

Special Issue

Powertrain Design and Control in Sustainable Electric Vehicles

Message from the Guest Editors

Since the transportation electrification trend began to sweep the automotive industry, powertrain configurations and control methods have changed greatly. The introduction of electric machines in powertrains not only offers various ways to improve vehicle performance and energy efficiency but also brings about challenges for academics and engineers to meet the emerging requirements. With the increase in system components, e.g., more energy sources and power sources, it is very difficult to balance the rapid iteration of system performance, advanced technology, and consumers' needs. In consequence, it is essential to create, adapt, and apply theories, methods, and technologies for every segment of electric vehicles to achieve multi-object optimization in terms of dynamics, energy, lifetime, and cost. The aim of this Special Issue is to provide a platform to introduce state-of-the-art theories, methods, technologies, and any other methods to further improve electrified powertrain performance sustainability, including, but not limited to, configuration, efficiency, dynamic, weight, cost, and lifetime. We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Jiageng Ruan

Dr. Yahui Zhang

Dr. Yang Tian

Dr. Jing Zhao

Deadline for manuscript submissions

closed (31 December 2025)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 8.9



mdpi.com/si/215359

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 8.9



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)