





an Open Access Journal by MDPI

Railway Traction Power Supply

Guest Editor:

Prof. Dr. Philippe Ladoux

Laboratory of Plasma and Energy Conversion (LAPLACE), University of Toulouse, Toulouse, France

Deadline for manuscript submissions:

closed (31 March 2023)

Message from the Guest Editor

Nowadays, electrified railway networks are considered one of the most environmentally friendly transportation systems. In the context of the need for increased rail transportation both for freight and passenger services, the efficiency of the electric traction system, from the power supply to the rolling stock, is of central concern. This Special Issue will focus on advances in the domain of railway traction power supply at different aspects levels: modelling, technologies, converters and systems. All electrification systems, both Direct Current and Alternating Current, are addressed.

Papers on the following topics are welcome:

New solutions for interconnection to public grid (reversible substation, voltage balancer, frequency changer ...);

New solutions for power supply (FACTs, three-wire DC power supply, MVDC power system, Integration of renewable energy sources, Energy storage systems ...);

Interactions between rolling stock and power supply (low frequency stability, harmonics interactions ...).











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Control and Systems

Engineering)

Contact Us