Special Issue

Technical Advances in Combustion Engines

Message from the Guest Editors

The transportation and power industries continue to rely heavily on internal combustion engines; however, meeting carbon emission targets and future legislative requirements necessitates a paradigm shift towards carbon-neutral and low-emission fuels. This shift requires the development of new combustion modes, optimized aftertreatment systems, new mixture preparation strategies, and the use of new materials, technologies, and technical solutions for reducing friction and costs. This Special Issue focuses on the latest advancements in adapting internal combustion engines to meet these new challenges. Topics of particular interest include, but are not limited to, the following:

- The design, modelling, and optimization of internal combustion engines and systems;
- Innovative approaches to minimizing engine friction;
- New concepts for mixture formation and combustion solutions;
- The development of advanced aftertreatment systems;
- Carbon-free combustion designs and alternative fuels;
- Emissions modelling, measurement, and reduction strategies;
- The use of new materials and production technologies.

Guest Editors

Dr. Rudolf Tomić

Prof. Dr. Gojmir Radica

Dr. Željko Penga

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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