



energies



an Open Access Journal by MDPI

Recent Advances in Energy Combustion and Flame

Guest Editors:

Prof. Dr. Xianchang Li

Department Mechanical
Engineering, Lamar University,
Beaumont, TX 77710, USA

Dr. Pritam Dey

Department of Mechanical
Engineering, Lamar University,
Beaumont, TX 77710, USA

Message from the Guest Editors

Dear Colleagues,

This special issue aims to highlight these recent findings on energy and combustion research and their potential to address global challenges related to energy security, environmental pollution, and climate change.

We invite original research articles, review papers, and technical communications covering, but not limited to, the following areas:

Deadline for manuscript
submissions:

20 November 2025

- Fundamental combustion phenomena: Turbulent combustion, flame chemistry, soot formation and control, pollutant emissions, advanced diagnostics, flame propagation and stabilization
- Innovative combustion technologies: Oxy-fuel combustion, chemical looping combustion, plasma-assisted combustion, pulse detonation combustion, micro-combustion, humidified combustion, lean combustion
- Computational modelling and simulation: Flame modelling, soot prediction, CFD simulations, and machine learning for combustion analysis.
- Combustion applications: Clean and efficient combustion in engines (gas turbines, internal combustion engines), boilers, furnaces, and industrial burners.
- Renewable fuels and alternative combustion strategies: Biofuels, hydrogen combustion, ammonia combustion, biomass gasification.



mdpi.com/si/198615

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

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)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/X@energies_mdpi)