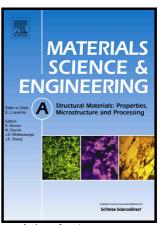
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Hot compression deformation characteristics and microstructural evolution of a co-cr-mo-C alloy: Effect of precipitate and martensitic transformation

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Hot compression deformation characteristics and microstructural evolution of

a Co-Cr-Mo-C alloy: Effect of precipitate and martensitic transformation

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Abstract

The hot compression behavior of a Co-Cr-Mo-C alloy was studied in the temperature range of

1100-1200 °C and the strain rate of 0.001-1 s⁻¹. The influence of processing parameters including

temperature and strain rate on the microstructure of the alloy was investigated. The flow curves

of the hot compressed samples at the investigated deformation temperatures and strain rates

exhibited single peak stress. The effect of the strain rate and temperature of deformation on the

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