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Plastic Deformation, Strengthening and Toughening of Advanced Metallic Materials (2nd Edition)

Guest Editor:

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Message from the Guest Editor

After our successful first volume of the Special Issue “Plastic Deformation, Strengthening and Toughening of Advanced Metallic Materials”, we have decided to create a second volume to collect and publish state-of-the-art research in the field of plastic deformation, strengthening and toughening of metallic materials.

Metallic structure materials have been gaining widespread industrial applications, owing to their excellent properties, such as in extensive applications of high-strength steels and aluminium (Al) alloys. In most industrial alloy production and modern alloy design strategies, multiple obstacle families (for instance, solid solutions, particles and grain boundaries) and dislocations are employed to increase the strength. However, for such advanced alloys, the mechanisms of strengthening and toughening, as well as their plastic deformation mechanisms related dislocations evolutions, are still under debate.

In this Special Issue, we welcome the submission of original research articles, communications and reviews concerning the plastic deformation, strengthening and toughening of advanced metallic materials.



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Special Issue



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Message from the Editor-in-Chief

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