

IMPORTANT DATES

- Manuscript Submission by **17 May 2022 (extended)**
- First Round Reviews **5 August 2022 (ext.)**
- Second Round Submissions **19 September 2022**
- Second Round Reviews / Editorial Decisions **16 November 2022**
- Publication **March 2023**

GUEST EDITORS

Anwer Al-Dulaimi
EXFO, Canada

Klaus David
Kassel University, Germany

Harald Haas
The University of Edinburgh, UK

Rose Hu
University of Michigan, USA

IEEE Future Networks Special Issue on 6G Technologies and Applications (4)

5G networks have made a significant step towards developing a multi-sliced infrastructure that supports various verticals with multi-KPIs. Although 5G deployment is still in its initial phases, the research community is moving forward to identify future 6G technologies and use cases. This series presented some conceptual visions in the previous four special issues of this series, and will continue to publish papers that study novel 6G network architectures and underpinning technologies across all layers of the protocol stack.

The next generation of communications networks will have a high degree of embedded artificial intelligence (AI), and will make use of new spectrum to create new smart infrastructures that feature proactive, secure and adaptive paradigms. These networks will extend beyond terrestrial environments. Future smart, secure and integrated networks will incorporate embedded-analytics, energy efficiency mechanisms, and blockchain systems to increase the network autonomy and foster self-synthesizing and self-healing operations.

Sponsored by the IEEE Future Networks initiative, this series aims to help the research and industrial communities define and shape the architecture, technologies and services for 6G networks. We are soliciting original contributions that are not published or currently under consideration by any other journals. The topics of interest include, but are not limited to:

- 6G dimensions and fundamental analyses
- Methods and technologies to harness new spectrum
- AI/ML assisted PHY and networking
- MU-MIMO and new antenna technologies
- New medium access technologies
- 6G networks and solutions including 6G-U and private networks
- New core network entities and interfaces
- Network assurance and service provisioning
- Cloudification, bigdata, orchestration, multi-access edge computing and IoT
- Cyber security and encrypted connectivity
- Wireless networking using the optical spectrum: LiFi, visible light communications (VLC), optical camera communication (OCC) and free-space optical (FSO) communications
- Quantum communications
- Terahertz communications
- Green 6G networks, wireless harvesting technologies and energy efficiency
- 6G satellite and UAV networks
- 6G-enabled vertical applications and services

Submissions should clearly identify how they relate to 6G and how they would progress beyond current 5G technologies. All manuscripts should contain state-of-the-art material presented in a tutorial or survey style, and must adhere to [IEEE VTM guidelines](#). Submit a PDF version of complete manuscripts to <http://mc.manuscriptcentral.com/vtm-ieee>.