

MECHANISM OF ACCEPTOR IMPURITY INITIATION
IN THE p -TiCoSb INTERMETALLIC
SEMICONDUCTOR HEAVILY DOPED
WITH A V DONOR IMPURITY.
2. ELECTROKINETIC STUDIES

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S u m m a r y

The temperature and concentration dependences of the resistivity and the thermopower coefficient of the intermetallic p -TiCoSb semiconductor heavily doped with a V donor impurity have been studied within the impurity concentration range $N_D^V = 9.5 \times 10^{19} \div 1.9 \times 10^{21} \text{ cm}^{-3}$ and the temperature interval $T = 80 \div 380 \text{ K}$. A conductivity transition of the insulator–metal–insulator type, which is caused by a change in the relative arrangement of the Fermi level and the percolation level in the conduction band, has been found; the latter phenomenon occurs owing to a change of the compensation degree in the semiconductor and runs following the mechanism that was established in our previous work.