Special Issue

Latest Developments in Advanced Machining Technologies for Materials

Message from the Guest Editors

In the context of the rapid development of modern manufacturing, advanced machining technologies play a pivotal role in enhancing the precision, efficiency, and sustainability of material processing. The latest innovations in these technologies continuously break traditional limitations by integrating intelligent control, digital management, and novel tools and equipment, enabling the efficient processing of a wide range of materials including metals, ceramics, and composites. In-depth research into the relationship between machining parameters and material properties not only optimizes production processes but also provides the scientific foundation and practical guidance necessary for achieving green manufacturing. This Special Issue is designed to showcase cutting-edge advancements, with a particular focus on key technologies such as hybrid machining, micro/nano machining, laser-assisted machining, and digital manufacturing. We cordially invite researchers and engineering experts to submit their contributions, exploring both the practical applications and future trends of advanced machining technologies and fostering continuous innovation and progress in material processing.

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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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