

# Joshua D Mcgraw

## List of Publications by Year in descending order

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34  
papers

952  
citations

566801

15  
h-index

433756

31  
g-index

35  
all docs

35  
docs citations

35  
times ranked

1271  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Direct Quantitative Measure of Surface Mobility in a Glassy Polymer. <i>Science</i> , 2014, 343, 994-999.	6.0	192
2	Reduced Glass Transition Temperatures in Thin Polymer Films: Surface Effect or Artifact?. <i>Physical Review Letters</i> , 2012, 109, 055701.	2.9	151
3	Influence of slip on the Plateau-Rayleigh instability on a fibre. <i>Nature Communications</i> , 2015, 6, 7409.	5.8	76
4	Plateau-Rayleigh instability in a torus: formation and breakup of a polymer ring. <i>Soft Matter</i> , 2010, 6, 1258.	1.2	56
5	Self-Similarity and Energy Dissipation in Stepped Polymer Films. <i>Physical Review Letters</i> , 2012, 109, 128303.	2.9	47
6	Al-M (M=Cr, Fe, Mn, Ni) Thin-Film Negative Electrode Materials. <i>Journal of the Electrochemical Society</i> , 2006, 153, A484.	1.3	41
7	Beyond Tanner's Law: Crossover between Spreading Regimes of a Viscous Droplet on an Identical Film. <i>Physical Review Letters</i> , 2012, 109, 154501.	2.9	34
8	Controlling Marangoni-induced instabilities in spin-cast polymer films: How to prepare uniform films. <i>European Physical Journal E</i> , 2016, 39, 90.	0.7	34
9	Capillary-driven flow induced by a stepped perturbation atop a viscous film. <i>Physics of Fluids</i> , 2012, 24, .	1.6	30
10	Numerical solutions of thin-film equations for polymer flows. <i>European Physical Journal E</i> , 2012, 35, 114.	0.7	30
11	Capillary levelling as a probe of thin film polymer rheology. <i>Soft Matter</i> , 2011, 7, 7832.	1.2	28
12	Slip-mediated dewetting of polymer microdroplets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1168-1173.	3.3	24
13	Step Edges in Thin Films of Lamellar-Forming Diblock Copolymer. <i>Macromolecules</i> , 2012, 45, 9531-9538.	2.2	21
14	Relaxation of non-equilibrium entanglement networks in thin polymer films. <i>European Physical Journal E</i> , 2013, 36, 7.	0.7	19
15	Mössbauer effect and X-ray diffraction investigation of Si-Fe thin films. <i>Philosophical Magazine</i> , 2006, 86, 5017-5030.	0.7	16
16	Relaxation and intermediate asymptotics of a rectangular trench in a viscous film. <i>Physical Review E</i> , 2013, 88, 035001.	0.8	14
17	Nanofluidics of thin polymer films: Linking the slip boundary condition at solid-liquid interfaces to macroscopic pattern formation and microscopic interfacial properties. <i>Advances in Colloid and Interface Science</i> , 2014, 210, 13-20.	7.0	13
18	Multimodal Miniature Surface Forces Apparatus ( $\frac{1}{4}$ SFA) for Interfacial Science Measurements. <i>Langmuir</i> , 2019, 35, 15500-15514.	1.6	12

#	ARTICLE	IF	CITATIONS
19	Capillary leveling of stepped films with inhomogeneous molecular mobility. <i>Soft Matter</i> , 2013, 9, 8297.	1.2	11
20	Adsorption-induced slip inhibition for polymer melts on ideal substrates. <i>Nature Communications</i> , 2018, 9, 1172.	5.8	11
21	Morphological evolution of microscopic dewetting droplets with slip. <i>Journal of Fluid Mechanics</i> , 2017, 828, 271-288.	1.4	9
22	Time dependence of advection-diffusion coupling for nanoparticle ensembles. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	9
23	Swelling molecular entanglement networks in polymer glasses. <i>Physical Review E</i> , 2010, 82, 021802.	0.8	8
24	Interface-Sensitive Raman Microspectroscopy of Water via Confinement with a Multimodal Miniature Surface Forces Apparatus. <i>Langmuir</i> , 2019, 35, 15543-15551.	1.6	8
25	Self-Similar Relaxation of Confined Microfluidic Droplets. <i>Physical Review Letters</i> , 2019, 123, 024501.	2.9	8
26	Dynamics of interacting edge defects in copolymer lamellae. <i>European Physical Journal E</i> , 2011, 34, 1-7.	0.7	7
27	Short chains enhance slip of highly entangled polystyrenes during thin film dewetting. <i>RSC Advances</i> , 2016, 6, 91163-91170.	1.7	7
28	Nucleated dewetting in supported ultra-thin liquid films with hydrodynamic slip. <i>Soft Matter</i> , 2017, 13, 4756-4760.	1.2	7
29	Influence of outer-layer finite-size effects on the dewetting dynamics of a thin polymer film embedded in an immiscible matrix. <i>Soft Matter</i> , 2018, 14, 6256-6263.	1.2	7
30	Glass transition at interfaces. <i>Europhysics News</i> , 2017, 48, 24-28.	0.1	6
31	Contact Dependence and Velocity Crossover in Friction between Microscopic Solid/Solid Contacts. <i>Nano Letters</i> , 2017, 17, 6335-6339.	4.5	5
32	Influence of bidisperse self-assembled monolayer structure on the slip boundary condition of thin polymer films. <i>Journal of Chemical Physics</i> , 2017, 146, 203326.	1.2	4
33	Near-surface rheology and hydrodynamic boundary condition of semi-dilute polymer solutions. <i>Soft Matter</i> , 2021, 17, 3765-3774.	1.2	4
34	Sacrificial mica substrates influence the slip boundary condition of dewetting polymer films. <i>Polymer</i> , 2015, 78, 202-207.	1.8	3