

Lakshminarayanan Mahadevan

List of Publications by Year in descending order

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331
papers

31,512
citations

4370

86
h-index

5101

166
g-index

363
all docs

363
docs citations

363
times ranked

29363
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic 4D printing. Nature Materials, 2016, 15, 413-418.	13.3	2,268
2	Geometry and Physics of Wrinkling. Physical Review Letters, 2003, 90, 074302.	2.9	1,092
3	Elastic Behavior of Cross-Linked and Bundled Actin Networks. Science, 2004, 304, 1301-1305.	6.0	1,090
4	How the Venus flytrap snaps. Nature, 2005, 433, 421-425.	13.7	879
5	Nested self-similar wrinkling patterns in skins. Nature Materials, 2005, 4, 293-297.	13.3	710
6	Microtubules can bear enhanced compressive loads in living cells because of lateral reinforcement. Journal of Cell Biology, 2006, 173, 733-741.	2.3	585
7	Non-equilibration of hydrostatic pressure in blebbing cells. Nature, 2005, 435, 365-369.	13.7	547
8	Phototactic guidance of a tissue-engineered soft-robotic ray. Science, 2016, 353, 158-162.	6.0	534
9	The cytoplasm of living cells behaves as a poroelastic material. Nature Materials, 2013, 12, 253-261.	13.3	527
10	Adaptive fluid-infused porous films with tunable transparency and wettability. Nature Materials, 2013, 12, 529-534.	13.3	481
11	Villification: How the Gut Gets Its Villi. Science, 2013, 342, 212-218.	6.0	454
12	On the growth and form of cortical convolutions. Nature Physics, 2016, 12, 588-593.	6.5	436
13	On the growth and form of the gut. Nature, 2011, 476, 57-62.	13.7	430
14	Life and Times of a Cellular Bleb. Biophysical Journal, 2008, 94, 1836-1853.	0.2	393
15	The "Cheerios effect". American Journal of Physics, 2005, 73, 817-825.	0.3	379
16	Self-Organization of a Mesoscale Bristle into Ordered, Hierarchical Helical Assemblies. Science, 2009, 323, 237-240.	6.0	368
17	Hygromorphs: from pine cones to biomimetic bilayers. Journal of the Royal Society Interface, 2009, 6, 951-957.	1.5	366
18	Wrinkling of an elastic sheet under tension. Nature, 2002, 419, 579-580.	13.7	350

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19	Programming curvature using origami tessellations. <i>Nature Materials</i> , 2016, 15, 583-588.	13.3	343
20	Quantifying cell-generated mechanical forces within living embryonic tissues. <i>Nature Methods</i> , 2014, 11, 183-189.	9.0	336
21	Cyrification from constrained cortical expansion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12667-12672.	3.3	332
22	How the Cucumber Tendril Coils and Overwinds. <i>Science</i> , 2012, 337, 1087-1091.	6.0	326
23	Strain-Induced Alignment in Collagen Gels. <i>PLoS ONE</i> , 2009, 4, e5902.	1.1	323
24	Rationally Designed Complex, Hierarchical Microarchitectures. <i>Science</i> , 2013, 340, 832-837.	6.0	308
25	Geometric Mechanics of Periodic Pleated Origami. <i>Physical Review Letters</i> , 2013, 110, 215501.	2.9	302
26	Physical Limits and Design Principles for Plant and Fungal Movements. <i>Science</i> , 2005, 308, 1308-1310.	6.0	278
27	Onset of Buckling in Drying Droplets of Colloidal Suspensions. <i>Physical Review Letters</i> , 2005, 94, 018302.	2.9	274
28	A Quantitative Analysis of Contractility in Active Cytoskeletal Protein Networks. <i>Biophysical Journal</i> , 2008, 94, 3126-3136.	0.2	274
29	Photosynthetic artificial organelles sustain and control ATP-dependent reactions in a protocellular system. <i>Nature Biotechnology</i> , 2018, 36, 530-535.	9.4	271
30	Shape-shifting structured lattices via multimaterial 4D printing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 20856-20862.	3.3	257
31	Fluid-flow-induced flutter of a flag. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1829-1834.	3.3	250
32	The Universal Dynamics of Cell Spreading. <i>Current Biology</i> , 2007, 17, 694-699.	1.8	249
33	Tissue tectonics: morphogenetic strain rates, cell shape change and intercalation. <i>Nature Methods</i> , 2009, 6, 458-464.	9.0	241
34	Motility Powered by Supramolecular Springs and Ratchets. <i>Science</i> , 2000, 288, 95-99.	6.0	239
35	Signal processing by the HOG MAP kinase pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7165-7170.	3.3	236
36	Bending Gradients: How the Intestinal Stem Cell Gets Its Home. <i>Cell</i> , 2015, 161, 569-580.	13.5	234

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37	Multifunctional ferrofluid-infused surfaces with reconfigurable multiscale topography. <i>Nature</i> , 2018, 559, 77-82.	13.7	229
38	Cell shape changes indicate a role for extrinsic tensile forces in <i>Drosophila</i> germ-band extension. <i>Nature Cell Biology</i> , 2009, 11, 859-864.	4.6	227
39	Self-Organized Origami. <i>Science</i> , 2005, 307, 1740-1740.	6.0	220
40	Scaling macroscopic aquatic locomotion. <i>Nature Physics</i> , 2014, 10, 758-761.	6.5	218
41	Hydraulic control of mammalian embryo size and cell fate. <i>Nature</i> , 2019, 571, 112-116.	13.7	216
42	Elasticity of an interfacial particle raft. <i>Europhysics Letters</i> , 2004, 68, 212-218.	0.7	214
43	The shape of a long leaf. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22049-22054.	3.3	201
44	Growth, geometry, and mechanics of a blooming lily. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 5516-5521.	3.3	185
45	Unfolding the Sulcus. <i>Physical Review Letters</i> , 2011, 106, 105702.	2.9	184
46	Programming shape using kirigami tessellations. <i>Nature Materials</i> , 2019, 18, 999-1004.	13.3	183
47	Elasticity of Floppy and Stiff Random Networks. <i>Physical Review Letters</i> , 2008, 101, 215501.	2.9	182
48	Peeling from a biomimetically patterned thin elastic film. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2004, 460, 2725-2735.	1.0	178
49	Relating microstructure to rheology of a bundled and cross-linked F-actin network in vitro. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 9636-9641.	3.3	178
50	Geometry, Mechanics, and Electronics of Singular Structures and Wrinkles in Graphene. <i>Physical Review Letters</i> , 2010, 105, 156603.	2.9	177
51	Conical dislocations in crumpling. <i>Nature</i> , 1999, 401, 46-49.	13.7	175
52	Kinks, rings, and rackets in filamentous structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12141-12146.	3.3	171
53	Sickle cell vasoocclusion and rescue in a microfluidic device. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20496-20500.	3.3	166
54	Bacillus spores as building blocks for stimuli-responsive materials and nanogenerators. <i>Nature Nanotechnology</i> , 2014, 9, 137-141.	15.6	166

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55	Avian egg shape: Form, function, and evolution. <i>Science</i> , 2017, 356, 1249-1254.	6.0	166
56	A tissue-engineered scale model of the heart ventricle. <i>Nature Biomedical Engineering</i> , 2018, 2, 930-941.	11.6	162
57	Optimal vein density in artificial and real leaves. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 9140-9144.	3.3	158
58	Conical Surfaces and Crescent Singularities in Crumpled Sheets. <i>Physical Review Letters</i> , 1998, 80, 2358-2361.	2.9	157
59	Scaling of F-Actin Network Rheology to Probe Single Filament Elasticity and Dynamics. <i>Physical Review Letters</i> , 2004, 93, 188102.	2.9	155
60	Photoinduced Deformations of Beams, Plates, and Films. <i>Physical Review Letters</i> , 2004, 92, 134302.	2.9	153
61	Experimental study of coating flows in a partially-filled horizontally Rotating cylinder. <i>Experiments in Fluids</i> , 1997, 23, 1-13.	1.1	150
62	Dissolution-driven convection in a Hele-Shaw cell. <i>Physics of Fluids</i> , 2013, 25, .	1.6	133
63	Implications of a poroelastic cytoplasm for the dynamics of animal cell shape. <i>Seminars in Cell and Developmental Biology</i> , 2008, 19, 215-223.	2.3	132
64	Magnetic self-assembly of three-dimensional surfaces from planar sheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 3924-3929.	3.3	131
65	Forward and inverse problems in the mechanics of soft filaments. <i>Royal Society Open Science</i> , 2018, 5, 171628.	1.1	129
66	Dynamics of Fracture in Drying Suspensions. <i>Langmuir</i> , 2006, 22, 7144-7147.	1.6	126
67	How kelp produce blade shapes suited to different flow regimes: A new wrinkle. <i>Integrative and Comparative Biology</i> , 2008, 48, 834-851.	0.9	125
68	Flip-Flop-Induced Relaxation of Bending Energy: Implications for Membrane Remodeling. <i>Biophysical Journal</i> , 2009, 97, 3113-3122.	0.2	125
69	New directions in mechanics. <i>Mechanics of Materials</i> , 2005, 37, 231-259.	1.7	118
70	Capillary rise between elastic sheets. <i>Journal of Fluid Mechanics</i> , 2006, 548, 141.	1.4	118
71	Excitable Dynamics and Yap-Dependent Mechanical Cues Drive the Segmentation Clock. <i>Cell</i> , 2017, 171, 668-682.e11.	13.5	117
72	Dynamics of Chromatin Decondensation Reveals the Structural Integrity of a Mechanically Prestressed Nucleus. <i>Biophysical Journal</i> , 2008, 95, 3028-3035.	0.2	116

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73	Soft lubrication: The elastohydrodynamics of nonconforming and conforming contacts. <i>Physics of Fluids</i> , 2005, 17, 092101.	1.6	115
74	Localized and extended deformations of elastic shells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7913-7918.	3.3	109
75	Biomimetic ratcheting motion of a soft, slender, sessile gel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 23-26.	3.3	108
76	Nonequilibrium scale selection mechanism for columnar jointing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 387-392.	3.3	108
77	Geometric Mechanics of Curved Crease Origami. <i>Physical Review Letters</i> , 2012, 109, 114301.	2.9	108
78	A Biophysical Indicator of Vaso-occlusive Risk in Sickle Cell Disease. <i>Science Translational Medicine</i> , 2012, 4, 123ra26.	5.8	103
79	Drops can bounce from perfectly hydrophilic surfaces. <i>Europhysics Letters</i> , 2014, 108, 24001.	0.7	102
80	A simple model for nanofiber formation by rotary jet-spinning. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	101
81	Gravitational Collapse of Colloidal Gels. <i>Physical Review Letters</i> , 2005, 94, 218302.	2.9	100
82	Excitable Patterns in Active Nematics. <i>Physical Review Letters</i> , 2011, 106, 218101.	2.9	100
83	Soft Lubrication. <i>Physical Review Letters</i> , 2004, 92, 245509.	2.9	98
84	Mechanosensation and mechanical load modulate the locomotory gait of swimming <i>C. elegans</i> . <i>Journal of Experimental Biology</i> , 2007, 210, 2383-2389.	0.8	98
85	Growth patterns for shape-shifting elastic bilayers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11597-11602.	3.3	96
86	Genetic and Mechanical Regulation of Intestinal Smooth Muscle Development. <i>Cell</i> , 2019, 179, 90-105.e21.	13.5	95
87	Termite mounds harness diurnal temperature oscillations for ventilation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11589-11593.	3.3	94
88	Swarming, swirling and stasis in sequestered bristle-bots. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2013, 469, 20120637.	1.0	92
89	Fluid "rope trick"™ investigated. <i>Nature</i> , 1998, 392, 140-140.	13.7	91
90	Mechanics of Interfacial Composite Materials. <i>Langmuir</i> , 2006, 22, 10204-10208.	1.6	91

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91	Flagellar dynamics of a connected chain of active, polar, Brownian particles. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20130884.	1.5	91
92	Shape and Dynamics of Tip-Growing Cells. <i>Current Biology</i> , 2009, 19, 2102-2107.	1.8	90
93	Biased migration of confined neutrophil-like cells in asymmetric hydraulic environments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 21006-21011.	3.3	89
94	The Force-Velocity Relationship for the Actin-Based Motility of <i>Listeria monocytogenes</i> . <i>Current Biology</i> , 2003, 13, 329-332.	1.8	88
95	Axial instability of a free-surface front in a partially filled horizontal rotating cylinder. <i>Physics of Fluids</i> , 1999, 11, 97-106.	1.6	87
96	Confined developable elastic surfaces: cylinders, cones and the Elastica. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005, 461, 671-700.	1.0	87
97	Nonlinear mechanics of soft fibrous networks. <i>Journal of the Royal Society Interface</i> , 2007, 4, 99-106.	1.5	87
98	Solid friction between soft filaments. <i>Nature Materials</i> , 2015, 14, 583-588.	13.3	87
99	Animal cell hydraulics. <i>Journal of Cell Science</i> , 2009, 122, 3233-3241.	1.2	86
100	Nanopottery: Coiling of Electrospun Polymer Nanofibers. <i>Nano Letters</i> , 2010, 10, 2138-2140.	4.5	85
101	Limbless undulatory propulsion on land. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 3179-3184.	3.3	84
102	Surface Sulci in Squeezed Soft Solids. <i>Physical Review Letters</i> , 2013, 110, 024302.	2.9	80
103	Non-stick water. <i>Nature</i> , 2001, 411, 895-896.	13.7	79
104	Physiological and pathological population dynamics of circulating human red blood cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20587-20592.	3.3	79
105	Peeling, Healing, and Bursting in a Lubricated Elastic Sheet. <i>Physical Review Letters</i> , 2004, 93, 137802.	2.9	78
106	The Föppl-von Kármán equations for plates with incompatible strains. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 402-426.	1.0	77
107	Evolution of spur-length diversity in <i>Aquilegia</i> petals is achieved solely through cell-shape anisotropy. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 1640-1645.	1.2	76
108	Banding, excitability and chaos in active nematic suspensions. <i>Nonlinearity</i> , 2012, 25, 2245-2269.	0.6	76

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109	Elastic Rod Model of a DNA Loop in the Lac Operon. <i>Physical Review Letters</i> , 1999, 83, 4900-4903.	2.9	75
110	Twisting graphene nanoribbons into carbon nanotubes. <i>Physical Review B</i> , 2012, 85, .	1.1	75
111	Self-sustained lift and low friction via soft lubrication. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5847-5849.	3.3	74
112	BMP signaling controls buckling forces to modulate looping morphogenesis of the gut. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2277-2282.	3.3	74
113	Measuring the Work of Adhesion between a Soft Confined Film and a Flexible Plate. <i>Langmuir</i> , 2005, 21, 1277-1281.	1.6	71
114	Lift-Off Instability During the Impact of a Drop on a Solid Surface. <i>Physical Review Letters</i> , 2014, 112, 134501.	2.9	71
115	Multiscale Method for Simulating Protein-DNA Complexes. <i>Multiscale Modeling and Simulation</i> , 2004, 2, 527-553.	0.6	68
116	The elements of draping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 1806-1810.	3.3	66
117	Controlled growth and form of precipitating microsculptures. <i>Science</i> , 2017, 355, 1395-1399.	6.0	66
118	Sensorimotor control during isothermal tracking in <i>Caenorhabditis elegans</i> . <i>Journal of Experimental Biology</i> , 2006, 209, 4652-4662.	0.8	65
119	Directional memory arises from long-lived cytoskeletal asymmetries in polarized chemotactic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1267-1272.	3.3	65
120	Mechanical Coupling Coordinates the Co-elongation of Axial and Paraxial Tissues in Avian Embryos. <i>Developmental Cell</i> , 2020, 55, 354-366.e5.	3.1	65
121	Control of Shape and Size of Nanopillar Assembly by Adhesion-Mediated Elastocapillary Interaction. <i>ACS Nano</i> , 2010, 4, 6323-6331.	7.3	63
122	Collective mechanical adaptation of honeybee swarms. <i>Nature Physics</i> , 2018, 14, 1193-1198.	6.5	62
123	How wet paper curls. <i>Europhysics Letters</i> , 2011, 93, 54001.	0.7	61
124	The dynamics of sperm cooperation in a competitive environment. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20140296.	1.2	60
125	Gait and speed selection in slender inertial swimmers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3874-3879.	3.3	58
126	Bending Stiffness of a Crystalline Actin Bundle. <i>Journal of Molecular Biology</i> , 2004, 337, 255-261.	2.0	57

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127	Rippling Instability of a Collapsing Bubble. <i>Science</i> , 2000, 287, 1468-1471.	6.0	54
128	Recovery of locomotion after injury in <i>Drosophila</i> depends on proprioception. <i>Journal of Experimental Biology</i> , 2016, 219, 1760-71.	0.8	53
129	Folding of viscous sheets and filaments. <i>Europhysics Letters</i> , 2000, 52, 532-538.	0.7	52
130	Scale and Nature of Sulcification Patterns. <i>Physical Review Letters</i> , 2012, 109, 025701.	2.9	52
131	Neuromimetic Circuits with Synaptic Devices Based on Strongly Correlated Electron Systems. <i>Physical Review Applied</i> , 2014, 2, .	1.5	52
132	Organ size control via hydraulically gated oscillations. <i>Development (Cambridge)</i> , 2017, 144, 4422-4427.	1.2	52
133	Self-Excited Motions of Volatile Drops on Swellable Sheets. <i>Physical Review Letters</i> , 2020, 124, 258002.	2.9	52
134	Hydrodynamics of Writing with Ink. <i>Physical Review Letters</i> , 2011, 107, 264501.	2.9	51
135	Hydrodynamical models for the chaotic dripping faucet. <i>Journal of Fluid Mechanics</i> , 2005, 526, 1-17.	1.4	50
136	Structural Basis for Cooperative DNA Binding by CAP and Lac Repressor. <i>Structure</i> , 2004, 12, 123-132.	1.6	49
137	Statistical Dynamics of Flowing Red Blood Cells by Morphological Image Processing. <i>PLoS Computational Biology</i> , 2009, 5, e1000288.	1.5	48
138	Controlled gliding and perching through deep-reinforcement-learning. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	48
139	Cooperative Adhesion and Friction of Compliant Nanohairs. <i>Nano Letters</i> , 2010, 10, 4509-4513.	4.5	47
140	Elastohydrodynamics of a sliding, spinning and sedimenting cylinder near a soft wall. <i>Journal of Fluid Mechanics</i> , 2015, 779, 181-196.	1.4	47
141	Power-Limited Contraction Dynamics of <i>Vorticella convallaria</i> : An Ultrafast Biological Spring. <i>Biophysical Journal</i> , 2008, 94, 265-272.	0.2	46
142	Why subduction zones are curved. <i>Tectonics</i> , 2010, 29, n/a-n/a.	1.3	46
143	On the growth and form of shoots. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170001.	1.5	46
144	Solar-powered ventilation of African termite mounds. <i>Journal of Experimental Biology</i> , 2017, 220, 3260-3269.	0.8	46

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145	Size control of the inner ear via hydraulic feedback. <i>ELife</i> , 2019, 8, .	2.8	46
146	Evaporation-driven ring and film deposition from colloidal droplets. <i>Journal of Fluid Mechanics</i> , 2015, 781, .	1.4	45
147	A multiphase theory for spreading microbial swarms and films. <i>ELife</i> , 2019, 8, .	2.8	45
148	Digital instability of a confined elastic meniscus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12545-12548.	3.3	44
149	Controlling the Orientation and Synaptic Differentiation of Myotubes with Micropatterned Substrates. <i>Biophysical Journal</i> , 2009, 97, 2771-2779.	0.2	43
150	Density-Gradient-Free Microfluidic Centrifugation for Analytical and Preparative Separation of Nanoparticles. <i>Nano Letters</i> , 2014, 14, 2365-2371.	4.5	43
151	Macroscopic Magnetic Frustration. <i>Physical Review Letters</i> , 2012, 109, 257203.	2.9	42
152	Colliding Waves in a Model Excitable Medium: Preservation, Annihilation, and Bifurcation. <i>Physical Review Letters</i> , 1997, 79, 2803-2806.	2.9	41
153	Superficial Wrinkles in Stretched, Drying Gelatin Films. <i>Langmuir</i> , 2006, 22, 3622-3626.	1.6	41
154	Elastohydrodynamics of wet bristles, carpets and brushes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 1665-1685.	1.0	40
155	Elastic Platonic Shells. <i>Physical Review Letters</i> , 2013, 111, 177801.	2.9	40
156	Four-phase merging in sessile compound drops. <i>Journal of Fluid Mechanics</i> , 2002, 451, 411-420.	1.4	39
157	Statistical Mechanics of Developable Ribbons. <i>Physical Review Letters</i> , 2010, 104, 238104.	2.9	39
158	Molecular control of macroscopic forces drives formation of the vertebrate hindgut. <i>Nature</i> , 2019, 565, 480-484.	13.7	39
159	Crack-front instability in a confined elastic film. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2006, 462, 3233-3251.	1.0	38
160	Balancing on tightropes and slacklines. <i>Journal of the Royal Society Interface</i> , 2012, 9, 2097-2108.	1.5	38
161	Topology, Geometry, and Mechanics of Strongly Stretched and Twisted Filaments: Solenoids, Plectonemes, and Artificial Muscle Fibers. <i>Physical Review Letters</i> , 2019, 123, 208003.	2.9	38
162	Solenoids and Plectonemes in Stretched and Twisted Elastomeric Filaments. <i>Physical Review Letters</i> , 2005, 95, 057801.	2.9	37

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163	Rotation of an immersed cylinder sliding near a thin elastic coating. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	37
164	Spatial control of irreversible protein aggregation. <i>ELife</i> , 2019, 8, .	2.8	37
165	Morphogenesis of termite mounds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3379-3384.	3.3	36
166	Physical basis for the adaptive flexibility of <i>Bacillus</i> spore coats. <i>Journal of the Royal Society Interface</i> , 2012, 9, 3156-3160.	1.5	35
167	How Things Get Stuck: Kinetics, Elastohydrodynamics, and Soft Adhesion. <i>Physical Review Letters</i> , 2012, 108, 226104.	2.9	35
168	Microtubules soften due to cross-sectional flattening. <i>ELife</i> , 2018, 7, .	2.8	35
169	Slicing Softly with Shear. <i>Physical Review Letters</i> , 2012, 109, 244301.	2.9	34
170	Aging in complex interdependency networks. <i>Physical Review E</i> , 2014, 89, 022811.	0.8	34
171	The viscous catenary. <i>Journal of Fluid Mechanics</i> , 2003, 478, 71-80.	1.4	33
172	Crack Street: The Cycloidal Wake of a Cylinder Tearing through a Thin Sheet. <i>Physical Review Letters</i> , 2003, 91, 215507.	2.9	33
173	Powerful curves. <i>Nature</i> , 2005, 435, 895-897.	13.7	32
174	Dynamics of Surfactant-Driven Fracture of Particle Rafts. <i>Physical Review Letters</i> , 2006, 96, 178301.	2.9	32
175	Elastic configurations of self-supported oxide membranes for fuel cells. <i>Journal of Power Sources</i> , 2013, 222, 359-366.	4.0	32
176	Elastic instability-mediated actuation by a supra-molecular polymer. <i>Nature Physics</i> , 2016, 12, 926-930.	6.5	32
177	Dynamics of poroelastic filaments. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2004, 460, 1995-2020.	1.0	31
178	Mechanics and statistics of the worm-like chain. <i>American Journal of Physics</i> , 2018, 86, 86-94.	0.3	31
179	Biophysical principles of choanoflagellate self-organization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 1303-1311.	3.3	31
180	Multi-stability of free spontaneously curved anisotropic strips. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 511-530.	1.0	30

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