

Molecular Dynamics Studies of Heat Flow in Two and Three Dimensions

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We report on molecular dynamics studies of heat flow in dielectric crystals and superlattices in two and three dimensions. The simulations are performed for cubic crystals using classical mechanics and periodic boundary conditions. In the two dimensional case, we report on a study of the dependence of the conductivity on the size of the sample. In the three dimensional case, we present results for the variation of the conductivity with the repeat distance and other characteristic parameters of the superlattice.