Special Issue

Recent Advances in Tool and High Speed Steel

Message from the Guest Editor

Tool and high-speed steels represent an important class of materials for the manufacture of moulds, cutting tools, punches, dies, rolls, and many other components. Their performance is closely related to the materials' properties, which, in turn, are the result of a complex manufacturing process that includes steelmaking, thermomechanical processing, and heat and surface treatment. Although many of the steels used today were formulated several decades ago, the development of new grades has continued into the present thanks to modern modeling software. Traditional production technologies, such as electric arc steelmaking, have been combined with novel powder metallurgy techniques based on activated sintering and, more recently, additive manufacturing, which allow us to produce near net shape components with a complex geometry and a tailored microstructure. The goal of this Special Issue of *Metals* is to present a collection of original research articles related to the development of tool and high-speed steels. High-quality papers from researchers in the scientific community and industry are welcome.

Guest Editor

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Message from the Editorial Board

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.

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