Special Issue

Performance and Emissions of Advanced Fuels in Combustion Engines

Message from the Guest Editors

The impact of climate change is growing more severe around the globe and there is clear evidence that the 1.5 ^{0}C temperature cap established in the Paris Agreement is not going to be achieved, given the current actions taken. It is critical for every country around the world to reduce their CO2 emissions in every sector possible. The use of decarbonized fuels or carbon-neutral fuels in internal combustion will help the world cope with these problems. With very small changes, these ICEs could provide a similar power and flexibility to that of conventional ICEs by burning hydrogen, ammonia, ethanol, or methanol. Topics of interest for this Special Issue include, but are not limited to, the following:

- The performance and emissions of engines powered by decarbonized fuels such as hydrogen and ammonia.
- The performance and emissions of engines powered by biofuels such as ethanol and methanol.
- The modelling and testing of the spray, flow, and combustion of advanced fuels.
- The use of low-carbon fuels in hybrid applications.
- The using of advanced fuels in Wankel engines and two-stroke engines.

Guest Editors

Dr. Changzhao Jiang

Dr. Dai Liu

Dr. Xiao Ma

Deadline for manuscript submissions

19 November 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/222293

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)