



Ground Source Heat Pumps as Efficient and Sustainable Systems in Buildings

Guest Editors:

Dr. Angelo Zarrella

Department of Industrial Engineering (DII), Università di Padova, Via Venezia, 1, 35131 Padova, Italy

Dr. Giuseppe Emmi

Department of Industrial Engineering, Applied Physics Section, University of Padova, Via Venezia 1, 35131 Padova, Italy

Deadline for manuscript submissions:

closed (31 December 2020)

Message from the Guest Editors

Dear Colleagues,

This Special Issue is seeking papers on the entire ground-source heat pump system: ground heat exchangers, heat pump technology and new refrigerant fluids, open and closed loops, direct and indirect systems, hybrid systems, optimization of the system performance, system simulations, GSHPs integrated with other renewable energy (solar collectors, hybrid thermo-photovoltaic panels, air-to-water heat pumps, etc.), retrofitting of GSHPs, thermal response tests, design, equipment, control strategies, case studies, field measurements, etc.

Keywords:

- Ground source heat pump (GSHP) systems
- ground-loop heat exchanger models
- ground heat transfer
- hybrid ground source heat pump systems
- thermal response tests
- system simulations

Dr. Angelo Zarrella
Dr. Giuseppe Emmi
Guest Editors





energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

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 Compindex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)