

Special Issue

Thermal Performance, Analysis and Application of Solar Photovoltaic Systems

Message from the Guest Editors

Solar energy is one of the most important clean energy sources that can meet a significant portion of the energy needed in the world. Researchers are gradually paying attention to solar energy alternatives and technologies, especially solar photovoltaic. Photovoltaic can be applied to any occasion where power is needed. Temperature rise generated by the solar cell will cause serious defects in the photoelectric conversion of photovoltaic systems. Research emphasizes that integrated photovoltaic and thermal technology is the most advanced solution. The use of cooling systems has a significant impact on the electrical efficiency of photovoltaic systems, including phase change materials, nanofluids, air cooling, water cooling and thermoelectric cooling, etc. The aim of this Special Issue is to provide the insight of latest researches, development and demonstrations on the thermal performance of PV. Topics of interest for publication include, but are not limited to: (1) Photovoltaic cell materials; (2) Concentrating photovoltaic technology; (3) Building integrated with photovoltaic; (4) Photovoltaic/thermal; (5) Photovoltaic integrated with heat pump.

Guest Editors

Prof. Dr. Guiqiang Li

Dr. Haifei Chen

Dr. Song Lv

Deadline for manuscript submissions

closed (15 May 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.2



mdpi.com/si/103124

Energies

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 3.0
CiteScore 6.2



[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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)