



an Open Access Journal by MDPI

# Emerging Converters, Advanced Control and Technologies Enhancing Electric Energy Conversion in Photovoltaic Systems

Guest Editor:

#### Dr. Andrii Chub

Department of Electrical Power Engineering and Mechatronics, Tallinn University of Technology, 19086 Tallinn, Estonia

Deadline for manuscript submissions: closed (10 September 2021)

### Message from the Guest Editor

Sustainable development is the only way for humanity to survive exhaustion of fossil fuels and overcome environmental challenges piled up during industrial age. Significant cost and efficiency improvements of PV systems made them commercially attractive solution. Therefore, mass deployment of photovoltaic systems is advancing at an accelerating pace. Large photovoltaic plants are considered as the best replacement for central generation facilities burning fossils. Each year new records are achieved in the top of the largest PV power plants. Moreover, building integrated photovoltaic as well as powering IoT devices and micro satellites show trend towards low-power high-performance systems. Hence, the PV technology is advancing fast at all power levels and penetrate increasing number of applications.

Even though the PV industry achieved high maturity level, there are numerous challenges and opportunities open for new solutions. Among them, stability of parallel PV generation units, reliability driven design of converters, shade-tolerant residential power interfaces, and active power control methods are of special interest among others...









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