^{147}Dy

In 1975, the discovery of ^{147}Dy was announced in the paper "Excitation energies of the $h_{11/2}$ and $d_{3/2}$ neutron states in ^{145}Gd and ^{147}Dy" by Toth et al. (1975To04). A ^{141}Pr target was bombarded with 124−157 MeV ^{14}N beams from the Oak Ridge isochronous cyclotron. A capillary transport system extracted the product nuclei to a shielded area where singles and coincidence γ-ray measurements were taken with Ge(Li) detectors. "A systematic shift in the X-ray energies can be noted by comparing the three sets of spectra. Based on this and other evidence the 72 and 679 keV γ-rays are assigned to ^{147}Dy^{m}". The γ-rays from this isomer populated the ground state of ^{147}Dy. Three weeks earlier Firestone et al. had mentioned a 72 keV γ-ray in ^{147}Dy without a reference (1975Fi02).

Adapted from reference (2013Fr10)

1975Fi02 R. B. Firestone, R. A. Warner, W. C. McHarris, and W. H. Kelly, Phys. Rev. C **11**, 1864 (1975).

1975To04 K. S. Toth, A. E. Rainis, C. R. Bingham, E. Newman *et al.*, Phys. Lett. B **56**, 29 (1975).

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"