Martin Brinkmann

List of Publications by Year
in descending order

70 papers	4,187 citations	159585 30 h-index	110387 64 g-index
71 all docs	71 docs citations	71 times ranked	4918 citing authors

#	Article	IF	Citations
1	Droplet based microfluidics. Reports on Progress in Physics, 2012, 75, 016601.	20.1	813
2	Wetting morphologies at microstructured surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1848-1852.	7.1	346
3	Morphological clues to wet granular pileÂstability. Nature Materials, 2008, 7, 189-193.	27.5	288
4	Design principles for superamphiphobic surfaces. Soft Matter, 2013, 9, 418-428.	2.7	196
5	Wetting morphologies on substrates with striped surface domains. Journal of Applied Physics, 2002, 92, 4296-4306.	2.5	174
6	Wetting and Dewetting of Complex Surface Geometries. Annual Review of Materials Research, 2008, 38, 101-121.	9.3	167
7	Comprehensive comparison of pore-scale models for multiphase flow in porous media. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13799-13806.	7.1	162
8	Characterization of super liquid-repellent surfaces. Current Opinion in Colloid and Interface Science, 2014, 19, 343-354.	7.4	151
9	Contact Line Pinning on Microstructured Surfaces for Liquids in the Wenzel State. Langmuir, 2010, 26, 860-865.	3.5	127
10	Capillary-Dominated Fluid Displacement in Porous Media. Annual Review of Fluid Mechanics, 2019, 51, 429-449.	25.0	109
11	Wettability controls slow immiscible displacement through local interfacial instabilities. Physical Review Fluids, 2016, 1, .	2.5	99
12	Drops on functional fibers: from barrels to clamshells and back. Soft Matter, 2011, 7, 5138.	2.7	90
13	Enhancement of Capillary Forces by Multiple Liquid Bridges. Langmuir, 2008, 24, 8813-8820.	3.5	74
14	Capillary Forces between Chemically Different Substrates. Langmuir, 2008, 24, 10161-10168.	3.5	74
15	Liquid distribution and cohesion in wet granular assemblies beyond the capillary bridge regime. Journal of Physics Condensed Matter, 2008, 20, 494236.	1.8	71
16	The Role of Local Instabilities in Fluid Invasion into Permeable Media. Scientific Reports, 2017, 7, 444.	3.3	65
17	On the onset of motion of sliding drops. Soft Matter, 2014, 10, 3325.	2.7	63
18	Switching Liquid Morphologies on Linear Grooves. Langmuir, 2007, 23, 12997-13006.	3.5	60

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19	Surface Hydrophobicity Causes SO2 Tolerance in Lichens. Annals of Botany, 2008, 101, 531-539.	2.9	58
20	Wetting Heterogeneities in Porous Media Control Flow Dissipation. Physical Review Applied, 2014, 2, .	3.8	56
21	Pinning and wicking in regular pillar arrays. Soft Matter, 2014, 10, 5739-5748.	2.7	50
22	Liquid Bridges in Chemically Structured Slit Pores. Langmuir, 2001, 17, 3390-3399.	3.5	44
23	Controlling the Formation of Capillary Bridges in Binary Liquid Mixtures. Langmuir, 2010, 26, 17184-17189.	3.5	44
24	Droplets, bubbles, and vesicles at chemically structured surfaces. Journal of Physics Condensed Matter, 2005, 17, S537-S558.	1.8	43
25	A general stability criterion for droplets on structured substrates. Journal of Physics A, 2004, 37, 11547-11573.	1.6	42
26	Stability of liquid channels or filaments in the presence of line tension. Journal of Physics Condensed Matter, 2005, 17, 2349-2364.	1.8	40
27	Blobs, channels and â€œcigarsâ€: Morphologies of liquids at a step. European Physical Journal E, 2004, 14, 79-89.	1.6	39
28	Morphological Transitions of Droplets Wetting Rectangular Domains. Langmuir, 2012, 28, 13919-13923.	3.5	34
29	Impact of thermal annealing on wettability and antifouling characteristics of alginate poly-l-lysine polyelectrolyte multilayer films. Colloids and Surfaces B: Biointerfaces, 2016, 145, 328-337.	5.0	34
30	Spatiotemporal control of cargo delivery performed by programmable self-propelled Janus droplets. Communications Physics, 2018, 1, .	5.3	34
31	Buoyant Droplets on Functional Fibers. Langmuir, 2012, 28, 13300-13306.	3.5	29
32	Wetting morphologies and their transitions in grooved substrates. Journal of Physics Condensed Matter, 2011, 23, 184108.	1.8	28
33	Advancing modes on regularly patterned substrates. Soft Matter, 2012, 8, 6301.	2.7	27
34	Microfluidic design rules for capillary slot-based electrospray sources. Applied Physics Letters, 2004, 85, 2140-2142.	3.3	26
35	Dewetting of Liquid Filaments in Wedge-Shaped Grooves. Langmuir, 2007, 23, 12138-12141.	3.5	26
36	Driven large contact angle droplets on chemically heterogeneous substrates. Europhysics Letters, 2012, 100, 16002.	2.0	26

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37	Wetting, budding, and fusionâ€”morphological transitions of soft surfaces. Journal of Physics Condensed Matter, 2005, 17, S2885-S2902.	1.8	25
38	Contact line stability of ridges and drops. Europhysics Letters, 2007, 80, 66002.	2.0	24
39	Slip-mediated dewetting of polymer microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1168-1173.	7.1	24
40	Liquid morphologies and capillary forces between three spherical beads. Physical Review E, 2016, 94, 012907.	2.1	23
41	Wettability Control of Droplet Deposition and Detachment. Physical Review Letters, 2006, 96, 146106.	7.8	22
42	Stability Limits of Capillary Bridges: How Contact Angle Hysteresis Affects Morphology Transitions of Liquid Microstructures. Physical Review Letters, 2015, 114, 234501.	7.8	20
43	Morphological Wetting Transitions at Ring-Shaped Surface Domains. Langmuir, 2010, 26, 11878-11885.	3.5	19
44	Role of contact-angle hysteresis for fluid transport in wet granular matter. Physical Review E, 2015, 91, 042204.	2.1	18
45	Wet granular rafts: aggregation in two dimensions under shear flow. Soft Matter, 2012, 8, 11939.	2.7	16
46	Deviation of sliding drops at a chemical step. Soft Matter, 2016, 12, 8268-8273.	2.7	15
47	Fluidization of wet granulates under shear. Physical Review E, 2010, 82, 061305.	2.1	14
48	Droplet sorting in a loop of flat microfluidic channels. Journal of Physics Condensed Matter, 2013, 25, 285102.	1.8	14
49	Free Cooling of the One-Dimensional Wet Granular Gas. Physical Review Letters, 2006, 97, 018001.	7.8	12
50	The Impact of Wetting-Heterogeneity Distribution on Capillary Pressure and Macroscopic Measures of Wettability. SPE Journal, 2019, 24, 200-214.	3.1	11
51	A response function perspective on yielding of wet granular matter. Europhysics Letters, 2009, 87, 14002.	2.0	10
52	Stochastic Rotation Dynamics simulations of wetting multi-phase flows. Journal of Computational Physics, 2016, 315, 554-576.	3.8	10
53	A Novel Microwave Applicator for Tailoring the Energy Input for Hydrothermal Synthesis of Zeolites. Journal of Microwave Power and Electromagnetic Energy, 2001, 36, 155-168.	0.8	9
54	Morphological evolution of microscopic dewetting droplets with slip. Journal of Fluid Mechanics, 2017, 828, 271-288.	3.4	9

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55	Fluidics of a Nanogap. Langmuir, 2006, 22, 9784-9788.	3.5	8
56	Switching wetting morphologies in triangular grooves. European Physical Journal: Special Topics, 2009, 166, 151-154.	2.6	8
57	Morphological Transitions of Liquid Droplets on Circular Surface Domains. Langmuir, 2009, 25, 13493-13502.	3.5	8
58	Shape Evolution of Droplets Growing on Linear Microgrooves. Langmuir, 2018, 34, 10498-10511.	3.5	8
59	Mechanical stability of ordered droplet packings in microfluidic channels. Applied Physics Letters, 2011, 99, .	3.3	7
60	Packings of monodisperse emulsions in flat microfluidic channels. Physical Review E, 2012, 85, 061403.	2.1	7
61	Energy dissipation in sheared wet granular assemblies. Physical Review E, 2018, 98, .	2.1	7
62	Kinetics of active water/ethanol Janus droplets. Soft Matter, 2020, 16, 6803-6811.	2.7	7
63	Capillary filling of miniaturized sources for electrospray mass spectrometry. Journal of Physics Condensed Matter, 2006, 18, S677-S690.	1.8	6
64	Control of Liquids by Surface Energies. , 2007, , 157-202.		5
65	Directional Liquid Wicking in Regular Arrays of Triangular Posts. Langmuir, 2019, 35, 16476-16486.	3.5	4
66	Ordered/disordered monodisperse dense granular flow down an inclined plane: dry versus wet media in the capillary bridge regime. Granular Matter, 2021, 23, 1.	2.2	2
67	Morphology quantification of three-dimensional fluid invasion patterns. International Journal of Multiphase Flow, 2022, 148, 103916.	3.4	2
68	Arrest stress of uniformly sheared wet granular matter. Physical Review E, 2015, 91, 062201.	2.1	1
69	Morphological Transitions of Water Channels Induced by Vertical Vibrations. Langmuir, 2018, 34, 12882-12888.	3.5	1
70	Capillary Interaction in Wet Granular Assemblies: Part 1. , 2019, , 239-275.		0