

Special Issue

Design for Reliability in Rotating Electrical Machines: Insulation Degradation and Lifetime Consumption

Message from the Guest Editors

The move towards transportation electrification has made reliability considerations of electrical machines a stringent and predominant requirement. Failures can cause severe downtime and economic losses, as well as endanger human lives. Especially in the automotive and aerospace sectors, electrical machines are required to simultaneously deliver high performance while guaranteeing the appropriate reliability considerations. This Special Issue will present scientific papers dealing with design for the reliability of electrical machines with special focus on the machine insulation system and the impact of their main ageing/stress factor. Articles on machine design, ageing mechanisms, lifetime degradation modelling, partial discharge detection and modelling, fault-tolerant systems, real-time fault detection, and diagnostics methodologies are invited for submission. Original research and practical contributions as well as surveys and state-of-the-art tutorials are welcome.

Guest Editors

Prof. Michael Galea

Aerospace Technology Center, University of Nottingham, Innovative Park, Nottingham NG7 2TU, UK

Dr. Paolo Giangrande

University of Nottingham, Aerospace Technology Center, Innovative Park, Nottingham NG7 2TU, UK

Deadline for manuscript submissions

closed (30 June 2021)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/44969

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)