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Multiscale Modelling and Characterization of Mechanical Properties in Heat-Resistant Alloys

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Deadline for manuscript
submissions:

closed (1 August 2021)

Message from the Guest Editors

Various heat-resistant alloys have been used in industry; however, the bridge between the bulk mechanical properties and the underlying micro- and nanoscopic local properties remains an issue. Here, we focus on modeling and characterization approaches from multiscale aspects, for example, finite element analysis for representative volume element, mechanism-based constitutive modeling, molecular dynamics for high-temperature modeling approaches, tensile small-specimen test, nano- or micro-indentation test, strain mapping using digital-image collation as characterization approaches.



mdpi.com/si/57190

Special Issue



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Message from the Editor-in-Chief

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