Special Issue

Application of Predictive Control in the Integration and Energy Conversion of Renewable Energy

Message from the Guest Editors

This Special Issue aims to highlight the latest developments and applications of predictive control in renewable energy integration and energy conversion systems. Its topics of interest include, but are not limited to, the following:

- New MPC techniques for power converters: multilevel, matrix, and classical converters for AC-AC, DC-DC, and DC-AC (bidirectional) power conversion.
- New MPC techniques for motor drives.
- Predictive control for power systems, smart and micro-grids, and wind, solar, and other energy conversion systems.
- Advanced MPC techniques for energy/power conversion system maintenance, including, but not limited to, fault detection and diagnosis, power electronics reliability and fault-tolerant control.
- MPC grid-integrated applications for low-inertia and inertia-varying grids.
- MPC solutions for very-low-switching-frequency medium-voltage/high-power drives.
- Data-driven (modeless) and artificial intelligence solutions for MPC, etc.

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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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