

substance: Nb₂O₅

property: crystal structure, lattice parameters of P-Nb₂O₅

crystal structure: tetragonal, space group D₄¹⁰ – I4₁22, Z = 4.

Structure related to anatase (Figs. 1, 2). It can be obtained in crystalline form using Cl₂/H₂O as transporting gas, with $T_1 = 600^\circ\text{C}$ and $T_2 = 800^\circ\text{C}$.

lattice parameters

a	3.876 Å	RT	65P
c	25.43 Å		

References:

- 65P Petter, W., Laves, F.: *Naturwissenschaften* 52 (1965) 617.
- 70W Wadsley, A. D., Anderson, S.: *Perspectives in Structural Chemistry*, Dunitz, J. D., Ibers, J. A. (eds.) New York: Academic Press 3 (1970) 1.

Fig. 1.

P-Nb₂O₅. Idealized structure [70W].

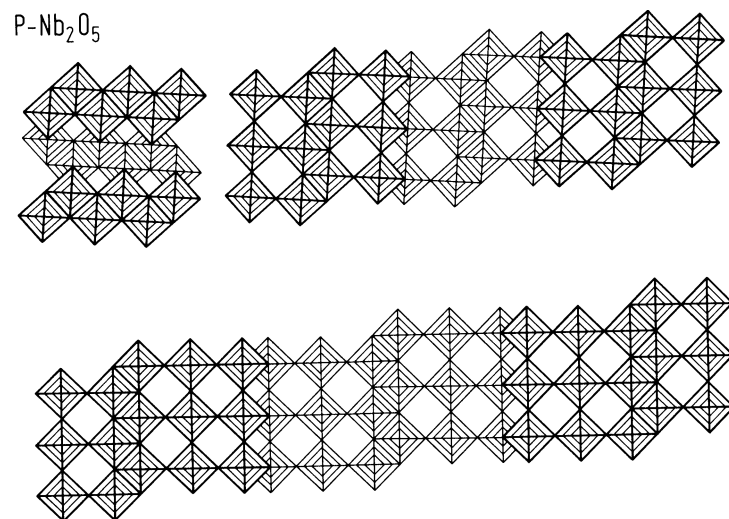


Fig. 2.

P-Nb₂O₅. Unit cell [65P].

