Special Issue

RF and Millimeter-Wave Technologies for Next-Generation Wireless Communications

Message from the Guest Editors

Advancing next-generation wireless networks requires effectively meeting the demand for higher data rates and ubiquitous connectivity. To achieve this, RF and Millimeter-Wave (mmWave) technologies are crucial, facilitating massive bandwidth and high data rates from 5G-Advanced to 6G. This Special Issue, titled "RF and Millimeter-Wave Technologies for Next-Generation Wireless Communications," highlights crucial advancements across key research areas.

- Core Technologies and System Design: This section explores foundational breakthroughs, including Massive MIMO, hybrid beamforming, advanced antenna design, and high-performance RF and mmWave integrated circuits (ICs).
- Applications and Challenges: This final area examines critical applications in 5G-Advanced and 6G (eMBB, URLLC, mMTC), alongside significant challenges, including high propagation loss, limited signal penetration, and the need for dense small-cell deployments.

This issue aims to provide a comprehensive overview of state-of-the-art wireless networks and future directions, offering valuable insights to inform the next generation of wireless communications.

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Message from the Editor-in-Chief

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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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