



energies



an Open Access Journal by MDPI

Reliability Assessment of DC-DC Converters for Photovoltaic Applications

Guest Editor:

Prof. Dr. Michaël Daenen

Faculty of Engineering
Technology, Universiteit Hasselt,
3590 Diepenbeek, Belgium

Deadline for manuscript
submissions:

closed (10 August 2020)

Message from the Guest Editor

DC-DC converters are becoming increasingly important in photovoltaic (PV) applications. The advantages of this type of inverter lie in the possibility to do per-module max power point tracking (MPPT) and make PV systems more shade tolerant. This increases the energy output but also improves PV module reliability. Additionally, combinations with local storage give opportunities to DC-DC converters, lowering the inverters' power and enabling the spread of energy injection to the grid. Possibilities of PV integration in electric vehicles also require DC-DC conversion. All these applications would benefit from better lifetimes and better lifetime predictions or comparisons. In this Special Issue we are aiming for articles that publish results on cases that validate reliability models and these models themselves at the component or system level for DC-DC conversion in photovoltaic applications.



mdpi.com/si/40039

Special Issue



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 Compendex, 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)