^{179}Lu

Kuroyanagi et al. observed ^{179}Lu in 1961 as reported in "New activities in rare earth region produced by the (γ,p) reactions" (1961Ku10). Hafnium oxide powder was irradiated with γ-rays at the Tohoku 25 MeV betatron. Decay curves were measured with a β-ray analyser or an end-window G-M counter and β-ray spectra were recorded with a plastic scintillator. "Several new activities in the rare earth region were identified and also the decay characteristics of some previously reported activities in this region were studied more in detail. They were produced by the (γ,p) reactions and measurement was made with the aid of the scintillation spectrometers. Results were as follows: ... Lu^{179}: 7.5±0.5 h (half-lives), 1.35±0.05 meV (beta rays), 90, 215 keV (gamma rays)." A year later Stensland and Voigt confirmed the results except for the 90 keV γ-ray and attributed the longer half-life to possible impurities (1963St06). Previously, half-lives of 22 min and 8 h were assigned to either ^{178}Lu or ^{179}Lu (1950Bu07) and a ∼5 h half-life was reported without a mass assignment (1951Bu25).

Adapted from reference (2012Gr19)

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