Brian A Camley

List of Publications by Year
in descending order

34 papers	1,401 citations	411340 20 h-index	425179 34 g-index
37 all docs	37 docs citations	37 times ranked	1474 citing authors

#	Article	IF	Citations
1	Collective gradient sensing with limited positional information. Physical Review E, 2022, 105, 044410.	0.8	5
2	Patterning by contraction. Cell, 2022, 185, 1809-1810.	13.5	2
3	Active gels, heavy tails, and the cytoskeleton. Soft Matter, 2021, 17, 9876-9892.	1.2	5
4	Rules of contact inhibition of locomotion for cells on suspended nanofibers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	25
5	Cellular memory in eukaryotic chemotaxis depends on the background chemoattractant concentration. Physical Review E, 2021, 103, 012402.	0.8	17
6	Hydrodynamic effects on the motility of crawling eukaryotic cells. Soft Matter, 2020, 16, 1349-1358.	1.2	5
7	Chemotaxis in uncertain environments: Hedging bets with multiple receptor types. Physical Review Research, 2020, 2, .	1.3	4
8	Motion of objects embedded in lipid bilayer membranes: Advection and effective viscosity. Journal of Chemical Physics, 2019, 151, 124104.	1.2	11
9	Leader cells in collective chemotaxis: Optimality and trade-offs. Physical Review E, 2019, 100, 032417.	0.8	6
10	Cell motility dependence on adhesive wetting. Soft Matter, 2019, 15, 2043-2050.	1.2	26
11	Collective gradient sensing and chemotaxis: modeling and recent developments. Journal of Physics Condensed Matter, 2018, 30, 223001.	0.7	36
12	Minimal Network Topologies for Signal Processing during Collective Cell Chemotaxis. Biophysical Journal, 2018, 114, 2986-2999.	0.2	8
13	Crawling and turning in a minimal reaction-diffusion cell motility model: Coupling cell shape and biochemistry. Physical Review E, 2017, 95, 012401.	0.8	69
14	Physical models of collective cell motility: from cell to tissue. Journal Physics D: Applied Physics, 2017, 50, 113002.	1.3	148
15	Lipid and Peptide Diffusion in Bilayers: The Saffmanâ€“DelbrÃ¼ck Model and Periodic Boundary Conditions. Journal of Physical Chemistry B, 2017, 121, 3443-3457.	1.2	91
16	Cell-to-cell variation sets a tissue-rheologyâ€“dependent bound on collective gradient sensing. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10074-E10082.	3.3	26
17	Modeling Contact Inhibition of Locomotion of Colliding Cells Migrating on Micropatterned Substrates. PLoS Computational Biology, 2016, 12, e1005239.	1.5	35
18	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. Physical Review Letters, 2016, 116, 098101.	2.9	96

#	Article	IF	Citations
19	Contact inhibition of locomotion determines cellâ€“cell and cellâ€“substrate forces in tissues. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2660-2665.	3.3	109
20	Collective Signal Processing in Cluster Chemotaxis: Roles of Adaptation, Amplification, and Co-attraction in Collective Guidance. PLoS Computational Biology, 2016, 12, e1005008.	1.5	52
21	Strong influence of periodic boundary conditions on lateral diffusion in lipid bilayer membranes. Journal of Chemical Physics, 2015, 143, 243113.	1.2	70
22	Velocity alignment leads to high persistence in confined cells. Physical Review E, 2014, 89, 062705.	0.8	24
23	Fluctuating hydrodynamics of multicomponent membranes with embedded proteins. Journal of Chemical Physics, 2014, 141, 075103.	1.2	25
24	Calculating hydrodynamic interactions for membrane-embedded objects. Journal of Chemical Physics, 2014, 141, 124711.	1.2	17
25	Polarity mechanisms such as contact inhibition of locomotion regulate persistent rotational motion of mammalian cells on micropatterns. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14770-14775.	3.3	131
26	Simulation of edge facilitated adsorption and critical concentration induced rupture of vesicles at a surface. Soft Matter, 2013, 9, 8420.	1.2	14
27	Diffusion of complex objects embedded in free and supported lipid bilayer membranes: role of shape anisotropy and leaflet structure. Soft Matter, 2013, 9, 4767.	1.2	56
28	Periodic Migration in a Physical Model of Cells on Micropatterns. Physical Review Letters, 2013, 111, 158102.	2.9	68
29	Contributions to membrane-embedded-protein diffusion beyond hydrodynamic theories. Physical Review E, 2012, 85, 061921.	0.8	32
30	Beyond the creeping viscous flow limit for lipid bilayer membranes: Theory of single-particle microrheology, domain flicker spectroscopy, and long-time tails. Physical Review E, 2011, 84, 021904.	0.8	26
31	Dynamic scaling in phase separation kinetics for quasi-two-dimensional membranes. Journal of Chemical Physics, 2011, 135, 225106.	1.2	29
32	Dynamic Simulations of Multicomponent Lipid Membranes over Long Length and Time Scales. Physical Review Letters, 2010, 105, 148102.	2.9	56
33	Lipid Bilayer Domain Fluctuations as a Probe of Membrane Viscosity. Biophysical Journal, 2010, 99, L44-L46.	0.2	53
34	Fol̀ˆrster transfer outside the weak-excitation limit. Journal of Chemical Physics, 2009, 131, 104509.	1.2	20