



energies

an Open Access Journal by MDPI



Modular Multilevel Converter for Photovoltaic Applications

Guest Editor:

Dr. Ahmed Darwish

School of Engineering, Lancaster
University, Lancaster LA1 4WY, UK

Deadline for manuscript
submissions:

closed (1 June 2022)

Message from the Guest Editor

The consumption of fossil fuels is leading to increasing concerns about the environment and is pressing for more efforts to promote renewable energy sources. Solar photovoltaic (PV) systems are a promising solution to replace the coal, oil and natural gas electricity generators, especially when they are close to reaching price parity. Multi-megawatt large-scale PV electricity plants became a favourable choice for meeting the rapid growth in electrical demands, as they can be installed in a short period (6–12 months). Large-scale PV power plants are expected to have power higher than 5 MW and can be connected directly to medium voltage networks. To achieve this, modular multilevel converters (MMCs) are expected to play an important role in these PV power farms, in order to build compact and efficient power conversion systems. The aim of this Special Issue is to receive scientific contributions regarding large-scale PV power systems in terms of new modular power converters, stability analysis, design and control of modular converters in the context of PV energy systems, and grid support functions from PV plant systems, as well as other similar topics.



mdpi.com/si/81985

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 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, CAPus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (*Engineering (miscellaneous)*)

Contact Us

Energies Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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