

## Special Issue

# Energy and Power Systems: Control and Management

### Message from the Guest Editors

Traditionally, only loads are variable, and an electric grid's stability is controlled by centralized generators. However, growing environmental concerns have led to the increased integration of Renewable Energy Sources such as photovoltaic, wave, and wind technologies. These are considered Variable Energy Sources because their generation is inherently influenced by weather conditions, which introduces new complexities in grid management. The problem has been further exacerbated by the worldwide increase in energy demand, putting additional strain on the grid. To address this, Demand Side Management techniques have played a crucial role in maintaining grid stability without requiring additional generation capacity. Today, the evolution of the smart grid, which is characterized by its intelligent, responsive, dynamic, flexible, and adaptive nature, is seen as the largest and most complex man-made system. This advanced grid enables better integration of renewable energy and more efficient energy distribution. However, as with any continuously evolving system, there are ongoing challenges and opportunities for improvement.

---

### Guest Editors

Dr. Stelios Ioannou

Prof. Dr. Mohamed Darwish

Dr. Nicholas G. Christofides

---

### Deadline for manuscript submissions

30 October 2025



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/218107](https://mdpi.com/si/218107)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, 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, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )