Vasily Kantsler

List of Publications by Citations

24 papers	1,520 citations	18 h-index	28 g-index
28 ext. papers	1,774 ext. citations	6.8 avg, IF	4.88 L-index

#	Paper	IF	Citations
24	Ciliary contact interactions dominate surface scattering of swimming eukaryotes. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 1187-92	11.5	196
23	Human spermatozoa migration in microchannels reveals boundary-following navigation. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 8007-10	11.5	193
22	Orientation and dynamics of a vesicle in tank-treading motion in shear flow. *Physical Review Letters*, **2005**, 95, 258101	7.4	178
21	Rheotaxis facilitates upstream navigation of mammalian sperm cells. *ELife*, **2014**, 3, e02403	8.9	141
20	Dynamics of a vesicle in general flow. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 11444-7	11.5	89
19	Phase diagram of single vesicle dynamical states in shear flow. *Physical Review Letters*, **2009**, 102, 118105	7.4	88
18	Fluctuations, dynamics, and the stretch-coil transition of single actin filaments in extensional flows. *Physical Review Letters*, **2012**, 108, 038103	7.4	70
17	Vesicle dynamics in time-dependent elongation flow: wrinkling instability. *Physical Review Letters*, **2007**, 99, 178102	7.4	68
16	Continuous particle size separation and size sorting using ultrasound in a microchannel. *Journal of Statistical Mechanics: Theory and Experiment*, **2006**, 2006, P01012-P01012	1.9	68
15	Bimodal rheotactic behavior reflects flagellar beat asymmetry in human sperm cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 15904-9	11.5	63
14	Dynamics of interacting vesicles and rheology of vesicle suspension in shear flow. *Europhysics Letters*, **2008**, 82, 58005	1.6	60
13	Membrane viscosity determined from shear-driven flow in giant vesicles. *Physical Review Letters*, **2013**, 111, 038103	7.4	59
12	Microalgae Scatter off Solid Surfaces by Hydrodynamic and Contact Forces. *Physical Review Letters*, **2015**, 115, 258102	7.4	49
11	Scattering of biflagellate microswimmers from surfaces. *Physical Review E*, **2017**, 96, 023102	2.4	48
10	Entrainment dominates the interaction of microalgae with micron-sized objects. *Nature Communications*, **2016**, 7, 12518	17.4	48
9	Fluid velocity fluctuations in a suspension of swimming protists. *Physical Review Letters*, **2010**, 105, 188101	7.4	28
8	The effect of flow on swimming bacteria controls the initial colonization of curved surfaces. *Nature Communications*, **2020**, 11, 2851	17.4	22

List of Publications

7	Geometric control of bacterial surface accumulation. *Physical Review E*, **2019**, 99, 052607	2.4	12
6	Pattern Engineering of Living Bacterial Colonies Using Meniscus-Driven Fluidic Channels. *ACS Synthetic Biology*, **2020**, 9, 1277-1283	5.7	8
5	Green algae scatter off sharp viscosity gradients. *Scientific Reports*, **2021**, 11, 399	4.9	5
4	Author response: Rheotaxis facilitates upstream navigation of mammalian sperm cells **2014**,		3
3	Disorder-induced topological transition in porous media flow networks. *Journal of Non-Newtonian Fluid Mechanics*, **2019**, 268, 66-74	2.7	2
2	The effect of flow on swimming bacteria controls the initial colonization of curved surfaces		1
1	Curved ratchets improve bacteria rectification in microfluidic devices. *Physical Review E*, **2021**, 104, 014602	2.4	1