Special Issue

Dynamics of Railway Vehicles

Message from the Guest Editor

With recent development in the field of rail transportation, rail transportation dynamics is attracting increased attention. In order to help trains operate with high speed, high load, low noise, and safety, many researchers have conducted studies on system dynamics, dynamic performance, longitudinal dynamics, impact dynamics, structural damage, vibration and noise reduction, and many other topics related to high-speed trains. In recent decades, researchers have continuously improved the dynamics of high-speed trains by optimizing train bodies, improving traction motors, strengthening vibration damping systems, and applying new materials, but people still want high-speed trains to be faster, more environmentally friendly, more comfortable, and safer. Therefore, many researchers strive to further improve the dynamics of trains by introducing new materials and new technical means. This Special Issue will discuss recent efforts and research advances achieved in high-speed train dynamics.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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