

Special Issue

Research on Energy Conversion Application by Low-Temperature Plasma Discharge

Message from the Guest Editors

At present, the energy conversion application by low-temperature plasma plays an important role in addressing severe carbon emission and global warming issues. Low-temperature plasma generated from solar, wind, and hydro energy is a promising technology which can address the intermittency and storage challenge of renewable electricity. Low-temperature plasma has shown remarkable advantages in enhancing ignition, extending flammability, accelerating chemical synthesis, and reducing emissions for the energy conversion application. The volumetric production of chemically active species, gas heating, and fuel fragments in a low-temperature plasma can modify conventional reaction pathways and interact with catalysts and materials via kinetic, thermal, and transport pathways. This Special Issue aims to present the recent research on energy conversion application by low-temperature plasma discharge using both experiments and numerical modelling. The topics of interest for publication include, but are not limited to, the applications of low-temperature plasma on combustion, propulsion, catalytic synthesis, emission control, interactions with materials, etc.

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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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