

## Special Issue

# New Challenges in Low-Power Electronics Design

### Message from the Guest Editor

This Special Issue focuses on the ongoing challenges in the design, power conditioning, integration, and control of suitable electronic circuits and their energy storage means. These include consumer electronics, portable devices, medical applications, energy harvesting, low-power renewable energy systems, battery chargers, and other applications up to 100 W. The key challenges to overcome include improving efficiency, optimizing standby operation, enabling fast charging, managing power and heat, achieving miniaturization, extending battery life, and reducing costs. Suggested themes and article types for submissions: In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Power converters for portable applications;
- battery and power management;
- energy harvesting;
- thermal management;
- GaN/SiC power devices.

We look forward to receiving your contributions.

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### Guest Editor

Dr. Gerardo Calderon-Lopez

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### Deadline for manuscript submissions

20 April 2025



## Applied Sciences

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## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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