Special Issue

Advanced Electric Powertrain Technologies for Electric Vehicles

Message from the Guest Editors

Due to increasing concerns regarding energy saving and environmental protection, electric vehicles have garnered significant attention in recent years. Electric powertrains, as the key systems utilized in electric vehicles, offer novel advantages, including a more compact size, lower cost, higher power density, enhanced efficiency, reduced noise and vibration, and improved reliability. This Special Issue is devoted to the latest developments in advanced electric powertrain technologies with applications in electric vehicles. It welcomes the submission of papers from both academia and industry that present the technical progress observed in advanced motor topologies, magnetic gears, integrated electric drive systems, multi-physics optimization, thermal management techniques and system-level design. Topics of interest include, but are not limited to, the following:

- New machine topologies
- Magnetic gears
- Integrated electric drive systems
- Advanced motor control strategies
- Multi-physics design optimization
- Noise and vibration analysis and reduction
- Advanced thermal management techniques
- System-level design optimization of the electric powertrain

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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.

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