

Special Issue

Life Cycle Assessment in Sustainable Materials Manufacturing

Message from the Guest Editors

The escalating demand for environmentally friendly products, driven by consumer awareness and increasingly stringent regulations, has catalyzed significant research and development in the field of sustainable materials. Life cycle assessment (LCA) provides the standardized framework required for the evaluation of such trade-offs. By systematically mapping all inputs (energy and raw materials) and outputs (emissions and waste) from “cradle to grave” or “cradle to cradle,” LCA identifies environmental hotspots and enables a comparative analysis of different material and manufacturing choices. Its application is essential in order to validate the “green” credentials of new materials and to optimize their production processes with the aim of minimizing their overall environmental footprint. We are pleased to invite you to contribute to our Special Issue, which aims to collate high-quality, original research and comprehensive reviews that showcase the latest advancements and applications of LCA in the context of sustainable material production.

Guest Editors

Dr. Daniele Landi

Department of Management, Information and Production Engineering,
University of Bergamo, 24044 Dalmine, Italy

Dr. Christian Spreafico

Department of Management, Information and Production Engineering,
University of Bergamo, 24044 Dalmine, Italy

Deadline for manuscript submissions

20 March 2026



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/245164

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

mdpi.com/journal/

[applsci](https://doi.org/10.3390/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)