



Finite Element Modeling of Solid State Phenomena in Metals and Alloys

Guest Editor:

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Message from the Guest Editor

The mechanical and functional properties of metals are strongly related to their microstructures, which are themselves inherited from thermal and mechanical processing. A precise numerical modeling of metallic materials is then a topic of prime importance largely due to the interest in the predictive simulation of materials behavior in order to reduce the difficulty of developing new materials and thanks to the academic interest of this strategy in order to improve our understanding of metallurgical phenomena. In the last several decades, numerous numerical methods have been developed at the mesoscopic scale to model solid-state phenomena taking place during metal forming under the concept of digital materials.

- finite element modeling
- metallic materials
- solid-state phenomena
- digital materials
- mesoscopic scale





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Message from the Editor-in-Chief

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