Special Issue

From 5G to 6G: The Role of Reconfigurable Intelligent Surfaces in the Evolution of Wireless Communications

Message from the Guest Editor

The transition from 5G to 6G represents a significant leap in wireless communication technologies, with Reconfigurable Intelligent Surfaces (RIS) playing a pivotal role in this evolution. RIS are artificial surfaces with embedded electronics that can manipulate electromagnetic waves, enhancing signal propagation, coverage, and capacity. These surfaces are expected to revolutionize wireless networks by providing smart, controllable environments that adapt to changing conditions, thereby improving communication reliability and efficiency. This Special Issue aims to explore the theoretical foundations, design principles, and practical implementations of RIS in the context of 6G networks. We invite contributions that address the challenges and opportunities associated with RIS, including advancements in materials, signal processing algorithms, network architectures, and real-world applications. By bringing together leading researchers and practitioners, this Special Issue will serve as a comprehensive resource for understanding the transformative impact of RIS on future wireless communication systems.

Guest Editor

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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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