



Amorphous Alloys — Properties, Modeling and Applications

Guest Editor:

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Message from the Guest Editor

The search for new materials with improved properties never stops, as we all know. Amorphous Alloys are among the new and promising material groups, these alloys have been attracting attention since their discovery in the 1960s. Contrary to crystalline materials, Amorphous Alloys lack crystallographic long-range order and they are attractive due to their improved mechanical, electronic, magnetic and chemical properties. Historically, amorphous alloys were first produced by rapid quenching methods, namely, cooling was carried out fast enough so that crystallization could not take place. Such a rapid cooling, of about 10^6 K·s⁻¹, enabled the production of thin sections only. However, recent research yielded compositions that can be cooled at much slower rates and still result in an amorphous structure. In addition, an amorphous structure can be obtained also by other production techniques, these techniques as well as composition modifications make much larger sections possible to obtain.

It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.





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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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