

Special Issue

Advances in Intelligent Machine Tools and Precision Machining

Message from the Guest Editors

The integration of advanced technologies, such as artificial intelligence (AI), machine learning (ML), sensing technologies, and integrated testing, is revolutionizing the design, manufacturing, and operation of intelligent machine tools and precision machining processes. This Special Issue focuses on the latest advancements in these research areas, highlighting their transformative impact on machine tool design and development, machining accuracy, efficiency, and adaptability. Topics of interest include AI-driven process optimization, ML-based predictive maintenance, real-time monitoring through advanced sensors, and the development of smart machining systems with integrated testing capabilities. We invite researchers to submit original research, reviews, and case studies that explore innovative applications of these technologies in intelligent machine tools and precision machining. This Special Issue aims to provide a platform for disseminating innovative research and fostering collaboration in this rapidly evolving field.

Guest Editors

Dr. Jun Zha

School of Mechanical Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Dr. Amaia Calleja-Ochoa

Department of Mechanical Engineering, University of the Basque Country (UPV/EHU), Nieves Cano 12, 01006 Vitoria-Gasteiz, Spain

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

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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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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