

substance: La_2Se_3

property: crystal structure, physical properties

La_2Se_3

crystal structure cubic (Th_3P_4 -defect structure, $T_d^6 - \bar{1}43d$)

lattice parameters, coefficient of linear thermal expansion

a 9.055 Å 65F

α $11.5 \cdot 10^{-6} \text{ K}^{-1}$ 66D

Debye temperature

Θ_D 347 K 66D

240 K 72S

Figures and further references:

coordination polyhedra: Fig. 1

heat capacity: Fig. 2

References:

- 65F Flahaut, J., Guittard, M., Patrie, M., Pardo, M. P., Golabi, S. M., Domange, L.: Acta. Cryst. 19 (1965) 14.
- 66D Dudnik, E. M., Lashkarev, G. V., Paderno, Y. B., Obolonchik, V. A.: Inorg. Mater. 2 (1966) 833.
- 66H Holtzberg, F., Methfessel, S.: J. Appl. Phys. 37 (1966) 1433.
- 72S Smirnov, I. A.: Phys. Status Solidi (a) 14 (1972) 363.

Fig. 1.

Th₃P₄-type compounds. The coordination polyhedra of the cations and the anions. Full circles: Th- atoms, other circles: P-atoms [66H].

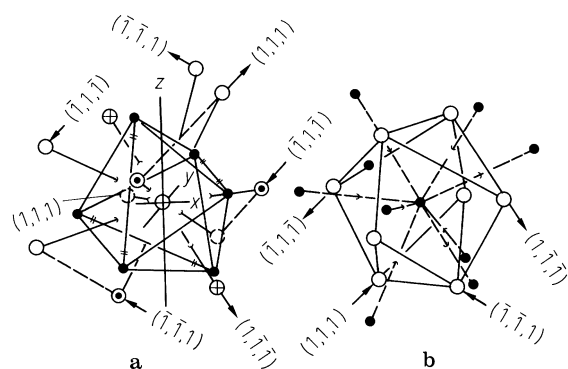


Fig. 2.

γ - La_2S_3 , La_2Se_3 , La_2Te_3 . Temperature dependence of the molar heat capacity [72S].

