Special Issue

Ultra-Low-Voltage and Ultra-Low-Power Integrated Circuits and Systems Evolution

Message from the Guest Editors

In the modern era of the interconnected world, ultra-low-voltage/power electronics is the true enabling factor for higher-impact applications. The use of analog and digital integrated circuits—often powered by energy harvesters—are becoming pervasive, while the challenges of small area occupation, low design effort, and technology/design portability have experienced exponential growth in relation to interconnected sensor nodes. The aim of this Special Issue is to attract papers related to the design and application of ultra-low voltage/power, analog/digital, or mixed-signal-based integrated circuits.

- Ultra-low-power interfaces for the Internet of Things: energy-efficient and power/voltage scalable, analog, mixed-signal IC;
- Energy harvesting and power management circuit for IoT devices;
- IC solutions for ultra-low-voltage/energy and standby power consumption systems;
- Inverter- and digital-based design methodologies of ultra-low power ICs;
- Ultra-low-power/voltage ICs for instrumentation and communication applications;
- Automated design methodology to shorten the timeto-market.

Guest Editors

Dr. Andrea Ballo

Prof. Dr. Gaetano Palumbo

Dr. Orazio Aiello

Deadline for manuscript submissions

closed (16 June 2025)



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About the Journal

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.

Editor-in-Chief

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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).

