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Microstructure, Mechanical Properties, and Deformation Characteristics of Metals and Alloys

Guest Editor:

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Deadline for manuscript submissions:
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Message from the Guest Editor

Dear Colleagues,

As the largest group of engineering materials, metals and alloys have always played an important role in the development of the world economy. Ready availability, ease of fabrication, and desirable mechanical properties are the principal attributes of metals and alloys. Metallic materials may be divided into two large groups, ferrous and nonferrous, depending on whether iron or another element is the principal constituent. Ferrous materials can be further grouped into wrought irons, cast irons, carbon steels, and alloy steels. Common nonferrous materials include alloys of copper, aluminum, magnesium, nickel, lead, tin, and zinc.

The relationship between microstructure, mechanical properties, and deformation characteristics is critical in the research of metals and alloys. This Special Issue welcomes the submission of high-quality research on various aspects of metals and alloys, including microstructure evolution, materials design, numerical modeling, processing technology, and failure mechanisms. In particular, we encourage papers on the relationship between advanced manufacturing processing and the microstructures properties of metals and alloys.

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Message from the Editor-in-Chief

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