

# Rastko Sknepnek

## List of Publications by Year in descending order

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47  
papers

1,905  
citations

218677

26  
h-index

265206

42  
g-index

48  
all docs

48  
docs citations

48  
times ranked

2335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Linear viscoelastic properties of the vertex model for epithelial tissues. PLoS Computational Biology, 2022, 18, e1010135.	3.2	12
2	Coordinated tractions increase the size of a collectively moving pack in a cell monolayer. Extreme Mechanics Letters, 2021, 48, 101438.	4.1	11
3	Dense active matter model of motion patterns in confluent cell monolayers. Nature Communications, 2020, 11, 1405.	12.8	86
4	Stratification relieves constraints from steric hindrance in the generation of compact actomyosin asters at the membrane cortex. Science Advances, 2020, 6, eaay6093.	10.3	14
5	Wrinkle patterns in active viscoelastic thin sheets. Physical Review Research, 2020, 2, .	3.6	12
6	Confinement-Induced Transition between Wavelike Collective Cell Migration Modes. Physical Review Letters, 2019, 122, 168101.	7.8	46
7	Dynamical patterns in nematic active matter on a sphere. Physical Review E, 2018, 97, 042605.	2.1	40
8	Dynamically generated patterns in dense suspensions of active filaments. Physical Review E, 2018, 97, 022606.	2.1	46
9	Cell division and death inhibit glassy behaviour of confluent tissues. Soft Matter, 2017, 13, 3205-3212.	2.7	51
10	Non-Hookean statistical mechanics of clamped graphene ribbons. Physical Review B, 2017, 95, .	3.2	55
11	Stiffening thermal membranes by cutting. Physical Review E, 2017, 96, 013002.	2.1	4
12	Active Vertex Model for cell-resolution description of epithelial tissue mechanics. PLoS Computational Biology, 2017, 13, e1005569.	3.2	180
13	On the Modeling of Endocytosis in Yeast. Biophysical Journal, 2015, 108, 508-519.	0.5	24
14	Active swarms on a sphere. Physical Review E, 2015, 91, 022306.	2.1	61
15	Effects of scars on icosahedral crystalline shell stability under external pressure. Physical Review E, 2015, 91, 033205.	2.1	8
16	Defect dynamics in active nematics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130365.	3.4	170
17	Optimal shapes and stresses of adherent cells on patterned substrates. Soft Matter, 2014, 10, 2424.	2.7	12
18	Pathways to faceting of vesicles. Soft Matter, 2013, 9, 8088.	2.7	28

#	ARTICLE	IF	CITATIONS
19	Thermally Active Hybridization Drives the Crystallization of DNA-Functionalized Nanoparticles. Journal of the American Chemical Society, 2013, 135, 8535-8541.	13.7	70
20	Topological defects in the buckling of elastic membranes. Soft Matter, 2013, 9, 60-68.	2.7	20
21	Planar sheets meet negative-curvature liquid interfaces. Europhysics Letters, 2013, 101, 44007.	2.0	8
22	Mechanical model of blebbing in nuclear lamin meshworks. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3248-3253.	7.1	89
23	Nonlinear elastic model for faceting of vesicles with soft grain boundaries. Physical Review E, 2012, 85, 050501.	2.1	15
24	Buckling of multicomponent elastic shells with line tension. Soft Matter, 2012, 8, 636-644.	2.7	38
25	Molecular Crystallization Controlled by pH Regulates Mesoscopic Membrane Morphology. ACS Nano, 2012, 6, 10901-10909.	14.6	56
26	Curvature-driven effective attraction in multicomponent membranes. Physical Review E, 2012, 86, 021504.	2.1	6
27	Charge renormalization of bilayer elastic properties. Journal of Chemical Physics, 2012, 137, 104905.	3.0	2
28	Modeling the Crystallization of Spherical Nucleic Acid Nanoparticle Conjugates with Molecular Dynamics Simulations. Nano Letters, 2012, 12, 2509-2514.	9.1	129
29	Shapes of pored membranes. Soft Matter, 2012, 8, 11613.	2.7	10
30	Electrostatic-Driven Ridge Formation on Nanoparticles Coated with Charged End-Group Ligands. Journal of Physical Chemistry C, 2011, 115, 6484-6490.	3.1	32
31	Platonic and Archimedean geometries in multicomponent elastic membranes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4292-4296.	7.1	80
32	Shape Change of Nanocontainers via a Reversible Ionic Buckling. Physical Review Letters, 2011, 106, 215504.	7.8	9
33	A Graphics Processing Unit Implementation of Coulomb Interaction in Molecular Dynamics. Journal of Chemical Theory and Computation, 2010, 6, 3058-3065.	5.3	38
34	A Quantitative Description of the Binding Equilibria of para-Substituted Aniline Ligands and CdSe Quantum Dots. Journal of Physical Chemistry C, 2010, 114, 22526-22534.	3.1	69
35	Spectral analysis for the iron-based superconductors: Anisotropic spin fluctuations and fully gapped $\chi(\mathbf{q})$ $\chi(\mathbf{q}) = \chi_0 + \chi_1 \cos(q_x) + \chi_2 \cos(q_y) + \chi_3 \cos(q_x) \cos(q_y)$ $\chi(\mathbf{q}) = \chi_0 + \chi_1 \cos(q_x) + \chi_2 \cos(q_y) + \chi_3 \cos(q_x) \cos(q_y)$ superconductivity. Physical Review B, 2010, 82, .	3.2	26
36	Anisotropy of the pairing gap of FeAs-based superconductors induced by spin fluctuations. Physical Review B, 2009, 79, .	3.2	44

#	ARTICLE	IF	CITATIONS
37	Orbital coupling and superconductivity in the iron pnictides. <i>Physical Review B</i> , 2009, 79, .	3.2	63
38	Nanoparticle Ordering <i>via</i> Functionalized Block Copolymers in Solution. <i>ACS Nano</i> , 2008, 2, 1259-1265.	14.6	44
39	Universality of Liquid-Gas Mott Transitions at Finite Temperatures. <i>Physical Review Letters</i> , 2008, 100, 026408.	7.8	40
40	Spin structure factor of the frustrated quantum magnet $\text{Cs}_2\text{CuCl}_4$ . <i>Physical Review B</i> , 2006, 73, .	3.2	32
41	Quantum phase transitions of the diluted $O(3)$ rotor model. <i>Physical Review B</i> , 2006, 74, .	3.2	25
42	Dynamics at a smeared phase transition. <i>Journal of Physics A</i> , 2005, 38, 2349-2358.	1.6	3
43	Exotic Versus Conventional Scaling and Universality in a Disordered Bilayer Quantum Heisenberg Antiferromagnet. <i>Physical Review Letters</i> , 2004, 93, 097201.	7.8	40
44	Order-parameter symmetry and mode-coupling effects at dirty superconducting quantum phase transitions. <i>Physical Review B</i> , 2004, 70, .	3.2	5
45	Smeared phase transition in a three-dimensional Ising model with planar defects: Monte Carlo simulations. <i>Physical Review B</i> , 2004, 69, .	3.2	33
46	Critical points and quenched disorder: From Harris criterion to rare regions and smearing. <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 2118-2127.	1.5	14
47	Pattern recognition in damaged neural networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 295, 526-536.	2.6	4