

SPECIFIC FEATURES OF DOPING THE  $p$ -TiCoSb  
INTERMETALLIC SEMICONDUCTOR WITH A Cu  
DONOR IMPURITY. 2. EXPERIMENTAL STUDIES

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S u m m a r y

Temperature and concentration dependences of the resistivity, magnetic susceptibility, Seebeck and thermoelectric power coefficients of the TiCo<sub>1-x</sub>Cu<sub>x</sub>Sb semiconductor solid solution in the temperature range from 80 to 380 K have been studied. A substantial difference between the activation energy values deduced from high-temperature sections of the conductivity versus temperature and the thermoelectric coefficient versus temperature dependences has been revealed and explained in the framework of the model which examines the heavily doped and strongly compensated semiconductor as the amorphous one. The theoretically predicted conductivity transition insulator–metal (the Anderson transition) stemming from crossing the percolation threshold level by the Fermi one has been discovered experimentally.