Special Issue

Intelligent Control and Simulation of Power Systems

Message from the Guest Editors

There is an evolution of the traditional power system in the direction of a full-fledged intelligent grid, which has such properties as continuous self-monitoring of the state and self-healing of network components, deep penetration of renewable energy sources, the participation of active consumers, increased physical/cyber security and flexibility, etc. Such an intelligent transformation of power systems is largely due to the introduction of new information technologies, the improvement of information collection and processing systems, as well as the emergence of new grid structures and adaptive control and regulation devices. The above-mentioned electric power system transformation will require a competitive approach of available principles and methods for modeling such systems, for studying their main properties, and for justifying their development and control of their operation.

- intelligent control
- power system
- simulation
- flexibility
- autonomous systems
- emergency control
- hybrid networks
- artificial intelligence
- machine learning

Guest Editors

Prof. Nikolai Voropai

Electric Power System Department, Melentiev Energy Systems Institute SB RAS, 664033 Irkutsk, Russia

Dr. Nikita Tomin

Electric Power System Department, Melentiev Energy Systems Institute SB RAS, 664033 Irkutsk, Russia

Deadline for manuscript submissions

closed (30 May 2022)

Energies

mdpi.com/si/63702

mdpi.com/journal/
energies

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

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:
free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:
indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:
CiteScore - Q1 (Control and Optimization)