
FOREWORD

Special Section on Optical Access System for Social Life

Since the FTTH (Fiber To The Home) service kicked into gear in Japan in 2001, optical access systems have kept on advancing as economical technologies which enable broadband services to be enjoyed easily in customer's homes, and FTTH has been taking root as an essential social infrastructure. Additionally, owing to standardization activities and overseas developments, the optical access technologies have been widely spread as international technologies which are employed not only in Japan.

On the other hand, a rapid development of mobile services is driving the drastic increase of the data traffic of mobile network, and evolution of optical access technologies is expected toward applications to mobile backhaul and mobile fronthaul of the 5G and future mobile networks. Furthermore, new technologies supporting social infrastructure, such as M2M and IoT, have been discussed actively, and expectations for optical access technologies supporting these applications are increasing. To meet such expectations, it is increasingly important to establish optical access technologies which will be essential in future social life.

For this section, we received eight paper submissions and have selected seven high quality papers. This includes four invited papers that cover state-of-the-art optical access technologies, standardization, and overseas expansion.

Finally, as the guest editor-in-chief, I would like to express my sincere appreciation to all the authors for their contribution and to all the reviewers and all the members of the editorial committee for their great efforts to make this Special Section a successful one.

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Jun Terada, Guest Editor-in-Chief

Jun Terada (*Senior Member*) received the B.E. degree in science and engineering and the M.E. degree in computer science from Keio University, Kanagawa, Japan, in 1993 and 1995, respectively. In 1995, he joined NTT LSI Laboratories, where he was engaged in the research and development of low-voltage analog circuits, especially A/D and D/A converters. From 1999, he was engaged in developing small and low-power wireless systems for sensor networks. From 2006, he was engaged in high-speed front-end circuits for optical transceivers. He is now a Senior Research Engineer and a Supervisor at NTT Access Network Service Systems Laboratories, where he is responsible for R&D management of optical and wireless converged access networks. He is a member of the Institute of Electronics, Information and Communication Engineers (IEICE) of Japan, and he has served as a member of technical program committee of Symposium on VLSI circuit, a secretary of the IEICE Technical Committee on Communication systems, and is currently serving Asian Solid-State Circuits Conference (A-SSCC) since 2012.

