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# **Electrical Power Converter Modeling, Simulation, Control and Realization with Energy Storage and Optimization**

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Deadline for manuscript submissions:

closed (10 December 2022)

## **Message from the Guest Editors**

New topologies with advanced control algorithms have been actively developed for power converters, and are being applied in various industries, such as transportation, mobile phones, electric vehicles, railway and high-speed trains, home appliances, induction heating systems, plasma generators, renewable energies, energy storage systems, robots, drones, and so on. The main requirements of modern power converters are high efficiency, high power density, fast transient response, and ability to operate in special applications such as fault-tolerant configurations. The idea to develop efficient and robust topologies with superior control features is the focal point of this Special Issue.

Articles are invited which fall within the following domains (not an exhaustive list):

- Power Converter Modeling and Simulation
- Power Electronic Converter Control
- Power Converter for Electric Transportation
- Design, Optimization and Simulation Tools
- Stability of Power Electronics Systems
- Fault-Tolerant Power Converter Topologies
- Energy Storage Technology
- Renewable Energy Applications of Power Converters
- Education and Innovation



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## **Editor-in-Chief**

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# Message from the Editor-in-Chief

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