# Special Issue

# Numerical Modeling of Materials under Extreme Conditions

## Message from the Guest Editors

The responses of materials under extreme conditions are important in various industrial and defense fields. Experiments in the encountered conditions are often difficult and/or expensive. Consequently, numerical modeling of the material response is crucial for study in these fields. These and more will be explored in this Special Issue “Numerical Modeling of Materials Under Extreme Conditions” of the open access journal *Metals*, which is now open for submissions. Manuscripts are solicited for numerical work on material responses to extreme conditions such as, but not limited to, shock loading (high strain rate) by solid or laser impact, neutron or ion irradiation, high pressure and/or high temperature environment, etc. Various approaches and models to simulate the mechanical response and microstructural evolution during the processes, from atomic scale up to macroscale, are welcome. All material types relevant to these topics are welcome. Early submission is encouraged because publication is ongoing and, therefore, publication much earlier than the deadline of 31th Jan 2022 is possible.

## Guest Editors

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## Deadline for manuscript submissions

closed (31 December 2022)

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# About the Journal

## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

## Editors-in-Chief

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**Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

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