

Special Issue

Frontiers in Hybrid Vehicles Powertrain

Message from the Guest Editors

The ongoing aggravation of the environmental issue requires us to urgently move toward alternative powertrains in ground vehicles. Nonetheless, a wide variety of hybrid electric powertrains is currently available on the market, ranging from several driveline architectures (series, parallel, and power-split hybrid) and degrees of electrification (mild, full, and plug-in hybrid). This Special Issue aims to gather original contributions on hybrid vehicle powertrains, including recent advances in this field. In particular, researchers are encouraged to propose innovative hybrid technologies, enhancements of the energy storage system (i.e., battery in HEVs) and of the related battery management system, efficiency-oriented control strategies for electric machines, and novel mathematical models for comprehensively addressing hybrid powertrains. Studies on the optimization of multimode power-split transmissions will be particularly appreciated, being the most promising transmission system owing to its great versatility. Lastly, providing experimental results on hybrid vehicles emissions, fuel-saving, and performance would be a major contribution to our scientific community.

Guest Editors

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Deadline for manuscript submissions

closed (7 January 2023)



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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

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