# Call for Papers

# Special Section on Fundamentals and Applications of Advanced Semiconductor Devices

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Electronics announce a Special Section on "Fundamentals and Applications of Advanced Semiconductor Devices" to be published in <u>October 2022</u>. As digital processing units penetrate deeply into information society, the demand for high-performance semiconductor devices is kept growing. The purpose of this Special Section is to discuss various aspects of advanced semiconductor devices from fundamental physics to circuit applications. These include Si-based MOSFETs and bipolar transistors, compound semiconductor devices, and nano-scale devices.

# 1. Scope

Contributions are solicited in the following areas (but are not limited to these areas):

- Advanced integration technologies
- · ULSI process technologies
- · High-speed devices and circuits
- Power devices
- · Wide bandgap materials and devices
- · Novel devices and circuits
- Semiconductor devices applications

- · MOS/bipolar devices technologies
- · Compound semiconductor materials and devices
- · Microwave/Millimeter-wave devices and circuits
- TFT materials, devices and circuits
- · Quantum effect/single electron devices
- · Characterization and simulation
- · Sensors and displays

#### 2. Submission Instructions

The deadline for submission is <u>October 18, 2021</u>. Types of manuscripts should be either "Paper (within 8 pages)" or "Brief Paper (within 4 pages)." Manuscripts should be prepared according to the "Information for Authors," the latest version of which is available at: <a href="http://www.ieice.org/eng/shiori/mokuji">http://www.ieice.org/eng/shiori/mokuji</a> es.html.

This special section will accept only papers by electronic submission. Prospective authors are requested to follow the submission procedure described below.

Submit a paper and transfer copyright of the paper using the IEICE Web site

https://review.ieice.org/regist/regist\_baseinfo\_e.aspx. Authors should choose the [Special-FU] Fundamentals and Applications of Advanced Semiconductor Devices as a "Issue/Section" on the online screen. Do not choose [Regular-EC].

Inquiries to

### Nobuaki Kobayashi

Nihon Univ.

Tel & Fax: +81-47-469-5586, E-mail: kobayashi.nobuaki@nihon-u.ac.jp

# Special Section Editorial Committee

Guest Editor: Hiroshige Hirano (Tower Partners Semiconductor)

Secretaries: Nobuaki Kobayashi (Nihon Univ.), Tomoyuki Suwa (Tohoku Univ.)

Members: Shun-ichiro Ohmi (Tokyo Tech.), Masanori Natsui (Tohoku Univ.), Takahiro Shinada (Tohoku Univ.)

Hiroya Ikeda (Shizuoka Univ.), Hisahiro Anzai (SONY), Toshiro Hiramoto (The Univ. of Tokyo)

Seiichi Miyazaki (Nagoya Univ.), Takahiro Mori (AIST), Yasuo Nara (Univ. of Hyogo)

Takashi Noguchi (Univ. of Ryukyus), Hiroshi Okada (Toyohashi Univ. of Tech.), Taizoh Sadoh (Kyushu Univ.)

Toshihiro Sugii (Fujitsu), Shintaro Nomura (Tsukuba Univ.), Takuya Futase (SanDisk)

Yukiharu Uraoka (Nara Institute of Sci. and Tech.)

# [IMPORTANT NOTICE]

<sup>\*</sup>Please note that if accepted, all authors, including authors of invited papers, should pay for the page charges covering partial cost of publication.

<sup>\*</sup>At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend authors to apply for the IEICE membership if they do not have one now. For membership applications, please visit the web-page, <a href="https://www.ieice.org/eng/join\_ieice/index.html">https://www.ieice.org/eng/join\_ieice/index.html</a>.