

niobium, Nb

I 5100

46 - 035

A Novel Semiconducting Perovskite-Related Phase: Sr₅Nb₅O₁₇.

— The structure of the novel title compound, prepared by the floating-zone melting technique, is determined by single crystal XRD. The compound, crystallizing in the orthorhombic space group Pnn2 with $Z = 2$, consists of distorted perovskite-type slabs parallel to (100) of NbO₆ octahedra and Sr atoms. The diamagnetic, electrically conductive compound is isotypic with La₅Ti₅O₁₇ which is paramagnetic. — (SCHMALLE, H. W.; WILLIAMS, T.; RELLER, A.; LICHTENBERG, F.; WIDMER, D.; BEDNORZ, J. G.; Acta Crystallogr., Sect. C: Cryst. Struct. Commun. 51 (1995) 7, 1243-1246; Inst. Inorg. Chem., Univ., CH-8057 Zuerich, Switz.; EN)