
FOREWORD

Special Section on Heterostructure Microelectronics with THWM 2011

Welcome to this Special Section on “Heterostructure Microelectronics with THWM2011”. Most of the papers in this section are extended version of the abstracts presented at the Topical Workshop on Heterostructure Microelectronics (THWM2011), which was held at Nagarakawa Convention Center, Gifu, Japan on August 28–31, 2011, and include a substantial amount of information beyond the presentations. The purpose of this Special Section is to share an overview of recent progress of research and development in electron devices using semiconductor heterostructures with many readers of this transaction. The topics cover ultra-high-frequency and/or high-power devices, their circuit applications, and novel nanostructures/nanodevices based on compound semiconductor heterostructures.

This Special Section consists of 13 papers from Europe and Japan, covering a broad range of theoretical and experimental aspects of compound semiconductor devices: Nitride-based devices, InP-based devices, and emerging devices.

We would like to thank all the authors of papers for their efforts in preparing the manuscripts, the reviewers who worked diligently to make sure that the papers are worth publication, and the staffs in IEICE Transactions on Electronics.

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Tamotsu Hashizume (Hokkaido Univ.), Guest Editor

Tamotsu Hashizume (*Member*) was born in Hokkaido in 1956. He received B.E. and Ph.D. degrees in electrical engineering from Hokkaido University, Hokkaido, Japan, in 1981 and 1991, respectively. He became Research Associate of Kushiro National College of Technology in 1981. In 1994, he moved to Hokkaido University, as Associate Professor. Since 2004, he has been a Professor of Research Center for Integrated Quantum Electronics, Hokkaido University. His research interests include characterization and control of surfaces and interfaces of GaN-based materials for electron device application. He has authored or co-authored over 150 papers in scientific and technical journals. From 2009 to 2011, he served as chair of the Electron Devices (ED) Technical Committee of IEICE.

