Special Section on Radio Access Technologies for 5G Mobile Communications System

The studies on the fifth generation mobile communications system (5G) are being activated more and more toward the launch of service in 2020. In many worldwide 5G-related organizations, the fifth generation mobile forum (5GMF) in Japan for example, novel applications, system requirements, and technologies have been discussed toward 5G. As also shown in IMT VISION finalized by ITU-R WP5D, massive machine type communications and ultra-reliable and low latency communications are also expected in addition to the enhancement of the mobile broadband.

This special section is planned to further promote 5G related R&D activities and to achieve the 5G system requirements in the circumstances above. We received 27 paper submissions and accepted 18 papers through the careful and strict review process. In addition, we have invited a couple of papers: one is from 5GMF and the other is from Samsung Electronics R&D Institute (UK), written by the specialists on wireless access and networking technologies for 5G.

Finally, as the guest editor-in-chief, I would like to thank all the reviewers and the editorial committee members for their contributions and efforts to publish this special section.

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Makoto Taromaru, Guest Editor-in-Chief

Makoto Taromaru (Senior Member) received the B.E. and M.E. degrees in electronics engineering from the Tokyo Institute of Technology in 1985 and 1987, respectively, and the Ph.D. degree from Kyushu Institute of Technology in 1997. In 1987, he joined Kyushu Matsushita Electric Co. Ltd., Fukuoka Japan, currently Panasonic System Networks, where he worked on the development of wireless communication devices. Between 2001 and 2004, he was with the Faculty of Engineering, Kyushu Sangyo University, where he was an Associate Professor in the Department of Electronics. From 2004 to 2010, he was with ATR Wave Engineering Laboratories, Kyoto, and was the head of the Department of Wireless Communication Systems. In 2010, he joined Fukuoka University, where he is currently a professor. He served as an Editor of IEICE Transactions on Communications during 2006–2008, and he also served as an Editor of IEICE Communications Express during 2014–2015. His research interests include radio communication systems, especially on transceiver architectures, diversity and adaptive antenna systems. Dr. Taromaru is a member of IEEE.