

Special Issue

Power Quality in Electrified Transportation Systems

Message from the Guest Editors

Electrified transportation systems (from railways to metros, tramways, and other newer guideway systems) feature a variety of current distribution and collection systems, as well as an increasing use of power electronic conversion to support higher dynamics, better driving performance, and more efficient energy exploitation. Static power conversion has known side effects caused by internal switching and transformation process: waveform distortion, harmonics and interharmonics, significant and varied reactive and nonactive power terms. The system architecture has grown in complexity, including solutions for energy storage and bidirectional exchange of energy with the utility, and an increased number of interacting control systems. This Special Issue has the aim of collecting contributions for complex scenario, improving techniques of analysis, including modern converter architectures, fostering the definition of suitable power quality indices, and exploring suitable measurement methods and systems, with a constructive and open comparison of proposals, solutions, and experiences.

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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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