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## Power Quality Analysis and Control of Railway Power Supply Systems

Guest Editors:

**Prof. Dr. Fujun Ma**

**Prof. Dr. Lei Wang**

**Dr. Xiaofeng Yang**

**Dr. Wei Liu**

**Dr. Ke Wang**

Deadline for manuscript  
submissions:

**closed (15 August 2023)**

### Message from the Guest Editors

Dear Colleagues,

Recently, distributed renewable energy systems (RESs), due to their pollution-free and flexible features, have been extensively applied in various practical fields. Naturally, the wide dissemination of these new power supply modes integrated with RESs has also resulted in rethinking and reformation in other industries, typically including railway traction power supply systems (TPSSs). Moreover, the contradiction between dramatic development and distressed power supply capacity has exacerbated the dilemma of the current high-speed railway TPSS, which urgently needs new methods to achieve balance between supply and demand. Hence, in order to ease the tension in TPSSs, the conventional TPSS should be transformed to provide access for RESs, eventually realizing the coexistence of them. Some multi-port railway power conditioners integrated with RES access are proposed to achieve the comprehensive management of power quality and RES access.

This Special Issue is focused on railway power supply system modeling, power quality analysis, power quality compensation, new energy access and control of the railway power supply system.



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# Special Issue



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### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

## Message from the Editor-in-Chief

*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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