

Special Issue

Modern Electrical Machines and Their Applications

Message from the Guest Editor

Electrical machines are now increasingly important as they are used more and more in electric mobility and renewable energy. Their efficiency is vastly superior to combustion engines, and it seems that little can be done to improve them. However, with the use of new materials, higher efficiency and an increased power/weight ratio can be obtained. Additionally, many researchers are investigating solutions to obtain high-efficiency electrical machines without the use of permanent magnets. Modern electrical machines should have the following characteristics: reliable, cheap, efficient, and lightweight. Of course, power electronic converters and control strategies are now critical to obtain a high-performance electric drive. This Special Issue covers all applications where electrical machines and drives are important components. Aspects related to mathematical modeling, optimization, numerical methods, and experimental validation are sought to be presented. The applications of such systems include, but are not limited to, electric mobility, renewable energy (wind power plants, hydroelectric power stations), industry, home appliances, etc.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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