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Nanocomposite High Performance Alloys

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Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editors

Dear Colleagues,

High-performance alloys provide both high performance and metallic characteristics, and they are synthesized using two or more kinds of metals, or a metal or nonmetal. These nanocomposites are materials based on high-performance alloys that are reinforced with a dispersed nanophase. The inorganic compounds are usually ceramics, metals, etc., and the organic compounds are usually organic polymer materials. Because of their designability, high-performance alloys and their nanocomposites have desirable properties, such as high modulus, high strength, and good toughness. Hence, high-performance alloys and their nanocomposites have been developed into new types of material, which have been widely applied in many fields, such as the military, aerospace, and automotive fields.

Thus, we welcome studies about the fabrication, characterization, and testing of high-performance alloys and metal-matrix composites reinforced with different nanophases to be submitted for publication in this Special Issue. Furthermore, studies on the manufacturing process of high-performance alloys and nanocomposites and analyses of their strengthening mechanism will also be considered.



mdpi.com/si/200676

Special Issue



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Message from the Editor-in-Chief

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