Special Issue

Finishing Operations to Enhance Surface Integrity of Parts

Message from the Guest Editors

Surface integrity management is remarkably important when metal alloys are used to manufacture relevant parts. Advanced materials such as titanium, nickel alloys, non-ferrous alloys, or special steels make surface integrity preservation after machining particularly difficult. Consequently, thorough finishing techniques are required to rectify the surface integrity.

In this context, processes like burnishing, honing, plateau-honing, grinding, and shot peening can contribute to improving the described surfaces in terms of texture, residual stress, and hardness, as well as for being easily maneuverable from a procedural point of view. This Special Issue is proposed to collect the research results about these kinds of finishing processes, which are very important to the transportation industry.

It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editors

Prof. Dr. Gilles Dessein

Laboratoire Génie de Production LGP, Université de Toulouse, INP-ENIT, 65000 Tarbes, France

Prof. Dr. J. Antonio Travieso-Rodriguez

Department of Mechanical Engineering, Universitat Politècnica de Catalunya, 08019 Barcelona, Spain

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

mdpi.com/journal/materials





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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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