^{152}Tb

Toth et al. discovered ^{152}Tb in the 1959 article "New terbium isotope, Tb^{152}" (1959To28). Enriched ^{151}Eu and ^{153}Eu targets were bombarded with 37 and 48 MeV α-particles from the Berkeley 60-in. cyclotron. Gamma-ray spectra were measured with NaI(Tl) detectors following chemical separation. "A careful examination of photon and electron spectra from cyclotron-produced mixtures of light terbium isotopes has led to the identification of a new isotope, Tb^{152}, with an 18.5-hr half-life." Four months later a 4.0(5) min half-life corresponding to an isomeric state of ^{152}Tb was measured independently (1959Ol22). A 4.5 h half-life previously assigned to ^{152}Tb (1948Wi02) was incorrect.

Adapted from reference (2013Ma01)

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