



Advanced Analysis of Heat Transfer and Energy Conversion

Guest Editors:

Prof. Dr. Jianxin Xu

School of Metallurgical and Energy Engineering, Kunming University of Science and Technology, Kunming 650093, China

Dr. Qingtai Xiao

State Key Laboratory of Complex Nonferrous Metal Resources Clean Utilization, Kunming University of Science and Technology, Kunming 650093, China

Deadline for manuscript submissions:

closed (25 June 2024)

Message from the Guest Editors

Dear Colleagues,

In the international context of carbon neutrality and carbon peaks, efficient and clean energy utilization methods are expected to be explored, and the mechanisms of advanced heat transfer processes should be revealed. The main topics include the inertial effect, wave effect, dissipation effect, and conversion effect of heat and mass, as well as a deeper understanding of the basic laws of basic physical processes such as flow, heat and mass transfer, and combustion from a combination of macroscopic, mesoscopic, and microscopic perspectives. This Special Issue aims to present and disseminate the advanced theory and technology of heat transfer, energy generation, utilization, conversion, storage, transmission, and conservation.

Topics of interest for publication include, but are not limited to:

- Modelling of multi-scale enhanced heat transfer;
- Application of advanced measurement technology in heat transfer and energy conversion;
- Characterization of heat mass transfer at phase interfaces;
- Deep learning and machine learning for flow pattern recognition;
- Advanced thermodynamic cycle construction;

Prof. Dr. Jianxin Xu

Dr. Qingtai Xiao



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Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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Energies Editorial Office
MDPI, Grosspeteranlage 5
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