

Special Issue

Advanced Design, Manufacturing, and Applications of Precision Machine Tools

Message from the Guest Editor

The pursuit of ultra-high precision and efficiency in modern manufacturing demands continuous innovation in machine tool design, fabrication, and application. This Special Issue focuses on cutting-edge technologies in precision machine tool development, including high-stiffness structural design, thermal error compensation, vibration suppression, advanced control systems, and smart monitoring. Additionally, it explores their applications in critical sectors such as aerospace, automobiles, microelectronics, and medical device manufacturing. We invite original research and reviews addressing challenges in machining accuracy, dynamic performance optimization, energy-efficient machining, and digital twin integration. Contributions may cover theoretical advances, experimental validations, or industrial case studies.

Guest Editor

Dr. Jun Zha

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

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Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

jmmp@mdpi.com

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About the Journal

Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (JMMP) (ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to *JMMP*.

Editor-in-Chief

Prof. Dr. Steven Y. Liang
George W. Woodruff School of Mechanical Engineering, Georgia
Institute of Technology, Atlanta, GA 30332-0405, USA

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