

CaFe₄As₃: A Metallic Iron Arsenide with Anisotropic Magnetic and Charge-Transport Properties [*J. Am. Chem. Soc.* **2009**, *131*, 5405–5407]. Iliya Todorov, Duck Young Chung, Christos D. Malliakas, Qing'an Li, Thomas Bakas, Alexios Douvalis, Giancarlo Trimarchi, Kenneth Gray, John F. Mitchell, Arthur J. Freeman, and Mercouri G. Kanatzidis*

Page 5406. The units in the label of the y-axis of Figure 3d should read $\mu\text{J}/\text{mol}\cdot\text{K}$ instead of $\text{J}/\text{mol}\cdot\text{K}$.

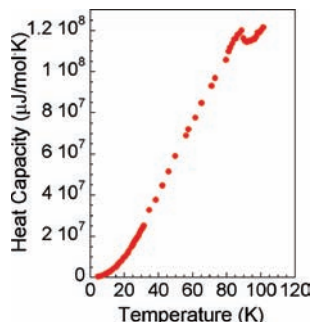


Figure 3. (d) Molar heat capacity measured from 10 to 110 K with no applied field.

Supporting Information. Details of the fit of the specific heat data are missing (Figure S1). The data were fitted to the Debye function:

$$C_p(T) = \gamma T + 9NR \left(\frac{T}{\Theta_D} \right)^3 \int_0^{\Theta_D/T} \frac{x^4 e^x}{(e^x - 1)^2} dx$$

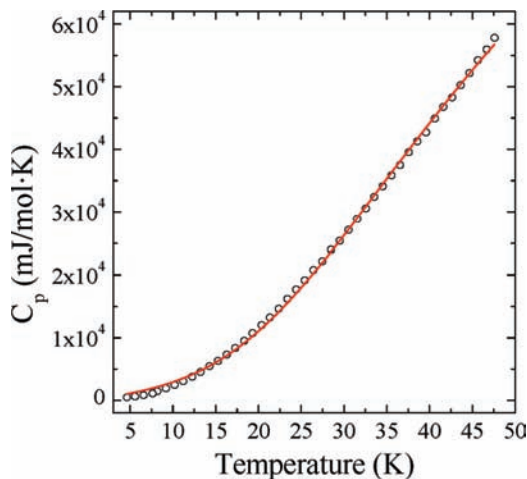


Figure S1. Plot of molar heat capacity measured from 4 to 48 K without applied field. Open circles represent the experimental data and solid red line the Debye function fit.

where the first term corresponds to the electronic contribution and the second term to the phonon contribution. N is the number of the atoms in the formula unit, R is the universal gas constant, and $x = \hbar\omega/k_B T$. The specific heat coefficient γ was determined from $(C_p/T)_{T \rightarrow 0}$. A fit to the experimental points (agreement factor $R^2 = 99.925\%$) gave a Debye temperature Θ_D of 210(3) K and an electronic specific heat coefficient γ of 204(15) $\text{mJ}/\text{mol}\cdot\text{K}^2$.

JA907195H

10.1021/ja907195h

Published on Web 11/13/2009