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Electrical Machines for Electric Vehicles and Renewable Energy Systems

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Message from the Guest Editors

We welcome any original research papers on the modelling of electrical machines. Topics are the following:

Finite element modelling and analysis of radial, axial and transverse flux motors and generators for e-mobility and energy systems; Multi-physics electrical renewable machine design, considering electromagnetic, thermal and mechanical aspects; Coupled electromagnetic-thermal finite element modelling and optimization of electrical machines; Electrical machine design, considering thermal management aspects; Heat transfer in electrical machines with thermal calculations, lumped parameter thermal networks, and computational fluid dynamics (CFD); Machine loss analysis coupled with thermal finite element and CFD simulations; The effect of manufacturing methods on the performance of electrical machines; Manufacturing challenges in electrical machines; Additively manufactured motor and generator components used to improve heat transfer in electric vehicles; Reliability-based electrical machine design for electric vehicles and renewable energy systems; Aging of electrical machines due to thermal and electrical stresses: Accelerated life tests in modern electrical machines.







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Message from the Editor-in-Chief

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