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.

Guest Editors

Prof. Dr. Ali Kara

Department of Electrical and Electronics Engineering, Gazi University, Ankara 06830, Türkiye

Dr. Yaser Dalveren

Department of Electrical and Electronics Engineering, Izmir Bakırcay University, Izmir 35660, Türkiye

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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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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

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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