



Leveraging AI in Industry 4.0: Overcoming Challenges and Seizing Opportunities for Sustainable Operations Management

Guest Editors:

Dr. Marco Mosca

DIME—Department of Mechanics, Energetics, Management and Transportation Engineering, University of Genoa, 16145 Genoa, Italy

Prof. Dr. Flavio Tonelli

Department of Mechanical Engineering, Energetics, Management and Transportation (DIME), Polytechnic School University of Genoa, 16145 Genova, Italy

Deadline for manuscript submissions:

31 January 2025

Message from the Guest Editors

Authors are encouraged to contribute original articles delving into topics such as:

1. The implementation and integration of AI with other Industry 4.0 technologies in operational processes, including the IIoT, big data analytics, cloud computing, augmented reality and CPS, with an emphasis on sustainability.
2. The applications of AI with advanced technologies such as 3D printing, CNC, collaborative robotics and intelligent automation to enhance efficiency, flexibility and sustainability in production processes.
3. The development of innovative, AI-enabled business models facilitated by Industry 4.0, such as servitization, distributed manufacturing, smart factories and their contributions to sustainability.
4. The impact of AI in Industry 4.0 on the design and management of supply chains, including product traceability, visibility along the entire distribution chain and sustainable practices.
5. Challenges and solutions in adopting AI within Industry 4.0 technologies, including workforce training, cybersecurity, organizational change management and strategies for achieving sustainability goals.





an Open Access Journal by MDPI

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

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.

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, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](https://twitter.com/Sus_MDPI)