

Special Issue

Multi-Scale Simulation of Metallic Materials

Message from the Guest Editor

Metallic materials include elemental metals and compounds or alloys. Today, they are one of—if not the most—important engineering materials and are additionally widely utilized as biomaterials. Present developments have led to an increasing demand for diverse new metallic materials, in addition to sustainable recycling, digital manufacturing, and environment- and climate-friendly production of devices and parts. Therefore, obtaining comprehensive knowledge regarding metallic materials on scales ranging from the atomic, micro-, meso- and macroscopic level has gained importance as of late. Correspondingly, multiscale simulation which combines existing and emerging methods is being employed to incorporate the wide range of time and space scales that are inherent to various disciplines. It is thus high time to have this Special Issue to improve our understanding of the complex metallic materials world.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editor-in-Chief

Prof. Dr. Yong Zhang

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