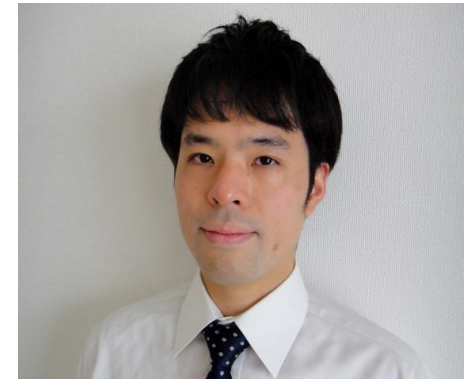


Name: Ken Komiya

Expertise: Dynamical DNA nanotechnology

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Reserch Theme in This Project:

Construction of reaction circuitry for enabling a molecular robot to behave intelligently according to its own memory

Main Research Results, Publications:

- * Construction of a molecular state machine that autonomously implement multi-step information processing programmed with a single DNA molecule
BioSystems, 83, pp. 18–25 (2006)
- * Development of an interface for a computing model using DNA methylation
Lecture Notes in Computer Science, 4848, pp. 191–200 (2008)
- * Desing of a DNA nanodevice that functions as a thermal bandpass filter by taking advantage of the sub-optimal structure
Nucleic Acids Research, 38, pp. 4539–4546 (2010)
- * Implementation of signal-dependent operation of a molecular state machine at a physiological temperature
Natural Computing, 9, pp. 207–218 (2010)
- * Construction of a signal DNA generation cascade that can fuction at a physiological temperature
New Generation Computing, 33, to appear (2015)

Recent Activities (hobbies, etc.): I would like to deepen a unified view of material and living systems from the view point of dissipative structure and emregence of sophisticated function, and also to perform sensuous science communication