

# Frank Julicher

## List of Publications by Year in descending order

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309  
papers

31,521  
citations

4641

85  
h-index

5806

161  
g-index

361  
all docs

361  
docs citations

361  
times ranked

17914  
citing authors

#	ARTICLE	IF	CITATIONS
1	Germline P Granules Are Liquid Droplets That Localize by Controlled Dissolution/Condensation. <i>Science</i> , 2009, 324, 1729-1732.	6.0	2,267
2	Liquid-Liquid Phase Separation in Biology. <i>Annual Review of Cell and Developmental Biology</i> , 2014, 30, 39-58.	4.0	2,234
3	Modeling molecular motors. <i>Reviews of Modern Physics</i> , 1997, 69, 1269-1282.	16.4	1,654
4	The Influence of Cell Mechanics, Cell-Cell Interactions, and Proliferation on Epithelial Packing. <i>Current Biology</i> , 2007, 17, 2095-2104.	1.8	1,039
5	Cell Flow Reorients the Axis of Planar Polarity in the Wing Epithelium of <i>Drosophila</i> . <i>Cell</i> , 2010, 142, 773-786.	13.5	650
6	Active gel physics. <i>Nature Physics</i> , 2015, 11, 111-117.	6.5	538
7	Asters, Vortices, and Rotating Spirals in Active Gels of Polar Filaments. <i>Physical Review Letters</i> , 2004, 92, 078101.	2.9	499
8	Adhesion Functions in Cell Sorting by Mechanically Coupling the Cortices of Adhering Cells. <i>Science</i> , 2012, 338, 253-256.	6.0	493
9	Generic theory of active polar gels: a paradigm for cytoskeletal dynamics. <i>European Physical Journal E</i> , 2005, 16, 5-16.	0.7	441
10	Anisotropies in cortical tension reveal the physical basis of polarizing cortical flows. <i>Nature</i> , 2010, 467, 617-621.	13.7	434
11	Formation and Interaction of Membrane Tubes. <i>Physical Review Letters</i> , 2002, 88, 238101.	2.9	415
12	Fluidization of tissues by cell division and apoptosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20863-20868.	3.3	379
13	Experimental and theoretical study of mitotic spindle orientation. <i>Nature</i> , 2007, 447, 493-496.	13.7	377
14	Active behavior of the Cytoskeleton. <i>Physics Reports</i> , 2007, 449, 3-28.	10.3	371
15	Cortical Dynein Controls Microtubule Dynamics to Generate Pulling Forces that Position Microtubule Asters. <i>Cell</i> , 2012, 148, 502-514.	13.5	362
16	Kinetics of Morphogen Gradient Formation. <i>Science</i> , 2007, 315, 521-525.	6.0	355
17	Auditory sensitivity provided by self-tuned critical oscillations of hair cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 3183-3188.	3.3	353
18	Dynamics of Dpp Signaling and Proliferation Control. <i>Science</i> , 2011, 331, 1154-1159.	6.0	330

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19	Domain-induced budding of vesicles. <i>Physical Review Letters</i> , 1993, 70, 2964-2967.	2.9	317
20	Cooperative Molecular Motors. <i>Physical Review Letters</i> , 1995, 75, 2618-2621.	2.9	313
21	Growth and division of active droplets provides a model for protocells. <i>Nature Physics</i> , 2017, 13, 408-413.	6.5	304
22	Calibration of optical tweezers with positional detection in the back focal plane. <i>Review of Scientific Instruments</i> , 2006, 77, 103101.	0.6	294
23	Interplay of cell dynamics and epithelial tension during morphogenesis of the <i>Drosophila</i> pupal wing. <i>ELife</i> , 2015, 4, e07090.	2.8	290
24	Polar Positioning of Phase-Separated Liquid Compartments in Cells Regulated by an mRNA Competition Mechanism. <i>Cell</i> , 2016, 166, 1572-1584.e16.	13.5	283
25	Increased Cell Bond Tension Governs Cell Sorting at the <i>Drosophila</i> Anteroposterior Compartment Boundary. <i>Current Biology</i> , 2009, 19, 1950-1955.	1.8	282
26	How molecular motors shape the flagellar beat. <i>HFSP Journal</i> , 2007, 1, 192-208.	2.5	278
27	Shape transformations of vesicles with intramembrane domains. <i>Physical Review E</i> , 1996, 53, 2670-2683.	0.8	270
28	Protein condensates as aging Maxwell fluids. <i>Science</i> , 2020, 370, 1317-1323.	6.0	247
29	High-precision tracking of sperm swimming fine structure provides strong test of resistive force theory. <i>Journal of Experimental Biology</i> , 2010, 213, 1226-1234.	0.8	236
30	Energy transduction of isothermal ratchets: Generic aspects and specific examples close to and far from equilibrium. <i>Physical Review E</i> , 1999, 60, 2127-2140.	0.8	235
31	Mechanics and remodelling of cell packings in epithelia. <i>European Physical Journal E</i> , 2010, 33, 117-127.	0.7	222
32	Spontaneous Oscillations of Collective Molecular Motors. <i>Physical Review Letters</i> , 1997, 78, 4510-4513.	2.9	220
33	Phase separation provides a mechanism to reduce noise in cells. <i>Science</i> , 2020, 367, 464-468.	6.0	214
34	Comparison of a hair bundle's spontaneous oscillations with its response to mechanical stimulation reveals the underlying active process. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 14380-14385.	3.3	212
35	The remarkable cochlear amplifier. <i>Hearing Research</i> , 2010, 266, 1-17.	0.9	208
36	Generic aspects of axonemal beating. <i>New Journal of Physics</i> , 2000, 2, 24-24.	1.2	204

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37	Chemotaxis of sperm cells. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13256-13261.	3.3	199
38	Active torque generation by the actomyosin cell cortex drives left-right symmetry breaking. ELife, 2014, 3, e04165.	2.8	197
39	Hydrodynamic Flow Patterns and Synchronization of Beating Cilia. Physical Review Letters, 2006, 96, 058102.	2.9	193
40	Pattern Formation in Active Fluids. Physical Review Letters, 2011, 106, 028103.	2.9	191
41	Centrosomes are autocatalytic droplets of pericentriolar material organized by centrioles. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2636-45.	3.3	187
42	Self-Organized Beating and Swimming of Internally Driven Filaments. Physical Review Letters, 1999, 82, 1590-1593.	2.9	184
43	Hydrodynamic theory of active matter. Reports on Progress in Physics, 2018, 81, 076601.	8.1	184
44	Actively Contracting Bundles of Polar Filaments. Physical Review Letters, 2000, 85, 1778-1781.	2.9	181
45	Oscillations in cell biology. Current Opinion in Cell Biology, 2005, 17, 20-26.	2.6	181
46	Centrosome Size Sets Mitotic Spindle Length in Caenorhabditis elegans Embryos. Current Biology, 2010, 20, 353-358.	1.8	181
47	Spindle Oscillations during Asymmetric Cell Division Require a Threshold Number of Active Cortical Force Generators. Current Biology, 2006, 16, 2111-2122.	1.8	177
48	Physics of active emulsions. Reports on Progress in Physics, 2019, 82, 064601.	8.1	176
49	Bidirectional cooperative motion of molecular motors. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6696-6701.	3.3	173
50	Contractility and retrograde flow in lamellipodium motion. Physical Biology, 2006, 3, 130-137.	0.8	160
51	Active hair-bundle motility harnesses noise to operate near an optimum of mechanosensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12195-12200.	3.3	158
52	Quantification of surface tension and internal pressure generated by single mitotic cells. Scientific Reports, 2014, 4, 6213.	1.6	151
53	Intercellular Coupling Regulates the Period of the Segmentation Clock. Current Biology, 2010, 20, 1244-1253.	1.8	149
54	Suppression of Ostwald ripening in active emulsions. Physical Review E, 2015, 92, 012317.	0.8	146

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55	Theory of Mitotic Spindle Oscillations. <i>Physical Review Letters</i> , 2005, 94, 108104.	2.9	144
56	Acting on actin: the electric motility assay. <i>European Biophysics Journal</i> , 1998, 27, 403-408.	1.2	143
57	Precision of the Dpp gradient. <i>Development (Cambridge)</i> , 2008, 135, 1137-1146.	1.2	138
58	Dynamic curvature regulation accounts for the symmetric and asymmetric beats of <i>Chlamydomonas</i> flagella. <i>ELife</i> , 2016, 5, .	2.8	136
59	Delayed coupling theory of vertebrate segmentation. <i>HFSP Journal</i> , 2009, 3, 55-66.	2.5	134
60	Quantitative differences in tissue surface tension influence zebrafish germ layer positioning. <i>HFSP Journal</i> , 2008, 2, 42-56.	2.5	132
61	Spatial Organization of the Cell Cytoplasm by Position-Dependent Phase Separation. <i>Physical Review Letters</i> , 2013, 111, 088101.	2.9	131
62	Generic theory of colloidal transport. <i>European Physical Journal E</i> , 2009, 29, 27-36.	0.7	129
63	Interface Contractility between Differently Fated Cells Drives Cell Elimination and Cyst Formation. <i>Current Biology</i> , 2016, 26, 563-574.	1.8	126
64	Epithelial Viscoelasticity Is Regulated by Mechanosensitive E-cadherin Turnover. <i>Current Biology</i> , 2019, 29, 578-591.e5.	1.8	126
65	Salt-Dependent Rheology and Surface Tension of Protein Condensates Using Optical Traps. <i>Physical Review Letters</i> , 2018, 121, 258101.	2.9	125
66	Unifying the Various Incarnations of Active Hair-Bundle Motility by the Vertebrate Hair Cell. <i>Biophysical Journal</i> , 2007, 93, 4053-4067.	0.2	124
67	A Doppler effect in embryonic pattern formation. <i>Science</i> , 2014, 345, 222-225.	6.0	121
68	Rheology of the Active Cell Cortex in Mitosis. <i>Biophysical Journal</i> , 2016, 111, 589-600.	0.2	119
69	Generic Properties of Stochastic Entropy Production. <i>Physical Review Letters</i> , 2017, 119, 140604.	2.9	118
70	Opening of nucleic-acid double strands by helicases: Active versus passive opening. <i>Physical Review E</i> , 2005, 71, 011904.	0.8	117
71	Physical Mechanisms Shaping the <i>Drosophila</i> Dorsoventral Compartment Boundary. <i>Current Biology</i> , 2012, 22, 967-976.	1.8	116
72	Polarized endosome dynamics by spindle asymmetry during asymmetric cell division. <i>Nature</i> , 2015, 528, 280-285.	13.7	116

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73	XMAP215 activity sets spindle length by controlling the total mass of spindle microtubules. <i>Nature Cell Biology</i> , 2013, 15, 1116-1122.	4.6	115
74	Cell-body rocking is a dominant mechanism for flagellar synchronization in a swimming alga. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 18058-18063.	3.3	114
75	TissueMiner: A multiscale analysis toolkit to quantify how cellular processes create tissue dynamics. <i>ELife</i> , 2016, 5, .	2.8	111
76	Self-Organization of Dynein Motors Generates Meiotic Nuclear Oscillations. <i>PLoS Biology</i> , 2009, 7, e1000087.	2.6	110
77	Hydrodynamic theory for multi-component active polar gels. <i>New Journal of Physics</i> , 2007, 9, 422-422.	1.2	108
78	A Critique of the Critical Cochlea: Hopf's a Bifurcation is Better Than None. <i>Journal of Neurophysiology</i> , 2010, 104, 1219-1229.	0.9	108
79	Topology and Dynamics of the Zebrafish Segmentation Clock Core Circuit. <i>PLoS Biology</i> , 2012, 10, e1001364.	2.6	108
80	Dpp gradient formation by dynamin-dependent endocytosis: receptor trafficking and the diffusion model. <i>Development (Cambridge)</i> , 2004, 131, 4843-4856.	1.2	106
81	Dynamic Fluctuations of Semiflexible Filaments. <i>Physical Review Letters</i> , 1999, 82, 3717-3720.	2.9	103
82	Understanding morphogenetic growth control – lessons from flies. <i>Nature Reviews Molecular Cell Biology</i> , 2011, 12, 594-604.	16.1	103
83	Differential lateral and basal tension drive folding of <i>Drosophila</i> wing discs through two distinct mechanisms. <i>Nature Communications</i> , 2018, 9, 4620.	5.8	103
84	Self-organized shape dynamics of active surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 29-34.	3.3	101
85	Stress Generation and Filament Turnover during Actin Ring Constriction. <i>PLoS ONE</i> , 2007, 2, e696.	1.1	99
86	Antagonistic Self-Organizing Patterning Systems Control Maintenance and Regeneration of the Anteroposterior Axis in Planarians. <i>Developmental Cell</i> , 2017, 40, 248-263.e4.	3.1	99
87	Establishment of Global Patterns of Planar Polarity during Growth of the <i>Drosophila</i> Wing Epithelium. <i>Current Biology</i> , 2012, 22, 1296-1301.	1.8	98
88	Persistence, period and precision of autonomous cellular oscillators from the zebrafish segmentation clock. <i>ELife</i> , 2016, 5, .	2.8	98
89	Shape equations for axisymmetric vesicles: A clarification. <i>Physical Review E</i> , 1994, 49, 4728-4731.	0.8	96
90	Guiding self-organized pattern formation in cell polarity establishment. <i>Nature Physics</i> , 2019, 15, 293-300.	6.5	96

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91	Mechanics of active surfaces. <i>Physical Review E</i> , 2017, 96, 032404.	0.8	95
92	Robust Formation of Morphogen Gradients. <i>Physical Review Letters</i> , 2005, 94, 018103.	2.9	94
93	Bipedal Locomotion in Crawling Cells. <i>Biophysical Journal</i> , 2010, 98, 933-942.	0.2	94
94	Active Phase and Amplitude Fluctuations of Flagellar Beating. <i>Physical Review Letters</i> , 2014, 113, 048101.	2.9	92
95	Flagellar Synchronization Independent of Hydrodynamic Interactions. <i>Physical Review Letters</i> , 2012, 109, 138102.	2.9	91
96	Active Traveling Wave in the Cochlea. <i>Physical Review Letters</i> , 2003, 90, 158101.	2.9	87
97	The stochastic dance of circling sperm cells: sperm chemotaxis in the plane. <i>New Journal of Physics</i> , 2008, 10, 123025.	1.2	86
98	Local Increases in Mechanical Tension Shape Compartment Boundaries by Biasing Cell Intercalations. <i>Current Biology</i> , 2014, 24, 1798-1805.	1.8	85
99	Cell dynamics underlying oriented growth of the <i>Drosophila</i> wing imaginal disc. <i>Development (Cambridge)</i> , 2017, 144, 4406-4421.	1.2	84
100	Transcription organizes euchromatin via microphase separation. <i>Nature Communications</i> , 2021, 12, 1360.	5.8	83
101	Self-organization and mechanical properties of active filament bundles. <i>Physical Review E</i> , 2003, 67, 051913.	0.8	82
102	Controlling contractile instabilities in the actomyosin cortex. <i>ELife</i> , 2017, 6, .	2.8	81
103	Physical basis of two-tone interference in hearing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 9080-9085.	3.3	79
104	Statistics of Infima and Stopping Times of Entropy Production and Applications to Active Molecular Processes. <i>Physical Review X</i> , 2017, 7, .	2.8	77
105	The chirality of ciliary beats. <i>Physical Biology</i> , 2008, 5, 016003.	0.8	76
106	Enhancement of sensitivity gain and frequency tuning by coupling of active hair bundles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18669-18674.	3.3	74
107	Steering Chiral Swimmers along Noisy Helical Paths. <i>Physical Review Letters</i> , 2009, 103, 068102.	2.9	73
108	Sequence-dependent surface condensation of a pioneer transcription factor on DNA. <i>Nature Physics</i> , 2022, 18, 271-276.	6.5	73

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109	Active chiral fluids. <i>European Physical Journal E</i> , 2012, 35, 89.	0.7	72
110	Motion of RNA Polymerase along DNA: A Stochastic Model. <i>Biophysical Journal</i> , 1998, 74, 1169-1185.	0.2	70
111	A General Theoretical Framework to Infer Endosomal Network Dynamics from Quantitative Image Analysis. <i>Current Biology</i> , 2012, 22, 1381-1390.	1.8	69
112	Nonlinear dynamics of cilia and flagella. <i>Physical Review E</i> , 2009, 79, 051918.	0.8	68
113	Decision Making in the Arrow of Time. <i>Physical Review Letters</i> , 2015, 115, 250602.	2.9	68
114	Determining Physical Properties of the Cell Cortex. <i>Biophysical Journal</i> , 2016, 110, 1421-1429.	0.2	68
115	Membranes with Rotating Motors. <i>Physical Review Letters</i> , 2003, 91, 108104.	2.9	67
116	The Balance of Prickle/Spiny-Legs Isoforms Controls the Amount of Coupling between Core and Fat PCP Systems. <i>Current Biology</i> , 2014, 24, 2111-2123.	1.8	67
117	Investigating the principles of morphogen gradient formation: from tissues to cells. <i>Current Opinion in Genetics and Development</i> , 2012, 22, 527-532.	1.5	65
118	Dynamics of anisotropic tissue growth. <i>New Journal of Physics</i> , 2008, 10, 063001.	1.2	64
119	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
120	Quantitation of Regional Cerebral Blood Flow with <sup>15</sup> O-Butanol and Positron Emission Tomography in Humans. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1996, 16, 645-649.	2.4	63
121	Precision of Genetic Oscillators and Clocks. <i>Physical Review Letters</i> , 2007, 98, 228101.	2.9	62
122	Active Chiral Processes in Thin Films. <i>Physical Review Letters</i> , 2013, 110, 048103.	2.9	62
123	The Taylor-Couette motor: spontaneous flows of active polar fluids between two coaxial cylinders. <i>New Journal of Physics</i> , 2012, 14, 023001.	1.2	59
124	Wnt-regulated dynamics of positional information in zebrafish somitogenesis. <i>Development (Cambridge)</i> , 2014, 141, 1381-1391.	1.2	59
125	Triangles bridge the scales: Quantifying cellular contributions to tissue deformation. <i>Physical Review E</i> , 2017, 95, 032401.	0.8	58
126	Motion of an Adhesive Gel in a Swelling Gradient: A Mechanism for Cell Locomotion. <i>Physical Review Letters</i> , 2003, 90, 168102.	2.9	57



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127	Scaling and Regeneration of Self-Organized Patterns. <i>Physical Review Letters</i> , 2015, 114, 138101.	2.9	57
128	Body size-dependent energy storage causes Kleiber's law scaling of the metabolic rate in planarians. <i>ELife</i> , 2019, 8, .	2.8	57
129	Self-Propagating Patterns in Active Filament Bundles. <i>Physical Review Letters</i> , 2001, 87, 138101.	2.9	56
130	Filament Depolymerization by Motor Molecules. <i>Physical Review Letters</i> , 2005, 94, 108102.	2.9	56
131	Cell flow and tissue polarity patterns. <i>Current Opinion in Genetics and Development</i> , 2011, 21, 747-752.	1.5	56
132	Pulsatory Patterns in Active Fluids. <i>Physical Review Letters</i> , 2014, 112, .	2.9	56
133	Growth control by a moving morphogen gradient during <i>Drosophila</i> eye development. <i>Development (Cambridge)</i> , 2014, 141, 1884-1893.	1.2	55
134	Postsynaptic Mad Signaling at the <i>Drosophila</i> Neuromuscular Junction. <i>Current Biology</i> , 2006, 16, 625-635.	1.8	54
135	Polo-like kinase phosphorylation determines <i>Caenorhabditis elegans</i> centrosome size and density by biasing SPD-5 toward an assembly-competent conformation. <i>Biology Open</i> , 2016, 5, 1431-1440.	0.6	53
136	A Motor that Makes Its Own Track: Helicase Unwinding of DNA. <i>Physical Review Letters</i> , 2003, 91, 258103.	2.9	52
137	Collective Modes of Coupled Phase Oscillators with Delayed Coupling. <i>Physical Review Letters</i> , 2012, 108, 204101.	2.9	52
138	Conformal degeneracy and conformal diffusion of vesicles. <i>Physical Review Letters</i> , 1993, 71, 452-455.	2.9	51
139	Force generation by protein-DNA co-condensation. <i>Nature Physics</i> , 2021, 17, 1007-1012.	6.5	51
140	Independent Control of the Static and Dynamic Components of the <i>Chlamydomonas</i> Flagellar Beat. <i>Current Biology</i> , 2016, 26, 1098-1103.	1.8	50
141	Continuum Description of the Cytoskeleton: Ring Formation in the Cell Cortex. <i>Physical Review Letters</i> , 2005, 95, 258103.	2.9	49
142	Stress distributions and cell flows in a growing cell aggregate. <i>Interface Focus</i> , 2014, 4, 20140033.	1.5	49
143	The interplay between active hair bundle motility and electromotility in the cochlea. <i>Journal of the Acoustical Society of America</i> , 2010, 128, 1175-1190.	0.5	47
144	Morphogen transport in epithelia. <i>Physical Review E</i> , 2007, 75, 011901.	0.8	45

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145	Hydrodynamics of active permeating gels. <i>New Journal of Physics</i> , 2011, 13, 093027.	1.2	45
146	Physical limits of flow sensing in the left-right organizer. <i>ELife</i> , 2017, 6, .	2.8	45
147	Active elastic thin shell theory for cellular deformations. <i>New Journal of Physics</i> , 2014, 16, 065005.	1.2	44
148	Emergence of tissue shape changes from collective cell behaviours. <i>Seminars in Cell and Developmental Biology</i> , 2017, 67, 103-112.	2.3	43
149	Liquid Phase Separation Controlled by pH. <i>Biophysical Journal</i> , 2020, 119, 1590-1605.	0.2	43
150	Liquid-crystal organization of liver tissue. <i>ELife</i> , 2019, 8, .	2.8	42
151	Morphogenetic oscillations during symmetry breaking of regenerating <i>Hydra vulgaris</i> cells. <i>Europhysics Letters</i> , 2003, 64, 137-143.	0.7	41
152	Coupling a sensory hair-cell bundle to cyber clones enhances nonlinear amplification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8079-8084.	3.3	41
153	Morphogenetic degeneracies in the actomyosin cortex. <i>ELife</i> , 2018, 7, .	2.8	41
154	Molecular Motors: From Individual to Collective Behavior. <i>Progress of Theoretical Physics Supplement</i> , 1998, 130, 9-16.	0.2	40
155	Role of tensile stress in actin gels and a symmetry-breaking instability. <i>European Physical Journal E</i> , 2004, 13, 247-259.	0.7	40
156	Positioning of microtubule organizing centers by cortical pushing and pulling forces. <i>New Journal of Physics</i> , 2012, 14, 105025.	1.2	40
157	Minimal Model of Cellular Symmetry Breaking. <i>Physical Review Letters</i> , 2019, 123, 188101.	2.9	40
158	Apico-basal cell compression regulates Lamin A/C levels in epithelial tissues. <i>Nature Communications</i> , 2021, 12, 1756.	5.8	40
159	Active dynamics of tissue shear flow. <i>New Journal of Physics</i> , 2017, 19, 033006.	1.2	39
160	A hydraulic instability drives the cell death decision in the nematode germline. <i>Nature Physics</i> , 2021, 17, 920-925.	6.5	38
161	Power-law population heterogeneity governs epidemic waves. <i>PLoS ONE</i> , 2020, 15, e0239678.	1.1	37
162	The Morphology of Vesicles of Higher Topological Genus: Conformal Degeneracy and Conformal Modes. <i>Journal De Physique II</i> , 1996, 6, 1797-1824.	0.9	36

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163	Universal Critical Behavior of Noisy Coupled Oscillators. <i>Physical Review Letters</i> , 2004, 93, 175702.	2.9	35
164	Thermal and non-thermal fluctuations in active polar gels. <i>European Physical Journal E</i> , 2008, 27, 149-60.	0.7	35
165	Transduction channelsâ€™ gating can control friction on vibrating hair-cell bundles in the ear. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7185-7190.	3.3	35
166	BMP Signaling Gradient Scaling in the Zebrafish Pectoral Fin. <i>Cell Reports</i> , 2020, 30, 4292-4302.e7.	2.9	35
167	Supercoiling transitions of closed DNA. <i>Physical Review E</i> , 1994, 49, 2429-2435.	0.8	34
168	Detachment of molecular motors under tangential loading. <i>Europhysics Letters</i> , 2001, 56, 603-609.	0.7	34
169	Continuum theory of contractile fibres. <i>Europhysics Letters</i> , 2003, 64, 716-722.	0.7	34
170	Collective Behavior of Antagonistically Acting Kinesin-1 Motors. <i>Physical Review Letters</i> , 2010, 105, 128103.	2.9	34
171	Morphogen gradient scaling by recycling of intracellular Dpp. <i>Nature</i> , 2022, 602, 287-293.	13.7	33
172	General theory for the mechanics of confined microtubule asters. <i>New Journal of Physics</i> , 2014, 16, 013018.	1.2	32
173	Quantification of growth asymmetries in developing epithelia. <i>European Physical Journal E</i> , 2009, 30, 93-99.	0.7	31
174	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
175	Self-organized patterning of cell morphology via mechanosensitive feedback. <i>ELife</i> , 2021, 10, .	2.8	31
176	Synchronization Dynamics in the Presence of Coupling Delays and Phase Shifts. <i>Physical Review Letters</i> , 2014, 112, 174101.	2.9	30
177	Curvature regulation of the ciliary beat through axonemal twist. <i>Physical Review E</i> , 2016, 94, 042426.	0.8	30
178	Continuum theory of gene expression waves during vertebrate segmentation. <i>New Journal of Physics</i> , 2015, 17, 093042.	1.2	29
179	Autonomous Chemical Oscillator Circuit Based on Bidirectional Chemicalâ€™Microfluidic Coupling. <i>Advanced Materials Technologies</i> , 2016, 1, 1600005.	3.0	29
180	Droplet ripening in concentration gradients. <i>New Journal of Physics</i> , 2017, 19, 053021.	1.2	29

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