Special Issue

Advanced Machining and Technologies in Materials Science

Message from the Guest Editor

This Special Issue aims to present groundbreaking developments in advanced manufacturing processes, precision manufacturing, and innovative material applications. The scope of this Special Issue includes high-performance machining techniques, additive and hybrid manufacturing, advanced coatings and tool materials, smart manufacturing, automation, and sustainable machining processes. We welcome experimental, theoretical, and computational studies that push the boundaries of modern machining and material sciences. A key aspect of these advancements is the development and application of innovative materials with superior properties. Therefore, this Special Issue aims to promote knowledge regarding the enhancement of machining efficiency via the achievement of exceptional hardness and wear resistance, improving the longevity of tools by reducing friction and thermal effects, and developing materials that offer high strength, corrosion resistance, and thermal stability. This Special Issue explores the interplay between material properties and manufacturing techniques, driving innovation toward more efficient, precise, and sustainable production.

Guest Editor

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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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