Special Issue

Reliability and Fault Tolerant Control of Electric Machines

Message from the Guest Editors

Electric machines play a critical role in modern energy conversion systems. As these systems become increasingly complex and integrated, ensuring their reliability and fault tolerance has become a key research and engineering challenge. This Special Issue aims to present the latest advances, methodologies, and applications that enhance system dependability under faulty operating conditions. Topics of interest include fault detection and diagnosis, fault-tolerant control strategies, condition monitoring, and predictive maintenance using advanced sensing, signal processing, and machine learning techniques. Contributions addressing modeling and simulation of electrical faults, hardware-in-the-loop testing, and resilience-oriented design are also encouraged. This Special Issue seeks to bridge the gap between theory and industrial implementation, promoting safer, smarter, and more sustainable electric drive systems. Researchers and practitioners are invited to submit original research papers and review articles that contribute to improving the reliability and robustness of electric machines and their associated control systems.

Guest Editors

Dr. Francisco Vedreño-Santos

School of Computing, Engineering and the Built Environment, Edinburgh Napier University, Edinburgh EH10 5DT, UK

Dr. Savvas Papadopoulos

School of Engineering and Built Environment (SEBE), Edinburgh Napier University, Edinburgh EH10 5DT, UK

Deadline for manuscript submissions

20 June 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/261173

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, 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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

