



## Model Predictive Control System Design and Implementation

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### Message from the Guest Editors

Dear Colleagues,

MPC has arguably become one of the most successful control methods due to its capacity to integrate issues such as multiple inputs and outputs, optimization goals, constraints, and dead times. This Special Issue aims at compiling advances regarding predictive controllers in systems where energy plays a central role. From power converters to solar plants, there is a myriad of applications where MPC and energy are entwined, perhaps being part of a larger system. For this reason, this Special Issue aims at bringing together contributions regarding topics such as:

- Centralized, hierarchical and distributed MPC methods in energy systems.
- Fast and flexible MPC methods in energy systems (e.g., numerical methods, clustering, plug and play).
- Cybersecurity and resilience in the design of MPC controllers for collaborative energy management.
- Learning and data-driven strategies for MPC controllers in energy systems.
- MPC-based methods to flatten the demand in energy systems.





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## Message from the Editor-in-Chief

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