

¹⁰⁶Nb

¹⁰⁶Nb was first detected by Ahrens et al. in 1976 as described in “Decay Properties of Neutron-Rich Niobium Isotopes” (1976Ah06). Thermal neutron induced fission of ²³⁵U, ²³⁹Pu, and ²⁴⁹Cf was investigated at the Mainz Triga reactor. ¹⁰⁶Nb was identified by measuring γ -ray spectra with a Ge(Li) detector following chemical separation. “With ²³⁹Pu or ²⁴⁹Cf as fissionable material, our niobium sample showed a weak γ -ray peak at this energy which decayed with a half-life of about 1 sec. Therefore, this half-life is assigned to ¹⁰⁶Nb.”

Adapted from reference (2012Ny02)

1976Ah06 H. Ahrens, N. Kaffrell, N. Trautmann, and G. Herrmann, Phys. Rev. C **14**, 211 (1976).

2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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