



Intelligent Control of Power Grid and Renewable Energy System

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Message from the Guest Editors

Dear Colleagues,

The increasing development of renewable energies, together with the growing fleet of electric vehicles worldwide, confronts electricity grids with an extraordinary challenge: the management of numerous supply points in which consumers can also act as energy generators (prosumers). In this strongly decentralised context, intelligent control techniques, such as neural networks, machine learning, etc., can offer efficient solutions to maintain the quality of electricity supply.

Potential topics include, but are not limited to, the following:

- Smart grids;
- Communication technologies for energy resource management;
- Intelligent control techniques applied to management of power grids;
- Provision of ancillary services (reactive, phase current balancing, peak shaving, frequency control, etc.) to the grid;
- Integration of energy storage systems in power grids;
- Intelligent management of renewable energy resources, such as photovoltaic, wind, etc.;
- Intelligent control techniques applied to power electronic converters.





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Message from the Editor-in-Chief

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