



Special Issue on Microstructure and Mechanical Properties

Relationship for Metallic Materials

Call for Papers

The optimisation of the mechanical behaviour of metallic alloys comes only with the understanding of the relationships microstructure-mechanical properties. The behaviour of metallic microstructures extends across several length scales and can be very complicated depending on the microstructure. Multi-phase metallic microstructures consist of several phases, with different morphologies, sizes and spatial distributions. Thus, their mechanical response is too complex to be predicted by just the modelling of average properties and phase fractions. The goal of this special issue is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in this area of **Microstructure and Mechanical Properties Relationship for Metallic Materials**.

In this special issue, we invite front-line researchers and authors to submit original research and review articles that explore **Microstructure and Mechanical Properties Relationship for Metallic Materials**. In this special issue, potential topics include, but are not limited to:

- Heat treatment of metallic materials
- Thermomechanical treatment of metallic materials
- Plastic deformations processes
- Processes of casting, welding of metallic materials
- Microstructures-properties relationships
- Mechanical properties of metallic materials
- The application of advanced metallic materials

Authors should read over the journal's [For Authors](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's [Paper Submission System](#).

Please kindly specify the “**Special Issue**” under your manuscript title. The research field “**Special Issue - Microstructure and Mechanical Properties Relationship for Metallic Materials**” should be selected during your submission.

Special Issue timetable:



Submission Deadline	September 15th, 2026
Publication Date	November 2026

Guest Editor:

For further questions or inquiries
Please contact Editorial Assistant at
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