



Specific Features and Properties of Amorphous Alloys beyond Semiconductors

Guest Editor:

Prof. Mikio FUKUHARA

New Industry Creation Hatchery
Center, Tohoku University,
Sendai, 980-8579, Japan.

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Message from the Guest Editor

Dear Colleagues,

Amorphous alloys, which are the last frontier of metals and metallic alloys, are peculiar metallic alloys in that they lack, on the nanoscale, the long-range translational order of crystalline alloys, as they have grain boundaries and lattice imperfections. Since 1960, when Klement et al. discovered amorphous alloys in the Au–Si system, work has been carried out on the preparation and properties of various amorphous alloys. Amorphous alloys have characteristic physical and chemical properties, such as high strength and high corrosion resistance, and superior electronic properties, which are significantly different from the corresponding crystalline alloys. In addition to these characteristics, it is also important to examine theoretically and experimentally their physical and chemical characteristics in order to understand the functional and electronic properties of amorphous alloys with nanometer-sized clusters. These findings will provide new insights into functional and electronic devices, which are based on cluster science and technology.





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Message from the Editorial Board

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Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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