



Second-Generation Low Temperature Combustion Concepts for Internal Combustion Engines

Guest Editor:

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Deadline for manuscript
submissions:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue is intended to provide a concentrated repository of second-generation low-temperature combustion (LTC) concepts to highlight the progress that has been made in recent decades in better understandings first-generation LTC concepts and addressing their shortcomings.

The conventional combustion modes are limited by their efficiency–emissions trade-off. LTC that is mostly premixed is the only method that can break this trade-off and provide simultaneous clean combustion with high efficiencies. Over time, the community has learned a lot about these first-generation LTC modes and have recognized their limitations. This Special Issue welcomes manuscripts related to these new LTC approaches for future internal combustion engines. Alternative hardware approaches that enable second-generation LTC are also welcome, including prechamber ignition systems, opposed-piston engines, free-piston engines, and others, as long as the combustion process deviates from the conventional combustion modes to break the efficiency–emissions trade-off. Fuel effects on LTC are also welcome.

Sincerely,





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Message from the Editor-in-Chief

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