

Special Issue

High-Energy Performance Compressors: Advanced Technologies and Applications

Message from the Guest Editors

Compressors are critical components in numerous industrial areas and fields of application. The improvement in the energy performance of compressors is beneficial for compressor users and also helps to meet the constraints and requirements set by organizations that aim to achieve green and efficient energy systems. The goal of this Special Issue is to explore the current trends, technologies and applications of high-energy performance compressors, as well as related scientific and technological challenges and solutions. The Special Issue welcomes contributions that cover, but are not limited to, theoretical, computational, experimental and practical aspects of compressors aiming to improve energy performance. Topics relevant to the SI include:

- Analytical, numerical and computational analysis;
- Structural dynamics;
- Machinery noise and vibration;
- Fluid-structure interaction;
- Structural health monitoring;
- Fatigue damage and fracture diagnosis;
- Optimal design and operation;
- Material systems and technologies for compressors;
- Manufacturing and materials processing for compressors;
- Experimental investigations.

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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.

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