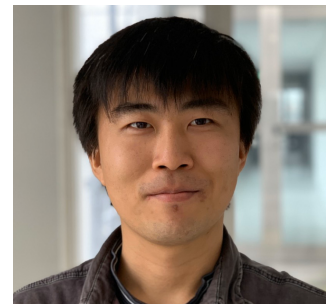


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2015	BS	The University of Tokyo, The School of Engineering, Department of Chemistry & Biotechnology
2017	MS	The University of Tokyo, The Graduate School of Engineering, Department of Chemistry & Biotechnology
2020	Ph.D.	The University of Tokyo, The Graduate School of Engineering, Department of Chemistry & Biotechnology

### **Research Careers**

2017 – 2020	Research Fellowships for Young Scientist (DC1), Japan Society of the Promotion of Science (JSPS)
2020 –	Assistant Professor, The University of Tokyo, The Graduate School of Engineering, Department of Chemistry and Biotechnology

### **Awards and Honors**

2017	The 42nd International Symposium of Nucleic Acid Chemistry, ISNAC Outstanding Poster Award
2018	The 98th CSJ Annual meeting, Student Oral Presentation Award

### **Fellowships and Grant**

2023.4–2025.3	JSPS Grant-in-Aid for Scientific Research on Innovative Areas
2022.4–2024.3	JSPS Grant-in-Aid for Young Scientists
2020.9–2022.3	JSPS Grant-in-Aid for Research Activity Start-up
2017.4–2020.3	JSPS Research Fellowship for Young Scientists (DC1)

### **Publications**

- (1) Takafumi Furuhashi, Phebee Angeline Devadasan Racheal, Iori Murayama, Usano Toyoda, Akimitsu Okamoto "One-pot, photocontrolled enzymatic assembly of the structure-defined heterotypic polyubiquitin chain" *J. Am. Chem. Soc.* 2023, <https://doi.org/10.1021/jacs.3c01912>

- (2) Takafumi Furuhashi, Yuki Komoto, Takahito Ohshiro, Masateru Taniguchi, Ryosuke Ueki, Shinsuke Sando “Key aurophilic motif for robust quantum-tunneling-based characterization of a nucleoside analogue marker” *Chem. Sci.* **2020**, *11*, 10135–10142.
- (3) Takafumi Furuhashi, Takahito Ohshiro, Yuichi Izuhara, Tomoaki Suzuki, Ryosuke Ueki, Masateru Taniguchi, Shinsuke Sando “Chemical Labeling-Assisted Detection of Nucleobase Modifications by Quantum Tunneling-Based Single Molecule Sensing” *ChemBioChem*, **2020**, *21*, 335–339.
- (4) Takafumi Furuhashi, Takahito Ohshiro, Gaku Akimoto, Ryosuke Ueki, Masateru Taniguchi, Shinsuke Sando “Highly conductive nucleotide analogue facilitates base-calling in quantum tunneling-based DNA sequencing” *ACS Nano*, **2019**, *13*, 5028–5035.
- (5) Akira Tsuchiya, Siti N. Hashim, Shoko Ise, Takafumi Furuhashi, Kiyohiko Kawai, Rie Wakabayashi, Masahiro Goto, Noriho Kamiya, Shinsuke Sando “BODIPY-Labeled fluorescent aptamer sensors for turn-on sensing of interferon-gamma and adenine compounds on cells” *Anal. Sci.* **2016**, *32*, 543-547.