

# Special Issue

## New Technologies for Power Electronic Converters and Inverters

### Message from the Guest Editors

This Special Issue will publish high-quality, original research papers in the fields of:

- Implementing new technology components and sophisticated control techniques to increase the efficiency of DC/DC converters and DC/AC inverters;
- The impact of the new components' usage on the control of converters and inverters;
- Design, discrete modeling and control with the prediction of voltage and current source inverters with new technology components;
- Increasing EMC of switched-mode converters and inverters based on the proper component choice and different PWM modulation schemas;
- New architecture solutions of single-stage microinverters that are predicted to cooperate with photo voltaic modules to decrease the common mode current from the PV module to the ground;
- The various maximum power point tracking algorithms in PV supply systems;
- Power converters in modern automotive applications;
- Driving high-speed induction and PMSM motors that require modified architecture inverters, high switching frequency;
- Implementing real-time interfaces for the initial experimental verification;
- Usage of supercapacitors in power conversion systems;



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### Deadline for manuscript submissions

closed (30 March 2025)





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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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