

Fig. 1. Calculated Permittivity vs. Pressure at 20°C Compared to Leonidova's Data.

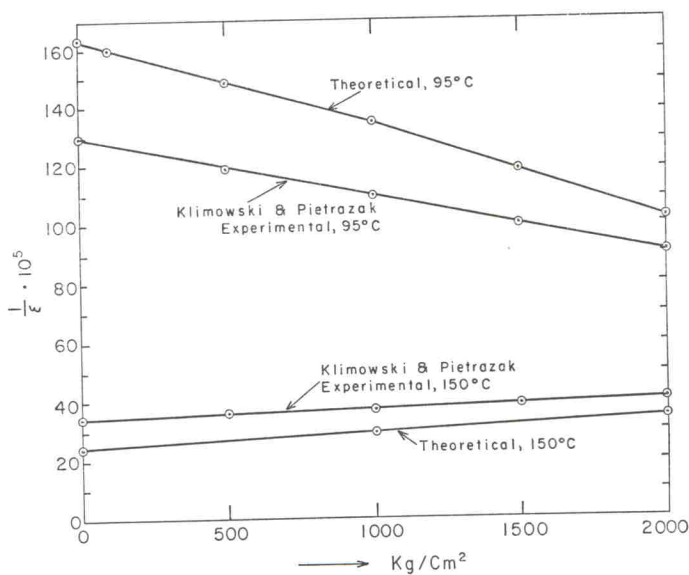


Fig. 2. Reciprocal Permittivity vs. Pressure at 95°C and 15°C.

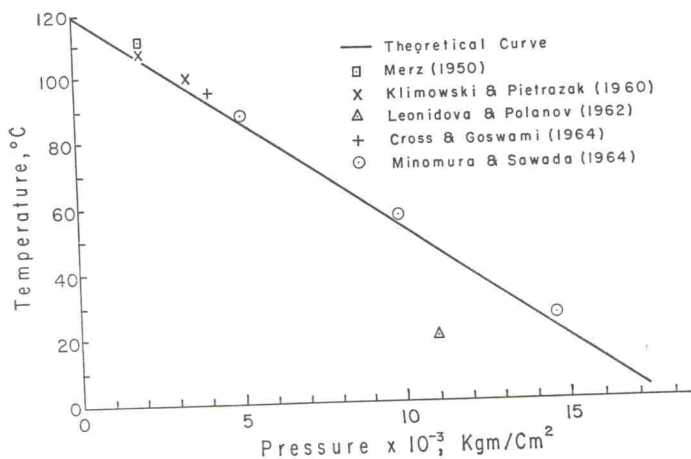


Fig. 3. Variation of Curie Temperature with Hydrostatic Pressure in BaTiO₃ Single Crystals.

various authors are also presented in the same graph for comparison purposes. The agreement between the theory and experiment is excellent except that Leonidova and Polanov's⁵⁾ datum due to the reasons above. Recently Samara¹²⁾ reported the transition pressure of 18.5 Kbar at 20°C compared to the theoretical value of 14.6 Kbar in this work.

From the equation (8), one could also compute the variation of ϵ_a with pressure, although no such experimental data are available.

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