

Special Issue

Control, Modeling and Optimization for Multiphase Machines and Drives

Message from the Guest Editors

The study of multiphase machines has emerged as a promising research area in recent years as interest in electrical machines has increased. The main objective of this Special Issue is to promote new advancements, developments, and applications of control, modeling and optimization in the field of multiphase machines and drives. Additionally, carefully choose the switching or create a power converter that has a minimal effect on the machine's performance. Moreover, this impact is important to be considered especially under the fault condition. This is not limited to the type of machine or the type of power converter. The topics of interest include, but are not limited to, mathematical and numerical methods applied to:

- Power converter topologies;
- Associated control and modulation techniques;
- Modeling and switching enhancement techniques for power converters;
- New technologies in multiphase drives;
- Fault detection and diagnosis;
- Innovative winding.

You are pleasantly invited to submit your original research or review papers to this Special Issue on “Control, Modeling and Optimization for Multiphase Machines and Drives” in *Mathematics*.

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2024)



Mathematics

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Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/133590

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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).