Special Issue

Deformation and Microstructural Evolution of Copper Alloy

Message from the Guest Editor

Microstructures and alloying chemistry are the principal factors influencing the material properties and deformation behaviours of metallic materials: for example, the grain size, sub-structure density, and precipitates are well-known parameters for designing mechanical strengths and ductility. Copper and copper alloys are typical examples of diversifying both deformation behaviour and microstructural evolution based on initial microstructure and texture, which are two essential factors that significantly influence the mechanical properties. Therefore, optimization of microstructure and texture of Cu alloys through advanced processing techniques such as severe plastic deformation or powder metallurgy is the key to achieve better combination of mechanical strength and ductility. Hence, the present Special Issue aims to provide more detailed insights into the deformation behaviour and microstructural evolution of copper and copper alloys, which contribute to improved mechanical properties and relate to texture and anisotropy.

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Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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