

---

## FOREWORD

---

### Special Section on Photonic Devices using Nanofabrication Technology and Their Applications

Nanofabrication is one of the most expected important key technologies to develop next stage photonics to play an indispensable active role to take us into the deeper information and communication society. Increasing and intensive demands from photonic device researches to provide finer and more precise fabrication technology have activated and accelerated extensive researches on nanotechnology, that has carried out a lot of interesting and promising results for novel applications in photonic devices. The main objective of the present special section is to highlight recent progress and trends in various approaches developed for building up a wide variety of photonic devices by using nanofabrication technology.

The editorial committee of the present special section is formed from members of two limited term technical committees, Silicon Photonics (Chair: Koji Yamada) and Next Generation Nanotechnology, Electronic Society, IEICE, with the intention to promote and enhance research activities on these fields further. I would like to express my sincere thanks to all the authors for their contributions to the section, and also should emphasize and highly appreciate guest editors most devoted invaluable efforts to materialize the section.

#### Editorial Committee Members

- |                          |  |
|--------------------------|--|
| Guest Editors:           | Eiji Higurashi (The Univ. of Tokyo)<br>Nobuhiko Nishiyama (Tokyo Inst. of Technology)  |
| Guest Associate Editors: | Takeru Amano (AIST)<br>Akio Higo (The Univ. of Tokyo)<br>Hiroyuki Ishii (NTT)<br>Jun Mizuno (Waseda Univ.)<br>Masashi Nakao (NICT)<br>Takahito Ono (Tohoku Univ.)<br>Shinichi Saito (Hitachi)<br>Takanori Shimizu (NEC/PETRA)<br>Yoshimasa Sugimoto (NIMS)<br>Junichi Takahara (Osaka Univ.)<br>Katsuyuki Utaka (Waseda Univ.) |

---

Masayuki Izutsu, Guest-Editor-in-Chief

---

**Masayuki Izutsu (Fellow)** was educated in Osaka University, and just after finished his doctoral thesis, joined the Department of Electrical Engineering, Faculty of Engineering Science, Osaka University, where he started to work in the field of guided-wave photonics. He spent a year as a Senior Visiting Research Fellow, at the Department of Electronics and Electrical Engineering, University of Glasgow, U.K. In 1996, he moved in to the Communications Research Laboratory, Ministry of Posts and Telecommunications (now the National Institute of Information and Communications Technology, NICT), where he served as Distinguished Researcher, and in charge of its New Generation Network Research Center as a special duty as well. After he retired from NICT, he has been in Tokyo Institute of Technology to look after activities of graduate students in the EE fields. He is also serving as a cooperator member of the Science Council of Japan, and a Guest Professor of Waseda University. Dr. Izutsu is a member of OSA, JSAP, and a fellow IEEE. He received the Best Paper Award and the Award for Significant Achievement from IEICE, served as director, president of the Electronics Society and chairs of several technical committees, and currently editor-in-chief of ELEX, IEICE, and also chair of the limited term technical committee on the Next Generation Nanotechnology, Electronics Society.

