Jonathan R Howse

List of Publications by Year in descending order

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73 papers 5,629 citations

32 h-index 98798 67 g-index

74 all docs

74 docs citations

74 times ranked 5756 citing authors

#	Article	IF	CITATIONS
1	Self-Motile Colloidal Particles: From Directed Propulsion to Random Walk. Physical Review Letters, 2007, 99, 048102.	7.8	1,717
2	In pursuit of propulsion at the nanoscale. Soft Matter, 2010, 6, 726.	2.7	534
3	Boundaries can steer active Janus spheres. Nature Communications, 2015, 6, 8999.	12.8	290
4	Templated formation of giant polymer vesicles with controlled size distributions. Nature Materials, 2009, 8, 507-511.	27.5	197
5	Size dependence of the propulsion velocity for catalytic Janus-sphere swimmers. Physical Review E, 2012, 85, 020401.	2.1	189
6	Electrokinetic effects in catalytic platinum-insulator Janus swimmers. Europhysics Letters, 2014, 106, 58003.	2.0	181
7	Direct Observation of the Direction of Motion for Spherical Catalytic Swimmers. Langmuir, 2011, 27, 12293-12296.	3.5	165
8	Importance of Particle Tracking and Calculating the Mean-Squared Displacement in Distinguishing Nanopropulsion from Other Processes. Langmuir, 2012, 28, 10997-11006.	3.5	159
9	Self-assembled autonomous runners and tumblers. Physical Review E, 2010, 82, 015304.	2.1	157
10	Reciprocating Power Generation in a Chemically Driven Synthetic Muscle. Nano Letters, 2006, 6, 73-77.	9.1	131
11	Noncovalent Cross-Linking of Casein by Epigallocatechin Gallate Characterized by Single Molecule Force Microscopy. Journal of Agricultural and Food Chemistry, 2006, 54, 4077-4081.	5.2	117
12	Determination of Solvent–Polymer and Polymer–Polymer Flory–Huggins Interaction Parameters for Poly(3-hexylthiophene) via Solvent Vapor Swelling. Macromolecules, 2013, 46, 6533-6540.	4.8	111
13	Covalently Cross-Linked Colloidosomes. Macromolecules, 2010, 43, 10466-10474.	4.8	98
14	The effect of the hydrothermal carbonization process on palm oil empty fruit bunch. Biomass and Bioenergy, 2012, 47, 82-90.	5.7	93
15	Responsive brushes and gels as components of soft nanotechnology. Faraday Discussions, 2005, 128, 55-74.	3.2	90
16	Antagonistic Triblock Polymer Gels Powered by pH Oscillations. Macromolecules, 2007, 40, 4393-4395.	4.8	81
17	Electrochemically-triggered spatially and temporally resolved multi-component gels. Materials Horizons, 2014, 1, 241-246.	12.2	78
18	Synthesis, characterization and swelling behaviour of poly(methacrylic acid) brushes synthesized using atom transfer radical polymerization. Polymer, 2009, 50, 1005-1014.	3.8	76

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19	Effect of the Hofmeister Anions upon the Swelling of a Self-Assembled pH-Responsive Hydrogel. Langmuir, 2010, 26, 10191-10197.	3.5	66
20	Electrospinning pHâ€Responsive Block Copolymer Nanofibers. Advanced Materials, 2007, 19, 3544-3548.	21.0	65
21	<i>InSitu</i> Imaging and Height Reconstruction of Phase Separation Processes in Polymer Blends during Spin Coating. ACS Nano, 2011, 5, 5124-5131.	14.6	65
22	The pH-induced swelling and collapse of a polybase brush synthesized by atom transfer radical polymerization. Soft Matter, 2006, 2, 1076-1080.	2.7	53
23	Floating Lipid Bilayers Deposited on Chemically Grafted Phosphatidylcholine Surfaces. Langmuir, 2008, 24, 1989-1999.	3.5	53
24	On the mechanisms of colloidal self-assembly during spin-coating. Soft Matter, 2014, 10, 8804-8812.	2.7	51
25	Preparation of stable foams using sterically stabilized pH-responsive latexes synthesized by emulsion polymerization. Journal of Materials Chemistry, 2008, 18, 545-552.	6.7	50
26	A Pickering Emulsion Route to Swimming Active Janus Colloids. Advanced Science, 2018, 5, 1700528.	11.2	49
27	Synthesis, Thermal Processing, and Thin Film Morphology of Poly(3-hexylthiophene)–Poly(styrenesulfonate) Block Copolymers. Macromolecules, 2015, 48, 2107-2117.	4.8	46
28	Melt-Processing of Conjugated Liquid Crystals: A Simple Route to Fabricate OFETs. Advanced Materials, 2007, 19, 805-809.	21.0	43
29	Adsorbed surfactant layers at polymer/liquid interfaces. A neutron reflectivity study. Physical Chemistry Chemical Physics, 2001, 3, 4044-4051.	2.8	39
30	Development of in situ studies of spin coated polymer films. Journal of Materials Chemistry C, 2013, 1, $603-616$.	5.5	39
31	Synthesis and Solid State Properties of a Poly(methyl methacrylate)-block-poly(2-(diethylamino)ethyl) Tj ETQq1 1 5573-5576.	0.784314 4.8	ł rgBT /Over 36
32	Critical adsorption and boundary layer structure of 2-butoxyethanol+D2O mixtures at a hydrophilic silica surface. Journal of Chemical Physics, 2002, 116, 7177-7188.	3.0	35
33	Insights into the Influence of Solvent Polarity on the Crystallization of Poly(ethylene oxide) Spin-Coated Thin Films viain SituGrazing Incidence Wide-Angle X-ray Scattering. Macromolecules, 2016, 49, 4579-4586.	4.8	31
34	The performance of poly(styrene)-block-poly(2-vinyl pyridine)-block-poly(styrene) triblock copolymers as pH-driven actuators. Soft Matter, 2007, 3, 1506.	2.7	28
35	Continuously tuneable optical filters from self-assembled block copolymer blends. Soft Matter, 2011, 7, 3721.	2.7	26
36	In Situ Studies of Phase Separation and Crystallization Directed by Marangoni Instabilities During Spinâ€Coating. Advanced Materials, 2013, 25, 7033-7037.	21.0	26

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37	Autonomous Volume Transitions of a Polybase Triblock Copolymer Gel in a Chemically Driven pHâ€Oscillator. Macromolecular Symposia, 2007, 256, 95-104.	0.7	25
38	Synthetic running and tumbling: an autonomous navigation strategy for catalytic nanoswimmers. Soft Matter, 2012, 8, 3077.	2.7	25
39	The Relationship between Charge Density and Polyelectrolyte Brush Profile Using Simultaneous Neutron Reflectivity and In Situ Attenuated Total Internal Reflection FTIR. Langmuir, 2013, 29, 6068-6076.	3.5	25
40	Controlled growth of poly (2-(diethylamino)ethyl methacrylate) brushes via atom transfer radical polymerisation on planar silicon surfaces. Polymer International, 2006, 55, 808-815.	3.1	24
41	Directed phase separation of PFO:PS blends during spin-coating using feedback controlled in situ stroboscopic fluorescence microscopy. Journal of Materials Chemistry A, 2013, 1, 3587.	10.3	24
42	Direct observation of morphological development during the spinâ€coating of polystyrene–poly(methyl) Tj ETG	Qq <u>Q.</u> ρ0 rg	BT_/Overlock
43	Influence of Surface Wettability on Microbubble Formation. Langmuir, 2016, 32, 1269-1278.	3.5	19
44	Neutron reflectivity studies of critical adsorption: $\hat{a} \in f$ The correspondence between a critical adsorption profile and specular neutron reflection. Physical Review E, 1999, 59, 5577-5581.	2.1	16
45	Highly Ordered Titanium Dioxide Nanostructures via a Simple One-Step Vapor-Inclusion Method in Block Copolymer Films. ACS Applied Nano Materials, 2018, 1, 3426-3434.	5.0	16
46	Perovskite Crystallization Dynamics during Spin-Casting: An <i>In Situ</i> Wide-Angle X-ray Scattering Study. ACS Applied Energy Materials, 2020, 3, 6155-6164.	5.1	16
47	Shear ordered diblock copolymers with tuneable optical properties. Physical Chemistry Chemical Physics, 2011, 13, 3179-3186.	2.8	14
48	Homopolymer Induced Aggregation of Poly(ethylene oxide) _{<i>n</i>} -b-poly(butylene) Tj ETQq0 0 0 0	gBT/Over	lock 10 Tf 50
49	pH-Dependent Control of Particle Motion through Surface Interactions with Patterned Polymer Brush Surfaces. Langmuir, 2012, 28, 12955-12961.	3.5	13
50	Selective molecular annealing: in situ small angle X-ray scattering study of microwave-assisted annealing of block copolymers. Physical Chemistry Chemical Physics, 2017, 19, 20412-20419.	2.8	13
51	Controlling the Motion and Placement of Micrometer-Sized Metal Particles Using Patterned Polymer Brush Surfaces. Langmuir, 2011, 27, 11801-11805.	3 . 5	12
52	Hydration and Ordering of Lamellar Block Copolymer Films under Controlled Water Vapor. Macromolecules, 2014, 47, 8682-8690.	4.8	12
53	Stroboscopic microscopyâ€"direct imaging of structure development and phase separation during spinâ€coating. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 17-25.	2.1	8
54	Development of an optical microscopy system for automated bubble cloud analysis. Applied Optics, 2016, 55, 6102.	2.1	8

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55	Efficient long-range electron transfer processes in polyfluorene–perylene diimide blends. Nanoscale, 2018, 10, 10934-10944.	5.6	8
56	Hybrid biomembrane substructure determination by contrast-variation analysis. Applied Physics A: Materials Science and Processing, 2002, 74, s1262-s1263.	2.3	7
57	Does 1,8-diiodooctane affect the aggregation state of PC ₇₁ BM in solution?. Royal Society Open Science, 2018, 5, 180937.	2.4	7
58	Autonomous propulsion. Nature Chemistry, 2012, 4, 247-248.	13.6	6
59	Neutron reflectivity studies of the free liquid surface of methylcyclohexane–perfluoromethylcyclohexane near the critical endpoint. Physical Chemistry Chemical Physics, 1999, 1, 4635-4643.	2.8	5
60	Gravimetric and density profiling using the combination of surface acoustic waves and neutron reflectivity. Journal of Colloid and Interface Science, 2017, 487, 465-474.	9.4	5
61	The influence of structure and morphology on ion permeation in commercial silicone hydrogel contact lenses. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 137-148.	3.4	4
62	Extensional flow affecting shear viscosity: Experimental evidence and comparison to models. Journal of Rheology, 2022, 66, 793-809.	2.6	4
63	Quantifying hydrogel response using laser light scattering. Soft Matter, 2010, 6, 743-749.	2.7	3
64	Real time laser interference microscopy for barâ€spread polystyrene/poly(methyl methacrylate) blends. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 985-992.	2.1	2
65	Development of an optical microscopy system for automated bubble cloud analysis: publisher's note. Applied Optics, 2016, 55, 7392.	2.1	2
66	Broadening the scope of Pd-catalyzed oscillatory carbonylation reactions: solvent, substrate, catalyst. Reaction Kinetics, Mechanisms and Catalysis, 2019, 127, 161-174.	1.7	2
67	The ROV Pontus - A winning design. , 2009, , .		1
68	Self-Motile Colloidal Particles: From Directed Propulsion to Random Walk. , 0, .		1
69	Technical Report of the Eastern Edge Robotics Team The Marine Institute of Memorial University 2007 MATE/MTS International Robotics Competition, Explorer Class. Marine Technology Society Journal, 2007, 41, 72-82.	0.4	0
70	ROV <i>Pontus</i> . Marine Technology Society Journal, 2009, 43, 37-46.	0.4	0
71	Surface Interactions for Controlling the Microfluidic Separation of Polymeric Microspheres. Materials Research Society Symposia Proceedings, 2011, 1357, 1.	0.1	0
72	Controlling Phoretic Swimmer Trajectory. Materials Research Society Symposia Proceedings, 2011, 1346, 1.	0.1	0

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73	Reduced curvilinear velocity of boar sperm on substrates with increased hydrophobicity. Theriogenology, 2014, 81, 764-769.	2.1	O