CONDITIONS FOR THE MAXIMAL THERMOELECTRIC POWER FACTOR YIELD IN INTERMETALLIC SEMICONDUCTORS ZrNiSn AND TiCoSb

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S u m m a r y

The heavy doping of intermetallic semiconductors ZrNiSn and TiCoSb with acceptor and/or donor impurities up to the concentrations, at which the Fermi level becomes fixed at the mobility edge of the corresponding continuous energy band (the conduction or the valence one), has been shown to be a condition for obtaining the maximal thermoelectric power factor in these materials.