

NANO KOREA 2020

July 1~3, KINTEX, Korea

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EDUCATION

The University of Tokyo	Ph.D	Material Science	2006
Tokyo Institute of Technology	MS	Material Science	2003
Tokyo Institute of Technology	BS	Physics	2001

PROFESSIONAL ACTIVITIES

- Senior Researcher, Electronic and Photonics Research Institute, National Institute of Advanced Industrial Science and Technology, Japan (October 2017 to Present)
- Researcher, Electronic and Photonics Research Institute, National Institute of Advanced Industrial Science and Technology, Japan (April 2012 to September 2017)
- Postdoctoral Researcher, The Institute of Physical and Chemical Research, Japan (March 2009 to March 2012)
- Postdoctoral Researcher, Institute of Solid-State Research, Jülich Research Center, Germany (April 2008 to February 2009)
- Alexander von Humboldt Research Fellow, Institute of Solid-State Research, Jülich Research Center, Germany (October 2006 to March 2008)
- Postdoctoral Researcher, Institute for Solid State Physics, The University of Tokyo, Japan (April 2006 to September 2006)

AWARD AND HONORS

- Young Researcher Supporting Grant in COE21 Program for “Applied Physics on Strong Correlation” at University of Tokyo, Japan (2004)
- International Research Grant, Marubun Research Promotion Foundation, Japan (2007)

MAIN SCIENTIFIC PUBLICATION

- K. Shibuya and A. Sawa, “Modulation of metal–insulator transition in VO₂ by electrolyte gating-induced protonation”, *Adv. Electron. Mater.* **2**, 1500131 (2016).
- M. Nakano, K. Shibuya, T. Hatano, S. Ono, M. Kawasaki, Y. Iwasa, and Y. Tokura, “Collective bulk carrier delocalization driven by electrostatic surface charge accumulation”, *Nature* **487**, 459 (2012).

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- K. Shibuya, M. Kawasaki, and Y. Tokura, "Metal–insulator transition in epitaxial $V_{1-x}W_xO_2$ ($0 \leq x \leq 0.33$) thin films", Appl. Phys. Lett. **96**, 022102 (2010).
- K. Shibuya, R. Dittmann, S. Mi, and R. Waser, "Impact of defect distribution on resistive switching characteristics of Sr_2TiO_4 thin films", Advanced Materials **22**, 411 (2010).

RESEARCH INTERESTS

- Oxide electronics
- Metal-insulator transition