Special Issue

Mathematical Approaches to Modeling, Optimally Designing, and Controlling Electric Machine

Message from the Guest Editors

This Special Issue aims to collect papers reporting the mathematical approaches to modeling, optimal design, and control of electric machines. The main topics of this Special Issue include, but are not limited to: - Analytical models (electromagnetic, thermal, etc.) of electric machines - Numerical models (finite element method, boundary element method, equivalent circuits, etc.) of electric machines - Multi-physics models of electric machines - Lifetime modeling of electric machines - Losses modeling of electric machines - Optimal design methodologies of electric machines - Optimization techniques for fast and efficient optimal design of electric machines - Offline and online methods for identification of electric machine parameters - Field-oriented control and direct torque control - Model predictive control of electric machines - Self-sensing control of electric machines - Robust control of electric machines - Optimal control techniques of electric machines

Guest Editors

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Deadline for manuscript submissions

closed (30 November 2021)

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Mathematics

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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