Special Issue

Intelligent Digital Twins: Trends and Applications in the Human-Centered Manufacturing Context

Message from the Guest Editors

We invite authors to submit scientific papers that approach the aspects of integrating simulation, continuous/discrete optimization, human factors, and decision support models based on simulation and distributed intelligence into the digital twin of manufacturing and logistics systems. The topics include, but are not limited to:

- Definition of the role of simulation for digital twins in manufacturing and logistics
- Digital twin maturity model
- Human factors and human digital twins
- Real-time execution of simulation models for digital twin implementation
- Digital twin synchronization with the real manufacturing/logistics system counterpart
- Digital twin for decision support in production and logistics
- Distributed and Edge Intelligence
- Simulation-based digital twins
- Verification and validation of simulation models in digital twins
- Integration of Simulation with Virtual, Mixed and Augmented Reality for Digital Twin Applications
- Digital twin of stochastic production environments

Guest EditorsDr. Vittorio Solina

Dr. Antonio Padovano

Dr. Francesco Longo

Dr. Giovanni Mirabelli

Deadline for manuscript submissions

closed (30 April 2023)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/142423

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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)

