

2010 年度 小林チーム発表論文

1. Takuya Umedachi, Koichi Takeda, Toshiyuki Nakagaki, Ryo Kobayashi, and Akio Ishiguro, “Fully Decentralized Control of a Soft-bodied Robot Inspired by True Slime Mold”, *Biological Cybernetics*, 102-3(2010), 261-269. DOI 10.1007/s00422-010-0367-9
2. Masahiro Shimizu and Akio Ishiguro, “Amoeboid Locomotion Having High Fluidity by a Modular Robot”, *International Journal of Unconventional Computing*, 6-2(2010), 145-161
3. 大脇 大, 坂井善行, 石田 怜, 手老篤史, 石黒章夫, 運動安定化と運動探索をシームレスに統合可能なマルチリズムオシレータモデルの提案 —次元ホッピングロボットの跳躍運動への適用—, 計測自動制御学会論文集, 46-9 (2010), 562-571
4. 梅舘拓也, 武田光一, 中垣俊之, 小林 亮, 石黒章夫, 真正粘菌変形体から着想を得た自律分散制御方策の実験的検証, 計測自動制御学会論文集, 46-11 (2010), 706-712
5. Kentaro Ito, David Sumpter, Toshiyuki Nakagaki : “ Risk management in spatio-temporally varying field by true slime mold”, *NOLTA (Nonlinear Theory and Application) journal, IEICE*, vol.1 (2010), 26-36
6. Tomoyuki Miyaji, Isamu Ohnishi, Ryo Kobayashi and Atsuko Takamatsu : “Mathematical analysis to coupled oscillators system with a conservation law”, *RIMS Kokyuroku Bessatsu, B21* (2010), 129-147
7. Kei-ichi Ueda, Seiji Takagi, Yasumasa Nishiura, and Toshiyuki Nakagaki : “Mathematical model for contemplative amoeboid locomotion”, *Physical Review E* 83, 021916 (2011). DOI: 10.1103/PhysRevE.83.021916
8. Tanya Latty, Kai Lamsch, Kentaro Ito, Martin Middendorf, Toshiyuki Nakagaki, Madeleine Beekman: “Construction of self-organized transportation networks in the polydomous Argentine ant”, *Journal of The Royal Society, Interface*, doi:10.1098/rsif.2010.0612, 2011
9. Dai Owaki, Satoshi Ishida, Atsushi Tero, Kentaro Ito, Koh Nagasawa, and Akio Ishiguro, An Oscillator Model That Enables Motion Stabilization and Motion Exploration by Exploiting Multi-rhythmicity, *Advanced Robotics*, 25-8, 9 (2011) (in press)

10. Dai Owaki, Masatoshi Koyama, Shin'ichi Yamaguchi, Shota Kubo, and Akio Ishiguro, A Two-Dimensional Passive Dynamic Running Biped with Elastic Elements, *IEEE Transaction on Robotics*, 27-1, pp.156-162 (2011)
11. Yoshimi Tanaka, Toshiyuki Nakagaki: "Cellular computation realizing intelligence of slime mold *Physarum polycephalum*", *Journal of Computational and Theoretical Nanoscience*, Vol. 8, 383-390 (2011). invited review, DOI: 10.1166/jctn.2011.1702
12. Takahide Sato, Takeshi Kano, and Akio Ishiguro, On the applicability of the decentralized control mechanism extracted from the true slime mold: A robotic case study with a serpentine robot, *Bioinspiration & Biomimetics* (accepted).