

## Special Issue

# New Advances in Coatings and Surface Treatments for Cutting and Grinding Tools

### Message from the Guest Editors

The application of coatings and surface treatments to cutting and grinding tools has provided substantial benefits to turning, milling, drilling, boring, grinding, lapping, polishing and other mechanical process. The constant development of coatings and surface treatment technologies for cutting and grinding tools render them more resistant to heat, corrosion, wear, breakage, loading, chip welding, and a host of other complications. These processes facilitate force reduction, chatter suppression, accuracy maintain, subsurface damage decrease, energy conservation, emission reduction and other new features for machining process. Therefore, due to the increasing demands of the industry, increasing attention has been paid to coatings and surface treatments in recent decades, with the aim of enhancing the machining performance of cutting and grinding tools.

This Special Issue of *Materials* intends to provide a forum for original research articles as well as review articles on current advances in the field of tool coatings and surface treatments for machining applications.

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### Guest Editors

Prof. Dr. Bing Guo

Dr. Quanli Zhang

Dr. Zhiqiang Liang

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### Deadline for manuscript submissions

closed (10 September 2023)



## Materials

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*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

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### 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.

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### 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

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