



Interactions between Railway Subsystems, Volume II

Guest Editor:

Prof. Dr. Seung-Yup Jang

Department of Transportation
System Engineering, Graduate
School of Transportation, Korea
National University of
Transportation, 157, Cheoldo-
bangmulgwan-ro, Uiwang 16106,
Gyeonggi-do, Republic of Korea

Deadline for manuscript
submissions:

closed (30 April 2022)

Message from the Guest Editor

At present, the proportion of railway systems in public transportation is increasing under the global goal of greenhouse gas reduction. In this respect, building a highly efficient railway system is a very important task for us. The railway system consists of several subsystems, such as vehicles, engineering structures, power supply systems, and signal and communication systems. The interactions between these subsystems have very significant effects on the performance and efficiency of the entire railway system. The subsystem interactions, e.g., wheel–rail contact, vehicle–track–substructure dynamic interaction, track–bridge interaction, pantograph–catenary contact, and track–signaling system interface, include a wide variety of complex static and dynamic problems, and many challenges have arisen, and meaningful developments have been made in recent decades. However, there are still several remaining important issues. Thus, I would like to propose this Special Issue including but not limited to the abovementioned themes. New unknown problems in recent or future railway systems are also welcomed.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)