



## Photovoltaic (PV) and Battery Converter

Guest Editor:

**Dr. Hristiyan Kanchev**

Department of Power Electronics,  
Technical University of Sofia, 8  
Kliment Ohridski blvd., 1000-  
Sofia, Bulgaria

Deadline for manuscript  
submissions:

**closed (15 September 2021)**

### Message from the Guest Editor

The interest in the efficient usage of renewable energy, together with the development of highly efficient power electronic converters, has created new interest in the topic of photovoltaic (PV) and battery converters. Nevertheless, highly efficient battery converters and battery management systems are also important for the electric vehicle sector. Smart battery management systems have also attracted interest for their promising role in improving the performance and life cycle of batteries in autonomous PV systems and electric vehicles. The control of PV and/or battery converters by application of modern artificial-intelligence-based techniques and systems is another topic of increasing importance.

Innovative solutions need to be evaluated and developed to allow new efficiency and intelligence levels in PV systems, battery management systems, and battery converters for electric vehicles. These new solutions are expected to increase the availability, convenience, and performance of the abovementioned systems.

Topics:

battery converters for electric vehicles  
battery management systems  
power converters for PV and battery systems at all scales





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Flavio Canavero**

Department of Electronics and  
Telecommunications,  
Politecnico di Torino, 10129  
Torino, Italy

## Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

## 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), CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

## Contact Us

---

Electronics Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/electronics](http://mdpi.com/journal/electronics)  
[electronics@mdpi.com](mailto:electronics@mdpi.com)  
[X@electronicsMDPI](https://x.com/electronicsMDPI)