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

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Deadline for manuscript submissions:
closed (20 March 2024)

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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Message from the Editor-in-Chief

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