Special Issue

Advancements and New Trends in Inverse Scattering and Imaging

Message from the Guest Editors

This Special Issue aims to provide a platform for cutting-edge research on inverse scattering and imaging, fostering the development of novel analytical, numerical, and experimental methods. Topics of interest include forward and inverse modeling techniques, optimization-based and data-driven methods, and hybrid approaches integrating physics-based models with artificial intelligence. Topics of interest include, but are not limited to, the following:

- Analytical and numerical methods for inverse scattering problems;
- Regularization techniques and uniqueness results;
- Computational approaches, including machine learning for inverse problems;
- Applications in medical imaging (e.g., ultrasound, MRI, optical tomography);
- Electromagnetic and acoustic wave-based imaging methods;
- Seismic imaging and geophysical exploration;
- Non-destructive testing and material characterization;
- Near-field and far-field inverse problems;
- Multi-frequency and multi-static inversion techniques;
- Super-resolution and compressed sensing in inverse imaging;
- Experimental validation and real-world applications.

We look forward to receiving your contributions.

Guest Editors

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Dr. Alessandro Fedeli

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Deadline for manuscript submissions

30 November 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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