# Special Issue

# New Advances and Applications in Electromagnetic Machines

## Message from the Guest Editors

Research and development efforts are pushing the boundaries of electromagnetic machine design, modeling, and manufacturing. In particular, additive manufacturing is unlocking unprecedented 3D structural freedom, enabling integrated thermal-magnetic design and complex topologies that were previously unachievable. Likewise, high-speed electric machines are promoting system miniaturization and power density gains, although they require careful consideration of coupled electromagnetic, mechanical, control, and thermal interactions. Furthermore, rare-earth-free and ironless machine topologies are emerging as key solutions to reduce material dependence and mitigate long-term environmental concerns. The growing use of multiphysics simulations, topology optimization, and AI-assisted design methodologies is also reshaping machine development paradigms, enabling high-fidelity performance prediction and accelerating the creation of innovative electromagnetic architectures. This Special Issue aims to present the latest advances in the design, analysis, optimization, and application of next-generation electric machines.

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## Deadline for manuscript submissions

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*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

## Editor-in-Chief

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