Special Issue

Energy Management Control and Optimization for Hybrid Electric Vehicles

Message from the Guest Editor

According to the International Energy Agency, about 55% of the crude oil demand is for transportation. Concerns over energy security from petroleum reserves and the effect of greenhouse gas emissions on global climate are driving interest in alternatives. Hybrid electric vehicles have thrived as a lucrative solution to the aforementioned problems, with their intermediate approach to achieving superior mileage and low tailpipe emission compared to conventional internal combustion engine vehicles. To achieve these advantages, it is crucial to have a real-time energy management strategy capable of coordinating the on-board power sources in order to maximize fuel economy. This Special Issue aims to address the challenges posed by energy management control and optimization in vehicle hybridization. Papers are invited that propose novel power management methods capable of acquiring optimal power handling, accommodating system inaccuracies, and suiting real-time applications to improve the powertrain efficiency at different operating conditions.

Guest Editor

Prof. Dr. Juan P. Torreglosa

Electrical Engineering Department, University of Huelva, Carretera Palos-Huelva, s/n, 21071 Palos de la Frontera, Huelva, Spain

Deadline for manuscript submissions

closed (31 October 2020)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/34165

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 multidimensional 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)

