Special Issue

Optimal Control of Hybrid Systems and Renewable Energies

Message from the Guest Editors

International policies for sustainable development have led to an increase of distributed power production based on renewable resources. It is necessary to define new technological solutions that can reduce costs and new control strategies to optimally manage renewable resources, which are more and more characterized by the close interaction between different energy vectors and their networks and by a transition from a centralized structure to a decentralized one (both in terms of sources and controls). The main aim of this Special Issue is to collect papers in the field of the optimal control of power and energy production from renewable resources (wind, PV, biomass, hydrogen, etc.). The specific topics of the Special Issue (but not limited to) are:

- Modelling and control of wind turbines, PV and solar thermal plants, etc.;
- Optimal control of hybrid systems (wind, hydrogen, fuel cells, hydro-electric plants, etc.);
- Operational management of biomass-based power plants;
- Optimization and control of energy systems;
- Stochastic optimization;
- Model predictive control;
- Distributed optimization;
- Optimal control of storage systems;
- Modelling and control of flexible loads.

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About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

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