

Special Issue

Energy-Efficient Wireless Solutions for 6G/B6G

Message from the Guest Editors

Future 6G/B6G is designed to operate at multi-terabit-per-second data rates along with ultra-low latency, which can support large amounts of data transmissions. With the deployment of massive Internet of Things (IoT) devices, the generated data will result in high energy demand; thus, energy efficiency becomes one of the important requirements of 6G/B6G. To achieve this goal, novel energy-efficient wireless solutions are required. For example, smart energy resource management is a mechanism that could be employed by future networks to dynamically optimize the balance between energy demand and energy availability. Edge computing allows some latency-sensitive computation tasks to be offloaded to the edge servers instead of being transferred to the cloud servers to shorten the communication distance. Topics of interest include the following: Energy-efficient resource allocation; Energy-efficient architecture for future networks; Smart energy resource management; Energy efficiency in edge computing; Energy-efficient radio technologies; Energy-efficient offloading for 6G; AI-based energy-efficient multiple access technologies; Integrated sensing and communication technologies.

Guest Editors

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Deadline for manuscript submissions

closed (15 June 2025)



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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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