

Vasily Kantsler

Patents

- Publication number WO/2007/083295 : *Device and Method for Manipulating Particles in Fluid Medium.* <http://patentscope.wipo.int/search/en/WO2007083295>

Publications

1. P. Denissenko, D. J. Smith, V. Kantsler, J. Kirkman-Brown *Propagation of Spermatozoa Along Series of Traps: An example of Sperm Cell Incidental Cooperation?* in preparation 2014
2. V. Kantsler, J. Dunkel, R. E. Goldstein *Swimming of E. coli near micro-structured surfaces* in preparation 2014
3. V. Kantsler, J. Dunkel, M. Blayney, R. E. Goldstein *Rheotaxis facilitates upstream navigation of mammalian sperm cell* in press *eLife* 2014
4. H. H. Wensink, V. Kantsler, R. E. Goldstein and J. Dunkel *Controlling active self-assembly through broken particle-shape symmetry* *Phys. Rev. E* 89, 010302 (2014)
5. A. R. Honerkamp-Smith, F. G. Woodhouse, V. Kantsler, R. E. Goldstein *Membrane Viscosity Determined from Shear-Driven Flow in Giant Vesicles* *Phys. Rev. Lett.* 111, 038103 (2013)
6. V. Kantsler, J. Dunkel, M. Polin, R. E. Goldstein *Ciliary contact interactions dominate surface scattering of swimming eukaryotes* *Proc. Natl. Acad. Sci. USA* 110 1187 (2013)
7. P. Denissenko, V. Kantsler, D. J. Smith, J. Kirkman-Brown *Human spermatozoa migration in microchannels reveals boundary-following navigation.* *Proc. Natl. Acad. Sci. USA* 109 8007 (2012)
8. V. Kantsler and R. E. Goldstein *Fluctuations, Dynamics, and the Stretch-Coil Transition of Single Actin Filaments in Extensional Flows.* *Phys. Rev. Lett.* 108 038103 (2012)
9. N. J. Zabusky, E. Segre, J. Deschamps, V. Kantsler and V. Steinberg *Dynamics of Vesicles in shear and rotational flows: Modal Dynamics and Phase Diagram.* *Phys. Fluids* 23 041905 (2011)
10. I. Rushkin, V. Kantsler, R. E. Goldstein *Fluid Velocity Fluctuations in a Suspension of Swimming Protists.* *Phys. Rev. Lett.* 105 188101 (2010)
11. J. Deschamps, V. Kantsler, E. Segre, V. Steinberg *Dynamics of vesicles in general flow.* *Proc. Natl. Acad. Sci. USA* 106 11444 (2009)
12. J. Deschamps, V. Kantsler, V. Steinberg *Phase diagram of single vesicle dynamical states in shear flow.* *Phys. Rev. Lett.* 102 118105 (2009)
13. V. Kantsler, E. Segre, V. Steinberg *Critical dynamics of vesicle stretching transition in elongation flow.* *Phys. Rev. Lett.* 101 048101 (2008)
14. V. Kantsler, E. Segre, V. Steinberg *Dynamics of interacting vesicles and rheology of vesicle suspension in shear flow.* *Europhys. Lett.* 82 58005 (2008)
15. V. Kantsler, E. Segre, V. Steinberg *Vesicle dynamics in time-dependent elongation flow: Wrinkling instability.* *Phys. Rev. Lett.* 99 178102 (2007)

16. S. Kapishnikov, V. Kantsler, and Victor Steinberg *Continuous particle size separation and size sorting using ultrasound in a micro-channel*. J. Stat. Mech. (2006) P01012
17. V. Kantsler and V. Steinberg *Transition to tumbling and two regimes of tumbling motion of vesicles in shear flow*. Phys. Rev. Lett. 96 036001 (2006)
18. V. Kantsler and V. Steinberg *Orientation and Dynamics of a Vesicle in Tank-Treading Motion in Shear Flow*. Phys. Rev. Lett. 95, 258101 (2005)