Abstract Submitted
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Possible deviation of magnetoresistivity of V_3Si from Kohler Rule[1] S. MORAES, A.A. GAPUD, P. FAVREAU, University of South Alabama, J.R. THOMPSON, University of Tennessee and Oak Ridge National Laboratory, D.K. CHRISTEN, Oak Ridge National Laboratory — The normal-state transport magnetoresistivity $\rho(H)$ in high-quality samples of A15 compound V_3Si is studied. Contrary to the results of a previous study by Zotos *et al.* (*Sol. State Comm.* **50** (5), 1984, p. 453) which found that $\rho \sim H^2$ over a wide range of temperatures, the result of the current study is closer to $\rho \sim H^{1.5}$ at higher temperatures. However, there seems to be also a deviation from this form at lower temperatures, thus showing a slight temperature dependence for $\rho(H)$ – in other words, a temperature-dependent deviation from the traditional Kohler's Rule, $\Delta\rho/\rho_0 = f(H/\rho_0)$.Possible reasons for this are discussed.

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