

Abstract Submitted
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The stability of a simulated model-glass created by cooling at a constant rate¹ HANNAH STALEY, ELIJAH FLENNER, GRZEGORZ SZAMEL, Colorado State University — Vapor deposition is used to create glasses that are much more stable than those obtained by cooling. To understand properties of stable glasses, computer simulations of vapor deposition and of random pinning have been used to create and examine properties of simulated stable glasses. However, little is known about the stability of simulated glasses that are created by cooling at a constant rate. We create simulated glasses by cooling a model glass-former at different rates. We examine the glass's stability by measuring the average potential energy, the average inherent structure energy, the dynamics upon reheating, and the shear modulus. When possible, we compare these results to those obtained from simulations of vapor deposited glasses and from simulated glasses created by random pinning.

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