^{143}Tb

In 1985, Ollivier et al. reported the discovery of ^{145}Tb in "Identification and decay of 12s ^{143}Tb" (1985Ol01). A 191 MeV ^{35}Cl beam from the Grenoble SARA accelerator bombarded an enriched ^{112}Sn target and ^{143}Tb was produced in the fusion-evaporation reaction ^{112}Sn(^{35}Cl,2p2n). Gamma-ray coincidences were measured with intrinsic Ge detectors in combination with a He-jet system. "The γ-rays determined from $\gamma-\gamma$ coincidence relations are ascribed to the decay of ^{143}Tb on the basis of following experimental evidences: i) all these γ-rays are in coincidence with K_{α_1} and K_{α_2} X-rays of Gd. ii) the average measured half-life of the most intensive γ-rays is found to be 12$\pm$1 s."

Adapted from reference (2013Ma01)

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