## Special Issue

## Advanced Power Electronics Converters: Design, Control and Applications

## Message from the Guest Editors

Power converters are essential devices for converting and conditioning electrical power in a controlled and efficient way. This Special Issue presents relevant developments, tests, and evaluation methodologies of modulation techniques, control strategies, algorithms, and communication, jointly with their implementation in digital systems. The objective is to report to the community the details of the implementation and validation in digital systems of modulation techniques for two-level converters, multilevel converters, and modular multilevel converters; grid-synchronization algorithms for three-phase or single-phase systems and their applications in weak grids; control strategies for power converters, including linear and non-linear controllers and predictive control, and their application as AC drives, energy integration, power quality, emerging applications, etc.; communication protocols for power converters, as well as which of these could be replicated in future developments and research of power electronic applications.

- power electronics
- modulation technique
- multilevel converters
- multi-modular converters
- industrial applications
- digital control

### **Guest Editors**

Dr. Eduardo Espinosa Neira

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## **Deadline for manuscript submissions**

20 January 2026



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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.

## Editor-in-Chief

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