

CHARGE CARRIER SCATTERING
MECHANISMS IN THERMOELECTRIC PbTe:Sb

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S u m m a r y

On the basis of the results of radiographic researches and measurements of thermoelectric parameters of antimony-doped lead telluride, such as the thermoelectric coefficient and the conductivity, the penetration mechanisms of impurity atoms into the crystal lattice of the matrix are established. The influence of impurity on the charge carrier mobility is revealed. The introduction of impurities up to 0.3 at.% is shown to favor the electron mobility owing to the filling of tellurium vacancies, which are active scattering centers, by antimony ions, the effect of which on the electron mobility is lower.