発表論文リスト

A. 原著論文
(査読あり)

1. "Full Counting Statistics of Spin-Flip/Conserving Charge Transitions in Pauli-Spin Blockade", Sadashige Matsuo, Kazuyuki Kuroyama, <u>Shunsuke Yabunaka</u>, Sascha R. Valentin, Arne Ludwig, Andreas D. Wieck and Seigo Tarucha, to appear in Physical Review Research

2. "Drag coefficient of a rigid spherical particle in a near-critical binary fluid mixture, beyond the regime of the Gaussian model", <u>Shunsuke Yabunaka</u> and Youhei Fujitani, Journal of Fluid Mechanics, vol. 886, A2 (2020)

3. "Why Might the Standard Large Analysis Fail in the Model: The Role of Cusps in Fixed Point Potentials", <u>Shunsuke Yabunaka</u> and Bertrand Delamotte, Phys. Rev. Lett 121, 231601 (2018)

□4. "Surprises in the O (N) models: nonperturbative fixed points, large N limit and multi-criticality", <u>Shunsuke Yabunaka</u> and Bertrand Delamotte, Phys. Rev. Lett 119 191602 (2017).

5. "Critical adsorption profiles around a sphere and a cylinder in a fluid at criticality: Local functional theory", <u>Shunsuke Yabunaka</u> and Akira Onuki, Phys. Rev. E 96, 032127 (7) (2017).

6. "Emergence of epithelial cell density waves", <u>Shunsuke Yabunaka</u> and Philippe Marcq, Softmatter 13, 7046-7052 (2017).

7. "Electric double layer composed of an antagonistic salt in an aqueous mixture: Local charge separation and surface phase transition", <u>Shunsuke Yabunaka</u> and Akira Onuki, Phys. Rev. Lett 119 118001 (5) (2017).

8. "Growth, proliferation and death in cohesive tissues: a thermodynamic approach", <u>Shunsuke Yabunaka</u> and Philippe Marcq, Phys. Rev. E 96, 022406 (9) (2017).

9. "Collision between chemically-driven self-propelled drops", <u>Shunsuke Yabunaka</u> and Natsuhiko Yoshinaga, Journal of Fluid Mechanics, 806, 205-233 (2016).

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11. "Structure formation due to antagonistic salts", Akira Onuki, <u>Shunsuke Yabunaka</u>, Takeaki Araki and Ryuichi Okamoto, Current Opinion in Colloid Interface Science, 22, 59-64 (2016).

12. "Hydrodynamics in bridging and aggregation of two colloidal particles in a near-critical binary mixture", <u>Shunsuke Yabunaka</u>, Ryuichi Okamoto and Akira Onuki, Soft Matter, 11, 5738-5747 (2015).

13. "Geometric pumping induced by shear flow in dilute liquid crystalline polymer solutions", <u>Shunsuke Yabunaka</u> and Hisao Hayakawa, J. Chem. Phys. 142, 054903 (10) (2015) **JCP Editor's choice**

14. "Interface and vortex motion in the two-component complex dissipative Ginzburg-Landau equation in two-dimensional space", <u>Shunsuke Yabunaka</u>, Phys. Rev. E 90, 04295 (10) (2014).

15. "Molecular orientation dynamics on the structural rheology in diblock copolymers", <u>Shunsuke Yabunaka</u> and Takao Ohta, Soft Matter, 9 (31), 7479-7488 (2013).

16. "Phase separation in a binary mixture confined between symmetric parallel plates: Capillary condensation transition near the bulk critical point", <u>Shunsuke Yabunaka</u>, Ryuichi Okamoto, and Akira Onuki, Phys. Rev. E. 87, 032405 (10) (2013).

17. "Viscoelastic interface motion in semidilute polymer solutions", <u>Shunsuke Yabunaka</u>, J. Stat. Mech. P7011 18 pages (2012).

18. "Self-propelled motion of a fluid droplet under chemical reaction", <u>Shunsuke Yabunaka</u>, Takao Ohta and Natsuhiko Yoshinaga, J. Chem. Phys. 136, 074904 (8) (2012).

19. "Polydomain growth at isotropic-nematic transitions in liquid crystalline polymers", <u>S. Yabunaka</u> and T. Araki, Phys. Rev. E. 83, 061711 1-10 (2011).

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B. 総説
(査読あり)

21. N. Yoshinaga and <u>S. Yabunaka</u>, "Theory of active particles and drops driven by chemical reactions: the role of hydrodynamics on self-propulsion and collective behaviours", to appear as a chapter of RSC e-book "Self-Organized motion."