## Special Issue

# Predictive Control: A Modernized Control Approach for High Performance Electrical Energy Systems (Theory and Practice)

### Message from the Guest Editors

This Special Issue will publish original manuscripts presenting recent advances in the predictive control of electrical energy systems, with a special focus on topics including but not limited to the following:

- The application of predictive control to electrical power systems (i.e., frequency control, reliability, power quality).
- Utilization of predictive control to manage the operation of utility-scale converters (HVDC, solid-state transformers, FACTS, etc.).
- Utilization of predictive control in the integration process of renewable energy systems to utility grids.
- Application of predictive control in microgrids (AC, DC and hybrid).
- Predictive control for smart grids.
- Predictive control in autonomous systems.
- The application of predictive control to variable-speed electric machine drives and power electronic converters (e.g., DC/AC and multi-phase AC/AC converters).
- Novel formulations of predictive control for rotating machine drives (three-phase and multi-phase) and linear machine drives.
- Design of fault-tolerant predictive control algorithms for autonomous driving vehicles, etc.

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### Deadline for manuscript submissions

closed (20 March 2024)



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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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