

Special Issue

Intelligent Communication Techniques for Future Multi-Functional Wireless Networks

Message from the Guest Editors

With the rapid evolution of wireless technologies, these networks are increasingly required to support a diverse range of functionalities, including high-speed data transmission, real-time sensing, localization and navigation, task computing, wireless power transfer, etc. By integrating these diverse functionalities within a single system, we can significantly enhance the efficiency, versatility, and overall capability of communication networks. This Special Issue will address the challenges and opportunities associated with applying intelligent communication techniques within these multi-functional wireless networks. We invite contributions that focus on innovative algorithms, protocols, and architectures that enhance future network performance, reliability, and security. Key topics of interest include, but are not limited to, artificial intelligence (AI) and machine learning applications in wireless communication, distributed AI and federated learning in large-scale wireless networks, connected intelligence in future wireless networks, and challenges and opportunities involved in standardizing intelligent communication techniques.

Guest Editors

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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.

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