# Special Issue

# Advances in Array Signal Processing: Methods and Applications

### Message from the Guest Editors

This Special Issue focuses on advancing the theory, methodology, and practical applications of Array Signal Processing (ASP), aiming to bridge classical techniques, cutting-edge innovations, and deep learning-driven methods while addressing real-world challenges in complex signal environments. The topics of interest include, but are not limited to, the following:

- **Deep learning-based ASP**: Exploring how neural networks (fully connected deep neural networks (FC-DNNs), convolutional deep neural networks (CNNs), Transformers, graph neural networks) and data-driven frameworks can improve ASP performance
- **Traditional ASP technologies** such as beamforming, direction-of-arrival (DOA) estimation (MUSIC, ESPRIT), and array calibration, which remain foundational but require optimization for modern scenarios
- **Advanced ASP methods** such as sparse representation methods, sparse array design, and distributed array processing, which overcome classical array limitations
- **New applications of ASP:** Non-contact respiratory and heartbeat detection using millimeter-wave radar, autonomous driving, and intelligent transportation fields.

### Guest Editors

Dr. Aifei Liu

Prof. Dr. Shengguo Shi

Dr. Feng Chen

### Deadline for manuscript submissions

15 April 2026

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

mdpi.com/journal/electronics

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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 guestedited by leading experts in selected topics of interest.

## Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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