

Special Issue

Internal Combustion Engine Performance 2024

Message from the Guest Editor

In this context, the 2024 issue of “Internal Combustion Engine Performance” aims to gather further innovative research and offer important developments for the field of the internal combustion engine. More specifically, topics of interest for the Special Issue include (but are not limited to):

- Combustion mechanisms in spark and compression ignition engines;
- Fuel injection and spray formation;
- Pollutants formation (particulate matter, NO_x, CO, HC, noise);
- Exhaust after-treatment systems (three-way catalysts, oxidation catalysts, diesel and gasoline particulate filters, SCR, NO_x adsorbers);
- Internal measures for emission control (EGR, water injection, etc.);
- Exhaust heat Recuperation Systems (Rankine cycle, turbocompound etc.);
- Engine downsizing;
- Effects on engine structure and design due to increased performance demands;
- Special problems associated with large-scale two-stroke engines performance and emission reduction;
- Alternative fuels’ and biofuels’ effects on engine performance and emissions (ethanol, butanol, biodiesel, etc.);
- Recent advances in internal combustion engines experimentation;
- Novel combustion systems (HCCI, PCCI and RCCI).

Guest Editor

Prof. Dr. Georgios Mavropoulos

Department of Mechanical Engineering Educators, School of Pedagogical and Technological Education (ASPETE), 15122 Marousi, Greece

Deadline for manuscript submissions

closed (5 March 2025)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



mdpi.com/si/199703

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

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





Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



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