

## Special Issue

# Modelling, Estimation and Control of Grid-Connected Converter Systems under Adverse Grid Voltage Conditions

### Message from the Guest Editors

In order to meet the demand of an ever-changing scenario of the customer devices landscape, innovative techniques are required that can cope with the presence of various distortions in the grid. This Special Issue will consider recent developments in the modelling, estimation and control of grid-connected converter systems under adverse grid conditions. Both original research articles and reviews are welcome. Topics of interest for this Special Issue include but are not limited to,

- Grid-synchronisation techniques (PLL, FLL etc.);
- Harmonics and grid abnormalities detection techniques;
- Advanced control of grid-connected devices;
- Advanced power converter topology development for distorted grid;
- Topology development, modelling, estimation and control of EV chargers;
- Multifunctional grid-connected renewable energy systems;
- Adaptive and learning-based techniques (e.g., neural networks) for grid-connected systems;
- Energy management of grid-connected systems;
- Control of grid-connected high voltage DC (HVDC) converters and modular multilevel converters (MMC);
- Stability and interaction issues in grid-connected converters.

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### Guest Editors

Dr. Hafiz Ahmed

Dr. Mohammad Amin

Prof. Dr. Mohamed Benbouzid

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### Deadline for manuscript submissions

closed (30 November 2021)



## Electronics

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Flavio Canavero

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