
FOREWORD

Joint Special Section on Opto-electronics and Communications for Future Optical Network

Data traffic is increasing and increasing due to the recent growth on ICT, and opto-electronic communication system has been playing an important role to support such that high demand. The international conference “Optoelectronics and Communications Conference (OECC)” has been recognized for long time to support the technical growth of this opto-electronic communication system. The 21st OECC in 2016 was held in Niigata which is a city lies in 200 km north from Tokyo, jointed with Photonics in Switching 2016. The research and development of opto-electronic devices are key issue to support the continuous growth of the optical communication system, and the following two categories were discussed for the opto-electronic devices;

1) Semiconductor active optical devices, and 2) Optical passive devices and modules.

This special section on IEICE Transaction on Electronics, is organized to provide an overview of the key topics which were discussed at the OECC/PS 2016. In this special section, we have 5 papers in total, including 2 excellent invited papers. I would like to appreciate to all of the authors for their contributions to the special section, as well as to the editorial committee members and the reviewers. I hope and believe that these papers will stimulate all of the readers which support the future research and development of the technology.

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Kiichi Hamamoto (Kyushu University), Guest Editor-in-Chief

Kiichi Hamamoto (*Senior Member*) received B.Eng. and M. Eng. degrees in electrical engineering from Waseda University, Tokyo, Japan, in 1986 and 1988, respectively, and Ph.D. degree in electrical engineering from Swiss Federal Institute of Technology (ETH-Zurich), Zurich, Switzerland, in 2000. In 1988, he joined NEC Opto-electronics Laboratories, where he was engaged in research on opto-electronic devices including optical switch, semiconductor optical amplifier, laser diode, and photonic integrated circuit. From 1996 to 1997, he was a guest researcher at ETH-Zurich, and at there, he proved and invented active-multimode interferometer devices for the first time. Since 2005, he has been a professor of Kyushu University, Fukuoka, Japan. Dr. Hamamoto is a senior member of IEEE Photonics Society, a life member of Optical Society of America, a senior member of Institute of Electronics, Information and Communication Engineers (IEICE), and a member of Japan Society of Applied Physics. He served as a chair of IEICE optoelectronics technical committee on 2009, a lecturer of IEICE over-sea lecture-tour in 2010, and TPC co-chairs for ECIO-MOC2014, MOC 2015, and OECC 2016.

