## Special Issue

## General Design, Analysis and Advanced Control of High Reliability Aerospace Electrical Machine Systems

### Message from the Guest Editors

More and all electric aircraft technology offers many potential benefits, such as high fuel efficiency, high reliability, low carbon and NOx emission, low noise, and ease of maintainability, which has brought about a technological revolution in the aviation industry. The electrical machine system is the core component of electromechanical energy conversion, which has been widely applied in flight control, starter generator systems, and electric propulsion systems, among others. To guarantee flight safety, the electrical machine system must meet stringent requirements for reliability, power density, and efficiency. This Special Issue aims to publish the most recent advancements along this path. Topics of interest for publication include, but are not limited to:

- High reliability electrical machine design theory
- High reliability electrical machine topology
- Multi-physics analysis and multi-objective optimization
- Thermal management
- Fault tolerant control
- Advanced control
- Fault diagnosis
- Sensorless control
- Integration technology of electrical machines and power electronics

#### **Guest Editors**

Dr. Jinquan Xu

Prof. Dr. Hong Guo

Prof. Dr. Zhuoran Zhang

### Deadline for manuscript submissions

closed (30 November 2022)



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mdpi.com/si/96393

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### 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

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