



Model Predictive Control: Future Trends and Advances in Motors

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Deadline for manuscript
submissions:

closed (15 May 2024)

Message from the Guest Editors

Dear Colleagues,

The model predictive control (MPC) of electrical drives has gained impressive attention. It has distinguished itself from classical vector and direct control techniques due to its ability to deal straightforwardly and intuitively with multi-objective control and integrate nonlinearities and constraints into a predefined cost function while providing a fast dynamic response and superior performance. Although advantageous, the lifetime performance of this modern control can be limited. As in any model-based control, the closed-loop performance highly depends on how accurately the electrical drive is modeled. On the other hand, the MPC computation burdens reduction, the weighting factor tuning as well as the switching frequency control, are topics of interest that require further investigation.

This Special Issue aims to bring together leading academic scientists, researchers and practicing engineers to exchange and share their experiences and research results in the aforementioned fields, indicating the future trends for the model predictive control of electrical drives.





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Message from the Editor-in-Chief

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