



Call for Papers

IEEE 5G Initiative Series on 5G Technologies and Applications (*4th Issue*)

The fifth-generation (5G) networks continue to emerge through evolved technologies that support massive users' connectivity and multigigabits downloading speeds. The 5G is a service-based network that requires efficient selection of sliced architectures considering connected end-user and requested standard slice type. The key advances over previous generations include spectrum extensions using new radio (NR) technologies, multi-interface access, orchestrated operations driven by network function virtualization (NFV) and software-defined networking (SDN), etc. Those technical evolutions will improve the resource availability and system scalability in response to dynamic changes in traffic. Considering a technology road-map for development, IEEE 5G Initiative is sponsoring this series of special issues to publish new papers on the state-of-the-art research material that convey new concepts and results in tutorial style. The selected papers will mark the milestones for 5G findings and trails in view of end-to-end system features. Authors are invited to submit original manuscripts on topics including, but not limited to:

- Physical layer developments in 5G
- Resource allocations for ultra-dense networks
- Interoperability between licensed and unlicensed bands
- Dense small cell deployments for edge device connectivity
- Time alignment for dual- and multi-transmission
- Millimetre wave band and massive MIMO
- Network slicing and topology managements
- Service type analysis: uRLLC, eMBB, mMTC
- C-RAN and network function virtualization
- 5G core network and service -based architecture
- Network hierarchy and mobile edge computing
- Software defined networking
- Distributed mobility management and network intelligence
- Network stability, control and optimization
- Integration of various services and tools
- Data centres and load provisioning
- Vertical application of 5G: smart grid, V2X, etc.
- Performance evaluation of testbeds and trials
- Internet of Things (IoT) and support for massive connectivity
- Innovative applications and services facilities by 5G
- Visions for Beyond 5G technologies
- Standardization activities by IEEE, 3GPP and ETSI

Submission Guidelines:

Authors should submit their manuscripts following the IEEE VTM guidelines at <http://www.ieeevtc.org/vtmagazine/submission.php>
Authors should submit a PDF version of their complete manuscripts to <http://mc.manuscriptcentral.com/vtm-ieee> according to the following schedule:

Important Dates:

- **Manuscript Submission:** 15 Oct 2018
- **First Revisions/Reject Notification:** 15 Dec 2018
- **Notification of Acceptance:** 15 Feb 2018
- **Final Manuscript Due:** 1 March 2019
- **Publication:** June 2019

Senior Editors

Anwer Al-Dulaimi
Rose Hu

EXFO, Canada anwer.al-dulaimi@exfo.com
Utah State University, USA rose.hu@usu.edu