

## Special Issue

# The Role of Functional Materials and Nanotechnology in Energy and Environmental Applications

### Message from the Guest Editors

This Special Issue, titled “The Role of Functional Materials and Nanotechnology in Energy and Environmental Applications”, aims to explore cutting-edge advancements in engineered materials and nanoscale technologies that address critical challenges in sustainable energy and environmental stewardship. The focus lies in the design, synthesis, and application of functional materials—such as perovskites, metal–organic frameworks (MOFs), graphene, and quantum dots—for energy generation (e.g., solar cells, fuel cells), storage (e.g., batteries, supercapacitors), and environmental remediation (e.g., pollutant degradation, carbon capture). The scope spans interdisciplinary research, covering innovations in nanotechnology for air/water purification, energy-efficient catalysts, and sensors for environmental monitoring, while emphasizing the scalability, sustainability, and lifecycle impacts of nanomaterials. The purpose is to bridge gaps between lab-scale discoveries and real-world deployment, fostering dialog on sustainable material design, manufacturing, and policy frameworks to align innovations with global sustainability goals, such as the UN SDGs.

### Guest Editors

Dr. Muhammad Yousaf

ZJU-Hangzhou Global Scientific and Technological Innovation Center,  
Zhejiang University, Hangzhou, China

Dr. Ali Imran

School of Micro and Nano Electronics, Zhejiang University, Hangzhou,  
China

### Deadline for manuscript submissions

7 March 2026



**Sustainability**

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.3**  
**CiteScore 7.7**



[mdpi.com/si/247279](https://mdpi.com/si/247279)

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

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





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



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



## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

### Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario  
Institute of Technology, Oshawa, ON L1G 0C5, Canada

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)