

Call for Papers

— Special Section on Technology Trials and Proof-of-Concept Activities for 5G and Beyond —

IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Technology Trials and Proof-of-Concept Activities for 5G and Beyond" in the August 2019 issue.

To the beginning of the service in 2020, technology trials and proof-of-concept are undergoing for the 5th generation mobile communication system (5G). In the 5G standardization, key enabling technologies such as massive MIMO, beamforming, access technology and a new frame design are to be specified. Meanwhile, the research and development of those key technologies and their technology trials are being carried out in many research entities. On the other hand, new technology concepts for beyond 5G (B5G) have been also investigated. In these regards, this special section is aiming to provide the opportunity to present the latest trials and trial results for 5G and the proof-of-concept activities for B5G.

1. Scope

This special section aims at timely dissemination of research in the following areas. Possible topics include, but are not limited to:

- Validation of technology for the 5G systems
- Hardware implementation issues of the 5G systems
- Proof-of-concept activities for the B5G systems
- Radio interface design
- New waveform design
- Massive MIMO techniques
- Small cell technologies
- Advanced modulation and coding schemes
- Advanced retransmission control
- Advanced multiple access technologies
- Advanced interference coordination and mitigation techniques
- Advanced MIMO technologies
- Advanced technologies for flexible duplex
- Capacity/coverage split system design
- Energy-efficient radio access technologies
- Technologies for higher frequency bands
- Technologies for massive connectivity
- Technologies for small packet transmission
- Technologies for ultra-low latency
- Device to device (D2D) communications
- Wireless fronthauling and backhauling
- Advanced relay
- Advanced multiple radio access technologies
- System concept and architecture
- Heterogeneous access networks

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guidelines in the "Information for Authors." The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors' photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by **7th September 2018 (JST)**. Authors should choose the "Technology Trials and Proof-of-Concept Activities for 5G and Beyond" as a "Journal/Section" on the online screen. Do not choose [Regular EB].

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