

¹³⁵Gd

Xu et al. published the observation of ¹³⁵Gd in the 1996 paper “New β -delayed proton precursor ¹³⁵Gd” (1996Xu07). An enriched ¹⁰⁶Cd target was bombarded with a 171 MeV ³²S beam from the Lanzhou cyclotron and ¹³⁵Gd was formed in the reaction ¹⁰⁶Cd(³²S,3n). Charged-particle, γ -rays, and X-rays were measured with a silicon surface barrier, HpGe(GMX) and planar HpGe detector, respectively. “Unknown β -delayed proton precursor ¹³⁵Gd has been synthesized by the reaction ¹⁰⁶Cd(³²S,3n) and identified using a helium-jet recoil fast-tape-transport system with a γ (X)-p coincidence measurements. Its β -delayed proton spectrum has been observed. The half-life of ¹³⁵Gd decay has been determined to be 1.1 ± 0.2 s.”

Adapted from reference (2013Ma01)

1996Xu07 S. Xu, Y. Xie, Z. Li, R. Ma *et al.*, Z. Phys. A **356**, 227 (1996).

2013Ma01 E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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