

## Special Issue

# Machine Learning and Optimization with Applications of Power System

### Message from the Guest Editor

In this Special Issue, new theoretical and/or practical research results using machine learning and optimization techniques with the application of power systems are solicited. Pilot programs and field tests considering regional requirements are also welcome. The preferred topics include, but are not limited to: Energy data analytics and forecasting Deep learning (RNN, LSTM, CNN, etc.) for load and renewable generation prediction Deep reinforcement learning for stochastic control ESS operation considering uncertainty, frequency regulation, demand response, and/or battery degradation Demand response Energy bidding and game theory in renewable energy markets Pilot programs and field tests Microgrid optimization and simulator development Optimal power flow in distribution networks Virtual power plants

---

### Guest Editor

Prof. Dr. Hongseok Kim

Department of Electronic Engineering, Sogang University, Seoul 04107, Republic of Korea

---

### Deadline for manuscript submissions

closed (30 April 2019)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/16820](https://mdpi.com/si/16820)

*Energies*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/journal/  
energies](https://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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)