Prof. Taro UEDA

Associate Professor
Division of Chemistry and Materials Science, Graduate School of Integrated Science and Technology, Nagasaki University, Japan

Education and Experience

2025.2–present Associate Professor, Graduate School of Integrated Science and Technology, Nagasaki University, Japan

2018.10–2019.2 Visiting Researcher, Massachusetts Institute of Technology, USA

2018.1–2018.7 Visiting researcher, University of Tubingen, Germany

2013.6–2025.1 Assistant Professor, Graduate School of Engineering, Nagasaki University, Japan

2008.4–2013.5 Researcher, Japan Fine Ceramics Center, Nagoya, Japan

2005.4–2008.3 Ph.D., Interdisciplinary Graduate School of Engineering Science, Kyushu University, Japan

2003.4–2005.3 M.S., Graduate School of Engineering, Kyushu Institute of Technology, Japan

1999.4–2003.3 B.S., Department of Material Science and Engineering, Kyushu Institute of Technology, Japan

Publications; Please refer to https://researchmap.jp/taroueda

1. T. Ueda, H. Hayashi, R. Tsukahara, Y. Shimizu, T. Hyodo, "Effects of Structure and Thickness of $Ce_{0.9}Pr_{0.1}O_2$ Electrodes of YSZ-Based Gas Sensors on VOC-Sensing Properties", *Sens. Actuators B*, 136580 (2025).
2. T. Ueda, S. Kamura, Y. Shimizu, T. Hyodo, "Effects of thickness of CeO_2-added Au electrodes of YSZ-based gas sensors on VOC-sensing properties", *Sens. Actuators B*, 417, 136217 (2024).
3. T. Ueda, S. Torai, K. Fujita, Y. Shimizu, T. Hyodo, Effects of Au Addition to Porous CuO_2-added SnO_2 Gas Sensors on Their VOC-Sensing Properties, *Chemosens*., *12*(8), 153 (2024).
4. T. Ueda, T. Matsuo, T. Hyodo, Y. Shimizu, "Effects of heat treatments of Pt-loaded Al2O3 on catalytic activities of CO oxidation and combustion-type CO sensors" *J. Mater. Sci.*, 58, 9459-9472 (2023).
5. S. Torai, T. Ueda, Kai Kamada, Takeo Hyodo, Y. Shimizu*, Effects of Addition of Cu_xO to Porous SnO_2 Microspheres Prepared by Ultrasonic Pyrolysis on VOC-Sensing Properties, *Chemosens*, 11(1), 59 (2023).
6. T. Ueda, I. Boehme, T. Hyodo, Y. Shimizu, U. Weimar, N. Barsan, “Effects of Gas Adsorption Properties of an Au-Loaded Porous In_2O_3 Sensor on NO_2-Sensing Properties”, *ACS Sens.*, 6(11), 4019−4028 (2021).
7. T. Ueda, T. Defferriere, T. Hyodo, Y. Shimizu, H. L. Tuller, “Nanostructured Pr-Doped Ceria (PCO) Thin Films as Sensing Electrodes in Solid-Electrolyte Type Gas Sensors with Enhanced Toluene Sensitivity”, *Sens. Actuators B*, 317, 128037 (2020).