Publications

Synchronization between microswimmer clocks
In preparation

3D shadowgraph technique visualizes thermal convection
In preparation

Rayleigh-Bénard thermal convection perturbed by horizontal heat flux
To be submitted

Decision-making at a T-junction by gradient-sensing agents
Submitted to Proceedings of the National Academy of Sciences of the USA

A stable and accurate scheme for solving the Stefan problem with natural convection using Immersed Boundary Smooth Extension
Submitted to Journal of Computational Physics

Singularly sharp pinnacles sculpted by natural convective dissolution
Submitted to Letters to Nature

Rayleigh-Bénard convection with side wall heating
Submitted to Physical Review Letters

The role of shape-dependent flight stability in the origin of oriented meteorites
Proceedings of the National Academy of Sciences of the USA. doi:10.1073/pnas.1815133116

Stochastic dynamics of fluid–structure interaction in turbulent thermal convection

Self-sculpting of a dissolvable body due to gravitational convection
Physical Review Fluids, 3. doi:10.1103/PhysRevFluids.3.043801

Shape dynamics and scaling laws for a body dissolving in fluid flow
Journal of Fluid Mechanics (Rapids), 765. doi:10.1017/jfm.2014.718