Lakshminarayanan Mahadevan

List of Publications by Year in Descending Order

326 papers	24,540 citations	81 h-index	150 g-index
363 ext. papers	28,369 ext. citations	9.5 avg, IF	7.39 L-index

#	Paper	IF	Citations
326	Euclid's Random Walk: Developmental Changes in the Use of Simulation for Geometric Reasoning.. *Cognitive Science*, **2022**, 46, e13070	2.2	0
325	A buckling-sheet ring oscillator for electronics-free, multimodal locomotion.. *Science Robotics*, **2022**, 7, eabg5812	18.6	4
324	Geometric control of topological dynamics in a singing saw.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2117241119	11.5	
323	Totimorphic assemblies from neutrally stable units. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
322	The cusp of an apple. *Nature Physics*, **2021**, 17, 1125-1129	16.2	0
321	Compact reconfigurable kirigami. *Physical Review Research*, **2021**, 3,	3.9	8
320	Puckering and wrinkling in a growing composite ring. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2021**, 477,	2.4	1
319	An additive algorithm for origami design. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	7
318	Self-organized biotectonics of termite nests. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	2
317	Models of benthic bipedalism. *Journal of the Royal Society Interface*, **2021**, 18, 20200701	4.1	1
316	Static adhesion hysteresis in elastic structures. *Soft Matter*, **2021**, 17, 2704-2710	3.6	1
315	Elastic-instability-enabled locomotion. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
314	Wallpaper group kirigami. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2021**, 477, 20210161	2.4	4
313	Feedback control of protein aggregation. *Journal of Chemical Physics*, **2021**, 155, 064102	3.9	0
312	Genetic architecture of floral traits in bee- and hummingbird-pollinated sister species of Aquilegia (columbine). *Evolution; International Journal of Organic Evolution*, **2021**, 75, 2197-2216	3.8	0
311	Instabilities and patterns in a submerged jelling jet. *Soft Matter*, **2021**, 17, 9745-9754	3.6	0
310	Mechanical Coupling Coordinates the Co-elongation of Axial and Paraxial Tissues in Avian Embryos. *Developmental Cell*, **2020**, 55, 354-366.e5	10.2	22

309	Dynamic morphoskeletons in development. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 11444-11449	11.5	7
308	Early warning signals in motion inference. *PLoS Computational Biology*, **2020**, 16, e1007821	5	
307	Rotation of a submerged finite cylinder moving down a soft incline. *Soft Matter*, **2020**, 16, 4000-4007	3.6	3
306	Self-Excited Motions of Volatile Drops on Swellable Sheets. *Physical Review Letters*, **2020**, 124, 258002	7.4	21
305	Deterministic and stochastic control of kirigami topology. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 4511-4517	11.5	10
304	Biophysical principles of choanoflagellate self-organization. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1303-1311	11.5	15
303	Mechanics and kinetics of dynamic instability. *ELife*, **2020**, 9,	8.9	8
302	Control of connectivity and rigidity in prismatic assemblies. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2020**, 476, 20200485	2.4	2
301	Poisson□ ratio and residual strain of freestanding ultra-thin films. *Journal of the Mechanics and Physics of Solids*, **2020**, 137, 103821	5	3
300	Flow-Driven Branching in a Frangible Porous Medium. *Physical Review Letters*, **2020**, 125, 158002	7.4	5
299	Optimal control of aging in complex networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 20404-20410	11.5	4
298	Elastohydrodynamic Scaling Law for Heart Rates. *Physical Review Letters*, **2020**, 125, 058102	7.4	1
297	Suspension Jams in a Leaky Microfluidic Channel. *Physical Review Letters*, **2020**, 125, 044501	7.4	1
296	Mechanical basis for fibrillar bundle morphology. *Soft Matter*, **2020**, 16, 9306-9318	3.6	1
295	Coordinated crawling via reinforcement learning. *Journal of the Royal Society Interface*, **2020**, 17, 20200198	4.8	2
294	Early warning signals in motion inference **2020**, 16, e1007821		
293	Early warning signals in motion inference **2020**, 16, e1007821		
292	Early warning signals in motion inference **2020**, 16, e1007821		

291	Early warning signals in motion inference **2020**, 16, e1007821		
290	Early warning signals in motion inference **2020**, 16, e1007821		
289	Early warning signals in motion inference **2020**, 16, e1007821		
288	Geometric localization in supported elastic struts. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2019**, 475, 20190370	2.4	4
287	Genetic and Mechanical Regulation of Intestinal Smooth Muscle Development. *Cell*, **2019**, 179, 90-105.e21	36.2	44
286	Shape-shifting structured lattices via multimaterial 4D printing. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 20856-20862	11.5	138
285	Hydraulic control of mammalian embryo size and cell fate. *Nature*, **2019**, 571, 112-116	50.4	111
284	Collective ventilation in honeybee nests. *Journal of the Royal Society Interface*, **2019**, 16, 20180561	4.1	12
283	Rigidity percolation and geometric information in floppy origami. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 8119-8124	11.5	7
282	Morphogenesis of termite mounds. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3379-3384	11.5	24
281	The effect of step size on straight-line orientation. *Journal of the Royal Society Interface*, **2019**, 16, 20190181	4.1	6
280	Programming shape using kirigami tessellations. *Nature Materials*, **2019**, 18, 999-1004	27	100
279	Evolution of avian egg shape: underlying mechanisms and the importance of taxonomic scale. *Ibis*, **2019**, 161, 922-925	1.9	12
278	Spatio-temporal integration in plant tropisms. *Journal of the Royal Society Interface*, **2019**, 16, 20190038	4.1	13
277	Dynamics of Growth and Form in Prebiotic Vesicles. *Physical Review Letters*, **2019**, 123, 038102	7.4	11
276	Optimal control strategies for inhibition of protein aggregation. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 14593-14598	11.5	7
275	Random sequential adsorption of spheres on a cylinder. *Europhysics Letters*, **2019**, 127, 38004	1.6	3
274	Topology, Geometry, and Mechanics of Strongly Stretched and Twisted Filaments: Solenoids, Plectonemes, and Artificial Muscle Fibers. *Physical Review Letters*, **2019**, 123, 208003	7.4	18

273	Controlled gliding and perching through deep-reinforcement-learning. *Physical Review Fluids*, **2019**, 4,	2.8	27
272	Size control of the inner ear via hydraulic feedback. *ELife*, **2019**, 8,	8.9	23
271	Spatial control of irreversible protein aggregation. *ELife*, **2019**, 8,	8.9	16
270	A multiphase theory for spreading microbial swarms and films. *ELife*, **2019**, 8,	8.9	17
269	Computational analysis of size, shape and structure of insect wings. *Biology Open*, **2019**, 8,	2.2	13
268	Molecular control of macroscopic forces drives formation of the vertebrate hindgut. *Nature*, **2019**, 565, 480-484	50.4	15
267	Competing failure modes in finite adhesive pads. *Soft Matter*, **2018**, 14, 1771-1779	3.6	7
266	Mechanics and statistics of the worm-like chain. *American Journal of Physics*, **2018**, 86, 86-94	0.7	16
265	Topology, Geometry, and Mechanics of Z-Plasty. *Physical Review Letters*, **2018**, 120, 068101	7.4	4
264	A tissue-engineered scale model of the heart ventricle. *Nature Biomedical Engineering*, **2018**, 2, 930-941	19	103
263	Microtubules soften due to cross-sectional flattening. *ELife*, **2018**, 7,	8.9	29
262	Self-Assembly-Mediated Release of Peptide Nanoparticles through Jets Across Microdroplet Interfaces. *ACS Applied Materials & Interfaces*, **2018**, 10, 27578-27583	9.5	11
261	Differential Activity-Driven Instabilities in Biphasic Active Matter. *Physical Review Letters*, **2018**, 120, 248003	7.4	7
260	Forward and inverse problems in the mechanics of soft filaments. *Royal Society Open Science*, **2018**, 5, 171628	3.3	58
259	Predicting object shape and curvature judgments with a new parameterization of shape. *Journal of Vision*, **2018**, 18, 422	0.4	
258	Mechanics of biomimetic 4D printed structures. *Soft Matter*, **2018**, 14, 8771-8779	3.6	13
257	Localized patterns in crushed conical shells. *Europhysics Letters*, **2018**, 124, 14005	1.6	1
256	Planar morphometrics using Teichmller maps. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2018**, 474, 20170905	2.4	10

255	The statistical shape of geometric reasoning. *Scientific Reports*, **2018**, 8, 12906	4.9	3
254	Collective mechanical adaptation of honeybee swarms. *Nature Physics*, **2018**, 14, 1193-1198	16.2	30
253	Meniscus instabilities in thin elastic layers. *Soft Matter*, **2018**, 14, 7680-7689	3.6	5
252	Generalized Erdős numbers for network analysis. *Royal Society Open Science*, **2018**, 5, 172281	3.3	
251	Photosynthetic artificial organelles sustain and control ATP-dependent reactions in a protocellular system. *Nature Biotechnology*, **2018**, 36, 530-535	44.5	163
250	Reprogrammable Braille on an elastic shell. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 7509-7514	11.5	14
249	Multifunctional ferrofluid-infused surfaces with reconfigurable multiscale topography. *Nature*, **2018**, 559, 77-82	50.4	146
248	Grasping with a soft glove: intrinsic impedance control in pneumatic actuators. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	16
247	BMP signaling controls buckling forces to modulate looping morphogenesis of the gut. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 2277-2282	11.5	49
246	Controlling the Roughness of Langmuir-Blodgett Monolayers. *Journal of Physical Chemistry B*, **2017**, 121, 5078-5085	3.4	5
245	Optimal strategies for throwing accurately. *Royal Society Open Science*, **2017**, 4, 170136	3.3	12
244	Avian egg shape: Form, function, and evolution. *Science*, **2017**, 356, 1249-1254	33.3	93
243	On the growth and form of shoots. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	26
242	Controlled growth and form of precipitating microsculptures. *Science*, **2017**, 355, 1395-1399	33.3	55
241	Excitable Dynamics and Yap-Dependent Mechanical Cues Drive the Segmentation Clock. *Cell*, **2017**, 171, 668-682.e11	56.2	75
240	Growth patterns for shape-shifting elastic bilayers. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 11597-11602	11.5	57
239	Solar-powered ventilation of African termite mounds. *Journal of Experimental Biology*, **2017**, 220, 3260-3269	3	32
238	Controllable biomimetic birdsong. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	1

237	Organ size control via hydraulically gated oscillations. *Development (Cambridge)*, **2017**, 144, 4422-4427	6.6	32
236	Rotation of an immersed cylinder sliding near a thin elastic coating. *Physical Review Fluids*, **2017**, 2,	2.8	27
235	Active elastohydrodynamics of vesicles in narrow blind constrictions. *Physical Review Fluids*, **2017**, 2,	2.8	11
234	Spontaneous exfoliation of a drying gel. *Soft Matter*, **2016**, 12, 7855-7862	3.6	6
233	Optimal switching between geocentric and egocentric strategies in navigation. *Royal Society Open Science*, **2016**, 3, 160128	3.3	5
232	Biomimetic 4D printing. *Nature Materials*, **2016**, 15, 413-8	27	1682
231	Programming curvature using origami tessellations. *Nature Materials*, **2016**, 15, 583-8	27	248
230	Directional memory arises from long-lived cytoskeletal asymmetries in polarized chemotactic cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 1267-72	11.5	47
229	Recovery of locomotion after injury in Drosophila melanogaster depends on proprioception. *Journal of Experimental Biology*, **2016**, 219, 1760-71	3	34
228	On the growth and form of cortical convolutions. *Nature Physics*, **2016**, 12, 588-593	16.2	312
227	A geometric model for the periodic undulation of a confined adhesive crack. *Soft Matter*, **2016**, 12, 1778-87	3.6	2
226	Pressure-driven occlusive flow of a confined red blood cell. *Soft Matter*, **2016**, 12, 562-73	3.6	18
225	Elastic instability-mediated actuation by a supra-molecular polymer. *Nature Physics*, **2016**, 12, 926-930	16.2	31
224	Phototactic guidance of a tissue-engineered soft-robotic ray. *Science*, **2016**, 353, 158-62	33.3	371
223	Bending and buckling of wet paper. *Physics of Fluids*, **2016**, 28, 042101	4.4	15
222	Similarity and singularity in adhesive elastohydrodynamic touchdown. *Physics of Fluids*, **2016**, 28, 011702	4.4	7
221	Self-sustained lift and low friction via soft lubrication. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5847-9	11.5	53
220	Optimal control of plates using incompatible strains. *Nonlinearity*, **2015**, 28, 3153-3174	1.7	15

219	Protein mediated membrane adhesion. *Physics of Fluids*, **2015**, 27, 051901	4.4	3
218	Feedback-induced phase transitions in active heterogeneous conductors. *Physical Review Letters*, **2015**, 114, 134501	7.4	5
217	Gait and speed selection in slender inertial swimmers. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 3874-9	11.5	37
216	Oscillation of the velvet worm slime jet by passive hydrodynamic instability. *Nature Communications*, **2015**, 6, 6292	17.4	16
215	Elastocapillary coalescence of plates and pillars. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20140593	2.4	17
214	Bending gradients: how the intestinal stem cell gets its home. *Cell*, **2015**, 161, 569-580	56.2	170
213	Dynamics of evaporative colloidal patterning. *Physics of Fluids*, **2015**, 27, 092105	4.4	22
212	Termite mounds harness diurnal temperature oscillations for ventilation. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 11589-93	11.5	67
211	Elastohydrodynamics of a sliding, spinning and sedimenting cylinder near a soft wall. *Journal of Fluid Mechanics*, **2015**, 779, 181-196	3.7	37
210	Evaporation-driven ring and film deposition from colloidal droplets. *Journal of Fluid Mechanics*, **2015**, 781,	3.7	30
209	The organization and control of an evolving interdependent population. *Journal of the Royal Society Interface*, **2015**, 12, 20150044	4.1	5
208	Elastic Cheerios effect: Self-assembly of cylinders on a soft solid. *Europhysics Letters*, **2015**, 112, 54001	1.6	10
207	Elastohydrodynamics and Kinetics of Protein Patterning in the Immunological Synapse. *PLoS Computational Biology*, **2015**, 11, e1004481	5	16
206	Solid friction between soft filaments. *Nature Materials*, **2015**, 14, 583-8	27	60
205	Fluid-driven fingering instability of a confined elastic meniscus. *Europhysics Letters*, **2015**, 110, 34001	1.6	9
204	Dynamics of a nanodroplet under a transmission electron microscope. *Physics of Fluids*, **2014**, 26, 012003	4.4	11
203	Quantifying cell-generated mechanical forces within living embryonic tissues. *Nature Methods*, **2014**, 11, 183-9	21.6	257
202	Bacillus spores as building blocks for stimuli-responsive materials and nanogenerators. *Nature Nanotechnology*, **2014**, 9, 137-41	28.7	130

201	Collective thermoregulation in bee clusters. *Journal of the Royal Society Interface*, **2014**, 11, 20131033	4.1	16
200	Flagellar dynamics of a connected chain of active, polar, Brownian particles. *Journal of the Royal Society Interface*, **2014**, 11, 20130884	4.1	62
199	Intermittent locomotion as an optimal control strategy. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2014**, 470, 20130535	2.4	10
198	Gyrification from constrained cortical expansion. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12667-72	11.5	240
197	Scaling macroscopic aquatic locomotion. *Nature Physics*, **2014**, 10, 758-761	16.2	141
196	Evaporative microclimate driven hygrometers and hygromotors. *Europhysics Letters*, **2014**, 107, 64002	1.6	13
195	Density-gradient-free microfluidic centrifugation for analytical and preparative separation of nanoparticles. *Nano Letters*, **2014**, 14, 2365-71	11.5	34
194	Exactly isochoric deformations of soft solids. *Europhysics Letters*, **2014**, 108, 64001	1.6	2
193	Drops can bounce from perfectly hydrophilic surfaces. *Europhysics Letters*, **2014**, 108, 24001	1.6	73
192	Statistical mechanics and shape transitions in microscopic plates. *Physical Review Letters*, **2014**, 112, 048101	7.4	4
191	Neuromimetic Circuits with Synaptic Devices Based on Strongly Correlated Electron Systems. *Physical Review Applied*, **2014**, 2,	4.3	41
190	Aging in complex interdependency networks. *Physical Review E*, **2014**, 89, 022811	2.4	24
189	Lift-off instability during the impact of a drop on a solid surface. *Physical Review Letters*, **2014**, 112, 134501	7.4	53
188	A proprioceptive neuromechanical theory of crawling. *Proceedings of the Royal Society B: Biological Sciences*, **2014**, 281,	4.4	13
187	Models for elastic shells with incompatible strains. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2014**, 470, 20130604	2.4	21
186	The dynamics of sperm cooperation in a competitive environment. *Proceedings of the Royal Society B: Biological Sciences*, **2014**, 281,	4.4	39
185	Continuum dynamics of elastocapillary coalescence and arrest. *Europhysics Letters*, **2014**, 106, 14002	1.6	7
184	Elastic platonic shells. *Physical Review Letters*, **2013**, 111, 177801	7.4	32

183	A pendulum in a flowing soap film. *Physics of Fluids*, **2013**, 25, 041702	4.4	9
182	Planar morphometry, shear and optimal quasi-conformal mappings. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2013**, 469, 20120653	2.4	10
181	Villification: how the gut gets its villi. *Science*, **2013**, 342, 212-8	33.3	323
180	Elastic configurations of self-supported oxide membranes for fuel cells. *Journal of Power Sources*, **2013**, 222, 359-366	8.9	29
179	Surface sulci in squeezed soft solids. *Physical Review Letters*, **2013**, 110, 024302	7.4	69
178	The cytoplasm of living cells behaves as a poroelastic material. *Nature Materials*, **2013**, 12, 253-61	27	389
177	Adaptive fluid-infused porous films with tunable transparency and wettability. *Nature Materials*, **2013**, 12, 529-34	27	400
176	Hydrodynamics of hemostasis in sickle-cell disease. *Physical Review Letters*, **2013**, 110, 138104	7.4	9
175	Rationally designed complex, hierarchical microarchitectures. *Science*, **2013**, 340, 832-7	33.3	275
174	Geometric mechanics of periodic pleated origami. *Physical Review Letters*, **2013**, 110, 215501	7.4	222
173	How a blister heals. *Europhysics Letters*, **2013**, 104, 46002	1.6	3
172	Digital instability of a confined elastic meniscus. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 12545-8	11.5	37
171	Dissolution-driven convection in a HeleShaw cell. *Physics of Fluids*, **2013**, 25, 024101	4.4	98
170	Swarming, swirling and stasis in sequestered bristle-bots. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2013**, 469, 20120637	2.4	60
169	Biased migration of confined neutrophil-like cells in asymmetric hydraulic environments. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 21006-11	11.5	65
168	Buckling of a thin-layer Couette flow. *Journal of Fluid Mechanics*, **2012**, 694, 5-28	3.7	12
167	Soft catenaries. *Journal of Fluid Mechanics*, **2012**, 691, 165-177	3.7	2
166	Slicing softly with shear. *Physical Review Letters*, **2012**, 109, 244301	7.4	24

165	Macroscopic magnetic frustration. *Physical Review Letters*, **2012**, 109, 257203	7.4	28
164	Geometric mechanics of curved crease origami. *Physical Review Letters*, **2012**, 109, 114301	7.4	82
163	How things get stuck: kinetics, elastohydrodynamics, and soft adhesion. *Physical Review Letters*, **2012**, 108, 226104	7.4	30
162	Strategies for cell shape control in tip-growing cells. *American Journal of Botany*, **2012**, 99, 1577-82	2.7	19
161	Actin network growth under load. *Biophysical Journal*, **2012**, 102, 1049-58	2.9	13
160	Banding, excitability and chaos in active nematic suspensions. *Nonlinearity*, **2012**, 25, 2245-2269	1.7	60
159	Deformation and capillary self-repair of carbon nanotube brushes. *Carbon*, **2012**, 50, 5618-5620	10.4	12
158	How the cucumber tendril coils and overwinds. *Science*, **2012**, 337, 1087-91	33.3	252
157	Geometric control of rippling in supported polymer nanolines. *Nano Letters*, **2012**, 12, 1516-21	11.5	9
156	Discovering communities through friendship. *PLoS ONE*, **2012**, 7, e38704	3.7	9
155	Twisting graphene nanoribbons into carbon nanotubes. *Physical Review B*, **2012**, 85,	3.3	68
154	Scale and nature of sulcification patterns. *Physical Review Letters*, **2012**, 109, 025701	7.4	47
153	A biophysical indicator of vaso-occlusive risk in sickle cell disease. *Science Translational Medicine*, **2012**, 4, 123ra26	17.5	82
152	Multi-stability of free spontaneously curved anisotropic strips. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2012**, 468, 511-530	2.4	23
151	Physical basis for the adaptive flexibility of Bacillus spore coats. *Journal of the Royal Society Interface*, **2012**, 9, 3156-60	4.1	28
150	Evolution of spur-length diversity in Aquilegia petals is achieved solely through cell-shape anisotropy. *Proceedings of the Royal Society B: Biological Sciences*, **2012**, 279, 1640-5	4.4	53
149	Balancing on tightropes and slacklines. *Journal of the Royal Society Interface*, **2012**, 9, 2097-108	4.1	34
148	Robust error correction in infofuses. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2012**, 468, 361-377	2.4	

147	The branch with the furthest reach. *Europhysics Letters*, **2012**, 97, 14005	1.6	6
146	A method for tensile tests of biological tissues at the mesoscale. *Journal of Applied Physics*, **2012**, 111, 074704	2.5	4
145	Flow-induced channelization in a porous medium. *Europhysics Letters*, **2012**, 98, 58003	1.6	21
144	The size, shape, and dynamics of cellular blebs. *Europhysics Letters*, **2012**, 100, 28004	1.6	21
143	Structural dynamics of an actin spring. *Biophysical Journal*, **2011**, 100, 839-44	2.9	4
142	Dynamic instability of a growing adsorbed polymorphic filament. *Biophysical Journal*, **2011**, 101, 267-75	2.9	7
141	Probability, geometry, and dynamics in the toss of a thick coin. *American Journal of Physics*, **2011**, 79, 1195-1201	0.7	7
140	On the growth and form of the gut. *Nature*, **2011**, 476, 57-62	50.4	325
139	Excitable patterns in active nematics. *Physical Review Letters*, **2011**, 106, 218101	7.4	82
138	Hydrodynamics of writing with ink. *Physical Review Letters*, **2011**, 107, 264501	7.4	47
137	Asymmetric network connectivity using weighted harmonic averages. *Europhysics Letters*, **2011**, 93, 40006	2.6	5
136	Planar controlled gliding, tumbling and descent. *Journal of Fluid Mechanics*, **2011**, 689, 489-516	3.7	9
135	New encoding schemes with infofuses. *Advanced Materials*, **2011**, 23, 4851-6	24	5
134	The Föppl-von Kármán equations for plates with incompatible strains. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2011**, 467, 402-426	2.4	63
133	A simple model for nanofiber formation by rotary jet-spinning. *Applied Physics Letters*, **2011**, 99, 203107	3.4	88
132	Shock-driven jamming and periodic fracture of particulate rafts. *Europhysics Letters*, **2011**, 96, 36008	1.6	19
131	Forced tearing of ductile and brittle thin sheets. *Physical Review Letters*, **2011**, 107, 245502	7.4	11
130	How wet paper curls. *Europhysics Letters*, **2011**, 93, 54001	1.6	51

129	Unfolding the sulcus. *Physical Review Letters*, **2011**, 106, 105702	7.4	162
128	Elastohydrodynamics of wet bristles, carpets and brushes. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2011**, 467, 1665-1685	2.4	30
127	The shallow turn of a worm. *Journal of Experimental Biology*, **2011**, 214, 1554-9	3	20
126	Growth, geometry, and mechanics of a blooming lily. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 5516-21	11.5	143
125	Influence of feedback on the stochastic evolution of simple climate systems. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2010**, 466, 993-1003	2.4	6
124	A generalized theory of viscous and inviscid flutter. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2010**, 466, 141-156	2.4	23
123	Statistical mechanics of developable ribbons. *Physical Review Letters*, **2010**, 104, 238104	7.4	34
122	Physiological and pathological population dynamics of circulating human red blood cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 20587-92	11.5	63
121	Control of shape and size of nanopillar assembly by adhesion-mediated elastocapillary interaction. *ACS Nano*, **2010**, 4, 6323-31	16.7	57
120	Why subduction zones are curved. *Tectonics*, **2010**, 29, n/a-n/a	4.3	39
119	Cooperative adhesion and friction of compliant nanohairs. *Nano Letters*, **2010**, 10, 4509-13	11.5	41
118	Geometry, mechanics, and electronics of singular structures and wrinkles in graphene. *Physical Review Letters*, **2010**, 105, 156603	7.4	152
117	Nanopottery: coiling of electrospun polymer nanofibers. *Nano Letters*, **2010**, 10, 2138-40	11.5	70
116	Shape and motion of a ruck in a rug. *Physical Review Letters*, **2009**, 103, 174302	7.4	23
115	Animal cell hydraulics. *Journal of Cell Science*, **2009**, 122, 3233-41	5.3	66
114	Nonequilibrium scale selection mechanism for columnar jointing. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 387-92	11.5	85
113	Statistical dynamics of flowing red blood cells by morphological image processing. *PLoS Computational Biology*, **2009**, 5, e1000288	5	41
112	The shape of a long leaf. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 22049-54	11.5	171

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