Special Issue

Optimization and Modeling of Complex Energy Systems

Message from the Guest Editors

Hybrid energy systems, combining two or more energy vectors into a single system, are a promising way of increasing the efficiency of energy production and demand but the complexity of their management increases when several types of energy sources are combined on the same site. In this context, the Special Issue focuses on the research, development, and practical application of optimization methods applied to the optimal management and/or design of complex energy systems.

- Energy analysis and optimization
- Process integration, analysis, and optimization
- Refrigeration, air-conditioning, and heat pumps
- Power generation and CHP
- Renewable energy (solar, wind, hydro, etc.)
- Energy storage (batteries, thermal, hydrogen, etc.)
- Distributed generation and smart grids
- District energy supply and networks
- Biomass and biofuels
- Energy use
- Industrial energy use
- Energy conservation and management
- Environmental impacts of energy conversion
- Energy policy and planning
- Techniques addressing uncertainties in optimization of energy systems.

Guest Editors

Prof. Luca Giaccone

Dipartimento Energia, Politecnico di Torino, 10129 Torino, Italy

Dr. Paolo Lazzeroni

Department of Energy, Politecnico di Torino, Turin, Italy

Deadline for manuscript submissions

closed (31 January 2021)



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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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About the Journal

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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.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

