Special Issue

Multi-Factor Coupling Analysis and Optimization Method for High-Quality Electrical Machine Systems

Message from the Guest Editors

With the constant upgrading development of new energy resources, aerospace, automobiles, and robots, high-quality electrical machine systems have become indispensable and attracted increasing attention. In order to realize the specific functions in these fields, torque density, power density, efficiency, temperature rise, torque fluctuation, dynamic response, and other qualities of an electrical machine system require proper optimization to meet the customized demands. Electrical machine systems are complex multi-factor coupled systems. The multi-factor coupling effect must be considered in the design and control of electrical machine systems so as to realize high-quality requirements. There are still some unsolved crucial issues such as accurate modeling of multi-factor coupling effect, highly efficient coupling calculation method, and multi-physics and multi-objective optimization, which limit development and research in high-quality electrical machine systems. This Special Issue aims to promote research and invites original works in the area of multi-factor coupling analysis and optimization method for high-quality electrical machine systems.

Guest Editors

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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