probes in viscoelastic materials. <i>Physical Review E</i> , 2014, 89, 042309.	2.1	11
36	The jamming elasticity of emulsions stabilized by ionic surfactants. <i>Soft Matter</i> , 2014, 10, 5040-5044.	2.7	25

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37	Self-limiting droplet fusion in ionic emulsions. <i>Soft Matter</i> , 2014, 10, 4662.	2.7	21
38	Crossover between entropic and interfacial elasticity and osmotic pressure in uniform disordered emulsions. <i>Soft Matter</i> , 2014, 10, 7109-7116.	2.7	26
39	Entropic chiral symmetry breaking in self-organized two-dimensional colloidal crystals. <i>Soft Matter</i> , 2014, 10, 4471.	2.7	7
40	Nanoparticle size distributions measured by optical adaptive-deconvolution passivated-gel electrophoresis. <i>Journal of Colloid and Interface Science</i> , 2014, 435, 67-74.	9.4	19
41	Passivated gel electrophoresis of charged nanospheres by light-scattering video tracking. <i>Journal of Colloid and Interface Science</i> , 2014, 428, 199-207.	9.4	12
42	Star colloids in nematic liquid crystals. <i>Soft Matter</i> , 2013, 9, 7843.	2.7	17
43	Cerberus Nanoemulsions Produced by Multidroplet Flow-Induced Fusion. <i>Langmuir</i> , 2013, 29, 15787-15793.	3.5	22
44	Reply to "Comment on "Three-dimensional imaging of a phase object from a single sample orientation using an optical laser". <i>Physical Review B</i> , 2012, 86, .	3.2	0
45	Twinning of Rhombic Colloidal Crystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 18125-18131.	13.7	32
46	Nanoinclusions in Cryogenically Quenched Nanoemulsions. <i>Langmuir</i> , 2012, 28, 12015-12021.	3.5	6
47	Interacting viscous instabilities in microfluidic systems. <i>Soft Matter</i> , 2012, 8, 10573.	2.7	27
48	Optically probing nanoemulsion compositions. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2455.	2.8	16
49	Advanced Nanoemulsions. <i>Annual Review of Physical Chemistry</i> , 2012, 63, 493-518.	10.8	202
50	Local chiral symmetry breaking in triatic liquid crystals. <i>Nature Communications</i> , 2012, 3, 801.	12.8	67
51	Shear-Induced Disruption of Dense Nanoemulsion Gels. <i>Langmuir</i> , 2011, 27, 5204-5210.	3.5	37
52	Three-dimensional imaging of a phase object from a single sample orientation using an optical laser. <i>Physical Review B</i> , 2011, 84, .	3.2	12
53	Rheology of attractive emulsions. <i>Physical Review E</i> , 2011, 84, 041404.	2.1	112
54	Entropic crystal-crystal transitions of Brownian squares. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 2684-2687.	7.1	134

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55	Tensorial generalized Stokes-Einstein relation for anisotropic probe microrheology. <i>Rheologica Acta</i> , 2010, 49, 1165-1177.	2.4	17
56	Fluid Mechanics of Microrheology. <i>Annual Review of Fluid Mechanics</i> , 2010, 42, 413-438.	25.0	553
57	Time-Dependent Nanoemulsion Droplet Size Reduction By Evaporative Ripening. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 3349-3353.	4.6	30
58	Frustrated Rotator Crystals and Glasses of Brownian Pentagons. <i>Physical Review Letters</i> , 2009, 103, 208302.	7.8	61
59	Shape-Controlled Colloidal Interactions in Nematic Liquid Crystals. <i>Science</i> , 2009, 326, 1083-1086.	12.6	289
60	Deformation, restructuring, and un-jamming of concentrated droplets in large-amplitude oscillatory shear flows. <i>Soft Matter</i> , 2009, 5, 2208.	2.7	12
61	Mesoscale structure of diffusion-limited aggregates of colloidal rods and disks. <i>Soft Matter</i> , 2009, 5, 3639.	2.7	26
62	Curvature Dependence of Viral Protein Structures on Encapsidated Nanoemulsion Droplets. <i>ACS Nano</i> , 2008, 2, 281-286.	14.6	70
63	Transmission of Visible and Ultraviolet Light through Charge-Stabilized Nanoemulsions. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12669-12676.	3.1	25
64	Suppressing and Enhancing Depletion Attractions between Surfaces Roughened by Asperities. <i>Physical Review Letters</i> , 2008, 101, 148301.	7.8	44
65	Capillary threads and viscous droplets in square microchannels. <i>Physics of Fluids</i> , 2008, 20, .	4.0	316
66	Well-Defined Deposition Particle Templating: Rapid Mass Production of LithoParticles Without Mechanical Imprinting. <i>Soft Materials</i> , 2007, 5, 13-31.	1.7	0
67	Effects of cytoskeletal disruption on transport, structure, and rheology within mammalian cells. <i>Physics of Fluids</i> , 2007, 19, 103102.	4.0	26
68	Slippery diffusion-limited aggregation. <i>Physical Review E</i> , 2007, 75, 011406.	2.1	33
69	Irreversible shear-induced vitrification of droplets into elastic nanoemulsions by extreme rupturing. <i>Physical Review E</i> , 2007, 75, 041407.	2.1	59
70	Pillar-Defined Deposition Particle Templating: A High-Throughput Synthetic Route for Producing LithoParticles. <i>Soft Materials</i> , 2007, 5, 1-11.	1.7	1
71	Directing Colloidal Self-Assembly through Roughness-Controlled Depletion Attractions. <i>Physical Review Letters</i> , 2007, 99, 268301.	7.8	136
72	Colloidal Alphabet Soup: Monodisperse Dispersions of Shape-Designed LithoParticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4477-4480.	3.1	160

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73	Simulations of complex particle transport in heterogeneous active liquids. Microfluidics and Nanofluidics, 2007, 3, 227-237.	2.2	20
74	Bio-Microrheology: A Frontier in Microrheology. Biophysical Journal, 2006, 91, 4296-4305.	0.5	173
75	Effective Structure Factor of Osmotically Deformed Nanoemulsions. Journal of Physical Chemistry B, 2006, 110, 22097-22102.	2.6	40
76	Formation of Concentrated Nanoemulsions by Extreme Shear. Soft Materials, 2004, 2, 109-123.	1.7	171
77	Estimating the viscoelastic moduli of complex fluids using the generalized Stokes-Einstein equation. Rheologica Acta, 2000, 39, 371-378.	2.4	613
78	Diffusing Wave Spectroscopy Microrheology of Actin Filament Networks. Biophysical Journal, 1999, 76, 1063-1071.	0.5	187