



Hot Deformation Behavior of Magnesium Alloys

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Message from the Guest Editors

Hot deformation is fundamental for magnesium and its alloys. Due to the hexagonal lattice structure and the related limited formability at room temperature, elevated temperatures are required for forming and associated microstructure-changing processes. Factors with significant influence on hot deformation behavior are, for example, the deformation conditions, alloy composition, precipitation state and manufacturing history. A good understanding of hot deformation behavior provides the groundwork for the configuration of hot deformation processes, such as extrusion, rolling and forging. Dynamic recrystallisation processes occur easily in magnesium alloys due to the low stacking fault energy. Knowledge of them and their characteristics enables the control of microstructure and texture developments, as well as the resulting property profile. This Special Issue is aimed at scientists and researchers wishing to contribute to the hot deformation behavior of magnesium alloys, microstructure development and processing at elevated temperatures.





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