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HIGH-TEMPERATURE CAPACITY OF C₆₀ FULLERENE

Heat capacity of C₆₀ fullerene was measured by the scanning calorimetry method in the range 285-640 K and by the adiabatic calorimetry method in the range 99-310 K. This study confirmed previous measurements and expanded their temperature range. The most recent knowledge of molecular and crystal parameters of C₆₀ was used to calculate its heat capacity. The calculation is consistent with experimental measurements at 300-640 K and covers a temperature range up to 1000 K.