SPECIAL ISSUE ON
MAC for the Next Generation Networks in Unlicensed Band

Overview:

Recent years, both cellular networks and wireless local area networks (WLAN) pay great attentions to the next generation networks in unlicensed band (UB-NGNs) in order to catch up with the ever-increasing wireless traffic demands. UB-NGNs include, for example, MuLTEfire, Licensed-Assisted Access (LAA), LTE-u in cellular networks, IEEE 802.11ax, 802.11ay, and etc. Media access control or multiple access control (MAC) is indispensable for wireless networks. It tries to make sure multiple users to share the wireless resources efficiently, fairly and systematically. However, since unlicensed band is open and even free, the MAC for UB-NGNs will be quite different and difficult comparing with networks in licensed band. Now, UB-NGNs are still being studied, therefore the MAC technologies for the current UB-NGNs need to fully design and further optimize urgently. Therefore, This Special Issue focuses on the MAC technology for the UB-NGNs.

The special issue focuses on the MAC technologies for the next generation networks in unlicensed band.

Topics

Topics of interest include, but are not limited to, the following scope:

– MAC analysis for UB-NGNs – MAC protocol design for UB-NGNs – Simulation platform and testbed for UB-NGNs – Resource allocation and scheduling scheme and/or algorithm for UB-NGNs – Coexistence solutions for UB-NGNs – Big data and artificial intelligence for MAC design of UB-NGNs	– New multiple access technologies for UB-NGNs such as non-orthogonal multiple access, Filtered-OFDMA – New features for UB-NGNs, e.g., device-to-device (D2D), Internet of things (IoTs), full duplex communications, non-orthogonal multiple access, and etc.

Important Dates

- **Manuscript submission deadline: June 1, 2018**
- Notification of acceptance: Aug 15, 2018
- Submission of final revised paper: Oct 1, 2018
- Publication of special issue (tentative): 4nd Quarter, 2018

Submission Procedure

Authors should follow the MONET Journal manuscript format described at the journal site. Manuscripts should be submitted on-line through http://www.editorialmanager.com/mone/.

A copy of the manuscript should also be emailed to the Guest Editor at the following email address: libo.npu@nwpu.edu.cn.

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Dr. Bo LI received the B.S., M.S. and Ph.D degrees in communications engineering from Xidian University, Xi'an, China, in 1994, 1996 and 2002, respectively. From 1997 to 1998, he was selected to study in the Electrical Engineering Department of Shizuoka University in Japan as an exchange student. From 2002 to 2004, he was a Postdoctoral Researcher at the University of Trento, Trento, Italy. In 2007, as a visiting professor, he visited the CITI LAB of INSA LYON for 6 months. He is currently with the School of Electronics and Information Engineering, Northwestern Polytechnical University, Xi'an, China, as a Full-Time Professor. He has authored about 80 research papers in the area of wireless communications and networking. Among these papers, some are published on famous international journals, such as, the IEEE Transactions on Vehicular Technology, the IEEE Communication Letters, and the International Journal of Computer Networks and so on. Moreover, these papers are citied by other authors for over 200 times. His current research interests include broadband wireless mobile networks, wireless local area networks, multimedia wireless communication networks, cross-layer design of wireless communications systems and resource allocations. In the above research areas, he is holding 13 authorized invention patents.

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