Special Issue

Resilient Communication Technologies for Non-Terrestrial Networks

Message from the Guest Editors

The non-terrestrial network (NTN) is a pivotal component of next-generation communication systems. With large constellation networks as the core, NTN is expected to extend coverage to deep-space, aerial, and oceanic environments, serving as the fundamental guarantee for ubiquitous connectivity in the 6G era. However, NTN is confronted with significant challenges of load balancing, link robustness, and user compatibility, due to the multitude of non-terrestrial network nodes, pronounced differences in physical characteristics across diverse communication scenarios, and the vulnerability of signals to both unintentional and intentional interference. Consequently, these factors limit the performance enhancement of reception capability, service communication latency, and network throughput, ultimately affecting the trajectory of unified and integrated development for NTN. This Special Issue focuses on important technical areas such as NTN system architecture, extended protocol specifications, resilient communications in physical, MAC, and network layers, etc. Original research articles and reviews are welcome.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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