

## Special Issue

# Control and Optimization of Electrical Power and Energy Systems to Integrate More Renewable and Sustainable Energy Resources

### Message from the Guest Editors

The global move towards decarbonization is encouraging growth in the sustainable energy sector. The making of great advances towards more sustainable, renewable, and distributed power generation comes with many new opportunities, as well as new challenges. Furthermore, many new technologies are now commercially available, such as programmable smart loads, electric vehicles, smart meters, and smart inverters. Energy storage systems, such as battery energy storage, compressed air storage, power storage bricks, and fuel cells, have come to the fore. To optimally involve all these new components and utilize renewable energy resources more effectively, the operation, control, and management methods employed must be updated. This Special Issue aims to present and disseminate the most recent advances in the control and optimization of electrical power and energy systems to integrate more renewable and sustainable energy resources. The areas focused on include control, theory, modeling, optimization methods, renewable energy integration, demand management, energy trading, behaviour prediction, integrated energy systems, and applications.

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### Guest Editors

Dr. Muhammad Numan  
Dr. Arshad Nawaz  
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### Deadline for manuscript submissions

closed (5 September 2025)



## Energies

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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

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