

## Special Issue

# Digital Technologies to Support Human Factors Engineering in Manufacturing System Design: Theory and Applications

### Message from the Guest Editors

The study of human factors (HFs) in working environments, including the physical, psychological, and physiological characteristics of workers, is crucial for Industry 4.0 implementation. Despite this, HFs are still rarely considered in manufacturing, mostly due to production costs and the narrow time to market, and in general, limited attention is paid to the HF integration (HFI) in the modern factory. In this context, User eXperience (UX) acquires a greater importance, and is essential to integrate it in the design of machines and complex systems. Digital technologies such as virtual reality, augmented reality, digital human simulations, human monitoring and motion capture systems could bridge the gap between industrial requirements and operators' needs, providing reliable tools for HFI in industry. This Special Issue will be devoted to state-of-the-art research on the integration of human factors in industry and applications of the digital technologies. We seek submissions with an original perspective and advanced thinking on the theme addressed. Research on theories, simulations, experiments, and engineering applications is welcome.

### Guest Editors

Dr. Fabio Grandi

Dr. Margherita Peruzzini

Dr. Agnese Brunzini

### Deadline for manuscript submissions

closed (30 June 2025)



## 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  
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