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# Electromagnetic Compatibility and Electromagnetic Interference in Power Electronic Converters

Guest Editors:

#### Dr. Leonardo Sandrolini

Department of Electrical, Electronic and Information Engineering, University of Bologna, 40136 Bologna, Italy

#### Prof. Dr. Andrea Mariscotti

DITEN, University of Genova, 16145 Genova, Italy

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### **Message from the Guest Editors**

Power electronic converters are a primary component of modern electrical equipment and applications. They are used to allow an efficient conversion and control of electrical power from source to load. This is particularly important in smart grid implementation and development, and in general in all applications where energy-efficient power electronic converters are required on both consumer and generation sides.

Nevertheless, the use of power electronics leads to three major issues, namely, power losses, electromagnetic interference, and harmonic distortion. This Special Issue has the aim of motivating further research on power electronic converters for electromagnetic compatibility and power quality improvement. The topics of interest include, but are not limited to:

- Analysis and modelling of EMI and harmonics issues in power converters;
- Design of novel power converters with reduced EMI and harmonics generation;
- Design of mitigation techniques for EMI and harmonics reduction;
- Design of power electronics systems with low parasitics;
- Supraharmonics in low-voltage installations;
- Measurement and assessment methods for the 2– 150 kHz supraharmonic range.







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# **Editor-in-Chief**

#### Prof. Dr. Flavio Canavero

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

## Message from the Editor-in-Chief

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