

## Special Issue

# Performance Analysis and Advanced Technologies of Internal Combustion Engines

### Message from the Guest Editors

The transportation sector is currently facing the hard challenge of decarbonization, resulting in a historic change in powertrain architecture. The need for an immediate reduction in greenhouse gas emissions pushes science and industry to develop advanced technologies and analysis methods to mitigate GHG emissions and improve the performance of internal combustion engines, either alone or in hybrid powertrains. The aim of this Special Issue is to collect the most recent findings and ideas for the development of advanced technologies for internal combustion engines supporting the scientific community in order to address efforts towards decarbonization and pollutant emission reduction. Topics of interest for this Special Issue include (but are not limited to) the following:

- Alternative combustion processes;
- Advanced ignition and combustion systems;
- Advanced fuel injection systems;
- Biofuels;
- E-fuels;
- Alternative fuels;
- Free carbon fuels;
- Hydrogen;
- Hybrid powertrain energy management;
- Fuel economy;
- Emissions regulations;
- Exhaust emissions.

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### Guest Editors

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### Deadline for manuscript submissions

closed (25 July 2025)



## Energies

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## 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.

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### Editor-in-Chief

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