$$V_p[001] = 8.869 \pm 0.013\ \mathrm{km \cdot s^{-1}},$$
$$(\partial V/\partial T)_p = -(3.14 \pm 0.13) \times 10^{-4}\ \mathrm{km \cdot s^{-1} \cdot K^{-1}};$$
$$V_s[001] = 6.5666 \pm 0.0055\ \mathrm{km \cdot s^{-1}},$$
$$(\partial V/\partial T)_p = -(1.47 \pm 0.10) \times 10^{-4}\ \mathrm{km \cdot s^{-1} \cdot K^{-1}};$$
$$V_p[110] = 10.199 \pm 0.011\ \mathrm{km \cdot s^{-1}},$$
$$(\partial V/\partial T)_p = -(3.20 \pm 0.15) \times 10^{-4}\ \mathrm{km \cdot s^{-1} \cdot K^{-1}};$$
$$V_s[110]\ (P//\ [110]) = 4.2101 \pm 0.0043\ \mathrm{km \cdot s^{-1}},$$
$$(\partial V/\partial T)_p = -(2.07 \pm 0.06) \times 10^{-4}\ \mathrm{km \cdot s^{-1} \cdot K^{-1}}.$$

The temperature dependence of the adiabatic elastic constants and bulk and shear (VRH average) moduli is computed using the density and literature value of thermal expansion coefficient. Values obtained are:

$$C^S_{11} = 2814 \pm 8\ \mathrm{Pa},\ (\partial C^S_{11}/\partial T)_p = -0.258 \pm 0.018\ \mathrm{Pa \cdot K^{-1}};$$
$$C^S_{12} = 1546 \pm 9\ \mathrm{Pa},\ (\partial C^S_{12}/\partial T)_p = -0.107 \pm 0.019\ \mathrm{Pa \cdot K^{-1}};$$
$$C^S_{44} = 1543 \pm 3\ \mathrm{Pa},\ (\partial C^S_{44}/\partial T)_p = -0.101 \pm 0.010\ \mathrm{Pa \cdot K^{-1}};$$
$$K_S = 1969 \pm 6\ \mathrm{Pa},\ (\partial K_S/\partial T)_p = -0.157 \pm 0.014\ \mathrm{Pa \cdot K^{-1}};$$
$$\mu_{VRH} = 1080 \pm 5\ \mathrm{Pa},\ (\partial \mu_{VRH}/\partial T)_p = -0.094 \pm 0.008\ \mathrm{Pa \cdot K^{-1}}.$$

A comparison with previous measurements by pulse superposition and ultrasonic interferometry methods is made. Disagreement, when present, is discussed in terms of the separate measuring techniques. Finally, the present method, with its possibility for further improvement, is evaluated as a new method to measure temperature and pressure dependence of elastic constants.

SCHOCK, R. N., and Hinze, E., The electrical conductivity of silver iodide to 410 K, 0.2 GPa, J. Phys. Chem. Solids 36, 713-21 (1975).

Electrical conductivity (σ) measurements have been made on powders and hexagonal single crystals of Agl at pressures to 0.2 GPa ($2 \times 10^8 N/m^2$) and at temperatures to 410 K. Single-crystal σ values indicate intrinsic ionic conduction at temperatures greater than 400 K. The enthalpy of activation (ΔH^*) in this region is about 0.9 eV, independent of crystallographic orientation. At lower temperatures, log (σT) is a nonlinear function of T^{-1}.