

## Special Issue

# Progress and Challenges of Advanced Metallic Materials and Composites

### Message from the Guest Editor

This Special Issue aims to present a series of featured articles and reviews exploring the latest advancements in the field of metallic materials and composites.

Metallic materials and alloys have been traditionally used since the bronze age and have been constantly under development up to this age of semiconductors. They find applications in various industries, including, but not limited to, aerospace, automotive, biomedical, jewelry, tooling, and structural engineering. This Special Issue aims to compile key developments in the advancements of metallic materials and composites, especially their alloy strategy, processing, structure–property correlations, strengthening and failure mechanisms, sustainability and circular economy aspects, recycling, and modeling and simulation of materials and their properties. By combining theoretical insights and experimental observations with practical applications, this Special Issue aims to foster a deeper understanding of the potential of metallic materials and composites, guiding future research and development initiatives.

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### Guest Editor

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## Materials

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### Message from the Editorial Board

*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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