FOREWORD

Special Section on Cooperative Communications for Cellular Networks

High data rate and large capacity in wireless radio communications enable wide range of services and increase users in wireless telecommunication industries. Then, the industries encourage academia to invent technologies that enhance the data rate and capacity. This positive feedback between industry and academia has energized their activities with each other. Today, we enjoy mobile broadband services at the order of several tens Mbps with LTE and WiMAX world wide.

Present wireless radio communications utilize adaptive modulation and coding with high-order modulation and strong data-error protection, multiantenna transmission and reception techniques, and smart radio resource management. These techniques are adopted between one base station and several users. New standards of IMT-Advanced in ITU-R require high data rate not only at the cell center but also at the cell edge. Introduction of cooperative technologies for multiple base stations and multiple users attracts the attention of many researchers.

This special section aims at timely disseminations of studies such as cooperative beam/resource control, cooperative transmission, relaying, and cooperative MIMO.

There were 38 submissions for a paper and 16 a letter, respectively The Editorial Committee has selected 16 papers and 7 letters and invited two tutorial papers from academia and industry. The Editorial Committee hopes that these excellent papers will encourage further research and development activities.

As the Guest Editor-in-Chief, I would like to express my appreciation to all authors for their contributions and to all members of the Editorial Committee for their efforts in realizing this outstanding special section.

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Katsuhiko Hiramatsu, Guest Editor-in-Chief

Katsuhiko Hiramatsu *(Member)* received B.E. and M.E. degree from Tohoku University, Japan, in 1988 and 1990, respectively. He received a Ph.D. from Tokai University, Japan, in 2008. Since 1990, he has been with Matsushita Communication Ind. Co., Ltd., and Panasonic Corporation, Japan. He joined mobile telecommunication standardization in 3GPP and was an editor of TS25.221 specification. He had been at Panasonic-IMEC Center, Belgium, from 2008 to 2010. He is presently Director of Next Generation Mobile Communication Development Center, Panasonic Corporation, and engaging in mobile commutations standardization and future mobile business development.

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