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Thermal expansion and pressure derivatives of T_c in $Ba(Fe_{1-x}Co_x)_2As_2$ single crystals[1] S.L. BUD'KO, Ames Laboratory/Iowa State University, M.S. TORIKACHVILI, Physics Department, San Diego State University, N. NI, J.-Q. YAN, P.C. CANFIELD, Ames Laboratory/Iowa State University, G.M. SCHMIEDESHOFF, Physics Department, Occidental College — We present heat capacity and anisotropic thermal expansion data for $Ba(Fe_{1-x}Co_x)_2As_2$. Evolution of structural/magnetic phase transition with Co-concentration is clearly detected by both measurements. Anisotropic pressure derivatives of the superconducting transition temperature are evaluated via the Ehrenfest relations and compared with directly measured hydrostatic dT_c/dP.

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