

Shear influence on the structural ordering in a model metallic glass

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Abstract

Nonequilibrium molecular dynamics simulations of a model amorphous system are performed with the aim of studying the structural transformations induced by external shear influence. We reveal that the shear drive has both positive and negative effects on the structural ordering processes. The dependence of the phase transition rate versus the strain rate at three different temperatures is found. © 2010 Allerton Press, Inc.

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