

Special Issue

Control and Operation of DC/AC/Hybrid Microgrids Based on Artificial Intelligence

Message from the Guest Editors

Artificial intelligence (AI) can be implemented in various applications for different goals. For an important instant, AI-based approaches can be used just with data, and as a result, the studied system can be considered as a black box. Therefore, in the case of using the AI-based approaches, the minimum knowledge about the system can be expected. So, AI-based methods have the mentioned and important advantages. Due to the advantage of the AI-based methods and their wide applicability, they can be implemented in power and energy applications to introduce new solutions and improve their performances. One of the most important power and energy applications can be a microgrid. Microgrids provide an opportunity to implement renewable energy resources. Therefore, by the deployment of green energy, environmental benefits can be suggested. In addition, the local implementation of energy resources makes the control and operation of the system simpler. Furthermore, microgrids can be designed in a way to reduce costs. Briefly, microgrids can offer environmentally friendly, economical, and less complex power and energy systems.

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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 guestedited by leading experts in selected topics of interest.

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