Jayati Sarkar

List of Publications by Year
in descending order

26 papers	538 citations	759233 12 h-index	642732 23 g-index
26 all docs	26 docs citations	26 times ranked	401 citing authors

#	Article	IF	Citations
1	Patterns, Forces, and Metastable Pathways in Debonding of Elastic Films. Physical Review Letters, 2004, 93, .	7.8	64
2	Electric-field induced instabilities and morphological phase transitions in soft elastic films. Physical Review E, 2008, 77, 031604.	2.1	55
3	A Unified Theory of Instabilities in Viscoelastic Thin Films: From Wetting to Confined Films, From Viscous to Elastic Films, and From Short to Long Waves. Langmuir, 2010, 26, 8464-8473.	3.5	53
4	Mechanical Strain Induced Tunable Anisotropic Wetting on Buckled PDMS Silver Nanorods Arrays. ACS Applied Materials & Interfaces, 2015, 7, 8419-8426.	8.0	50
5	Contact Instability in Adhesion and Debonding of Thin Elastic Films. Physical Review Letters, 2006, 97, 018303.	7.8	46
6	CFD of mixing of multiâ€phase flow in a bioreactor using population balance model. Biotechnology Progress, 2016, 32, 613-628.	2.6	42
7	Adhesion and Debonding of Soft Elastic Films:Â Crack Patterns, Metastable Pathways, and Forces. Langmuir, 2005, 21, 1457-1469.	3.5	36
8	Spontaneous surface roughening induced by surface interactions between two compressible elastic films. Physical Review E, 2003, 67, 031607.	2.1	34
9	CFD based mass transfer modeling of a single use bioreactor for production of monoclonal antibody biotherapeutics. Chemical Engineering Journal, 2021, 412, 128592.	12.7	29
10	Adhesion and Debonding of Soft Elastic Films on Rough and Patterned Surfaces. Journal of Adhesion, 2005, 81, 271-295.	3.0	23
11	Application of CFD in Bioprocessing: Separation of mammalian cells using disc stack centrifuge during production of biotherapeutics. Journal of Biotechnology, 2018, 267, 1-11.	3.8	19
12	Contact Instability of a Soft Elastic Film Bonded to a Patterned Substrate. Journal of Adhesion, 2011, 87, 214-234.	3.0	18
13	Pattern formation in soft elastic films cast on periodically corrugated surfacesâ€"a linear stability and finite element analysis. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 055003.	2.0	10
14	Squeezing instabilities and delamination in elastic bilayers: A linear stability analysis. Physical Review E, 2012, 86, 051604.	2.1	9
15	Miniaturized Pattern Formation in Elastic Films Cast on Sinusoidally Patterned Substrates. Langmuir, 2014, 30, 12278-12286.	3.5	8
16	Kinetically engendered subspinodal length scales in spontaneous dewetting of thin liquid films. Physical Review E, 2014, 90, 020401.	2.1	7
17	Selective adsorption of oil on self-organized surface patterns formed over soft thin PDMS films. Chemical Engineering Science, 2019, 207, 970-979.	3.8	7
18	Kinetics of sub-spinodal dewetting of thin films of thickness dependent viscosity. Journal of Physics Condensed Matter, 2017, 29, 175001.	1.8	6

#	Article	IF	Citations
19	Hierarchical micro- and nanofabrication by pattern-directed contact instabilities of thin viscoelastic films. Physical Review Fluids, 2017, 2, .	2.5	6
20	A finite element study of adhesion of soft thin elastic films cast on rough surfaces. International Journal of Adhesion and Adhesives, 2017, 79, 102-110.	2.9	4
21	Self-assembly of graphene nano-particles on biocompatible polymer through dewetting. Surfaces and Interfaces, 2021, 23, 101009.	3.0	4
22	Simulating Contact Instability in Soft Thin Films through Finite Element Techniques. , 2016, , .		3
23	Miniaturization of surface patterns in soft elastic film over patterned substrates. Chemical Engineering Science, 2019, 197, 195-203.	3.8	3
24	Miniaturized pattern formation in a soft elastically graded thin film in adhesive contact. Chemical Engineering Science, 2021, 236, 116516.	3.8	1
25	Dewetting assisted self-assembly of graphene nanoparticles by diverse approaches. Bulletin of Materials Science, 2021, 44, 1.	1.7	1
26	Numerical modeling and development of a dual lung simulator using partitioned fluidâ€“structure interaction approach for ventilator testing. International Journal for Numerical Methods in Biomedical Engineering, 2022, , e3607.	2.1	0