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Born May 6, 1973

Career

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| 2004-present | Research associate
Section of Biological Sciences, Faculty of Science, Hokkaido University |
| 2003-2004 | Research Assistant
Graduate School of Science, Hokkaido University |

Research Interests

Soft and Wet matter (Hydrogel), Soft-actuator, Motor proteins, Functional polymer,
Self-assembly system

Most Important Relevant Publications (Selected)

- (1) J. P. Gong, N. Hirota, **A. Kakugo**, T. Narita, Y. Osada, "Effect of Aspect Ratio on Protein Diffusion in Hydrogels", *J. Phys. Chem. B*, 104, 9904-9908 (2000)
- (2) **A. Kakugo**, S. Sugimoto, J. P. Gong, Y. Osada, "Nanoactuators built of covalently bound myosin and actin gel fibers", *Advanced Materials*, 14, 1124-1126 (2002). J. P.
- (3) **A. Kakugo**, K. Shikinaka, K. Matsumoto, J. P. Gong, Y. Osada, "Growth of Large Polymer-Actin Complexes", *Bioconjugate Chem.*; 14(6); 1185-1190 (2003).
- (4) **A. Kakugo**, S. Sugimoto, . Shikinaka, J. P. Gong, Y. Osada, "Characteristics of Chemically Cross-linked Myosin Gels", *J. Biomater. Sci. Polymer Edn*, 16, 203-218 (2005).
- (5) **A. Kakugo**, K. Shikinaka, N. Takekawa, S. Sugimoto, J. P. Gong, Y. Osada, "Polarity and Motility of Large Polymer-Actin Complexes", *Biomacromolecules*, 6, 845-849 (2005).
- (6) **A. Kakugo**, K. Shikinaka, J. P. Gong, Y. Osada, "Gel machines constructed from chemically cross-linked actins and myosins", *Polymer*, 46, 7759-7770 (2005).
- (7) H. Kwon, **A. Kakugo**, K. Shikinaka, J. P. Gong, Y. Osada, "The morphology of actin assemblies in response to polycations and salts", *Biomacromolecules*, 6, 3005-3009 (2005).
- (8) H. Kwon, **A. Kakugo**, K. Shikinaka, H Furukawa, Y. Osada, J. P. Gong, "Motility and structural polymorphism of polymer-actin complex gel", *J. Nanotechnology and Nanoscience*, in press.
- (9) H. Kwon, Y. Tanaka, **A. Kakugo**, K. Shikinaka, H. Furukawa, Y. Osada, J. P. Gong, "Anisotropic nucleation-growth of actin bundle: A model for determining the well defined thickness of bundles", *Biochemistry*, in press.
- (10) H. Kwon, **A. Kakugo**, T. Ura, T. Okajima, Y. Tanaka, H. Furukawa, Y. Osada, J. P. Gong, "Actin network formation by uni-directional polycation diffusion" Submitted to *Biomacromolecules*.