

## **$^{158}\text{Yb}$**

Ward et al. from the University of California at Berkeley published the identification of  $^{158}\text{Yb}$  in the 1967 paper “Gamma rays following  $^{40}\text{Ar}$ -induced reactions” (1967Wa18). Isotopically enriched tellurium targets were bombarded with  $^{40}\text{Ar}$  beams and ytterbium isotopes were populated in (xn) fusion-evaporation reactions. Gamma-ray spectra were studied using a lithium-drifted germanium counter. “We have bombarded separated Sn and Te isotopes with  $^{40}\text{Ar}$  projectiles in order to study the ( $^{40}\text{Ar}$ ,xn) reactions and evaluated them as a means to produce excited nuclei for spectroscopic studies. This proves to be an excellent method for populating ground-band collective levels, and such levels have been identified as the 88-, 90-, and 92-neutron Er and Yb isotopes.” The first three transition of the rotational ground-state band were measured for  $^{158}\text{Yb}$ .

Adapted from reference (2013Fr10)

1967Wa18 D. Ward, F. S. Stephens, and J. O. Newton, Phys. Rev. Lett. **19**, 1247 (1967).

2013Fr10 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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