

Mahesh S Tirumkudulu

List of Publications by Year in descending order

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43
papers

1,033
citations

623574

14
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434063

31
g-index

46
all docs

46
docs citations

46
times ranked

1020
citing authors

#	ARTICLE	IF	CITATIONS
1	Cracking in Drying Colloidal Films. <i>Physical Review Letters</i> , 2007, 98, 218302.	2.9	252
2	Cracking in Drying Latex Films. <i>Langmuir</i> , 2005, 21, 4938-4948.	1.6	237
3	Role of Capillary Stresses in Film Formation. <i>Langmuir</i> , 2004, 20, 2947-2961.	1.6	105
4	Cracking in Drying Colloidal Films of Flocculated Dispersions. <i>Langmuir</i> , 2009, 25, 4284-4287.	1.6	44
5	Cracking in drying films of polymer solutions. <i>Soft Matter</i> , 2020, 16, 3476-3484.	1.2	37
6	Instability of a moving liquid sheet in the presence of acoustic forcing. <i>Physics of Fluids</i> , 2010, 22, .	1.6	25
7	Cracking in Soft~Hard Latex Blends: Theory and Experiments. <i>Langmuir</i> , 2009, 25, 751-760.	1.6	21
8	Delamination of drying nanoparticle suspensions. <i>Soft Matter</i> , 2011, 7, 8816.	1.2	19
9	Yielding in a strongly aggregated colloidal gel. Part I: 2D simulations. <i>Journal of Rheology</i> , 2016, 60, 559-574.	1.3	16
10	Universality in consolidation of colloidal gels. <i>Soft Matter</i> , 2016, 12, 9402-9406.	1.2	16
11	Buckling of a drying colloidal drop. <i>Soft Matter</i> , 2018, 14, 7455-7461.	1.2	16
12	Dynamics of cracking in drying colloidal sheets. <i>Soft Matter</i> , 2016, 12, 3149-3155.	1.2	15
13	A novel methodology for measuring the tensile strength of expansive clays. <i>Geomechanics and Geoengineering</i> , 2012, 7, 15-25.	0.9	14
14	Synthesis of Sub-100-nm Liposomes via Hydration in a Packed Bed of Colloidal Particles. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 198-205.	1.8	14
15	Stability of a moving radial liquid sheet:~experiments. <i>Journal of Fluid Mechanics</i> , 2015, 770, 398-423.	1.4	14
16	Variation in swimming speed of <i>Escherichia coli</i> in response to attractant. <i>Archives of Microbiology</i> , 2015, 197, 211-222.	1.0	14
17	Solventborne Polymer Coatings: Drying, Film Formation, Stress Evolution, and Failure. <i>Langmuir</i> , 2022, 38, 2409-2414.	1.6	14
18	Chemotaxis of <i>Escherichia coli</i> to L-serine. <i>Physical Biology</i> , 2010, 7, 026007.	0.8	13

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19	Stability of a moving radial liquid sheet: Time-dependent equations. <i>Physics of Fluids</i> , 2013, 25, .	1.6	13
20	Trajectory of a model bacterium. <i>Journal of Fluid Mechanics</i> , 2018, 835, 252-270.	1.4	12
21	Asymptotic analysis of stresses near a crack tip in a two-dimensional colloidal packing saturated with liquid. <i>Physical Review E</i> , 2011, 83, 051401.	0.8	11
22	Mathematical modeling and experimental validation of chemotaxis under controlled gradients of methyl-aspartate in <i>Escherichia coli</i> . <i>Molecular BioSystems</i> , 2010, 6, 1082.	2.9	9
23	Enhancement of Swimming Speed Leads to a More-Efficient Chemotactic Response to Repellent. <i>Applied and Environmental Microbiology</i> , 2016, 82, 1205-1214.	1.4	9
24	Growth of sinuous waves on thin liquid sheets: Comparison of predictions with experiments. <i>Physics of Fluids</i> , 2016, 28, 052101.	1.6	8
25	Modeling the drying of polymer coatings. <i>Soft Matter</i> , 2021, 18, 214-227.	1.2	8
26	Yielding in a strongly aggregated colloidal gel. Part II: Theory. <i>Journal of Rheology</i> , 2016, 60, 575-586.	1.3	7
27	<i>Escherichia coli</i> modulates its motor speed on sensing an attractant. <i>Archives of Microbiology</i> , 2016, 198, 827-833.	1.0	7
28	Dynamics of Radially Expanding Liquid Sheets. <i>Physical Review Letters</i> , 2018, 120, 164501.	2.9	7
29	Micro-mechanical theory of shear yield stress for strongly flocculated colloidal gel. <i>Soft Matter</i> , 2020, 16, 1801-1809.	1.2	7
30	Ultimate strength of a colloidal packing. <i>Soft Matter</i> , 2012, 8, 303-306.	1.2	6
31	Variation of swimming speed enhances the chemotactic migration of <i>Escherichia coli</i> . <i>Systems and Synthetic Biology</i> , 2015, 9, 85-95.	1.0	6
32	Ligand sensing enhances bacterial flagellar motor output via stator recruitment. <i>ELife</i> , 2021, 10, .	2.8	6
33	Mechanics of Saturated Colloidal Packings: A Comparison of Two Models. <i>Transport in Porous Media</i> , 2020, 135, 457-486.	1.2	5
34	An experimental study of impulsively started turbulent axisymmetric jets. <i>European Physical Journal B</i> , 2008, 61, 293-297.	0.6	4
35	Open water bells. <i>Physics of Fluids</i> , 2016, 28, .	1.6	4
36	Free-standing monolayer films of ordered colloidal particles. <i>Soft Matter</i> , 2017, 13, 4520-4525.	1.2	4

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37	Capillary-Induced Motion of Particles Bridging Interfaces of a Free-Standing Thin Liquid Film. <i>Physical Review Letters</i> , 2019, 122, 098001.	2.9	4
38	Osmotic tablet coatings: Drying stress, mechanical properties and microstructure. <i>International Journal of Pharmaceutics</i> , 2022, 617, 121611.	2.6	3
39	A low-cost flow cell for flow cytometry. <i>Biosensors and Bioelectronics</i> , 2022, 211, 114334.	5.3	3
40	Drying and Consolidation in Drying Colloidal Dispersions. <i>Procedia IUTAM</i> , 2015, 15, 57-63.	1.2	2
41	Moving cracks in drying colloidal films. <i>Soft Matter</i> , 2022, 18, 2252-2275.	1.2	2
42	Study on the Effect of Glucose on Trg Receptor of Escherichia coli Using Soft Agar Experiment. <i>Indian Chemical Engineer</i> , 2014, 56, 229-234.	0.9	0
43	Influence of the Gas Boundary Layer on the Stability of a Moving Planar Liquid Sheet. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 7633-7639.	1.8	0