

¹⁹⁰Tl

The first observation of ¹⁹⁰Tl by Vandlik et al. from Dubna was reported in the 1970 paper “The new isotopes ¹⁹⁰Tl and ¹⁸⁸Tl” (1970Va27). PbF₂ was bombarded with 660 MeV protons from Dubna synchrocyclotron. The thallium fraction was chemically separated and γ spectra were measured with a Ge(Li) detector. “We conclude from the above results and the analogy with the adjacent isotopes that ¹⁹⁰Tl has a metastable state as well as a ground state, whose half-lives are respectively 2.9 ± 0.4 min and ≥ 3.6 min.” Vandlik et al. had the order of the states reversed.

Adapted from reference (2013Fr04)

1970Va27 Y. Vandlik, N. G. Zaitseva, Z. Mate, I. Mahunka *et al.*, Bull. Acad. Sci. USSR, Phys. Ser. **34**, 1472 (1971).

2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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