Special Issue

Microstructure and Mechanical Properties of Alloys

Message from the Guest Editor

The microstructure of metallic engineering alloys can be controlled via thermal, mechanical, or thermomechanical processes. Currently, more and more advanced engineering alloys are experiencing significant improvements in their mechanical properties, owing to the development of suitable microstructures. The microstructural evolution is often rationalized based on advanced materials' characterization and simulation tools. Additionally, the impact of different microstructural features on the mechanical behavior of the structural and functional parts must be addressed so as to correlate process–microstructure–properties relationships. This Special Issues aims to address the microstructural evolution and its impact on the mechanical properties of advanced engineering alloys. Papers dealing with processing techniques, modeling of the mechanical behavior, characterization of material microstructure, influence of environmental parameters, and temperature dependence, as well as advanced applications, are encouraged. Dr. Joao Pedro Oliveira

Guest Editor

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