Special Issue

Wideband RF Front-End Components for Ultra-Wideband (UWB) Applications

Message from the Guest Editor

Ultra-wideband (UWB) systems are attracting attention as ultra-high-speed wireless communication technologies. A major feature of UWB communication is that it uses a very wide frequency band compared to conventional wireless systems. The frequency band of UWB communication is available in the microwave band of 3.1 to 10.6 GHz, and in the quasi-millimeter wave band of 22 to 29 GHz. The UWB system is capable of high accuracy position measurement with an error of a few centimeters as well as large volume data transfer. The system using the impulse radio-type UWB (IR UWB) is expected to be applied to material management and safety management in factories. The major topics of interest for this Special Issue include, but are not limited to:

- Ultra-wideband antennas
- Broadband antennas
- Multiband antennas
- Ultra-wideband communication
- Ultra-wideband radar
- Radar applications
- UWB system

Guest Editor

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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 guest-edited by leading experts in selected topics of interest.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

