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Advances in High-Performance Machining Operations

Guest Editors:

Dr. Guang Chen

Key Laboratory of Mechanism Theory and Equipment Design of Ministry of Education, Tianjin University, Tianjin 300354, China

Dr. Chunlei He

Key Laboratory of Mechanism Theory and Equipment Design of Ministry of Education, Tianjin University, Tianjin 300354, China

Deadline for manuscript submissions:

30 September 2024

Message from the Guest Editors

High-performance machining operations comprise a variety of advanced manufacturing technologies which are proposed to machine components with high precision and machined surface integrity. In this Special Issue of JMMP, we are looking for recent findings which focus on advances in high-performance machining operations, including experimental studies and numerical modelings of cutting or thermal–mechanical deformation-induced machined surface integrity.

We are interested in contributions that focus on topics such as:

- Advanced machining processes using novel or hybrid thermal-mechanical processes to achieve high performance, including high precision and machined surface integrity;
- Theoretical and experimental studies of the mechanism of machined surface integrity achieved via advanced thermal–mechanical processes:
- Numerical modeling of machined surface integrity considering microstructure evolution and the effects of microstructure on mechanical behaviors;
- Studies focused on the combined effect of material, thermal–mechanical deformation processes and surface integrity using an advanced surface modification operation.











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Editor-in-Chief

Prof. Dr. Steven Y. Liang

George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0405, USA

Message from the Editor-in-Chief

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