

# Special Issue

## Digital Twin Applications in Smart Manufacturing

### Message from the Guest Editors

This Special Issue “Digital Twin Applications in Smart Manufacturing” will cover intelligent perception and information fusion, intelligent modeling and analysis, intelligent collaborative optimization control, intelligent analysis and optimization decision-making, and precise execution and service for DT in smart manufacturing. This Special Issue will focus on (but not be limited to) the following topics:

- Reference architecture of DT in smart manufacturing
- High-performance intelligent perception and comprehensive cognition of manufacturing data for DT
- Dynamic intelligent modeling with deep integration of mechanism model and data model in DT
- Implementation, operation, and optimization of DT in smart manufacturing
- Multi-layer decision and optimal control method of end-edge-cloud based on DT
- New smart manufacturing scheduling using DT
- DT and big data-driven preventive maintenance in smart manufacturing
- DT-based dynamic adjustment and control service
- Distributed DT system and its applications in smart manufacturing

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### Guest Editors

Prof. Dr. Jiafu Wan

Dr. Yuqian Lu

Prof. Dr. Sang Do Noh

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### Deadline for manuscript submissions

closed (28 February 2023)



## Machines

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## About the Journal

### Message from the Editor-in-Chief

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
CISE–Electromechatronic Systems Research Centre, University of  
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#### Rapid Publication:

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