
FOREWORD

Special Section on Fundamentals and Applications of Advanced Semiconductor Devices

Semiconductor devices have been, and will continue to be, key components that support our society. The demands of capacity, performance and new functionality for semiconductor devices have been growing drastically in recent years. The aim of this special section is discussing recent progress of semiconductor materials and devices in the fields from fundamental physics to advanced device and process technologies. This section contains 10 papers, which cover the fields of advanced CMOS and memory technology, high frequency device technology for THz and energy harvesting application, thermoelectric device, field emission device and bio-electrochemistry.

I would like to express my sincere thanks to all authors for their contributions to the special section. I also appreciate the editorial committee members and reviewers for their devoted contribution. Despite of the busy and tight schedule, they spent precious time to do hard work for editing and reviewing papers. Without their efforts, this special section could not be achieved.

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Kunio Tsuda (*Member*) received the B.S. degree in electric engineering from Tohoku University, Sendai, Miyagi, Japan, in 1983. He joined Research & Development Center, Toshiba Corporation, Kawasaki, Kanagawa, Japan, in April 1983, where he was engaged in the research and development on compound semiconductor devices. Since April 2016, he has been with Toshiba Infrastructure Systems & Solutions Corporation. His current interests include GaN based electron devices for RF and power switching applications. From 2017 to 2019, he served as chair of the Electron Devices (ED) Technical Committee of IEICE.

