

## The research of changes in the conductivity of solid solutions based on PbTe with CdSe impurities

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*The temperature dependences of the specific electrical conductivity were studied and, on the basis of Maxwell's equations, the contribution of the new phases formed to the total conductivity of the obtained alloys in the temperature range 460–720 K was estimated. It was found, that in alloys with impurities from 5 mol % to 10 mol %  $E_a$  does not change and it is 0.11 eV. The value of the activation energy of PbTe conduction at room temperature,  $E_a = 0.36$  eV, was also obtained, which is in good agreement with the literature data.*

*Keywords:* lead telluride, cadmium selenide, conductivity, isothermal annealing.

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