
FOREWORD

Special Section on Recent Progress in Microwave and Millimeter-wave Technologies

Microwave and millimeter-wave technologies have played an important role in a variety of systems such as wireless communications, sensing, imaging, power transmission, or medical applications for the last several decades. The systems based on these technologies have brought about a dramatic change in our lifestyle as represented by mobile communications, which suggests that these technological fields have immense potential to construct our future society. There has been remarkable progress in microwave and millimeter-wave technologies for their further innovations achieved by sustained efforts of the researchers and engineers in the same technologies sector.

It would be a great honor for me to announce the publication of this special section on recent progress in microwave and millimeter-wave technologies. The section aims at encouraging the prompt disclosure of the latest and latitudinous research works in these fields. It comprises nine regular papers and two brief papers selected from fifteen submitted papers based on the reviewers' reports and discussions in the Editorial Committee. The accepted papers cover a wide range of topics including passive and active circuits, antennas, microwave heating, evaluation techniques, and MIMO systems. In addition to these papers, the section has an invited paper by Dr. Kazukiyo Joshin on millimeter-wave GaN HEMT for power amplifier applications.

On behalf of the Editorial Committee, I would like to express my sincere appreciation to all the authors for their contributions and to all the reviewers for their generous support. I would also like to convey my cordial gratitude to all the Editorial Committee members for their dedicated work on this special section. Finally, I would like to thank all the members of the IEICE publication department.

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Shoichi Narahashi (*Senior Member*) received the B.E. and M.E. degrees from Kumamoto University, Kumamoto, Japan in 1986 and 1988, respectively, and the Ph.D. degree from Hokkaido University, Sapporo, Japan in 2008. In 1988, he joined Radio Communication Systems Laboratories, Nippon Telegraph and Telephone (NTT) Corporation where he was engaged in research and development on base station equipment for digital mobile communications. Since 1992, he has been with NTT DOCOMO, INC. He is currently an Executive Research Engineer, Group Leader of Research Laboratories with the mission of investigating RF circuits for mobile communications. He was the recipient of the 2011 IEICE Achievement Award and the 2012 IEICE Best Paper Award. He is a member of the IEEE, EuMA, IEEJ and the Society of Instrument and Control Engineers (SICE).

