Shiladitya Banerjee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1437166/publications.pdf

Version: 2024-02-01

53 papers	2,611 citations	236925 25 h-index	233421 45 g-index
72 all docs	72 docs citations	72 times ranked	2657 citing authors

#	Article	IF	Citations
1	Cellular resource allocation strategies for cell size and shape control in bacteria. FEBS Journal, 2022, 289, 7891-7906.	4.7	14
2	Pulsatile contractions and pattern formation in excitable actomyosin cortex. PLoS Computational Biology, 2022, 18, e1009981.	3.2	11
3	Force-dependent intercellular adhesion strengthening underlies asymmetric adherens junction contraction. Current Biology, 2022, 32, 1986-2000.e5.	3.9	17
4	Antibiotic Resistance via Bacterial Cell Shape-Shifting. MBio, 2022, 13, .	4.1	23
5	Emergence and maintenance of variable-length actin filaments in a limiting pool of building blocks. Biophysical Journal, 2022, 121, 2436-2448.	0.5	4
6	Size regulation of multiple organelles competing for a limiting subunit pool. PLoS Computational Biology, 2022, 18, e1010253.	3.2	4
7	Hindbrain neuropore tissue geometry determines asymmetric cell-mediated closure dynamics in mouse embryos. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
8	Cell-scale biophysical determinants of cell competition in epithelia. ELife, 2021, 10, .	6.0	28
9	Bacterial cell shape control by nutrient-dependent synthesis of cell division inhibitors. Biophysical Journal, 2021, 120, 2079-2084.	0.5	12
10	Mechanical feedback promotes bacterial adaptation to antibiotics. Nature Physics, 2021, 17, 403-409.	16.7	25
11	Single-cell approaches to cell competition: High-throughput imaging, machine learning and simulations. Seminars in Cancer Biology, 2020, 63, 60-68.	9.6	10
12	RhoA Mediates Epithelial Cell Shape Changes via Mechanosensitive Endocytosis. Developmental Cell, 2020, 52, 152-166.e5.	7.0	82
13	The Actin Cytoskeleton as an Active Adaptive Material. Annual Review of Condensed Matter Physics, 2020, 11, 421-439.	14.5	86
14	Nutrient-Dependent Trade-Offs between Ribosomes and Division Protein Synthesis Control Bacterial Cell Size and Growth. Cell Reports, 2020, 32, 108183.	6.4	40
15	Adaptive viscoelasticity of epithelial cell junctions: from models to methods. Current Opinion in Genetics and Development, 2020, 63, 86-94.	3.3	8
16	Cell-type-specific mechanical response and myosin dynamics during retinal lens development in Drosophila. Molecular Biology of the Cell, 2020, 31, 1355-1369.	2.1	19
17	Size-Regulated Symmetry Breaking in Reaction-Diffusion Models of Developmental Transitions. Cells, 2020, 9, 1646.	4.1	4
18	Tissue fluidity promotes epithelial wound healing. Nature Physics, 2019, 15, 1195-1203.	16.7	131

#	Article	IF	Citations
19	Filament Nucleation Tunes Mechanical Memory in Active Polymer Networks. Advanced Functional Materials, 2019, 29, 1905243.	14.9	12
20	Mechanosensitive Junction Remodeling Promotes Robust Epithelial Morphogenesis. Biophysical Journal, 2019, 117, 1739-1750.	0.5	59
21	Wound healing coordinates actin architectures to regulate mechanical work. Nature Physics, 2019, 15, 696-705.	16.7	52
22	Transcription factories in Igĺº allelic choice and diversity. Advances in Immunology, 2019, 141, 33-49.	2.2	5
23	Continuum Models of Collective Cell Migration. Advances in Experimental Medicine and Biology, 2019, 1146, 45-66.	1.6	24
24	Surface-to-volume scaling and aspect ratio preservation in rod-shaped bacteria. ELife, 2019, 8, .	6.0	63
25	Entropy production rate is maximized in non-contractile actomyosin. Nature Communications, 2018, 9, 4948.	12.8	48
26	Force localization modes in dynamic epithelial colonies. Molecular Biology of the Cell, 2018, 29, 2835-2847.	2.1	33
27	Cooperation of dual modes of cell motility promotes epithelial stress relaxation to accelerate wound healing. PLoS Computational Biology, 2018, 14, e1006502.	3.2	53
28	Regulated Capture of Vĺº Gene Topologically Associating Domains by Transcription Factories. Cell Reports, 2018, 24, 2443-2456.	6.4	16
29	Nonequilibrium phase diagrams for actomyosin networks. Soft Matter, 2018, 14, 7740-7747.	2.7	35
30	Liquid behavior of cross-linked actin bundles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2131-2136.	7.1	106
31	Local cellular neighborhood controls proliferation in cell competition. Molecular Biology of the Cell, 2017, 28, 3215-3228.	2.1	62
32	Biphasic growth dynamics control cell division in Caulobacter crescentus. Nature Microbiology, 2017, 2, 17116.	13.3	36
33	A Versatile Framework for Simulating the Dynamic Mechanical Structure of Cytoskeletal Networks. Biophysical Journal, 2017, 113, 448-460.	0.5	66
34	Filament rigidity and connectivity tune the deformation modes of active biopolymer networks. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10037-E10045.	7.1	63
35	Structural basis for oligomerization and glycosaminoglycan binding of CCL5 and CCL3. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5000-5005.	7.1	72
36	Disordered actomyosin networks are sufficient to produce cooperative and telescopic contractility. Nature Communications, 2016, 7, 12615.	12.8	108

#	Article	IF	Citations
37	Cellular Contraction and Polarization Drive Collective Cellular Motion. Biophysical Journal, 2016, 110, 2729-2738.	0.5	135
38	Shape dynamics of growing cell walls. Soft Matter, 2016, 12, 3442-3450.	2.7	24
39	Intergenerational continuity of cell shape dynamics in Caulobacter crescentus. Scientific Reports, 2015, 5, 9155.	3.3	17
40	Propagating Stress Waves During Epithelial Expansion. Physical Review Letters, 2015, 114, 228101.	7.8	97
41	Active Viscoelastic Matter: From Bacterial Drag Reduction to Turbulent Solids. Physical Review Letters, 2015, 114, 098302.	7.8	31
42	Optimal shapes and stresses of adherent cells on patterned substrates. Soft Matter, 2014, 10, 2424.	2.7	12
43	Geometry Regulates Traction Stresses in Adherent Cells. Biophysical Journal, 2014, 107, 825-833.	0.5	211
44	Cadherin-based intercellular adhesions organize epithelial cellâ€“matrix traction forces. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 842-847.	7.1	215
45	Polymorphism and bistability in adherent cells. Soft Matter, 2013, 9, 5251.	2.7	13
46	Controlling cellâ€“matrix traction forces by extracellular geometry. New Journal of Physics, 2013, 15, 035015.	2.9	32
47	Scaling of Traction Forces with the Size of Cohesive Cell Colonies. Physical Review Letters, 2012, 108, 198101.	7.8	158
48	Contractile Stresses in Cohesive Cell Layers on Finite-Thickness Substrates. Physical Review Letters, 2012, 109, 108101.	7.8	60
49	Heterogeneous Drying Stresses in Stratum Corneum. Biophysical Journal, 2012, 102, 2424-2432.	0.5	22
50	Instabilities and oscillations in isotropic active gels. Soft Matter, 2011, 7, 463-473.	2.7	41
51	Substrate rigidity deforms and polarizes active gels. Europhysics Letters, 2011, 96, 28003.	2.0	41
52	Generic phases of cross-linked active gels: Relaxation, oscillation and contractility. Europhysics Letters, 2011, 96, 58004.	2.0	18
53	Motor-driven dynamics of cytoskeletal filaments in motility assays. Physical Review E, 2011, 84, 011914.	2.1	6