Special Issue

Advances in Predictive Maintenance for Critical Infrastructure

Message from the Guest Editors

Critical infrastructures are vital for modern living, providing essential services such as water and gas utilities, transportation networks (e.g., airports and rail stations), communication networks, and the smart electric power grid.

However, these infrastructures are vulnerable to attacks. Recent advancements in artificial intelligence (AI) can help to identify the hazards, risks, and gaps in resilience and enhance the critical infrastructure protection.

The Special Issue will showcase significant advancements in artificial intelligence, machine learning, signal, and information processing that aim to mitigate failures and increase the resilience of critical infrastructure, including anomaly detection, strategies, and security. The Issue will highlight key innovations in these fields and their potential impact on critical infrastructure development and management. This Session covers, but is not limited to, the following topics:

- Critical infrastructure protection;
- Infrastructure resilience;
- Intelligent systems;
- Machine learning and deep learning;
- Regulatory and normative aspects;
- Safety and security;
- Sensor signal processing;
- Sensor networks topology and design;

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Deadline for manuscript submissions

closed (15 August 2024)

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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

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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).

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