Mahesh S Tirumkudulu

List of Publications by Year
in descending order

43 papers	1,033 citations	623188 14 h-index	433756 31 g-index
46 all docs	46 docs citations	46 times ranked	1020 citing authors

#	Article	IF	Citations
1	Moving cracks in drying colloidal films. Soft Matter, 2022, 18, 2252-2275.	1.2	2
2	Solventborne Polymer Coatings: Drying, Film Formation, Stress Evolution, and Failure. Langmuir, 2022, 38, 2409-2414.	1.6	14
3	Osmotic tablet coatings: Drying stress, mechanical properties and microstructure. International Journal of Pharmaceutics, 2022, 617, 121611.	2.6	3
4	A low-cost flow cell for flow cytometry. Biosensors and Bioelectronics, 2022, 211, 114334.	5.3	3
5	Ligand sensing enhances bacterial flagellar motor output via stator recruitment. ELife, 2021, 10, .	2.8	6
6	Modeling the drying of polymer coatings. Soft Matter, 2021, 18, 214-227.	1.2	8
7	Micro-mechanical theory of shear yield stress for strongly flocculated colloidal gel. Soft Matter, 2020, 16, 1801-1809.	1.2	7
8	Mechanics of Saturated Colloidal Packings: A Comparison of Two Models. Transport in Porous Media, 2020, 135, 457-486.	1.2	5
9	Cracking in drying films of polymer solutions. Soft Matter, 2020, 16, 3476-3484.	1.2	37
10	Capillary-Induced Motion of Particles Bridging Interfaces of a Free-Standing Thin Liquid Film. Physical Review Letters, 2019, 122, 098001.	2.9	4
11	Influence of the Gas Boundary Layer on the Stability of a Moving Planar Liquid Sheet. Industrial & Engineering Chemistry Research, 2019, 58, 7633-7639.	1.8	0
12	Dynamics of Radially Expanding Liquid Sheets. Physical Review Letters, 2018, 120, 164501.	2.9	7
13	Trajectory of a model bacterium. Journal of Fluid Mechanics, 2018, 835, 252-270.	1.4	12
14	Buckling of a drying colloidal drop. Soft Matter, 2018, 14, 7455-7461.	1.2	16
15	Free-standing monolayer films of ordered colloidal particles. Soft Matter, 2017, 13, 4520-4525.	1.2	4
16	Growth of sinuous waves on thin liquid sheets: Comparison of predictions with experiments. Physics of Fluids, 2016, 28, 052101.	1.6	8
17	Yielding in a strongly aggregated colloidal gel. Part I: 2D simulations. Journal of Rheology, 2016, 60, 559-574.	1.3	16
18	Open water bells. Physics of Fluids, 2016, 28, .	1.6	4

#	Article	IF	Citations
19	Universality in consolidation of colloidal gels. Soft Matter, 2016, 12, 9402-9406.	1.2	16
20	Yielding in a strongly aggregated colloidal gel. Part II: Theory. Journal of Rheology, 2016, 60, 575-586.	1.3	7
21	Escherichia coli modulates its motor speed on sensing an attractant. Archives of Microbiology, 2016, 198, 827-833.	1.0	7
22	Enhancement of Swimming Speed Leads to a More-Efficient Chemotactic Response to Repellent. Applied and Environmental Microbiology, 2016, 82, 1205-1214.	1.4	9
23	Dynamics of cracking in drying colloidal sheets. Soft Matter, 2016, 12, 3149-3155.	1.2	15
24	Drying and Consolidation in Drying Colloidal Dispersions. Procedia IUTAM, 2015, 15, 57-63.	1.2	2
25	Stability of a moving radial liquid sheet:Âexperiments. Journal of Fluid Mechanics, 2015, 770, 398-423.	1.4	14
26	Variation of swimming speed enhances the chemotactic migration of Escherichia coli. Systems and Synthetic Biology, 2015, 9, 85-95.	1.0	6
27	Variation in swimming speed of Escherichia coli in response to attractant. Archives of Microbiology, 2015, 197, 211-222.	1.0	14
28	Synthesis of Sub-100-nm Liposomes via Hydration in a Packed Bed of Colloidal Particles. Industrial & Engineering Chemistry Research, 2014, 53, 198-205.	1.8	14
29	Study on the Effect of Glucose on Trg Receptor ofEscherichia coliUsing Soft Agar Experiment. Indian Chemical Engineer, 2014, 56, 229-234.	0.9	0
30	Stability of a moving radial liquid sheet: Time-dependent equations. Physics of Fluids, 2013, 25, .	1.6	13
31	Ultimate strength of a colloidal packing. Soft Matter, 2012, 8, 303-306.	1.2	6
32	A novel methodology for measuring the tensile strength of expansive clays. Geomechanics and Geoengineering, 2012, 7, 15-25.	0.9	14
33	Delamination of drying nanoparticle suspensions. Soft Matter, 2011, 7, 8816.	1.2	19
34	Asymptotic analysis of stresses near a crack tip in a two-dimensional colloidal packing saturated with liquid. Physical Review E, 2011, 83, 051401.	0.8	11
35	Chemotaxis ofEscherichia colitoL-serine. Physical Biology, 2010, 7, 026007.	0.8	13
36	Instability of a moving liquid sheet in the presence of acoustic forcing. Physics of Fluids, 2010, 22, .	1.6	25

#	Article	IF	Citations
37	Mathematical modeling and experimental validation of chemotaxis under controlled gradients of methyl-aspartate in Escherichia coli. Molecular BioSystems, 2010, 6, 1082.	2.9	9
38	Cracking in Softâ"Hard Latex Blends: Theory and Experiments. Langmuir, 2009, 25, 751-760.	1.6	21
39	Cracking in Drying Colloidal Films of Flocculated Dispersions. Langmuir, 2009, 25, 4284-4287.	1.6	44
40	An experimental study of impulsively started turbulent axisymmetric jets. European Physical Journal B, 2008, 61, 293-297.	0.6	4
41	Cracking in Drying Colloidal Films. Physical Review Letters, 2007, 98, 218302.	2.9	252
42	Cracking in Drying Latex Films. Langmuir, 2005, 21, 4938-4948.	1.6	237
43	Role of Capillary Stresses in Film Formation. Langmuir, 2004, 20, 2947-2961.	1.6	105