Special Issue

Low-Power Electronic Circuits for Monolithic Smart Wireless Sensors

Message from the Guest Editors

Recent advancements in sensor and integrated circuit technologies have facilitated widespread use of smart wireless sensor instruments in various applications. With continuous scaling of CMOS process technologies, a high degree of miniaturization has been achieved, which has led to the realization of complex analytical systems. The purpose of this Special Issue is to address research activities in the design of transducers and the associated electronics, including wireless telemetry required for achieving smart wireless monolithic sensor instruments:

- Low-power circuit design methodologies
- Transducer design for monolithic sensors
- Energy harvesting techniques for battery-less sensor instruments
- Power and energy management circuits and systems
- Circuits techniques for energy-efficient wireless communication
- Wireless smart sensor architecture and system-level design methodologies
- Low-power, intelligent and adaptive sensor signal processing for wireless sensors

Guest Editors

Dr. Syed Kamrul Islam

Dr. Salvatore Pullano

Dr. Nicole McFarlane

Dr. Ifana Mahbub

Deadline for manuscript submissions

closed (30 September 2017)



Journal of Low Power Electronics and Applications

an Open Access Journal by MDPI

Impact Factor 1.8 CiteScore 4.3



mdpi.com/si/8882

Journal of Low Power Electronics and Applications Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ilbea@mdbi.com

mdpi.com/journal/ jlpea





Journal of Low Power Electronics and Applications

an Open Access Journal by MDPI

Impact Factor 1.8 CiteScore 4.3





About the Journal

Message from the Editor-in-Chief

Journal of Low Power Electronics and Applications is an open access journal which provides an advanced forum for rapid dissemination of innovative research and important results in all aspects of low power electronics and design.

It publishes reviews, regular research papers and short communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. The full experimental details must be provided so that the results can be reproduced.

Editor-in-Chief

Dr. Davide Bertozzi

Reader in Advanced Processing Technologies, Department of Computer Science, University of Manchester, Manchester M13 9PL, UK

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.4 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

Journal Rank:

CiteScore - Q2 (Electrical and Electronic Engineering)