

Active gel physics

Nature Physics

11, 111-117

DOI: [10.1038/nphys3224](https://doi.org/10.1038/nphys3224)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Inherently unstable networks collapse to a critical point. <i>Physical Review E</i> , 2015, 92, 012710. | 0.8 | 6 |
| 2 | Motility of active fluid drops on surfaces. <i>Physical Review E</i> , 2015, 92, 062311. | 0.8 | 26 |
| 3 | How to Turn an Embryo Inside Out. <i>Physics Magazine</i> , 2015, 8, . | 0.1 | 0 |
| 4 | Multi-particle collision dynamics algorithm for nematic fluids. <i>Soft Matter</i> , 2015, 11, 5101-5110. | 1.2 | 22 |
| 5 | Topological mechanics of gyroscopic metamaterials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14495-14500. | 3.3 | 611 |
| 6 | Diverse phenomena, common themes. <i>Nature Physics</i> , 2015, 11, 105-107. | 6.5 | 35 |
| 7 | Active cell mechanics: Measurement and theory. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 3083-3094. | 1.9 | 55 |
| 8 | Elastic properties of epithelial cells probed by atomic force microscopy. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 3075-3082. | 1.9 | 46 |
| 9 | Cortical instability drives periodic supracellular actin pattern formation in epithelial tubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 8620-8625. | 3.3 | 97 |
| 10 | The Material Basis of Life. <i>Trends in Cell Biology</i> , 2015, 25, 713-716. | 3.6 | 3 |
| 11 | Fleeting defects line up. <i>Nature Materials</i> , 2015, 14, 1084-1085. | 13.3 | 2 |
| 12 | When cell biology meets theory. <i>Journal of Cell Biology</i> , 2015, 210, 1041-1045. | 2.3 | 2 |
| 13 | After the Greeting: Realizing the Potential of Physical Models in Cell Biology. <i>Trends in Cell Biology</i> , 2015, 25, 711-713. | 3.6 | 5 |
| 14 | Measuring Cell Mechanics. <i>Colloquium Series on Quantitative Cell Biology</i> , 2015, 2, 1-75. | 0.5 | 3 |
| 15 | Local mechanical properties of bladder cancer cells measured by AFM as a signature of metastatic potential. <i>European Physical Journal Plus</i> , 2015, 130, 1. | 1.2 | 37 |
| 16 | A local difference in Hedgehog signal transduction increases mechanical cell bond tension and biases cell intercalations along the <i>Drosophila</i> anteroposterior compartment boundary. <i>Development (Cambridge)</i> , 2015, 142, 3845-3858. | 1.2 | 31 |
| 17 | Cortical flow aligns actin filaments to form a furrow. <i>ELife</i> , 2016, 5, . | 2.8 | 144 |
| 18 | Conformational Properties of Active Semiflexible Polymers. <i>Polymers</i> , 2016, 8, 304. | 2.0 | 95 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Physicochemical modeling of tumorigenic homeorhesis: a system-dynamics interpretation of computer simulations. <i>Convergent Science Physical Oncology</i> , 2016, 2, 035001. | 2.6 | 0 |
| 20 | Measuring shape fluctuations in biological membranes. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 243002. | 1.3 | 89 |
| 21 | The dynamic mechanical properties of cellularised aggregates. <i>Current Opinion in Cell Biology</i> , 2016, 42, 113-120. | 2.6 | 38 |
| 22 | Dynamic heterogeneity and non-Gaussian statistics for acetylcholine receptors on live cell membrane. <i>Nature Communications</i> , 2016, 7, 11701. | 5.8 | 147 |
| 23 | The dynamics of filament assembly define cytoskeletal network morphology. <i>Nature Communications</i> , 2016, 7, 13827. | 5.8 | 24 |
| 24 | Computational approaches to substrate-based cell motility. <i>Npj Computational Materials</i> , 2016, 2, . | 3.5 | 64 |
| 25 | Single cell rigidity sensing: A complex relationship between focal adhesion dynamics and large-scale actin cytoskeleton remodeling. <i>Cell Adhesion and Migration</i> , 2016, 10, 554-567. | 1.1 | 47 |
| 26 | Control of active liquid crystals with a magnetic field. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5498-5502. | 3.3 | 151 |
| 27 | Focal Adhesionâ€“Independent Cell Migration. <i>Annual Review of Cell and Developmental Biology</i> , 2016, 32, 469-490. | 4.0 | 270 |
| 28 | Defect-Mediated Morphologies in Growing Cell Colonies. <i>Physical Review Letters</i> , 2016, 117, 048102. | 2.9 | 114 |
| 29 | Multiciliated cell basal bodies align in stereotypical patterns coordinated by the apical cytoskeleton. <i>Journal of Cell Biology</i> , 2016, 214, 571-586. | 2.3 | 60 |
| 30 | Cortical Flow-Driven Shapes of Nonadherent Cells. <i>Physical Review Letters</i> , 2016, 116, 028102. | 2.9 | 37 |
| 31 | Broken Detailed Balance of Filament Dynamics in Active Networks. <i>Physical Review Letters</i> , 2016, 116, 248301. | 2.9 | 65 |
| 32 | Growth, collapse, and stalling in a mechanical model for neurite motility. <i>Physical Review E</i> , 2016, 93, 032410. | 0.8 | 28 |
| 33 | Boundaries steer the contraction of active gels. <i>Nature Communications</i> , 2016, 7, 13120. | 5.8 | 50 |
| 34 | Activity induces traveling waves, vortices and spatiotemporal chaos in a model actomyosin layer. <i>Scientific Reports</i> , 2016, 6, 20838. | 1.6 | 24 |
| 35 | Non-equilibrium physics of Rydberg lattices in the presence of noise and dissipative processes. <i>European Physical Journal: Special Topics</i> , 2016, 225, 3019-3036. | 1.2 | 1 |
| 36 | The mGluR2 Positive Allosteric Modulator, AZD8529, and Cue-Induced Relapse to Alcohol Seeking in Rats. <i>Neuropsychopharmacology</i> , 2016, 41, 2932-2940. | 2.8 | 35 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Varying the counter ion changes the kinetics, but not the final structure of colloidal gels. <i>Journal of Colloid and Interface Science</i> , 2016, 463, 137-144. | 5.0 | 6 |
| 38 | Physical Models of Cell Motility. <i>Biological and Medical Physics Series</i> , 2016, , . | 0.3 | 23 |
| 39 | A chemo-mechanical free-energy-based approach to model durotaxis and extracellular stiffness-dependent contraction and polarization of cells. <i>Interface Focus</i> , 2016, 6, 20150067. | 1.5 | 72 |
| 40 | Actin flows in cell migration: from locomotion and polarity to trajectories. <i>Current Opinion in Cell Biology</i> , 2016, 38, 12-17. | 2.6 | 74 |
| 41 | Actomyosin-driven left-right asymmetry: from molecular torques to chiral self organization. <i>Current Opinion in Cell Biology</i> , 2016, 38, 24-30. | 2.6 | 61 |
| 42 | Modeling cell shape and dynamics on micropatterns. <i>Cell Adhesion and Migration</i> , 2016, 10, 516-528. | 1.1 | 43 |
| 43 | Fiber networks amplify active stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2827-2832. | 3.3 | 143 |
| 44 | Frontâ€“Rear Polarization by Mechanical Cues: From Single Cells to Tissues. <i>Trends in Cell Biology</i> , 2016, 26, 420-433. | 3.6 | 127 |
| 45 | Dynamics of flexible active Brownian dumbbells in the absence and the presence of shear flow. <i>Soft Matter</i> , 2016, 12, 3737-3749. | 1.2 | 23 |
| 46 | Cell Locomotion in One Dimension. <i>Biological and Medical Physics Series</i> , 2016, , 135-197. | 0.3 | 2 |
| 47 | Cell Crawling Driven by Spontaneous Actin Polymerization Waves. <i>Biological and Medical Physics Series</i> , 2016, , 69-93. | 0.3 | 3 |
| 48 | The Dynamics of Microtubule/Motor-Protein Assemblies in Biology and Physics. <i>Annual Review of Fluid Mechanics</i> , 2016, 48, 487-506. | 10.8 | 79 |
| 49 | Chromatin as active matter. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2017, 2017, 014001. | 0.9 | 14 |
| 50 | Cell mechanics: a dialogue. <i>Reports on Progress in Physics</i> , 2017, 80, 036601. | 8.1 | 36 |
| 51 | Tweezing of Magnetic and Nonâ€“Magnetic Objects with Magnetic Fields. <i>Advanced Materials</i> , 2017, 29, 1603516. | 11.1 | 36 |
| 52 | The Physical Basis of Coordinated Tissue Spreading in Zebrafish Gastrulation. <i>Developmental Cell</i> , 2017, 40, 354-366.e4. | 3.1 | 62 |
| 53 | Collective cell migration: a physics perspective. <i>Reports on Progress in Physics</i> , 2017, 80, 076601. | 8.1 | 158 |
| 54 | Self-organizing actin patterns shape membrane architecture but not cell mechanics. <i>Nature Communications</i> , 2017, 8, 14347. | 5.8 | 99 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Liquid behavior of cross-linked actin bundles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2131-2136. | 3.3 | 106 |
| 56 | Topological defects in epithelia govern cell death and extrusion. Nature, 2017, 544, 212-216. | 13.7 | 511 |
| 57 | Hydrodynamic instabilities in active cholesteric liquid crystals. European Physical Journal E, 2017, 40, 50. | 0.7 | 28 |
| 58 | How Active Mechanics and Regulatory Biochemistry Combine to Form Patterns in Development. Annual Review of Biophysics, 2017, 46, 337-356. | 4.5 | 70 |
| 59 | Active matter. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 054002. | 0.9 | 227 |
| 60 | Internal dynamics of semiflexible polymers with active noise. Journal of Chemical Physics, 2017, 146, 154903. | 1.2 | 74 |
| 62 | Optogenetic control of RhoA reveals zyxin-mediated elasticity of stress fibres. Nature Communications, 2017, 8, 15817. | 5.8 | 123 |
| 63 | Transition from turbulent to coherent flows in confined three-dimensional active fluids. Science, 2017, 355, . | 6.0 | 199 |
| 64 | Imag(in)ing growth and form. Mechanisms of Development, 2017, 145, 13-21. | 1.7 | 2 |
| 65 | Transmission of cytokinesis forces via E-cadherin dilution and actomyosin flows. Nature, 2017, 545, 103-107. | 13.7 | 125 |
| 66 | Fluidization and Active Thinning by Molecular Kinetics in Active Gels. Physical Review Letters, 2017, 118, 088002. | 2.9 | 16 |
| 67 | A bioenergetic mechanism for amoeboid-like cell motility profiles tested in a microfluidic electrotaxis assay. Integrative Biology (United Kingdom), 2017, 9, 844-856. | 0.6 | 3 |
| 68 | Musings on mechanism: quest for a quark theory of proteins?. FASEB Journal, 2017, 31, 4207-4215. | 0.2 | 3 |
| 69 | Nonequilibrium mode-coupling theory for dense active systems of self-propelled particles. Soft Matter, 2017, 13, 7609-7616. | 1.2 | 44 |
| 70 | Viscoelastic Dissipation Stabilizes Cell Shape Changes during Tissue Morphogenesis. Current Biology, 2017, 27, 3132-3142.e4. | 1.8 | 120 |
| 71 | Active Polymers – Emergent Conformational and Dynamical Properties: A Brief Review. Journal of the Physical Society of Japan, 2017, 86, 101014. | 0.7 | 79 |
| 72 | Taming active turbulence with patterned soft interfaces. Nature Communications, 2017, 8, 564. | 5.8 | 103 |
| 73 | Mechanochemical pattern formation in simple models of active viscoelastic fluids and solids. Journal Physics D: Applied Physics, 2017, 50, 434004. | 1.3 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 74 | Enhanced Dynamics of Confined Cytoskeletal Filaments Driven by Asymmetric Motors. <i>Biophysical Journal</i> , 2017, 113, 1121-1132. | 0.2 | 21 |
| 75 | Mechanics of active surfaces. <i>Physical Review E</i> , 2017, 96, 032404. | 0.8 | 95 |
| 76 | Biomechanics of cell rearrangements in <i>Drosophila</i> . <i>Current Opinion in Cell Biology</i> , 2017, 48, 113-124. | 2.6 | 40 |
| 77 | Active matter at the interface between materials science and cell biology. <i>Nature Reviews Materials</i> , 2017, 2, . | 23.3 | 384 |
| 78 | Control of active nematics with passive liquid crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 646, 226-234. | 0.4 | 6 |
| 79 | Biology and the art of abstraction. <i>Biophysical Reviews</i> , 2017, 9, 273-275. | 1.5 | 2 |
| 80 | Motility of active nematic films driven by "active anchoring". <i>Soft Matter</i> , 2017, 13, 6137-6144. | 1.2 | 18 |
| 81 | Nonequilibrium dynamics of probe filaments in actin-myosin networks. <i>Physical Review E</i> , 2017, 96, 022408. | 0.8 | 19 |
| 82 | Systems with Interacting Particles and Soft Matter. <i>The Frontiers Collection</i> , 2017, , 159-180. | 0.1 | 0 |
| 83 | Self-organizing actin patterns shape cytoskeletal cortex organization. <i>Communicative and Integrative Biology</i> , 2017, 10, e1303591. | 0.6 | 3 |
| 84 | Review and perspective on soft matter modeling in cellular mechanobiology: cell contact, adhesion, mechanosensing, and motility. <i>Acta Mechanica</i> , 2017, 228, 4095-4122. | 1.1 | 11 |
| 85 | "The Forms of Tissues, or Cell-aggregates": D'Arcy Thompson's influence and its limits. <i>Development (Cambridge)</i> , 2017, 144, 4226-4237. | 1.2 | 33 |
| 86 | Vortex formation and dynamics of defects in active nematic shells. <i>New Journal of Physics</i> , 2017, 19, 103043. | 1.2 | 37 |
| 87 | Active nematic gels as active relaxing solids. <i>Physical Review E</i> , 2017, 96, 052603. | 0.8 | 6 |
| 88 | Control of active turbulence through addressable soft interfaces. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 504003. | 0.7 | 3 |
| 89 | Cytoskeletal control of B cell responses to antigens. <i>Nature Reviews Immunology</i> , 2017, 17, 621-634. | 10.6 | 107 |
| 90 | Perspectives on the mathematics of biological patterning and morphogenesis. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 99, 192-210. | 2.3 | 18 |
| 91 | Connecting macroscopic dynamics with microscopic properties in active microtubule network contraction. <i>New Journal of Physics</i> , 2017, 19, 125011. | 1.2 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 92 | A theory that predicts behaviors of disordered cytoskeletal networks. <i>Molecular Systems Biology</i> , 2017, 13, 941. | 3.2 | 100 |
| 93 | Leaders in collective migration: are front cells really endowed with a particular set of skills?. <i>F1000Research</i> , 2017, 6, 1899. | 0.8 | 57 |
| 94 | Soft inclusion in a confined fluctuating active gel. <i>Physical Review E</i> , 2018, 97, 032602. | 0.8 | 8 |
| 95 | Size matters in nanoscale communication. <i>Nature Cell Biology</i> , 2018, 20, 228-230. | 4.6 | 107 |
| 96 | Optical control of cytoplasmic flows. <i>Nature Cell Biology</i> , 2018, 20, 227-228. | 4.6 | 4 |
| 97 | Maximal Fluctuations of Confined Actomyosin Gels: Dynamics of the Cell Nucleus. <i>Physical Review Letters</i> , 2018, 120, 098001. | 2.9 | 11 |
| 98 | Broken detailed balance and non-equilibrium dynamics in living systems: a review. <i>Reports on Progress in Physics</i> , 2018, 81, 066601. | 8.1 | 175 |
| 99 | Getting in shape and swimming: the role of cortical forces and membrane heterogeneity in eukaryotic cells. <i>Journal of Mathematical Biology</i> , 2018, 77, 595-626. | 0.8 | 13 |
| 100 | Spontaneous shear flow in confined cellular nematics. <i>Nature Physics</i> , 2018, 14, 728-732. | 6.5 | 148 |
| 101 | Live streaming. <i>Nature Physics</i> , 2018, 14, 638-639. | 6.5 | 0 |
| 102 | Active nematic emulsions. <i>Science Advances</i> , 2018, 4, eaao1470. | 4.7 | 51 |
| 103 | Non-invasive perturbations of intracellular flow reveal physical principles of cell organization. <i>Nature Cell Biology</i> , 2018, 20, 344-351. | 4.6 | 130 |
| 104 | Long-wavelength instabilities in a system of interacting active particles. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 023201. | 0.9 | 5 |
| 105 | Dynamically generated patterns in dense suspensions of active filaments. <i>Physical Review E</i> , 2018, 97, 022606. | 0.8 | 46 |
| 106 | Indentation analysis of active viscoelastic microplasmodia of <i>P. polycephalum</i> . <i>Journal Physics D: Applied Physics</i> , 2018, 51, 024005. | 1.3 | 10 |
| 107 | Physical principles of intracellular organization via active and passive phase transitions. <i>Reports on Progress in Physics</i> , 2018, 81, 046601. | 8.1 | 319 |
| 108 | Tensile Forces and Mechanotransduction at Cell-Cell Junctions. <i>Current Biology</i> , 2018, 28, R445-R457. | 1.8 | 301 |
| 109 | Steady state, relaxation and first-passage properties of a run-and-tumble particle in one-dimension. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 043215. | 0.9 | 157 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 110 | Active Prestress Leads to an Apparent Stiffening of Cells through Geometrical Effects. <i>Biophysical Journal</i> , 2018, 114, 419-424. | 0.2 | 25 |
| 111 | Orchestrated control of filaggrin-actin scaffolds underpins cornification. <i>Cell Death and Disease</i> , 2018, 9, 412. | 2.7 | 42 |
| 112 | Hydrodynamic theory of active matter. <i>Reports on Progress in Physics</i> , 2018, 81, 076601. | 8.1 | 184 |
| 113 | Morphology and flow patterns in highly asymmetric active emulsions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 503, 464-475. | 1.2 | 17 |
| 114 | Cell membrane biophysics with optical tweezers. <i>European Biophysics Journal</i> , 2018, 47, 499-514. | 1.2 | 65 |
| 115 | Re-engineering of protein motors to understand mechanisms biasing random motion and generating collective dynamics. <i>Current Opinion in Biotechnology</i> , 2018, 51, 39-46. | 3.3 | 12 |
| 116 | Entropy production of active particles and for particles in active baths. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 01LT01. | 0.7 | 85 |
| 117 | Computational modeling of single-cell mechanics and cytoskeletal mechanobiology. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2018, 10, e1407. | 6.6 | 36 |
| 118 | Biomechanics in Oncology. <i>Advances in Experimental Medicine and Biology</i> , 2018, , . | 0.8 | 7 |
| 119 | Unite to divide – how models and biological experimentation have come together to reveal mechanisms of cytokinesis. <i>Journal of Cell Science</i> , 2018, 131, . | 1.2 | 11 |
| 120 | An Integrated Cytoskeletal Model of Neurite Outgrowth. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 447. | 1.8 | 80 |
| 121 | Assessing the Contribution of Active and Passive Stresses in <i>C. elegans</i> Elongation. <i>Physical Review Letters</i> , 2018, 121, 268102. | 2.9 | 13 |
| 122 | Mechanical forces in cell monolayers. <i>Journal of Cell Science</i> , 2018, 131, . | 1.2 | 45 |
| 123 | Population variability and temporal disorder disrupt coherent motion and biological functionality of active matter. <i>Physical Review E</i> , 2018, 98, . | 0.8 | 1 |
| 124 | Oscillatory fluid flow drives scaling of contraction wave with system size. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 10612-10617. | 3.3 | 26 |
| 125 | Role of hydrodynamic flows in chemically driven droplet division. <i>New Journal of Physics</i> , 2018, 20, 105010. | 1.2 | 26 |
| 126 | Exactly solvable dynamics of forced polymer loops. <i>New Journal of Physics</i> , 2018, 20, 113005. | 1.2 | 4 |
| 127 | Modeling Cell Migration Mechanics. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1092, 159-187. | 0.8 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 128 | Active Brownian Filamentous Polymers under Shear Flow. <i>Polymers</i> , 2018, 10, 837. | 2.0 | 22 |
| 129 | Biological Tissues as Active Nematic Liquid Crystals. <i>Advanced Materials</i> , 2018, 30, e1802579. | 11.1 | 63 |
| 130 | Activity-dependent self-regulation of viscous length scales in biological systems. <i>Physical Review E</i> , 2018, 97, 052404. | 0.8 | 6 |
| 131 | Integrating Physical and Molecular Insights on Immune Cell Migration. <i>Trends in Immunology</i> , 2018, 39, 632-643. | 2.9 | 73 |
| 132 | The Physics of the Metaphase Spindle. <i>Annual Review of Biophysics</i> , 2018, 47, 655-673. | 4.5 | 48 |
| 133 | Repetitive stretching of giant liposomes utilizing the nematic alignment of confined actin. <i>Communications Physics</i> , 2018, 1, . | 2.0 | 45 |
| 134 | Active Suspensions have Nonmonotonic Flow Curves and Multiple Mechanical Equilibria. <i>Physical Review Letters</i> , 2018, 121, 018001. | 2.9 | 31 |
| 135 | Global morphogenetic flow is accurately predicted by the spatial distribution of myosin motors. <i>ELife</i> , 2018, 7, . | 2.8 | 146 |
| 136 | A disassembly-driven mechanism explains F-actin-mediated chromosome transport in starfish oocytes. <i>ELife</i> , 2018, 7, . | 2.8 | 26 |
| 137 | FiloGen: A Model-Based Generator of Synthetic 3-D Time-Lapse Sequences of Single Motile Cells With Growing and Branching Filopodia. <i>IEEE Transactions on Medical Imaging</i> , 2018, 37, 2630-2641. | 5.4 | 27 |
| 138 | Liquid-crystalline nanoarchitectures for tissue engineering. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 205-215. | 1.5 | 15 |
| 139 | The noisy basis of morphogenesis: Mechanisms and mechanics of cell sheet folding inferred from developmental variability. <i>PLoS Biology</i> , 2018, 16, e2005536. | 2.6 | 22 |
| 140 | A random first-order transition theory for an active glass. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7688-7693. | 3.3 | 63 |
| 141 | Rolling sound waves. <i>Nature Materials</i> , 2018, 17, 759-760. | 13.3 | 0 |
| 142 | Arcsine Laws in Stochastic Thermodynamics. <i>Physical Review Letters</i> , 2018, 121, 090601. | 2.9 | 16 |
| 143 | Non-Gaussianity, population heterogeneity, and transient superdiffusion in the spreading dynamics of amoeboid cells. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 23034-23054. | 1.3 | 67 |
| 144 | Active nematics. <i>Nature Communications</i> , 2018, 9, 3246. | 5.8 | 414 |
| 145 | The mechanical bidomain model of cardiac muscle with curving fibers. <i>Physical Biology</i> , 2018, 15, 066012. | 0.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 146 | Fluidization of epithelial sheets by active cell rearrangements. <i>Physical Review E</i> , 2018, 98, 022409. | 0.8 | 51 |
| 147 | Active Brownian particles driven by constant affinity. <i>Europhysics Letters</i> , 2018, 123, 20007. | 0.7 | 30 |
| 148 | <i>Hydra</i> Regeneration: Closing the Loop with Mechanical Processes in Morphogenesis. <i>BioEssays</i> , 2018, 40, e1700204. | 1.2 | 35 |
| 149 | Mechanics of Cell Crawling by Means of Force-free Cyclic Motion. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 044803. | 0.7 | 12 |
| 150 | The Mechanics of Leaf Growth on Large Scales. , 2018, , 109-126. | | 7 |
| 151 | Differential Activity-Driven Instabilities in Biphasic Active Matter. <i>Physical Review Letters</i> , 2018, 120, 248003. | 2.9 | 11 |
| 152 | Self-organized stress patterns drive state transitions in actin cortices. <i>Science Advances</i> , 2018, 4, eaar2847. | 4.7 | 46 |
| 153 | Eukaryotic cell dynamics from crawlers to swimmers. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2019, 9, e1376. | 6.2 | 13 |
| 154 | The physics of cell-size regulation across timescales. <i>Nature Physics</i> , 2019, 15, 993-1004. | 6.5 | 99 |
| 155 | Tissue Regeneration from Mechanical Stretching of Cellâ€“Cell Adhesion. <i>Tissue Engineering - Part C: Methods</i> , 2019, 25, 631-640. | 1.1 | 20 |
| 156 | Cellular Organization: Bulk Actin Network Flows Drive Ooplasm Segregation. <i>Current Biology</i> , 2019, 29, R758-R761. | 1.8 | 1 |
| 157 | Topological chaos in active nematics. <i>Nature Physics</i> , 2019, 15, 1033-1039. | 6.5 | 53 |
| 158 | Actin assembly produces sufficient forces for endocytosis in yeast. <i>Molecular Biology of the Cell</i> , 2019, 30, 2014-2024. | 0.9 | 24 |
| 159 | Mechanochemical Feedback Loops in Development and Disease. <i>Cell</i> , 2019, 178, 12-25. | 13.5 | 270 |
| 160 | Computational modeling of active deformable membranes embedded in three-dimensional flows. <i>Physical Review E</i> , 2019, 99, 062418. | 0.8 | 19 |
| 161 | Tunable corrugated patterns in an active nematic sheet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22464-22470. | 3.3 | 32 |
| 162 | Dechlorination of carbon tetrachloride by Nanoscale Nicked Zeroâ€“Valent Iron @ Multiâ€“Walled Carbon Nanotubes: Impact of reaction conditions, kinetics and mechanism. <i>Applied Organometallic Chemistry</i> , 2019, 33, e4772. | 1.7 | 6 |
| 163 | Continuum theory of bending-to-stretching transition. <i>Physical Review E</i> , 2019, 100, 051001. | 0.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 164 | Reconfigurable flows and defect landscape of confined active nematics. <i>Communications Physics</i> , 2019, 2, . | 2.0 | 60 |
| 165 | Imitating nonequilibrium steady states using time-varying equilibrium force in many-body diffusive systems. <i>Physical Review E</i> , 2019, 100, 032104. | 0.8 | 2 |
| 166 | Topology of Three-Dimensional Active Nematic Turbulence Confined to Droplets. <i>Physical Review X</i> , 2019, 9, . | 2.8 | 19 |
| 167 | Tissue curvature and apicobasal mechanical tension imbalance instruct cancer morphogenesis. <i>Nature</i> , 2019, 566, 126-130. | 13.7 | 119 |
| 168 | Emergence of Active Nematic Behavior in Monolayers of Isotropic Cells. <i>Physical Review Letters</i> , 2019, 122, 048004. | 2.9 | 107 |
| 169 | Fiber plucking by molecular motors yields large emergent contractility in stiff biopolymer networks. <i>Soft Matter</i> , 2019, 15, 1481-1487. | 1.2 | 5 |
| 170 | Theory of defect motion in 2D passive and active nematic liquid crystals. <i>Soft Matter</i> , 2019, 15, 587-601. | 1.2 | 29 |
| 171 | Spontaneous spatiotemporal ordering of shape oscillations enhances cell migration. <i>Soft Matter</i> , 2019, 15, 4939-4946. | 1.2 | 4 |
| 172 | Influence of cross-linking and retrograde flow on formation and dynamics of lamellipodium. <i>PLoS ONE</i> , 2019, 14, e0213810. | 1.1 | 4 |
| 173 | Dissecting fat-tailed fluctuations in the cytoskeleton with active micropost arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13839-13846. | 3.3 | 15 |
| 174 | Modelling fluid deformable surfaces with an emphasis on biological interfaces. <i>Journal of Fluid Mechanics</i> , 2019, 872, 218-271. | 1.4 | 67 |
| 175 | Self-organizing motors divide active liquid droplets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 11125-11130. | 3.3 | 44 |
| 176 | Network Contractility during Cytokinesis—From Molecular to Global Views. <i>Biomolecules</i> , 2019, 9, 194. | 1.8 | 31 |
| 177 | Effects of spatial dimensionality and steric interactions on microtubule-motor self-organization. <i>Physical Biology</i> , 2019, 16, 046004. | 0.8 | 16 |
| 178 | Bulk Actin Dynamics Drive Phase Segregation in Zebrafish Oocytes. <i>Cell</i> , 2019, 177, 1463-1479.e18. | 13.5 | 39 |
| 179 | Stress relaxation in epithelial monolayers is controlled by the actomyosin cortex. <i>Nature Physics</i> , 2019, 15, 839-847. | 6.5 | 126 |
| 180 | Chemotaxis mediated interactions can stabilize the hydrodynamic instabilities in active suspensions. <i>Soft Matter</i> , 2019, 15, 3248-3255. | 1.2 | 12 |
| 181 | Statistical properties of autonomous flows in 2D active nematics. <i>Soft Matter</i> , 2019, 15, 3264-3272. | 1.2 | 53 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 182 | Active Fingering Instability in Tissue Spreading. <i>Physical Review Letters</i> , 2019, 122, 088104. | 2.9 | 56 |
| 183 | Active matter invasion of a viscous fluid: Unstable sheets and a no-flow theorem. <i>Physical Review Letters</i> , 2019, 122, 098002. | 2.9 | 15 |
| 184 | Attachment of the blastoderm to the vitelline envelope affects gastrulation of insects. <i>Nature</i> , 2019, 568, 395-399. | 13.7 | 95 |
| 185 | Exact results for sheared polar active suspensions with variable liquid crystalline order. <i>Journal of Chemical Physics</i> , 2019, 150, 104902. | 1.2 | 3 |
| 186 | Stress fluctuations in transient active networks. <i>Soft Matter</i> , 2019, 15, 3520-3526. | 1.2 | 3 |
| 187 | Active Brownian filaments with hydrodynamic interactions: conformations and dynamics. <i>Soft Matter</i> , 2019, 15, 3957-3969. | 1.2 | 38 |
| 188 | Biophysics in oviduct: Planar cell polarity, cilia, epithelial fold and tube morphogenesis, egg dynamics. <i>Biophysics and Physicobiology</i> , 2019, 16, 89-107. | 0.5 | 34 |
| 189 | The matrix environmental and cell mechanical properties regulate cell migration and contribute to the invasive phenotype of cancer cells. <i>Reports on Progress in Physics</i> , 2019, 82, 064602. | 8.1 | 157 |
| 190 | Topological states in chiral active matter: Dynamic blue phases and active half-skyrmions. <i>Journal of Chemical Physics</i> , 2019, 150, 064909. | 1.2 | 24 |
| 191 | Nonlinear and nonlocal elasticity in coarse-grained differential-tension models of epithelia. <i>Physical Review E</i> , 2019, 99, 022411. | 0.8 | 10 |
| 192 | Spontaneous rotation can stabilise ordered chiral active fluids. <i>Nature Communications</i> , 2019, 10, 920. | 5.8 | 23 |
| 193 | Power functional theory for active Brownian particles: General formulation and power sum rules. <i>Journal of Chemical Physics</i> , 2019, 150, 074112. | 1.2 | 19 |
| 194 | Form and function of F-actin during biomineralization revealed from live experiments on foraminifera. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 4111-4116. | 3.3 | 44 |
| 195 | Active Brownian ring polymers. <i>Journal of Chemical Physics</i> , 2019, 150, 064913. | 1.2 | 33 |
| 196 | Encapsulation of the cytoskeleton: towards mimicking the mechanics of a cell. <i>Soft Matter</i> , 2019, 15, 8425-8436. | 1.2 | 71 |
| 197 | Cooperative ordering of treadmilling filaments in cytoskeletal networks of FtsZ and its crosslinker ZapA. <i>Nature Communications</i> , 2019, 10, 5744. | 5.8 | 49 |
| 198 | Shaping the zebrafish myotome by intertissue friction and active stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 25430-25439. | 3.3 | 53 |
| 199 | Rheology of active polar emulsions: from linear to unidirectional and inviscid flow, and intermittent viscosity. <i>Soft Matter</i> , 2019, 15, 8251-8265. | 1.2 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 200 | Quantitative Assessment of the Toner and Tu Theory of Polar Flocks. <i>Physical Review Letters</i> , 2019, 123, 218001. | 2.9 | 31 |
| 201 | Oriented Active Solids. <i>Physical Review Letters</i> , 2019, 123, 238001. | 2.9 | 21 |
| 202 | Tractionless Self-Propulsion of Active Drops. <i>Physical Review Letters</i> , 2019, 123, 248006. | 2.9 | 18 |
| 203 | Active gel segment behaving as an active particle. <i>Physical Review E</i> , 2019, 100, 062403. | 0.8 | 4 |
| 204 | Dynamically asymmetric and bicontinuous morphologies in active emulsions. <i>International Journal of Modern Physics C</i> , 2019, 30, 1941002. | 0.8 | 4 |
| 205 | Stress-dependent amplification of active forces in nonlinear elastic media. <i>Soft Matter</i> , 2019, 15, 331-338. | 1.2 | 12 |
| 206 | Unveiling the Active Nature of Living-Membrane Fluctuations and Mechanics. <i>Annual Review of Condensed Matter Physics</i> , 2019, 10, 213-232. | 5.2 | 37 |
| 207 | Material approaches to active tissue mechanics. <i>Nature Reviews Materials</i> , 2019, 4, 23-44. | 23.3 | 103 |
| 208 | From Stochastic Thermodynamics to Thermodynamic Inference. <i>Annual Review of Condensed Matter Physics</i> , 2019, 10, 171-192. | 5.2 | 127 |
| 209 | Active wetting of epithelial tissues. <i>Nature Physics</i> , 2019, 15, 79-88. | 6.5 | 148 |
| 210 | Physical Models of Collective Cell Migration. <i>Annual Review of Condensed Matter Physics</i> , 2020, 11, 77-101. | 5.2 | 214 |
| 211 | Microfluidic control over topological states in channel-confined nematic flows. <i>Nature Communications</i> , 2020, 11, 59. | 5.8 | 30 |
| 212 | “Stochastic Resonance” for Individual Cells. <i>Biophysical Journal</i> , 2020, 118, 533-534. | 0.2 | 1 |
| 213 | The Actin Cytoskeleton as an Active Adaptive Material. <i>Annual Review of Condensed Matter Physics</i> , 2020, 11, 421-439. | 5.2 | 86 |
| 214 | Dynamics of active swelling in contractile polymer gels. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 135, 103807. | 2.3 | 8 |
| 215 | Nonequilibrium Biophysical Processes Influence the Large-Scale Architecture of the Cell Nucleus. <i>Biophysical Journal</i> , 2020, 118, 2229-2244. | 0.2 | 22 |
| 216 | Supersonic kinks and solitons in active solids. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190115. | 1.6 | 4 |
| 217 | A theoretical model of collective cell polarization and alignment. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103860. | 2.3 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 218 | A continuum model for the growth of dendritic actin networks. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200464. | 1.0 | 0 |
| 219 | Classifying and characterizing active materials. <i>Synthesis</i> , 2021, 199, 2007-2026. | 0.6 | 2 |
| 220 | Soft channel formation and symmetry breaking in exotic active emulsions. <i>Scientific Reports</i> , 2020, 10, 15936. | 1.6 | 11 |
| 221 | Shear-Induced Gelation of Self-Yielding Active Networks. <i>Physical Review Letters</i> , 2020, 125, 178003. | 2.9 | 17 |
| 222 | Dynamics of active nematic defects on the surface of a sphere. <i>Physical Review E</i> , 2020, 102, 012607. | 0.8 | 17 |
| 223 | Wrinkling Instability in 3D Active Nematics. <i>Nano Letters</i> , 2020, 20, 6281-6288. | 4.5 | 24 |
| 224 | Controlling the Microstructure and Phase Behavior of Confined Soft Colloids by Active Interaction Switching. <i>Physical Review Letters</i> , 2020, 125, 078001. | 2.9 | 17 |
| 225 | Active inter-cellular forces in collective cell motility. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200312. | 1.5 | 14 |
| 226 | The physics of active polymers and filaments. <i>Journal of Chemical Physics</i> , 2020, 153, 040901. | 1.2 | 86 |
| 227 | Continuum elastic models for force transmission in biopolymer gels. <i>Soft Matter</i> , 2020, 16, 10781-10808. | 1.2 | 10 |
| 228 | Scalar Active Mixtures: The Nonreciprocal Cahn-Hilliard Model. <i>Physical Review X</i> , 2020, 10, . | 2.8 | 59 |
| 229 | Collective chemotaxis of active nematic droplets. <i>Physical Review E</i> , 2020, 102, 020601. | 0.8 | 7 |
| 230 | Quantum Dot-Driven Stabilization of Liquid-Crystalline Blue Phases. <i>Frontiers in Physics</i> , 2020, 8, . | 1.0 | 11 |
| 231 | Pattern Formation and Defect Ordering in Active Chiral Nematics. <i>Physical Review Letters</i> , 2020, 125, 098002. | 2.9 | 11 |
| 232 | Non-Hermitian Band Topology and Skin Modes in Active Elastic Media. <i>Physical Review Letters</i> , 2020, 125, 118001. | 2.9 | 107 |
| 233 | Universal Thinning of Liquid Filaments under Dominant Surface Forces. <i>Physical Review Letters</i> , 2020, 125, 114502. | 2.9 | 12 |
| 234 | Active microfluidic transport in two-dimensional handlebodies. <i>Soft Matter</i> , 2020, 16, 9230-9241. | 1.2 | 23 |
| 235 | Chiral Active Hexatics: Giant Number Fluctuations, Waves, and Destruction of Order. <i>Physical Review Letters</i> , 2020, 125, 238005. | 2.9 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 236 | Spontaneous deformation and fission of oil droplets on an aqueous surfactant solution. <i>Physical Review E</i> , 2020, 102, 042603. | 0.8 | 8 |
| 237 | Underdamped active Brownian heat engine. <i>Physical Review E</i> , 2020, 102, 060101. | 0.8 | 27 |
| 238 | Active, self-motile, and driven emulsions. <i>Current Opinion in Colloid and Interface Science</i> , 2020, 49, 16-26. | 3.4 | 12 |
| 239 | Shape and size changes of adherent elastic epithelia. <i>Soft Matter</i> , 2020, 16, 5282-5293. | 1.2 | 1 |
| 240 | Hydrodynamics of polymers in an active bath. <i>Physical Review E</i> , 2020, 101, 052612. | 0.8 | 19 |
| 241 | Dynamic heterogeneity and non-Gaussian statistics for ganglioside GM1s and acetylcholine receptors on live cell membrane. <i>Molecular Biology of the Cell</i> , 2020, 31, 1380-1391. | 0.9 | 3 |
| 242 | Thin-film modeling of resting and moving active droplets. <i>Physical Review E</i> , 2020, 101, 062802. | 0.8 | 14 |
| 243 | Mechanics of the cellular actin cortex: From signalling to shape change. <i>Current Opinion in Cell Biology</i> , 2020, 66, 69-78. | 2.6 | 77 |
| 244 | Gap statistics of two interacting run and tumble particles in one dimension. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 345003. | 0.7 | 9 |
| 245 | Treadmilling stability of a one-dimensional actin growth model. <i>International Journal of Solids and Structures</i> , 2020, 198, 87-98. | 1.3 | 7 |
| 246 | Dense active matter model of motion patterns in confluent cell monolayers. <i>Nature Communications</i> , 2020, 11, 1405. | 5.8 | 86 |
| 247 | The 2020 motile active matter roadmap. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 193001. | 0.7 | 242 |
| 248 | How many ways a cell can move: the modes of self-propulsion of an active drop. <i>Soft Matter</i> , 2020, 16, 3106-3124. | 1.2 | 12 |
| 249 | Effective temperature scaled dynamics of a flexible polymer in an active bath. <i>Molecular Physics</i> , 2020, 118, . | 0.8 | 5 |
| 250 | The Poisson Ratio of the Cellular Actin Cortex Is Frequency Dependent. <i>Biophysical Journal</i> , 2020, 118, 1968-1976. | 0.2 | 28 |
| 251 | Universal scaling of active nematic turbulence. <i>Nature Physics</i> , 2020, 16, 682-688. | 6.5 | 85 |
| 252 | Computational models for active matter. <i>Nature Reviews Physics</i> , 2020, 2, 181-199. | 11.9 | 192 |
| 253 | Conformation and dynamics of a self-avoiding active flexible polymer. <i>Physical Review E</i> , 2020, 101, 030501. | 0.8 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 254 | Cytoskeleton polarity is essential in determining orientational order in basal bodies of multi-ciliated cells. <i>PLoS Computational Biology</i> , 2020, 16, e1007649. | 1.5 | 5 |
| 255 | Active forces shape the metaphase spindle through a mechanical instability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 16154-16159. | 3.3 | 22 |
| 256 | Shaping Organs: Shared Structural Principles Across Kingdoms. <i>Annual Review of Cell and Developmental Biology</i> , 2020, 36, 385-410. | 4.0 | 35 |
| 258 | Spontaneous helical flows in active nematics lying on a cylindrical surface. <i>Physical Review E</i> , 2020, 101, 022701. | 0.8 | 14 |
| 259 | Odd elasticity. <i>Nature Physics</i> , 2020, 16, 475-480. | 6.5 | 142 |
| 260 | Motility and morphodynamics of confined cells. <i>Physical Review E</i> , 2020, 101, 022404. | 0.8 | 13 |
| 261 | Contrastive factors of activity and crowding on conformational properties of a flexible polymer. <i>Chemical Physics Letters</i> , 2020, 745, 137213. | 1.2 | 1 |
| 262 | The stiffness of living tissues and its implications for tissue engineering. <i>Nature Reviews Materials</i> , 2020, 5, 351-370. | 23.3 | 756 |
| 263 | Active nematics with anisotropic friction: the decisive role of the flow aligning parameter. <i>Soft Matter</i> , 2020, 16, 2065-2074. | 1.2 | 23 |
| 264 | Steady-state distributions and nonsteady dynamics in nonequilibrium systems. <i>Physical Review E</i> , 2020, 101, 042107. | 0.8 | 7 |
| 265 | Universality of dissipative self-assembly from quantum dots to human cells. <i>Nature Physics</i> , 2020, 16, 795-801. | 6.5 | 39 |
| 266 | Quantifying the non-equilibrium activity of an active colloid. <i>Soft Matter</i> , 2020, 16, 7202-7209. | 1.2 | 4 |
| 267 | Mechanics of active gel spheres under bulk contraction. <i>International Journal of Mechanical Sciences</i> , 2021, 193, 106147. | 3.6 | 8 |
| 268 | Machine learning forecasting of active nematics. <i>Soft Matter</i> , 2021, 17, 738-747. | 1.2 | 22 |
| 269 | The Actomyosin Cortex of Cells: A Thin Film of Active Matter. <i>Journal of the Indian Institute of Science</i> , 2021, 101, 97-112. | 0.9 | 0 |
| 270 | Rayleigh's Plateau instability of anisotropic interfaces. Part 1. An analytical and numerical study of fluid interfaces. <i>Journal of Fluid Mechanics</i> , 2021, 910, . | 1.4 | 10 |
| 271 | Onsager's variational principle in active soft matter. <i>Soft Matter</i> , 2021, 17, 3634-3653. | 1.2 | 31 |
| 273 | Maxwell-Boltzmann velocity distribution for noninteracting active matter. <i>Physical Review E</i> , 2021, 103, 012601. | 0.8 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 274 | Supramolecular gelation controlled by an iodine clock. <i>Soft Matter</i> , 2021, 17, 1189-1193. | 1.2 | 12 |
| 275 | Fluctuations can induce local nematic order and extensile stress in monolayers of motile cells. <i>Soft Matter</i> , 2021, 17, 3068-3073. | 1.2 | 9 |
| 276 | Cell Junction Mechanics beyond the Bounds of Adhesion and Tension. <i>Developmental Cell</i> , 2021, 56, 202-212. | 3.1 | 33 |
| 277 | Fingering instability in spreading epithelial monolayers: roles of cell polarisation, substrate friction and contractile stresses. <i>Soft Matter</i> , 2021, 17, 8276-8290. | 1.2 | 10 |
| 278 | Continuum Theory of Active Phase Separation in Cellular Aggregates. <i>Physical Review Letters</i> , 2021, 126, 018102. | 2.9 | 18 |
| 280 | Defects in Active Nematics – Algorithms for Identification and Tracking. <i>Computational Methods in Applied Mathematics</i> , 2021, 21, 683-692. | 0.4 | 9 |
| 281 | Viscoelastic control of spatiotemporal order in bacterial active matter. <i>Nature</i> , 2021, 590, 80-84. | 13.7 | 83 |
| 283 | Autonomous materials systems from active liquid crystals. <i>Nature Reviews Materials</i> , 2021, 6, 437-453. | 23.3 | 53 |
| 284 | Active Viscoelasticity of Odd Materials. <i>Physical Review Letters</i> , 2021, 126, 138001. | 2.9 | 28 |
| 285 | Emergence of self-organizational patterning at the mesoscopic scale. <i>Developmental Cell</i> , 2021, 56, 719-721. | 3.1 | 3 |
| 286 | Learning active nematics one step at a time. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 3.3 | 4 |
| 287 | Peristalsis by pulses of activity. <i>Physical Review E</i> , 2021, 103, 042411. | 0.8 | 2 |
| 288 | Collective migrations in an epithelial – cancerous cell monolayer. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 773-784. | 1.5 | 3 |
| 289 | Learning physically consistent differential equation models from data using group sparsity. <i>Physical Review E</i> , 2021, 103, 042310. | 0.8 | 12 |
| 290 | Activity pulses induce spontaneous flow reversals in viscoelastic environments. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20210100. | 1.5 | 5 |
| 291 | Modelling and computation of liquid crystals. <i>Acta Numerica</i> , 2021, 30, 765-851. | 6.3 | 23 |
| 292 | Modeling cells spreading, motility, and receptors dynamics: a general framework. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 1013-1030. | 1.5 | 10 |
| 293 | Formation and propagation of solitonlike defect clusters in confined active nematics with chiral anchoring. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 294 | Theory and simulation for equilibrium glassy dynamics in cellular Potts model of confluent biological tissue. <i>Physical Review E</i> , 2021, 103, 062403. | 0.8 | 10 |
| 295 | Chemo-mechanical model of a cell as a stochastic active gel. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 151, 104381. | 2.3 | 9 |
| 296 | Physical bioenergetics: Energy fluxes, budgets, and constraints in cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 3.3 | 52 |
| 297 | Layered Chiral Active Matter: Beyond Odd Elasticity. <i>Physical Review Letters</i> , 2021, 126, 248001. | 2.9 | 14 |
| 298 | Schrödinger's What Is Life? at 75. <i>Cell Systems</i> , 2021, 12, 465-476. | 2.9 | 4 |
| 299 | Lab-on-a-chip based mechanical actuators and sensors for single-cell and organoid culture studies. <i>Journal of Applied Physics</i> , 2021, 129, 210905. | 1.1 | 7 |
| 300 | Thermodynamics of Active Field Theories: Energetic Cost of Coupling to Reservoirs. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 20 |
| 301 | Tuning the Properties of Active Microtubule Networks by Depletion Forces. <i>Langmuir</i> , 2021, 37, 7919-7927. | 1.6 | 5 |
| 302 | Active flows and deformable surfaces in development. <i>Seminars in Cell and Developmental Biology</i> , 2021, 120, 44-52. | 2.3 | 12 |
| 303 | Topology Protects Chiral Edge Currents in Stochastic Systems. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 9 |
| 304 | Bio-chemo-mechanical theory of active shells. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 152, 104419. | 2.3 | 18 |
| 305 | Mechanical Patterning in Animal Morphogenesis. <i>Annual Review of Cell and Developmental Biology</i> , 2021, 37, 469-493. | 4.0 | 14 |
| 307 | A two species micro-macro model of wormlike micellar solutions and its maximum entropy closure approximations: An energetic variational approach. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2021, 293, 104559. | 1.0 | 9 |
| 309 | Odd Viscosity in Active Matter: Microscopic Origin and 3D Effects. <i>Physical Review Letters</i> , 2021, 127, 048001. | 2.9 | 40 |
| 312 | Optogenetic control of intracellular flows and cell migration: A comprehensive mathematical analysis with a minimal active gel model. <i>Physical Review E</i> , 2021, 104, 024406. | 0.8 | 3 |
| 313 | Dissecting Organismal Morphogenesis by Bridging Genetics and Biophysics. <i>Annual Review of Genetics</i> , 2021, 55, 209-233. | 3.2 | 5 |
| 314 | Fuel-Driven and Enzyme-Regulated Redox-Responsive Supramolecular Hydrogels. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21062-21068. | 7.2 | 46 |
| 315 | Brennstoffbetriebene und enzymregulierte redoxresponsive supramolekulare Hydrogele. <i>Angewandte Chemie</i> , 2021, 133, 21231-21238. | 1.6 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 316 | Behavior of chiral active nematics confined to nanoscopic circular region. <i>European Physical Journal E</i> , 2021, 44, 112. | 0.7 | 3 |
| 317 | Diversity of non-equilibrium patterns and emergence of activity in confined electrohydrodynamically driven liquids. <i>Science Advances</i> , 2021, 7, eabh1642. | 4.7 | 13 |
| 318 | A C++ expression system for partial differential equations enables generic simulations of biological hydrodynamics. <i>European Physical Journal E</i> , 2021, 44, 117. | 0.7 | 4 |
| 319 | Local thermodynamics govern formation and dissolution of <i>Caenorhabditis elegans</i> P granule condensates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 3.3 | 64 |
| 320 | Nonlinear rheology of cellular networks. <i>Cells and Development</i> , 2021, 168, 203746. | 0.7 | 19 |
| 321 | Inertia Drives a Flocking Phase Transition in Viscous Active Fluids. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 10 |
| 322 | Scaling Regimes of Active Turbulence with External Dissipation. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 18 |
| 323 | Integrated biology of <i>Physarum polycephalum</i> : cell biology, biophysics, and behavior of plasmodial networks. , 2022, , 453-492. | | 0 |
| 324 | Rayleighâ€Plateau instability of anisotropic interfaces. Part 2. Limited instability of elastic interfaces. <i>Journal of Fluid Mechanics</i> , 2021, 910, . | 1.4 | 6 |
| 325 | Computational Modeling of Collective Cell Migration: Mechanical and Biochemical Aspects. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1146, 1-11. | 0.8 | 7 |
| 326 | Continuum Models of Collective Cell Migration. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1146, 45-66. | 0.8 | 24 |
| 327 | A Model of Integrin and VEGF Receptors Recruitment on Endothelial Cells. <i>Advanced Structured Materials</i> , 2020, , 163-198. | 0.3 | 2 |
| 328 | Apical Cytoskeletons Help Define the Barrier Functions of Epithelial Cell Sheets in Biological Systems. , 2020, , 31-38. | | 1 |
| 330 | Selection mechanism at the onset of active turbulence. <i>Nature Physics</i> , 2019, 15, 362-366. | 6.5 | 66 |
| 331 | Scaling behaviour in steady-state contracting actomyosin networks. <i>Nature Physics</i> , 2019, 15, 509-516. | 6.5 | 43 |
| 332 | Collective forces in scalar active matter. <i>Soft Matter</i> , 2020, 16, 2652-2663. | 1.2 | 37 |
| 333 | Drops and fibers â€” how biomolecular condensates and cytoskeletal filaments influence each other. <i>Emerging Topics in Life Sciences</i> , 2020, 4, 247-261. | 1.1 | 54 |
| 334 | Chromatin as an active polymeric material. <i>Emerging Topics in Life Sciences</i> , 2020, 4, 111-118. | 1.1 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 335 | Design of nematic liquid crystals to control microscale dynamics. <i>Liquid Crystals Reviews</i> , 2020, 8, 59-129. | 1.1 | 22 |
| 336 | Cortical contraction drives the 3D patterning of epithelial cell surfaces. <i>Journal of Cell Biology</i> , 2020, 219, . | 2.3 | 24 |
| 337 | Getting around the cell: physical transport in the intracellular world. <i>Physical Biology</i> , 2020, 17, 061003. | 0.8 | 71 |
| 338 | Designer substrates and devices for mechanobiology study. <i>Journal of Semiconductors</i> , 2020, 41, 041607. | 2.0 | 2 |
| 344 | Active matter in a viscoelastic environment. <i>Physical Review Fluids</i> , 2020, 5, . | 1.0 | 14 |
| 345 | Swimmer Suspensions on Substrates: Anomalous Stability and Long-Range Order. <i>Physical Review Letters</i> , 2020, 124, 028002. | 2.9 | 25 |
| 346 | Dynamics and escape of active particles in a harmonic trap. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 29 |
| 347 | Assembly and positioning of actomyosin rings by contractility and planar cell polarity. <i>ELife</i> , 2015, 4, e09206. | 2.8 | 22 |
| 348 | Active contraction of microtubule networks. <i>ELife</i> , 2015, 4, . | 2.8 | 112 |
| 349 | Shear-induced damped oscillations in an epithelium depend on actomyosin contraction and E-cadherin cell adhesion. <i>ELife</i> , 2018, 7, . | 2.8 | 19 |
| 350 | Odd elasticity realized by piezoelectric material with linear feedback. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1. | 2.0 | 6 |
| 351 | Multi-particle collision dynamics with a non-ideal equation of state. II. Collective dynamics of elongated squirmer rods. <i>Journal of Chemical Physics</i> , 2021, 155, 134904. | 1.2 | 6 |
| 352 | A Three-Dimensional Numerical Model of an Active Cell Cortex in the Viscous Limit. <i>Frontiers in Physics</i> , 2021, 9, . | 1.0 | 9 |
| 353 | Realization of active metamaterials with odd micropolar elasticity. <i>Nature Communications</i> , 2021, 12, 5935. | 5.8 | 50 |
| 361 | Mathematical models with frills. <i>ELife</i> , 2019, 8, . | 2.8 | 0 |
| 364 | Simulation of microswimmer hydrodynamics with multiparticle collision dynamics*. <i>Chinese Physics B</i> , 2020, 29, 074701. | 0.7 | 9 |
| 366 | Permeation Instabilities in Active Polar Gels. <i>Physical Review Letters</i> , 2021, 127, 188001. | 2.9 | 6 |
| 367 | Physics of liquid crystals in cell biology. <i>Trends in Cell Biology</i> , 2022, 32, 140-150. | 3.6 | 24 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 368 | Coupling Turing stripes to active flows. <i>Soft Matter</i> , 2021, 17, 10716-10722. | 1.2 | 6 |
| 369 | Multi-scale Integration of Forces during Morphogenesis: Quantification and Mechanical Modeling Approaches. <i>Seibutsu Butsuri</i> , 2020, 60, 037-043. | 0.0 | 0 |
| 370 | Integrative Models for TGF- β^2 Signaling and Extracellular Matrix. <i>Biology of Extracellular Matrix</i> , 2020, , 209-225. | 0.3 | 2 |
| 372 | Active Turbulence. <i>Annual Review of Condensed Matter Physics</i> , 2022, 13, 143-170. | 5.2 | 106 |
| 375 | DNA-Controlled Spatiotemporal Patterning of a Cytoskeletal Active Gel. <i>Journal of the American Chemical Society</i> , 2021, 143, 20022-20026. | 6.6 | 10 |
| 376 | Irreversibility and Biased Ensembles in Active Matter: Insights from Stochastic Thermodynamics. <i>Annual Review of Condensed Matter Physics</i> , 2022, 13, 215-238. | 5.2 | 43 |
| 377 | Turbulence-induced clustering in compressible active fluids. <i>Soft Matter</i> , 2021, 17, 10447-10457. | 1.2 | 4 |
| 378 | How surrogates for cortical forces determine cell shape. <i>International Journal of Non-Linear Mechanics</i> , 2022, 140, 103907. | 1.4 | 3 |
| 379 | Front speed and pattern selection of a propagating chemical front in an active fluid. <i>Physical Review E</i> , 2022, 105, 014602. | 0.8 | 2 |
| 380 | Collective durotaxis of cohesive cell clusters on a stiffness gradient. <i>European Physical Journal E</i> , 2022, 45, 7. | 0.7 | 6 |
| 381 | Rigidity transitions in development and disease. <i>Trends in Cell Biology</i> , 2022, 32, 433-444. | 3.6 | 26 |
| 382 | Unifying polar and nematic active matter: emergence and co-existence of half-integer and full-integer topological defects. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 094002. | 0.7 | 9 |
| 383 | Active nematics across scales from cytoskeleton organization to tissue morphogenesis. <i>Current Opinion in Genetics and Development</i> , 2022, 73, 101897. | 1.5 | 18 |
| 384 | Substrate elasticity and surface tension mediate the spontaneous rotation of active chiral droplet on soft substrates. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 161, 104788. | 2.3 | 1 |
| 385 | A gelation transition enables the self-organization of bipolar metaphase spindles. <i>Nature Physics</i> , 2022, 18, 323-331. | 6.5 | 6 |
| 386 | Stochastic Hydrodynamics of Complex Fluids: Discretisation and Entropy Production. <i>Entropy</i> , 2022, 24, 254. | 1.1 | 7 |
| 387 | Symmetry, Thermodynamics, and Topology in Active Matter. <i>Physical Review X</i> , 2022, 12, . | 2.8 | 59 |
| 388 | Dynamics and Stability of the Contractile Actomyosin Ring in the Cell. <i>Physical Review Letters</i> , 2022, 128, 068102. | 2.9 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 389 | A model of actin-driven endocytosis explains differences of endocytic motility in budding and fission yeast. <i>Molecular Biology of the Cell</i> , 2022, 33, mbcE21070362. | 0.9 | 3 |
| 390 | Nonequilibrium Green-Kubo relations for hydrodynamic transport from an equilibrium-like fluctuation-response equality. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 6 |
| 391 | Geometric constraints alter the emergent dynamics of an active particle. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 3 |
| 392 | Asymptotic stability of contraction-driven cell motion. <i>Physical Review E</i> , 2022, 105, 024403. | 0.8 | 5 |
| 393 | Nano/Micromotors in Active Matter. <i>Micromachines</i> , 2022, 13, 307. | 1.4 | 5 |
| 394 | Activity-induced phase transition in a quantum many-body system. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 1 |
| 395 | Sticking around: Cell adhesion patterning for energy minimization and substrate mechanosensing. <i>Biophysical Journal</i> , 2022, 121, 1777-1786. | 0.2 | 8 |
| 396 | Active T1 transitions in cellular networks. <i>European Physical Journal E</i> , 2022, 45, 29. | 0.7 | 7 |
| 397 | Filopodia rotate and coil by actively generating twist in their actin shaft. <i>Nature Communications</i> , 2022, 13, 1636. | 5.8 | 21 |
| 399 | Appreciating the role of cell shape changes in the mechanobiology of epithelial tissues. <i>Biophysics Reviews</i> , 2022, 3, . | 1.0 | 10 |
| 400 | Active elastocapillarity in soft solids with negative surface tension. <i>Science Advances</i> , 2022, 8, eabk3079. | 4.7 | 8 |
| 402 | A viscous active shell theory of the cell cortex. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 164, 104876. | 2.3 | 16 |
| 404 | Unified description of compressive modulus revealing multiscale mechanics of living cells. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 5 |
| 405 | Active forces modulate collective behaviour and cellular organization. <i>Comptes Rendus - Biologies</i> , 2021, 344, 325-335. | 0.1 | 0 |
| 406 | Activity-induced instabilities of brain organoids. <i>European Physical Journal E</i> , 2021, 44, 147. | 0.7 | 4 |
| 407 | Convergence Analysis of the Variational Operator Splitting Scheme for a Reaction-Diffusion System with Detailed Balance. <i>SIAM Journal on Numerical Analysis</i> , 2022, 60, 781-803. | 1.1 | 16 |
| 408 | Crosslinking and depletion determine spatial instabilities in cytoskeletal active matter. <i>Soft Matter</i> , 2022, 18, 3793-3800. | 1.2 | 6 |
| 409 | Quadrupolar active stress induces exotic patterns of defect motion in compressible active nematics. <i>Soft Matter</i> , 2022, , . | 1.2 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 410 | Some Recent Advances in Energetic Variational Approaches. <i>Entropy</i> , 2022, 24, 721. | 1.1 | 4 |
| 411 | Actin Turnover Required for Adhesion-Independent Bleb Migration. <i>Fluids</i> , 2022, 7, 173. | 0.8 | 0 |
| 412 | Curvature strains as a global orchestrator of morphogenesis. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 1 |
| 413 | Mechanical activation drives tenogenic differentiation of human mesenchymal stem cells in aligned dense collagen hydrogels. <i>Biomaterials</i> , 2022, 286, 121606. | 5.7 | 19 |
| 414 | Bridging microscopic cell dynamics to nematohydrodynamics of cell monolayers. <i>Soft Matter</i> , 0, , . | 1.2 | 1 |
| 415 | Active-gel theory for multicellular migration of polar cells in the extra-cellular matrix. <i>New Journal of Physics</i> , 2022, 24, 073001. | 1.2 | 1 |
| 416 | Stability selection enables robust learning of differential equations from limited noisy data. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, . | 1.0 | 4 |
| 417 | Modeling Receptor Motility along Advecting Lipid Membranes. <i>Membranes</i> , 2022, 12, 652. | 1.4 | 1 |
| 418 | Computational approaches for simulating luminogenesis. <i>Seminars in Cell and Developmental Biology</i> , 2022, 131, 173-185. | 2.3 | 4 |
| 420 | Hierarchical Biomechanics: Concepts, Bone as Prominent Example, and Perspectives Beyond. <i>Applied Mechanics Reviews</i> , 2022, 74, . | 4.5 | 6 |
| 421 | Modeling Active Non-Markovian Oscillations. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 5 |
| 422 | Nematic order condensation and topological defects in inertial active nematics. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 3 |
| 423 | On continuum modeling of cell aggregation phenomena. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 167, 105004. | 2.3 | 2 |
| 424 | Geometric trade-off between contractile force and viscous drag determines the actomyosin-based motility of a cell-sized droplet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 3.3 | 11 |
| 425 | General solutions of linear poro-viscoelastic materials in spherical coordinates. <i>Journal of Fluid Mechanics</i> , 2022, 946, . | 1.4 | 0 |
| 427 | A Second-Order Accurate, Operator Splitting Scheme for Reaction-Diffusion Systems in an Energetic Variational Formulation. <i>SIAM Journal of Scientific Computing</i> , 2022, 44, A2276-A2301. | 1.3 | 7 |
| 428 | Selective and collective actuation in active solids. <i>Nature Physics</i> , 2022, 18, 1234-1239. | 6.5 | 34 |
| 429 | Active gel: A continuum physics perspective. , 2022, , 287-309. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 430 | Variational methods and deep Ritz method for active elastic solids. <i>Soft Matter</i> , 2022, 18, 6015-6031. | 1.2 | 9 |
| 431 | Enhanced short time peak in four-point dynamic susceptibility in dense active glass-forming liquids. <i>Soft Matter</i> , 2022, 18, 7309-7316. | 1.2 | 1 |
| 432 | Curvature-controlled geometrical lensing behavior in self-propelled colloidal particle systems. <i>Soft Matter</i> , 0, , . | 1.2 | 5 |
| 433 | Theory of nematic and polar active fluid surfaces. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 11 |
| 434 | Active Nematic Flows over Curved Surfaces. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 14 |
| 435 | Adhesion regulation and the control of cellular rearrangements: From emulsions to developing tissues. <i>Frontiers in Physics</i> , 0, 10, . | 1.0 | 1 |
| 437 | Geometry Adaptation of Protrusion and Polarity Dynamics in Confined Cell Migration. <i>Physical Review X</i> , 2022, 12, . | 2.8 | 6 |
| 440 | Emergence of traveling waves and their stability in a free boundary model of cell motility. <i>Transactions of the American Mathematical Society</i> , 2023, 376, 1799-1844. | 0.5 | 1 |
| 441 | Network model of active elastic shells swollen by hydrostatic pressure. <i>Soft Matter</i> , 2022, 18, 7981-7989. | 1.2 | 2 |
| 443 | Self-organization in amoeboid motility. <i>Frontiers in Cell and Developmental Biology</i> , 0, 10, . | 1.8 | 6 |
| 444 | Active nematic gel with quenched disorder. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 0 |
| 445 | Competing instabilities reveal how to rationally design and control active crosslinked gels. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 5 |
| 446 | Pattern formation and the mechanics of a motor-driven filamentous system confined by rigid membranes. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 3 |
| 447 | Incompressible Polar Active Fluids with Quenched Random Field Disorder in Dimensions $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:mi} \rangle d \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \> \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 2 |
| 448 | Facilitated dynamics of an active polymer in 2D crowded environments with obstacles. <i>Soft Matter</i> , 2022, 18, 9263-9272. | 1.2 | 5 |
| 449 | Broken living layers: Dislocations in active smectic liquid crystals. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 2 |
| 450 | Nonequilibrium dynamical structure factor of a dilute suspension of active particles in a viscoelastic fluid. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 0 |
| 451 | Active boundary layers in confined active nematics. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 452 | Active turbulence and spontaneous phase separation in inhomogeneous extensile active gels. <i>Soft Matter</i> , 0, , . | 1.2 | 3 |
| 453 | On the origin of universal cell shape variability in confluent epithelial monolayers. <i>ELife</i> , 0, 11, . | 2.8 | 7 |
| 454 | Attachment and detachment of cortical myosin regulates cell junction exchange during cell rearrangement in the <i>Drosophila</i> wing epithelium. <i>Current Biology</i> , 2023, 33, 263-275.e4. | 1.8 | 7 |
| 455 | Polymer-chain configurations in active and passive baths. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 0 |
| 456 | Topological defect-mediated morphodynamics of activeâ€“active interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 3.3 | 9 |
| 458 | Cell size and actin architecture determine force generation in optogenetically activated cells. <i>Biophysical Journal</i> , 2023, 122, 684-696. | 0.2 | 6 |
| 459 | Heat fluctuations in chemically active systems. <i>Physical Review E</i> , 2023, 107, . | 0.8 | 2 |
| 460 | Vibration induced by active nematics. <i>Journal of Fluid Mechanics</i> , 2023, 954, . | 1.4 | 0 |
| 461 | Discontinuous Tension-Controlled Transition between Collective Actuations in Active Solids. <i>Physical Review Letters</i> , 2023, 130, . | 2.9 | 2 |
| 462 | Fluctuations of entropy production of a run-and-tumble particle. <i>Physical Review E</i> , 2023, 107, . | 0.8 | 4 |
| 463 | Positive, negative and controlled durotaxis. <i>Soft Matter</i> , 2023, 19, 2993-3001. | 1.2 | 4 |
| 464 | Emergent organization and polarization due to active fluctuations. <i>Physical Review Research</i> , 2023, 5, . | 1.3 | 4 |
| 465 | Orientational ordering of active nematics confined to a 2D nanoscopic ring-shaped cavity. <i>Journal of Molecular Liquids</i> , 2023, 377, 121513. | 2.3 | 1 |
| 467 | Structure and Rheology in Vertex Models under Cell-Shape-Dependent Active Stresses. <i>Physical Review Letters</i> , 2023, 130, . | 2.9 | 3 |
| 468 | Two-temperature activity induces liquid-crystal phases inaccessible in equilibrium. <i>Physical Review E</i> , 2023, 107, . | 0.8 | 5 |
| 469 | Morphodynamics of active nematic fluid surfaces. <i>Journal of Fluid Mechanics</i> , 2023, 957, . | 1.4 | 5 |
| 470 | Two-dimensional long-range uniaxial order in three-dimensional active fluids. <i>Nature Physics</i> , 2023, 19, 733-740. | 6.5 | 1 |
| 471 | Collective rotational motion of freely expanding T84 epithelial cell colonies. <i>Journal of the Royal Society Interface</i> , 2023, 20, . | 1.5 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 472 | The effect of futile chemical cycles on chemical-to-mechanical energy conversion in interacting motor protein systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2023, 615, 128608. | 1.2 | 0 |
| 473 | The crucial role of adhesion in the transmigration of active droplets through interstitial orifices. <i>Nature Communications</i> , 2023, 14, . | 5.8 | 4 |
| 474 | Machine learning phases in swarming systems. <i>Machine Learning: Science and Technology</i> , 2023, 4, 015028. | 2.4 | 1 |
| 475 | Crystallization and ordered self-organization of soft matter at droplet interface. <i>Scientia Sinica Chimica</i> , 2023, 53, 734-746. | 0.2 | 0 |
| 477 | Active Nematics: Mesoscale Turbulence and Self-propelled Topological Defects. , 2023, , 88-106. | | 0 |
| 478 | Active Transport in Complex Environments. , 2023, , 151-218. | | 2 |
| 479 | What is "Active Matter"? , 2023, , 1-31. | | 0 |
| 481 | Generic stress rectification in nonlinear elastic media. <i>Soft Matter</i> , 2023, 19, 2970-2976. | 1.2 | 1 |
| 482 | Active viscoelastic nematics with partial degree of order. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2023, 479, . | 1.0 | 0 |