



Advanced Control Strategies for Renewable Energy Systems and Sustainable Development

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Message from the Guest Editors

In recent years, with the growth of population and industrialization, there has been increasing attention on renewable energy sources, which are unlimited in nature and eco-friendly. In addition, these sources are expected to play a significant role in the future energy industry, becoming the main alternative to, and reaching the level of, conventional fossil resources. This Special Issue aims to present recent advances related to the theory and control of all categories of renewable energy sources.

Topics of interest for publication include, but are not limited to:

- Renewable energy systems;
- Back-to-back power converters;
- New efficient renewable energy technologies;
- Multi-level power converters for renewable energy sources;
- Modelling, control and nonlinear control of renewable energy sources;
- Fuzzy logic research;
- AI learning approaches;
- New control strategies for maximum power extraction;
- Adaptive power electronic control algorithms for the efficient operation of integrated renewable energy sources;
- Artificial intelligence control;
- Optimal power flow control;
- Practical implementation of control techniques;
- Grid-forming power electronics systems and future grid code requirements.



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Message from the Editor-in-Chief

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