Special Issue

Advanced Control Methods for Power Electronics, Energy Storage, Photovoltaics, and Microgrids

Message from the Guest Editors

The integration of power electronics, energy storage, photovoltaic (PV) systems, and microgrids marks a groundbreaking advancement in the evolution of modern energy systems. These technologies, when combined, offer a cohesive and synergistic framework that can reshape the energy landscape by enhancing the efficiency, flexibility, and sustainability of energy networks. This Special Issue, titled "Advanced Control Methods for Power Electronics, Energy Storage, Photovoltaics, and Microgrids", will explore and disseminate the latest advancements in the theory, design, modeling, applications, and control approaches for power electronics-based systems. These systems are essential for the efficient generation and management of electrical energy from renewable sources and energy storage, realizing a sustainable energy future.

- power electronics-based systems
- energy storage systems
- photovoltaic energy
- advancements in semiconductors
- high-efficiency power electronics system topologies
- advanced control techniques
- fault detection and fault tolerance
- reliability of power electronics systems

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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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