Special Issue

Grid-Interactive Electric and Hybrid Electric Vehicles

Message from the Guest Editor

Electric and plug-in hybrid electric vehicles produce significantly lower amounts of noise and greenhouse gas emissions than conventional fossil fuel-powered vehicles. In addition to these benefits, vehicles powered through electricity feature performance and efficiency improvements. To this end, there is an ongoing trend of electric propulsion as a replacement to engine propulsion. However, high-efficiency charging and the management of battery storage challenge global engineers and experts. In parallel, the smart control of charging and/or even discharging will greatly facilitate the development of grid operators and thus enable a large coordination of electric vehicles. This Special Issue focuses on the recent developments in electric vehicles, particularly related to power and energy. It aims to lay a foundation for the further development of electric and hybrid electric vehicles in future renewable-dominated power systems. Topics of interest to this Special Issue include, but are not limited to, the following:

- Power architectures of electric drivetrain;
- Multilevel converters in electric vehicles;
- Autonomous driving systems and enabling components.

Guest Editor

Prof. Dr. Jingyang Fang
School of Control Science and Engineering, Shandong University, Jinan 250061, China

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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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

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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