

Special Issue

Digital Twins in the Industry 4.0

Message from the Guest Editor

This Special Issue (SI), “Digital Twins in Industry 4.0”, aims to explore the dynamic role that digital twins play in transforming industries, enhancing operations, and unlocking new opportunities for growth and optimization. Authors are invited to submit original contributions on methods, models, and control architectures dealing with the intelligent control of future supply chains, including but not limited to the following topics:

- Digital twins and smart manufacturing;
- Industrial robotics and digital twins for automation;
- Predictive maintenance using digital twins in Industry 4.0;
- Digital twins in supply chain optimization;
- The optimization of production processes with digital twins;
- Digital models for product lifecycle management (PLM);
- Human-machine interactions in smart factories via digital twins;
- Achieving energy efficiency and sustainability using digital twins;
- Digital twins in quality control and inspections;
- Cyber-physical systems (CPSs) and digital twins in Industry 4.0.

Case studies, theoretical models, design methodologies, and literature reviews are especially welcome.

Guest Editor

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Deadline for manuscript submissions

closed (30 May 2025)



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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.

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