Benedikt Sabass

List of Publications by Year
in descending order

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20 papers	3,346 citations	567281 15 h-index	752698 20 g-index
20 all docs	20 docs citations	20 times ranked	4370 citing authors

#	Article	IF	Citations
1	Generic self-stabilization mechanism for biomolecular adhesions under load. Nature Communications, 2022, 13, 2197.	12.8	6
2	A Bayesian traction force microscopy method with automated denoising in a user-friendly software package. Computer Physics Communications, 2020, 256, 107313.	7.5	14
3	Substrate-rigidity dependent migration of an idealized twitching bacterium. Soft Matter, 2019, 15, 6224-6236.	2.7	8
4	Traction force microscopy with optimized regularization and automated Bayesian parameter selection for comparing cells. Scientific Reports, 2019, 9, 539.	3.3	48
5	Verticalization of bacterial biofilms. Nature Physics, 2018, 14, 954-960.	16.7	92
6	Fluctuating, Lorentz-force-like coupling of Langevin equations and heat flux rectification. Physical Review E, 2017, 96, 022109.	2.1	5
7	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
8	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
9	Mechanics regulates ATP-stimulated collective calcium response in fibroblast cells. Journal of the Royal Society Interface, 2015, 12, 20150140.	3.4	14
10	Extracellular rigidity sensing by talin isoform-specific mechanical linkages. Nature Cell Biology, 2015, 17, 1597-1606.	10.3	278
11	High-Resolution Traction Force Microscopy. Methods in Cell Biology, 2014, 123, 367-394.	1.1	181
12	Force Fluctuations within Focal Adhesions Mediate ECM-Rigidity Sensing to Guide Directed Cell Migration. Cell, 2012, 151, 1513-1527.	28.9	716
13	Nonlinear, electrocatalytic swimming in the presence of salt. Journal of Chemical Physics, 2012, 136, 214507.	3.0	51
14	Cell-ECM traction force modulates endogenous tension at cellâ€“cell contacts. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4708-4713.	7.1	448
15	Optimization of traction force microscopy for micron-sized focal adhesions. Journal of Physics Condensed Matter, 2010, 22, 194104.	1.8	48
16	Efficiency of Surface-Driven Motion: Nanoswimmers Beat Microswimmers. Physical Review Letters, 2010, 105, 218103.	7.8	50
17	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
18	Plasmodium Sporozoite Motility Is Modulated by the Turnover of Discrete Adhesion Sites. Cell Host and Microbe, 2009, 6, 551-562.	11.0	163

#	Article	IF	Citations
19	High Resolution Traction Force Microscopy Based on Experimental and Computational Advances. Biophysical Journal, 2008, 94, 207-220.	0.5	514
20	Traction stress in focal adhesions correlates biphasically with actin retrograde flow speed. Journal of Cell Biology, 2008, 183, 999-1005.	5.2	422