^{168}Lu

^{168}Lu was reported in "Radioactive decay of Lu^{168}" by Wilson and Pool from Ohio State University in 1960 (1960Wi09). Ytterbium oxide targets enriched in ^{168}Yb were bombarded with 6 MeV protons and ^{168}Lu was produced in the (p,n) charge exchange reaction. Decay curves, γ-ray and K X-ray spectra were measured. "The initially resulting activity is assigned to Lu^{168} by the identification of the ytterbium K x ray and by comparison with the activities produced by similar proton irradiations of each of the other enriched isotopes of ytterbium." The reported half-life was 7.1(2) min and corresponds to an isomer. The 5.5(1) min ground-state of ^{168}Lu was first observed twelve years later (1972Ch44).

Adapted from reference (2012Gr19)

1960Wi09 R. G. Wilson and M. L. Pool, Phys. Rev. **118**, 227 (1960).

1972Ch44 A. Charvet, R. Chery, Do Huu Phuoc, R. Duffait *et al.*, Nucl. Phys. A **197**, 490 (1972).

2012Gr19 J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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