Special Issue

Superfinishing Operations in Manufactured Parts

Message from the Guest Editors

Superfinishing operations applied to manufactured parts are crucial for improving the precision, quality and durability of components in various industries.

Superfinishing, which encompasses techniques comprising polishing, lapping, honing, burnishing and precision grinding, is essential for optimizing surface characteristics (such as roughness and geometry of parts), contributing to a greater efficiency in the performance of critical components.

For this reason, the aim of this Special Issue is to explore this topic in depth and gather a compendium of current research on the impact of these processes in sectors such as automotive, aeronautics and biomedical engineering. Our goal is to present case studies that demonstrate the improvement in the useful life of parts through meticulous control of tolerances and ultra-fine surfaces.

This is why we invite renowned academics and professionals in the field to publish papers in this Special Issue, providing a comprehensive overview of the most innovative methods, cutting-edge tools and future trends that will transform the field of manufactured parts' superfinishing.

Guest Editors

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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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