Special Issue

Recent Developments in Vehicle System Dynamics

Message from the Guest Editors

This Special Issue aims to compile original research and cutting-edge developments in the field of rail vehicle system dynamics, with a focus on new vehicle system design, dynamic analysis, abnormal vibration monitoring, and control. We welcome contributions addressing theoretical, numerical, and experimental methodologies, including, but not limited to, the following:

- Innovative design and dynamic analysis of railway vehicles;
- Real-time monitoring and fault diagnosis of abnormal vibrations;
- Novel control techniques for enhancing vehicle dynamic performance;
- Lightweight and eco-friendly design methodologies;
- Data-driven and Al-based methods for predictive maintenance.

By fostering interdisciplinary discussions, this Special Issue seeks to provide a platform for researchers and engineers to share insights that will drive the future of rail transportation systems.

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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