

THERMAL CONDUCTIVITY OF SOLID SF₆
IN THE PLASTIC PHASE

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S u m m a r y

Isobaric thermal conductivity of the high-temperature phase of solid SF₆ is studied in the temperature range 90 - 220 K by the flat stationary method. The experimental technique of sample growth and measurement of thermal conductivity is described. It is found that, while temperature increases, isobaric thermal conductivity decreases more rapidly than $\lambda \sim 1/T$, as compared with isohoric researches, where thermal conductivity grows. The thermal conductivity behavior for molecular crystals depending on temperature is discussed within the framework of representations about the additional influence of molecular orientational movement on a phonon flow. The received results are discussed in connection with the influence found of changes in speeds of phonons due to thermal expansion on heat transport of the crystal lattice of solid SF₆.