



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

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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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Editor-in-Chief

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

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Energies Editorial Office
MDPI, Grosspeteranlage 5
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