Special Issue

Precision and Ultra-Precision Subtractive and Additive Manufacturing Processes of Alloys and Steels

Message from the Guest Editors

The development of precision and ultra-precision manufacturing processes results from a growing demand for reduced mass and dimensions of manufactured products of the highest surface quality and dimensional accuracy, while reducing production costs. The extreme requirement towards a surface quality constitutes the fundamental objective of precision and ultra-precision manufacturing processes. Therefore, the recognition of a specific physical phenomenon occurring during these techniques, as well as the selection of input parameters enabling simultaneous improvement of a machined surface quality, together with a process stability and tool life, are of high scientific importance. It is our pleasure to invite you to submit original research papers, short communications or state-of-the-art reviews which are within the scope of this Special Issue. Contributions can range from novel approaches in precision and ultraprecision manufacturing, the analysis and modeling of process mechanics, and measurements of physical phenomena during manufacturing processes to evaluation of surface integrity.

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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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