

## Special Issue

# Edge Cloud Continuum for Energy Communities

### Message from the Guest Editor

Edge clouds revolutionize energy communities, fostering innovative solutions for efficiency, reliability, and sustainability. This distributed environment, integrating edge computing and cloud infrastructure, empowers communities through real-time monitoring and control via smart meters and IoT devices. Localized edge intelligence, backed by centralized cloud analytics, optimizes energy distribution and grid stability.

Seamless data exchange, enabled by protocols like MQTT, fuels real-time decision-making. Successful case studies and future research, including AI and blockchain integration, highlight the promise of this approach for shaping smart, sustainable energy communities. This Special Issue seeks cutting-edge research, industry insights, and practical applications in this transformative landscape. Recommended topics include (but are not limited to): - Edge Cloud Computing in Smart Energy Systems- Machine Learning for Intelligent Energy Management- Artificial Intelligence for Sustainable Energy- Interdisciplinary Research and Case Studies- Emerging Trends and Future Directions

---

### Guest Editor

Dr. Giandomenico Spezzano

National Research Council of Italy (CNR), Institute for High Performance Computing and Networking (ICAR), Via Pietro Bucci, 8-9C, 87036 Rende, CS, Italy

---

### Deadline for manuscript submissions

31 January 2025



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/si/196036](https://mdpi.com/si/196036)

*Applied Sciences*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
appls@mdpi.com

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[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), Inspec, CAPIus / SciFinder, and other databases.

#### Journal Rank:

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