Benedikt Sabass

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6113651/publications.pdf

Version: 2024-02-01

20 papers 3,346 citations

567281 15 h-index 752698 20 g-index

20 all docs

20 docs citations

times ranked

20

4370 citing authors

#	Article	IF	CITATIONS
1	Force Fluctuations within Focal Adhesions Mediate ECM-Rigidity Sensing to Guide Directed Cell Migration. Cell, 2012, 151, 1513-1527.	28.9	716
2	High Resolution Traction Force Microscopy Based on Experimental and Computational Advances. Biophysical Journal, 2008, 94, 207-220.	0.5	514
3	Cell-ECM traction force modulates endogenous tension at cell–cell contacts. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4708-4713.	7.1	448
4	Traction stress in focal adhesions correlates biphasically with actin retrograde flow speed. Journal of Cell Biology, 2008, 183, 999-1005.	5.2	422
5	Extracellular rigidity sensing by talin isoform-specific mechanical linkages. Nature Cell Biology, 2015, 17, 1597-1606.	10.3	278
6	Size-dependent control of colloid transport via solute gradients in dead-end channels. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 257-261.	7.1	189
7	High-Resolution Traction Force Microscopy. Methods in Cell Biology, 2014, 123, 367-394.	1.1	181
8	Plasmodium Sporozoite Motility Is Modulated by the Turnover of Discrete Adhesion Sites. Cell Host and Microbe, 2009, 6, 551-562.	11.0	163
9	Verticalization of bacterial biofilms. Nature Physics, 2018, 14, 954-960.	16.7	92
10	Modeling cytoskeletal flow over adhesion sites: competition between stochastic bond dynamics and intracellular relaxation. Journal of Physics Condensed Matter, 2010, 22, 194112.	1.8	60
11	Nonlinear, electrocatalytic swimming in the presence of salt. Journal of Chemical Physics, 2012, 136, 214507.	3.0	51
12	Efficiency of Surface-Driven Motion: Nanoswimmers Beat Microswimmers. Physical Review Letters, 2010, 105, 218103.	7.8	50
13	Optimization of traction force microscopy for micron-sized focal adhesions. Journal of Physics Condensed Matter, 2010, 22, 194104.	1.8	48
14	Traction force microscopy with optimized regularization and automated Bayesian parameter selection for comparing cells. Scientific Reports, 2019, 9, 539.	3.3	48
15	Force generation by groups of migrating bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7266-7271.	7.1	39
16	Mechanics regulates ATP-stimulated collective calcium response in fibroblast cells. Journal of the Royal Society Interface, 2015, 12, 20150140.	3.4	14
17	A Bayesian traction force microscopy method with automated denoising in a user-friendly software package. Computer Physics Communications, 2020, 256, 107313.	7.5	14
18	Substrate-rigidity dependent migration of an idealized twitching bacterium. Soft Matter, 2019, 15, 6224-6236.	2.7	8

#	Article	IF	CITATIONS
19	Generic self-stabilization mechanism for biomolecular adhesions under load. Nature Communications, 2022, 13, 2197.	12.8	6
20	Fluctuating, Lorentz-force-like coupling of Langevin equations and heat flux rectification. Physical Review E, 2017, 96, 022109.	2.1	5