

## $^{113}\text{Tc}$

The first observation of  $^{113}\text{Tc}$  was reported by Äystö et al. in “Discovery of Rare Neutron-Rich Zr, Nb, Mo, Tc and Ru Isotopes in Fission: Test of  $\beta$  Half-life Predictions Very Far from Stability” in 1992 ([1992Ay02](#)). At the Ion Guide Isotope Separator On-Line (IGISOL) in Jyväskylä, Finland, targets of uranium were bombarded with 20 MeV protons.  $\beta$  decays were measured with a planar Ge detector, while  $\gamma$ -rays were measured with a 50% Ge detector located behind a thin plastic detector. “The data show clearly the  $K\alpha$  peaks associated with  $\beta$  decay of the new isotopes  $^{107}\text{Nb}$ ,  $^{109}\text{Mo}$ ,  $^{110}\text{Mo}$ , and  $^{113}\text{Tc}$ .”

Adapted from reference ([2012Ny02](#))

[1992Ay02](#) J. Aysto, A. Astier, T. Enqvist, K. Eskola *et al.*, Phys. Rev. Lett. **69**, 1167 (1992).

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

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