

Special Issue

Energy Deposition for Aerospace Applications

Message from the Guest Editor

This Special Issue is dedicated to studies in the field of the control of supersonic/hypersonic flows past aerodynamic bodies. The Special Issue focuses on high-speed flow control via an energy deposition at different points of a flow or on a body surface. Laser pulses, microwave discharges, electric discharges of various types, or their combinations can be used as instruments for the implementation of energy effects. The problems under consideration are characterized by significant compressibility of the gas medium, the presence of shock waves and shock–vortex configurations, gasdynamic instabilities, and multiscale processes. Therefore, the problems of qualitative modeling come to the fore. The planned topics include (but are not limited to) the following areas: flow control, supersonic/hypersonic streamlining, shock waves, vortices, shock–vortex structures, boundary layers, heat fluxes, gasdynamic instabilities, turbulence, computational CFD methods, difference scheme construction, code testing.

Guest Editor

Prof. Dr. Olga A. Azarova

Department of Mathematical Modeling of Computer-Aided Design Systems, Federal Research Center “Computer Science and Control” of the Russian Academy of Sciences, Vavilova st. 40, 119333 Moscow, Russia

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

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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