

^{150}Yb

Beck et al. observed ^{150}Yb for the first time in 2021 as described in “Mass Measurements of Neutron-Deficient Yb Isotopes and Nuclear Structure at the Extreme Proton-Rich Side of the $N = 82$ Shell” (2021Be23). A 480 MeV proton beam from the TRIUMF cyclotron in Vancouver, Canada, irradiated a tantalum target. Spallation reaction products were extracted and separated with the Isotope Separator and Accelerator (ISAC) facility and transported to TRIUMF’s Ion Trap for Atomic and Nuclear Science (TITAN) facility. Masses of the isotopes of interest were measured with the multiple-reflection time-of-flight mass spectrometer (MR-TOF-MS). “The masses of ^{150}Yb and ^{153}Yb and the excitation energy of $^{151}\text{Yb}^m$ were measured for the first time.” The authors did not consider their results as the discovery of ^{150}Y because the observation of this isotope in a fragmentation reaction had been reported previously in a conference proceeding.(2000So11) However, it was not subsequently published in a refereed journal.

Adapted from reference (2023Th03)

- 2000So11 G. A. Souliotis, Phys. Scr. T **88**, 153 (2000).
2021Be23 S. Beck, B. Kootte, I. Dedes, T. Dickel *et al.*, Phys. Rev. Lett. **127**, 112501 (2021).
2023Th03 M. Thoennessen, Int. J. Mod. Phys. E **32**, 2330001 (2023).

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