

Special Issue

Advances in Wireless Sensor Network Signal Processing

Message from the Guest Editors

As a revolutionary information-gathering method, wireless sensor networks (WSNs) are an indispensable building block of Internet-of-Things (IoT) systems. Currently, data transmissions in WSNs are enabled by a wide variety of wireless communication technologies, such as Wi-Fi, ZigBee, LoRa, and NB-IoT. However, these radio solutions as they exist today are not yet well-established paths to satisfy the required reliability and efficiency of various IoT applications. This is due to their limited and insufficient signal processing capabilities regarding power consumption, data rate, coverage, immunity against interference, and so forth. In this context, this Special Issue aims to foster discussions about the design, implementation, evaluation, and application of emerging signal processing techniques for WSNs among practitioners, researchers, and educators. This Special Issue solicits articles addressing numerous topics, including but not limited to the following:

- Design, development, and measurement of WSN testbeds and simulation tools;
- Foundations of signal processing in WSNs;
- Distributed and collaborative signal processing in WSNs...

Guest Editors

Dr. Chenglong Shao

Prof. Dr. Qinghe Du

Dr. Keping Yu

Deadline for manuscript submissions

closed (30 September 2024)



Signals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.6



mdpi.com/si/149975

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

[mdpi.com/journal/
signals](https://mdpi.com/journal/signals)





Signals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.6



[mdpi.com/journal/
signals](https://mdpi.com/journal/signals)



About the Journal

Message from the Editor-in-Chief

Our primary goal is to encourage scientists and engineers to publish their theoretical results and developed methods in as much detail as possible. There is no limit to the maximum length of papers. Whenever possible, authors are encouraged to provide relevant data and developed code so that the results can be reproduced. Our goal is to provide a platform for scientists and engineers to share new approaches to signal processing in various application domains.

Editor-in-Chief

Prof. Dr. Santiago Marco

1. Department of Electronics and Biomedical Engineering, University of Barcelona, Martí I Franqués 1, 08028 Barcelona, Spain
2. Signal and Information Processing in Sensor Systems, Institute for Bioengineering of Catalonia, The Barcelona Institute of Science and Technology, Baldiri Reixac 10-12, 08028 Barcelona, Spain

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 22.9 days after submission; acceptance to publication is undertaken in 7.6 days (median values for papers published in this journal in the first half of 2025).

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /
CiteScore - Q2 (Engineering (miscellaneous))