Special Issue

Recent Developments in Electric Vehicles

Message from the Guest Editor

Electric and plug-in hybrid electric vehicles produce significantly lower noises and greenhouse gas emissions than conventional fossil fuel-powered vehicles. Apart from these, vehicles powered through electricity feature performance and efficiency improvements. for this, there is an ongoing trend of electric propulsion in the replacement of engine propulsion. High-efficiency charging and management of battery storage challenge global engineers and experts. Smart control of charging and/or even discharging will greatly facilitate grid operators and thus enable large coordination of electric vehicles. This Special Issue focuses on the recent developments in electric vehicles, particularly related to power and energy.

- Power architectures of electric drivetrain
- Multilevel converters in electric vehicles
- Battery state-of-charge (SOC)/-health (SOH) estimation
- Battery management systems
- Wireless power chargers
- Vehicle-to-grid (V2G) services
- Optimization and coordination of charging for multiple vehicles
- Autonomous driving systems and enabling components

Guest Editor

Prof. Dr. Jingyang Fang

School of Control Science and Engineering, Shandong University, Jinan 250061, China

Deadline for manuscript submissions

closed (30 April 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/106965

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

mdpi.com/journal/applsci

MDPI

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 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

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)