

## Special Issue

# New Power Electronics-Based Converters and Control Systems for Sustainable Energy and Electric Vehicle Applications

### Message from the Guest Editor

Power electronics circuits are increasingly critical in energy systems due to their wide applications, spanning from electric and hydrogen vehicles to renewable energy sources and their integration into power grids, making them a vital area in global science. This Special Issue will cover recent advancements in optimization and control techniques for power and energy systems. Topics of interest include, but are not limited to:

- Wired and wireless charging topologies for electric vehicles,
- Energy storage systems based on power electronics converters,
- Unidirectional and bidirectional power electronics converter topologies,
- Efficient low, medium, and high-power topologies for industrial applications,
- Reliability of power electronics-based converters,
- Applications of wide-bandgap transistors in power converters,
- Integration of renewable energy sources into power grids using power electronics-based converters,
- Control of power electronics systems using artificial intelligence (AI) techniques,
- Other control systems in power electronics,
- Power electronics in DC distribution systems.

### Guest Editor

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### Deadline for manuscript submissions

closed (5 May 2025)



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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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