Special Issue

Fuel and Energy: Unlocking the Potential of Combustion Research Techniques

Message from the Guest Editor

This Special Issue aims to showcase cutting-edge research in the development of new experimental and theoretical methods to gain insights into fundamental combustion phenomena. The focus will be on the application of advanced diagnostic techniques and novel experimental designs to investigate combustion dynamics, as well as the chemical kinetic models for alternative fuels, including biofuels (e.g., ethanol, biodiesel) and e-fuels (e.g., methanol, dimethyl ether). Research areas may include (but are not limited to) the following:

- Experimental and theoretical studies of fundamental combustion phenomena, such as autoignition, flame propagation, and extinction.
- Development and application of advanced diagnostic techniques, including imaging and spectroscopy, to investigate combustion dynamics.
- Chemical kinetic modeling of alternative fuels, including biofuels and e-fuels.
- Uncertainty analysis of new experimental and theoretical methods in combustion research.
- Novel concepts and applications of combustion technology, including advanced power generation systems and propulsion systems.

Guest Editor

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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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