Special Issue

Advanced Technologies and Approaches for the Condition Monitoring of Railway Transportation Infrastructure

Message from the Guest Editors

- In recent decades, increases in traffic volumes, and dynamic loads together with the progressive aging of infrastructure assets, have posed major challenges to railway infrastructure management. The integration of multi-sensor data, physics-based modelling, and data-driven techniques has opened new opportunities for the real-time and quantitative assessment of the health condition of railway infrastructure components.
- Within this context, the present Special Issue aims to collect the latest scientific contributions on advanced technologies and methodologies for the condition monitoring of railway transportation infrastructure.
- We welcome original research articles and critical reviews that address theoretical, numerical, and experimental aspects, including (but not limited to) the following thematic areas:
- Bridge direct structural health monitoring;
- Bridge indirect structural health monitoring through on-board measurements;
- Artificial intelligence applied to condition monitoring of railway network components;
- Development of cutting-edge solutions and technologies for novel sensing devices;
- Track degradation assessment.
- We look forward to your contribution.

Guest Editors

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