

Special Issue

Advances in Fault Diagnosis, Defect Detection and Predictive Maintenance of Railway Vehicle Systems

Message from the Guest Editors

This Special Issue focuses on the latest advances in fault diagnosis, defect detection, and predictive maintenance for railway vehicle systems, aiming to enhance operational safety, reliability, and sustainability through advanced sensing, data analytics, and artificial intelligence. It brings together cutting-edge research to address challenges in monitoring vehicles and infrastructure—such as wheelsets, bearings, and tracks—and supports the development of intelligent maintenance strategies for modern railways. The potential topics include but are not limited to the following:

- Advanced Sensing and Inspection Technologies
- Intelligent Fault Diagnosis and Prognosis
- Predictive Maintenance Strategies
- Structural Health Monitoring
- Non-Destructive Testing and Defect Detection
- Data Analytics and AI in Railways
- Remaining Useful Life Prediction

Guest Editors

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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 guestedited by leading experts in selected topics of interest.

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