

——Special Section on Exploring Drone for Mobile Sensing, Coverage and Communications :
Theory and Applications——

The IEICE Transactions on Communications announces that it will publish a special section on “Exploring Drone for Mobile Sensing, Coverage and Communications : Theory and Applications” in the October 2019 issue.

Nowadays drone system has emerged as an advanced technology with boundless viable applications due to its on-demand deployment, fast response, low cost and flexibility in reconfiguration and movement, such as reconnaissance, cargo delivery, agriculture, photography and other public services. Specifically, the use of drone system for achieving high-speed and prompting wireless communication would interact with underlying sensing network and thus enhance the total network efficiency. It is expected that the drone system has a huge growth prospect, and extensively exploring drone system would transform traditional application scenarios and network topologies accordingly which arouses much distinctive attention including weak connectivity maintenance, energy management, reliable data transfer, data fusion, motion control and scheduling, etc. Indeed, drone-based applications are to extend conventional functions, provide services and results which are fundamentally different from previous studies. To meet such demands, it is important to build technologies for efficient and reliable mobile sensing, coverage and communication in drone system.

1. Scope

The special section aims at timely dissemination of research. Possible topics include, but are not limited to :

- Drone communication
- QoS and performance for drone-aided ubiquitous sensing coverage
- Multi-hop wireless communication and Drone-enabled mobile relaying
- Amateur drone detection and tracking
- Mobile charging, tour planning and routing protocols for drones
- Efficient aerial information dissemination/data collection
- Cooperative motion control of drones flying in formation
- Task distribution and resource allocation for heterogeneous drone system
- Drone-based data fusion and trustworthy services

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 guideline 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.

The special section accepts papers only by electronic submission. Submit a manuscript and source files (LaTeX/Word files, figures, authors’ photos and biographies) via IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by November 10, 2018 (JST). Authors should choose the Exploring Drone for Mobile Sensing, Coverage and Communication : Theory and Applications as a “Journal/Section” on the online screen. Do not choose [Regular EB]

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3. Special Section Editorial Committee

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