Effect of Pressure on the Resistivity of Ag-Au Alloys

The difference between the calculated and experimental curve in Fig. 5 can be ascribed to deviations from Matthiessen's rule. The limited accuracy to which the various pressure derivatives can be determined does not allow a very enlightening comparison of the deviations between the different alloys. The significant deviation observed does indicate the importance of considering deviations from Matthiessen's rule in pressure studies of the resistivity of alloys.

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and form a common ing potential could ne derivative of the agreement between -Au alloys is someintroduced into the oes not account for the Ag-Au alloys. uld be a reflection vith concentration. nce of d ln ϱ_0 /d ln V uch as the Cu-Ag ld Ag are not very ing potentials init for the observed ys.

loys as compared I Au suggests that $\varrho^{-1} d\varrho/dP$ for the following simple st two terms in (3) ence of $\varrho^{-1} d\varrho/dP$. ained from Goree of e₁ was obtained re obtained from ctions should be 300 °K and was is of (3) and the pared for the c =) and 0.75 alloys. perature dependdetermined the P. Typically at here $\varrho_1^{-1} d\varrho_1/dP$ sign, the magnia result of the

rature dependence of ure derivative of the 5 at 6 Ag alloy