Special Issue

Applications of Machine Learning and Artificial Intelligence in Modern Power and Energy Systems, 2nd Edition

Message from the Guest Editors

Intelligent energy management, conversion and control are vital to optimize the generation, distribution and consumption of electrical energy and the corresponding necessity of using solid and liquid fossil fuels With the technological improvements in renewable energy sources, electricity production is transitioning from the traditional centralized systems to distributed energy systems.

This Special Issue aims to collect new research information and contributions on intelligent energy management,

conversion, prediction and control, including, but not limited to smart applications for power grid control, renewable energy sources, power electronic converters, fuel cells and others Smart energy management and control can be effectively realized in various ways, including

- Effective load prediction and management, applying machine learning and artificial intelligence
- Fuel consumption forecasting and optimization
- Efficiency optimization in power flow management
- Power electronics energy conversion with loss minimization
- Monitoring and timely troubleshooting of intelligent energy systems
- Energy and power system management and optimization
- Energy and power resiliency and trust

Guest Editors

Prof. Dr. Valeri Mladenov

Department Fundamentals of Electrical Engineering, Technical University of Sofia, Kliment Ohridski St. 8, 1000 Sofia, Bulgaria

Dr. Panagiotis Sarigiannidis

Department of Electrical and Computer Engineering, University of Western Macedonia, 50100 Kozani, Greece



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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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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

Prof. Dr. Flavio Canavero

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

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