

Special Issue

Energy Efficient Cooling and Heating Systems for Improved Passenger Thermal Comfort in Electric Vehicles

Message from the Guest Editors

In this Special Issue, the challenge of enhancing the EV driving range while maintaining high passenger thermal comfort is to be addressed by capitalizing on either individual or synergetic use of various technologies in the areas of: new concepts of the HVAC system and related subsystems and component technologies (including advanced heat pump concepts, infrared heating, consideration of novel refrigerants, thermal energy storage devices, etc.), user-centric designed HVAC systems with enhanced passenger thermal comfort, optimized vehicle energy management/control, lightweight materials with improved thermal insulation properties, and similar. The optimized vehicle energy and thermal management, implemented in an intelligent vehicle control unit, is aimed at ensuring maximized energy efficiency and enhanced thermal comfort, while accounting for various users' needs specified through a proper human-machine interface in an interactive way.

Guest Editors

Prof. Dr. Joško Deur

Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb, 10000 Zagreb, Croatia

Dr. Dragan Šimić

AIT Austrian Institute of Technology GmbH, Center for Low-Emission Transport, Competence Unit Electric Drive Technologies, Vienna, Austria

Deadline for manuscript submissions

closed (10 January 2021)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/41733

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)