Special Issue

Advances in Ground Heat Exchangers and Ground-Coupled Heat Pumps

Message from the Guest Editors

Ground-source heat pumps, and in particular ground-coupled heat pumps (GCHPs), are becoming a rather widely used technology for building climatization and domestic hot water production. Relevant contributions to improve the design and simulation of GCHP systems can be given by the evaluation of accurate thermal response factors of GHE fields, by developing new analytical and numerical models of GHEs, by the experimental validation of GHE mathematical models, by performing innovative thermal response tests for a more precise evaluation of the ground thermal properties, by the dynamic simulation and monitoring of GCHP systems, and by the economic and the exergy analysis of these systems. Papers addressing but not limited to the following topics are recommended:

- Thermal response factors of borehole heat exchangers (BHEs) and BHE fields;
- Thermal response factors of horizontal ground heat exchangers;
- Analytical and numerical models of ground heat exchangers;
- Experimental analysis and laboratory models of ground heat exchangers;
- Thermal response tests (TRTs);

Guest Editors

Prof. Dr. Enzo Zanchini

Department of Industrial Engineering, University of Bologna, Bologna, Italy

Dr. Claudia Naldi

Department of Industrial Engineering, Alma Mater Studiorum—University of Bologna, Viale del Risorgimento 2, 40136 Bologna, Italy

Deadline for manuscript submissions

closed (30 June 2021)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/43366

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

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)

MDPI