

## Special Issue

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

### 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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### Guest Editors

Dr. Shafiq Ahmad

Dr. Adil Sarwar

Dr. Mohd Tariq

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### Deadline for manuscript submissions

closed (10 December 2022)



## Energies

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*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

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