Special Issue

Advances in Control Strategies of Permanent Magnet Motor Drive

Message from the Guest Editors

Permanent magnet motor drives play a vital role in modern motion control and energy conversion, with broad applications in EVs, industrial automation, renewable energy, and smart devices. As demands for efficiency, speed range, reliability, and intelligence rise, advanced control strategies face new challenges and opportunities. This Special Issue invites contributions that share the latest research and innovations in control strategies for permanent magnet motor drives. Topics include, but are not limited to:

- Application of artificial intelligence in control strategies;
- Sensorless control strategies;
- Online and offline parameter identification methods;
- Field-weakening control techniques for high-speed operation;
- Advanced modulation and overmodulation techniques;
- High-efficiency and energy optimization control;
- Electrolytic capacitor-less and low-cost drive solutions:
- Application of modern control theories;
- Integration of wide bandgap semiconductor devices;
- Multiphase and special motor drive control techniques;
- Fault diagnosis and fault-tolerant control strategies;
- Health monitoring and predictive maintenance strategies.

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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.

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