Oliver BÃ¤umchen

List of Publications by Year
in descending order

37	1,172	535685 17	425179 34
papers	citations	h-index	g-index

42	42	42	1752
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Measuring and upscaling micromechanical interactions in a cohesive granular material. Soft Matter, 2021, 17, 5806-5814.	1.2	1
2	Surfactant-free production of biomimetic giant unilamellar vesicles using PDMS-based microfluidics. Communications Chemistry, 2021, 4, .	2.0	30
3	Emergent probability fluxes in confined microbial navigation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	17
4	Self-generated oxygen gradients control collective aggregation of photosynthetic microbes. Journal of the Royal Society Interface, 2021, 18, 20210553.	1.5	10
5	Dynamic force measurements on swimming Chlamydomonas cells using micropipette force sensors. Journal of the Royal Society Interface, 2020, 17, 20190580.	1.5	17
6	Altered N-glycan composition impacts flagella-mediated adhesion in Chlamydomonas reinhardtii. ELife, 2020, 9, .	2.8	10
7	Micropipette force sensors for in vivo force measurements on single cells and multicellular microorganisms. Nature Protocols, 2019, 14, 594-615.	5.5	28
8	In vivoadhesion force measurements ofChlamydomonason model substrates. Soft Matter, 2019, 15, 3027-3035.	1.2	19
9	Curvature-Guided Motility of Microalgae in Geometric Confinement. Physical Review Letters, 2018, 120, 068002.	2.9	54
10	A modular approach for multifunctional polymersomes with controlled adhesive properties. Soft Matter, 2018, 14, 894-900.	1.2	17
11	Adsorption-induced slip inhibition for polymer melts on ideal substrates. Nature Communications, 2018, 9, 1172.	5.8	11
12	Adhesion of Chlamydomonas microalgae to surfaces is switchable by light. Nature Physics, 2018, 14, 45-49.	6.5	55
13	Adhesion strategies ofDictyostelium discoideumâ€“ a force spectroscopy study. Nanoscale, 2018, 10, 22504-22519.	2.8	13
14	Nucleated dewetting in supported ultra-thin liquid films with hydrodynamic slip. Soft Matter, 2017, 13, 4756-4760.	1.2	7
15	Elastocapillary levelling of thin viscous films on soft substrates. Physical Review Fluids, 2017, 2, .	1.0	13
16	Vesicles-on-a-chip: A universal microfluidic platform for the assembly of liposomes and polymersomes. European Physical Journal E, 2016, 39, 59.	0.7	71
17	Solid capillarity: when and how does surface tension deform soft solids?. Soft Matter, 2016, 12, 2993-2996.	1.2	77
18	Onset of Area-Dependent Dissipation in Droplet Spreading. Physical Review Letters, 2015, 115, 046103.	2.9	4

#	Article	IF	Citations
19	Selfâ€assembled silane monolayers: an efficient stepâ€byâ€step recipe for highâ€quality, low energy surfaces. Surface and Interface Analysis, 2015, 47, 557-564.	0.8	93
20	Influence of slip on the Plateauâ€“Rayleigh instability on a fibre. Nature Communications, 2015, 6, 7409.	5.8	76
21	Capillary droplet propulsion on a fibre. Soft Matter, 2015, 11, 6921-6926.	1.2	13
22	Universal contact-line dynamics at the nanoscale. Soft Matter, 2015, 11, 9247-9253.	1.2	12
23	Influence of Slip on the Rayleigh-Plateau Rim Instability in Dewetting Viscous Films. Physical Review Letters, 2014, 113, 014501.	2.9	34
24	Nanofluidics of thin polymer films: Linking the slip boundary condition at solidâ€“liquid interfaces to macroscopic pattern formation and microscopic interfacial properties. Advances in Colloid and Interface Science, 2014, 210, 13-20.	7.0	13
25	Relaxation and intermediate asymptotics of a rectangular trench in a viscous film. Physical Review E, 2013, 88, 035001.	0.8	14
26	Capillary leveling of stepped films with inhomogeneous molecular mobility. Soft Matter, 2013, 9, 8297.	1.2	11
27	Solid surface structure affects liquid order at the polystyreneâ€“self-assembled-monolayer interface. Physical Review E, 2013, 87, 012306.	0.8	18
28	Self-Similarity and Energy Dissipation in Stepped Polymer Films. Physical Review Letters, 2012, 109, 128303.	2.9	47
29	Capillary-driven flow induced by a stepped perturbation atop a viscous film. Physics of Fluids, 2012, 24, .	1.6	30
30	Reduced Glass Transition Temperatures in Thin Polymer Films: Surface Effect or Artifact?. Physical Review Letters, 2012, 109, 055701.	2.9	151
31	Slippage and nanorheology of thin liquid polymer films. Journal of Physics Condensed Matter, 2012, 24, 325102.	0.7	27
32	Numerical solutions of thin-film equations for polymer flows. European Physical Journal E, 2012, 35, 114.	0.7	30
33	Sliding fluids: Dewetting experiments reveal the solid/liquid boundary condition. Journal of Physics: Conference Series, 2010, 216, 012002.	0.3	7
34	Can liquids slide? Linking stability and dynamics of thin liquid films to microscopic material properties. Soft Matter, 2010, 6, 6028.	1.2	10
35	Slip effects in polymer thin films. Journal of Physics Condensed Matter, 2010, 22, 033102.	0.7	46
36	Reduced Interfacial Entanglement Density Affects the Boundary Conditions of Polymer Flow. Physical Review Letters, 2009, 103, 247801.	2.9	81

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37	Comprehensive Analysis of Dewetting Profiles to Quantify Hydrodynamic Slip. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 51-65.	0.1	3