Special Issue

Advances in Spark-Ignition Engines

Message from the Guest Editors

Dear colleagues, The debate on how to face the impact of Internal Combustion Engines (ICEs) on atmospheric air pollution and climate change remains open. Hybrid vehicles represent the most suitable option for addressing these issues in the medium term, since hybridization allows us to overcome the major disadvantages of ICEs, electric units, and energy storage devices and merge their respective benefits. In this scenario, ICEs remain the core component of automotive propulsion systems in the years to come. Of course, further efforts to improve the efficiency and reduce the pollutant and CO2 emissions of ICEs are necessary. This Special Issue will focus on the study and application of advanced techniques for spark-ignition ICE improvement, with particular emphasis on simulations of, and experiments on, in-cylinder phenomena, thermodynamics, and noxious emission formation. Topics of interest include, but are not limited to:

- advanced boosting systems;
- advanced knock mitigation techniques;
- lean, ultra-lean, and unconventional combustion concepts;
- advanced ignition and injection systems; and
- waste heat recovery systems.

Guest Editors

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Deadline for manuscript submissions

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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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