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Design and Optimization of High-Speed Permanent Magnet Synchronous Machines

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Message from the Guest Editors

In a world where rapid transportation, efficient power generation, and agile industrial processes are vital, these machines have a critical position. Their compact design, precision, and robustness make them ideal for applications where speed, reliability, and energy efficiency are essential.

This Special Issue is dedicated to advancing our understanding and harnessing the potential of HSPMSMs. We invite contributions that delve into various facets of HSPMSMs:

- Innovative Design Principles:** Explore novel design principles that optimize HSPMSMs for high-speed operation while ensuring compactness, power density, and efficiency.
- Advanced Optimization Techniques:** Uncover the latest optimization methods, including genetic algorithms and finite element analysis, that fine-tune HSPMSMs to achieve optimum performance.
- Materials and Manufacturing Innovations:** Share insights into innovative materials and manufacturing techniques that enable the production of reliable and high-speed HSPMSMs.
- Applications in High-Speed Environments:** Highlight real-world applications where HSPMSMs are revolutionizing high-speed scenarios, from aerospace propulsion to electric vehicle drives.



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Message from the Editor-in-Chief

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