FOREWORD

Special Section on Fundamentals and Applications of Advanced Semiconductor Devices

Recently, semiconductor device research is facing new aspects beyond Moore's law. They include devices based on new materials, new structures, and new operating principles. The application area is also spreading into various directions, such as green electronics, and IoT. This special section on Fundamentals and Applications of Advanced Semiconductor Devices is arranged to discuss fundamentals and applications of semiconductor devices for future advanced electronics. This section contains 12 papers, which cover the fields of process technology, memory, ultrahigh frequency devices, organic devices, and carbon devices.

I would like to express my sincere thanks to all authors for their contributions to the special section. I also thank all reviewers and editorial committee members for their devoted contribution to reviewing and editing the papers. This special section could not be achieved without their efforts.

Koichi Maezawa (Univ. of Toyama), Guest Editor-in-Chief

Koichi Maezawa *(Senior Member)* was born in Tokyo, Japan, in 1959. He received a B.E. in Applied Physics, and M.S. in Physics, and the Ph.D. in Applied Physics from Waseda University, Tokyo, Japan, in 1982, 1984, and 1993, respectively. He was engaged in the research and development of heterostructure FETs and quantum effect devices at NTT from 1984 to 1997, and at Nagoya University from 1997 to 2006. He is currently a professor at the Graduate School of Science and Engineering, University of Toyama. His current interests include heterostructure FETs, resonant tunneling devices, MBE growth of quantum structures, and applications of quantum functional devices to new architectures for computation.