

Special Issue

Thermally-Assisted and Mechanical Machining of Metals and Alloys

Message from the Guest Editors

In industries, lasers are employed for a variety of material processing methods, including welding, surface hardening, rapid prototyping, and machining. Laser-assisted machining is an effective process to facilitate material removal processes for various materials. In this Special Issue, we aim to collect a set of contributions in the referred fields, which include but are not limited to:

- Laser-assisted machining: grinding, drilling, turning, milling, turn-mill process;
- Material behavior and influence of thermal effect;
- Optimization of process parameters;
- Design and development of innovative equipment, tools, and systems;
- Cutting tool wear, tool life, and a novel cutting tool design.

Research and review papers addressing all aspects of laser-assisted machining are welcome. Articles focusing on material processing, as well as design and development of equipment and cutting tools, are also encouraged. We hope that the present Special Issue will be an opportunity to create a network between authors and other researchers working in the area of laser-assisted machining.

Guest Editors

Prof. Dr. Choonman Lee

Department of Mechanical Engineering, Changwon National University,
Changwon 51140, Republic of Korea

Dr. Dong-Hyeon Kim

Mechatronics Research Center, Changwon National University,
Changwon 51140, Republic of Korea

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

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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