Special Issue

Implementation of Renewable Energy in Power Distribution Systems Using Digitalization

Message from the Guest Editors

The integration of renewable energy sources (RES) into power grids is a significant global trend impacting various problems in specific conditions of particular countries. The aim of this Special Issue is to study the digitalization of Renewable Energy Sources (RES), creating Digital Twins (DTs), supporting the balancing of the power grid and increasing the flexibility of the energy system, possible through dispatchable renewable energy sources. For this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Analysis of available technical means
- Development of technological schemes implementation RES in the power grid
- Simulation photovoltaic system
- Model microgrid with renewable energy sources
- DT microgrid and RES
- Formation of optimal parameters of the power supply system according to the criterion of cost minimization and energy efficiency
- Developing the composition of equipment (the number, type, and location of electrical modules, inverters, and storage systems, taking into account the terrain and meteorological conditions)
- Using modern software for simulation RES
- Degradation PV module

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Deadline for manuscript submissions

closed (15 December 2024)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/185176

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Message from the Editor-in-Chief

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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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