

# Jens Elgeti

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

4,618  
citations

218677

26  
h-index

223800

46  
g-index

49  
all docs

49  
docs citations

49  
times ranked

3831  
citing authors

#	ARTICLE	IF	CITATIONS
1	A minimal model for structure, dynamics, and tension of monolayered cell colonies. <i>Communications Physics</i> , 2021, 4, .	5.3	15
2	The role of thickness inhomogeneities in hierarchical cortical folding. <i>NeuroImage</i> , 2021, 231, 117779.	4.2	6
3	Multi-ciliated microswimmersâ€™ metachronal coordination and helical swimming. <i>European Physical Journal E</i> , 2021, 44, 76.	1.6	6
4	Reconstruction of the three-dimensional beat pattern underlying swimming behaviors of sperm. <i>European Physical Journal E</i> , 2021, 44, 87.	1.6	23
5	The steering gaits of sperm. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020, 375, 20190149.	4.0	24
6	Chiral-filament self-assembly on curved manifolds. <i>Soft Matter</i> , 2020, 16, 10548-10557.	2.7	3
7	Tissue evolution: mechanical interplay of adhesion, pressure, and heterogeneity. <i>New Journal of Physics</i> , 2020, 22, 033048.	2.9	7
8	Instability and fingering of interfaces in growing tissue. <i>New Journal of Physics</i> , 2020, 22, 083005.	2.9	10
9	Mechanics of tissue competition: interfaces stabilize coexistence. <i>New Journal of Physics</i> , 2019, 21, 063017.	2.9	12
10	Sperm motility in modulated microchannels. <i>New Journal of Physics</i> , 2019, 21, 013016.	2.9	35
11	Quantitative modelling of nutrient-limited growth of bacterial colonies in microfluidic cultivation. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20170713.	3.4	21
12	Collective dynamics of self-propelled semiflexible filaments. <i>Soft Matter</i> , 2018, 14, 4483-4494.	2.7	63
13	Microswimmers: Spermatozoa as Functional Components of Robotic Microswimmers ( <i>Adv. Mater.</i> ) Tj ETQq1 1 0.784314 rgBT <sub>0</sub> /Overl 21.0	21.0	125
14	Spermatozoa as Functional Components of Robotic Microswimmers. <i>Advanced Materials</i> , 2017, 29, 1606301.	21.0	125
15	Active Polymers â€™ Emergent Conformational and Dynamical Properties: A Brief Review. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 101014.	1.6	79
16	Generalized Archimedes' principle in active fluids. <i>Physical Review E</i> , 2017, 96, 032606.	2.1	19
17	Forces in inhomogeneous open active-particle systems. <i>Physical Review E</i> , 2017, 96, 052409.	2.1	11
18	Human sperm steer with second harmonics of the flagellar beat. <i>Nature Communications</i> , 2017, 8, 1415.	12.8	79

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19	Interface dynamics of competing tissues. <i>New Journal of Physics</i> , 2016, 18, 083020.	2.9	24
20	Dynamics of self-propelled filaments pushing a load. <i>Soft Matter</i> , 2016, 12, 8495-8505.	2.7	57
21	Microswimmers near surfaces. <i>European Physical Journal: Special Topics</i> , 2016, 225, 2333-2352.	2.6	64
22	Giant adsorption of microswimmers: Duality of shape asymmetry and wall curvature. <i>Physical Review E</i> , 2015, 91, 050302.	2.1	45
23	Tissue homeostasis: A tensile state. <i>Europhysics Letters</i> , 2015, 109, 58005.	2.0	19
24	Physics of active jamming during collective cellular motion in a monolayer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15314-15319.	7.1	334
25	Conformations, hydrodynamic interactions, and instabilities of sedimenting semiflexible filaments. <i>Soft Matter</i> , 2015, 11, 7337-7344.	2.7	20
26	Physics of microswimmers—single particle motion and collective behavior: a review. <i>Reports on Progress in Physics</i> , 2015, 78, 056601.	20.1	1,029
27	Myosin II Activity Softens Cells in Suspension. <i>Biophysical Journal</i> , 2015, 108, 1856-1869.	0.5	96
28	Self-propelled worm-like filaments: spontaneous spiral formation, structure, and dynamics. <i>Soft Matter</i> , 2015, 11, 7181-7190.	2.7	117
29	Run-and-tumble dynamics of self-propelled particles in confinement. <i>Europhysics Letters</i> , 2015, 109, 58003.	2.0	97
30	Motility-sorting of self-propelled particles in microchannels. <i>Europhysics Letters</i> , 2014, 107, 36003.	2.0	57
31	Alignment of cell division axes in directed epithelial cell migration. <i>New Journal of Physics</i> , 2014, 16, 115005.	2.9	13
32	Wall accumulation of self-propelled spheres. <i>Europhysics Letters</i> , 2013, 101, 48003.	2.0	221
33	Mechanical Control of Cell flow in Multicellular Spheroids. <i>Physical Review Letters</i> , 2013, 110, 138103.	7.8	57
34	Mechanical Pressure Arrests the Growth of Tumor Spheroids. <i>Biophysical Journal</i> , 2013, 104, 492a.	0.5	2
35	Detachment and fracture of cellular aggregates. <i>Soft Matter</i> , 2013, 9, 2282.	2.7	22
36	Alignment of cellular motility forces with tissue flow as a mechanism for efficient wound healing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 2452-2459.	7.1	184

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37	Emergence of metachronal waves in cilia arrays. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4470-4475.	7.1	313
38	Isotropic stress reduces cell proliferation in tumor spheroids. New Journal of Physics, 2012, 14, 055008.	2.9	84
39	Defect hydrodynamics in 2D polar active fluids. Soft Matter, 2011, 7, 3177.	2.7	34
40	Response to Comment on Article: Hydrodynamics of Sperm Cells Near Surfaces. Biophysical Journal, 2011, 100, 2321-2324.	0.5	8
41	Dissipative particle dynamics simulations for biological tissues: rheology and competition. Physical Biology, 2011, 8, 026014.	1.8	92
42	Stress Clamp Experiments on Multicellular Tumor Spheroids. Physical Review Letters, 2011, 107, 188102.	7.8	188
43	Fluidization of tissues by cell division and apoptosis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20863-20868.	7.1	379
44	Hydrodynamics of Sperm Cells near Surfaces. Biophysical Journal, 2010, 99, 1018-1026.	0.5	197
45	Self-propelled rods near surfaces. Europhysics Letters, 2009, 85, 38002.	2.0	142
46	Cooperation of sperm in two dimensions: Synchronization, attraction, and aggregation through hydrodynamic interactions. Physical Review E, 2008, 78, 061903.	2.1	164
47	Nematic liquid crystals at rough and fluctuating interfaces. European Physical Journal E, 2005, 18, 407-415.	1.6	19