

Recent Advances in the Machining of Metals and Composites

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Message from the Guest Editors

The success of many manufacturing operations depends on proper planning and implementation. Therefore, efficiency is a deciding factor in their success and competitiveness in many manufacturing industries. In this regard, both researchers and the industry are seeking innovative methods for improving machining operations based on tool geometry, tool materials and coatings and reducing machining time for high productivity. This Special Issue focuses on the conventional and nonconventional machining of metals and composites to provide academic and industrial researchers with a platform to share high-quality original research and critical reviews. Articles focusing on uncoated and coated tools, modelling and the optimization of machining processes are welcome. Topics of articles include but are not limited to:

- Machining of metal and composites
- Machining quality and defect assessments in materials
- Uncoated and coated tools for machining processes
- Failure mechanisms and tool wear modes of cutting tools
- Modelling, simulation and optimization of the machining process
- Characterization of advanced coating materials
- Health and safety considerations in machining operations.

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Special Issue

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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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