

Associate Professor **YOSHIDA Toshiyuki** Room 811, Interdisciplinary Faculty of Science and Engineering 3 TEL: 0852-32-6346 (Ext. 6314) Email: yosisi[at]riko.shimane-u.ac.jp (Please change [at] to @ for email.) Website: <u>http://www.ecs.shimane-u.ac.jp/~yosisi/index\_E.html</u>

## Background

- 2019 Associate Professor, Department of Physics and Materials Science, Interdisciplinary Faculty of Science and Engineering (IFSE), Shimane University
- 2018 Assistant Professor, Dept. of Physics and Material Science, IFSE, Shimane University
- 2012 Assistant Professor, Dept. of Mechanical, Electriacal and Electronic Engineering, IFSE, Shimane University
- 2007 Assistant Professor, Dept. of Electronic Control Systems Engineering, IFSE, Shimane University
- 2001 Research Associate, Dept. of Electronic Control Systems Engineering, IFSE, Shimane University
- 2001 Graduated the doctor's program, Graduate school of Electronics and Information Engineering, Hokkaido University
- 2000 Research Fellowship for Young Scientists, Japan Society for the Promotion of Science

## Research

Characterization and Device Application of Surfaces and Interfaces in Semiconductor Thin-Films and Particle-Layers

## Key papers

- Toshiyuki Yoshida, Islam Md Maruful, and Yasuhisa Fujita: "Trial of Ga-doping on ZnO Nanoparticles by Thermal Treatment with Ga<sub>2</sub>O<sub>3</sub> Nanoparticles", e-Journal of Surface Science and Nanotechnology, **18** (2020) pp.12-17.
- 2. Itohara Daiki, Kazato Shinohara, Toshiyuki Yoshida, and Yasuhisa Fujita: "P-channel and nchannel thin-film-transistor operation on sprayed ZnO nanoparticle layers", Journal of Nanomaterials, **2016** (2016) pp.8219326\_1-6.
- Toshiyuki Yoshida, and Tamotsu Hashizume: "Studies on atomic layer deposition Al<sub>2</sub>O<sub>3</sub>/In<sub>0.53</sub>Ga<sub>0.47</sub>As interface formation mechanism based on air-gap capacitance-voltage method", Applied Physics Letters, **101** (2012) pp.122102\_1-4.
- Toshiyuki Yoshida, Yoshiki Ebiko, Michiko Takei, Nobuo Sasaki, and Toshiaki Tsuchiya: "Grain-Boundary Related Hot Carrier Degradation Mechanism in Low-Temperature Polycrystalline Silicon Thin-Film Transistors", Japanese Journal of Applied Physics, Part 1, 42 4B (2003) pp. 1999-2003.