



an Open Access Journal by MDPI

Advances in the Machined Surface Integrity in Manufacturing Process of Materials

Guest Editors:

Prof. Dr. Caixu Yue

Prof. Dr. Haibo Liu

Dr. Yinfei Yang

Prof. Dr. Minchao Cui

Dr. Yihang Fan

Deadline for manuscript
submissions:

20 April 2025

Message from the Guest Editors

The surface integrity alteration induced by the machining process has a profound influence on the performance of a component. The cutting process directly affects the surface state of the machined parts (texture, morphology, residual stress, etc.) and the final performance of the workpiece. Therefore, it is of great significance to reveal the mapping relationship between working conditions, surface integrity, and workpiece functionality in cutting process. The effects of cutting parameters such as cutting speed, feed speed, cutting depth, and tool wear on the machined surface integrity during milling should be revealed. The relationship between the machined surface integrity and the performance of parts should also be explored.

This Special Issue provides an excellent opportunity for researchers who are studying and working with machined surface integrity in manufacturing processes, such as surface integrity in the turning process, the milling process, grinding process, shot peening process, rolling process and other high-energy modification processes. It is our pleasure to invite you to submit papers or reviews which are within the scope of this Special Issue.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)