^{230}U

Studier and Hyde reported the discovery of ^{230}U in the 1948 paper "A new radioactive series - the protactinium series" (1948St42). Thorium metal targets were bombarded with 19 MeV deuterons and a 38 MeV ^{4}He beam from the Berkeley 60-inch cyclotron forming ^{230}Pa in (d,p4n) and (α,p5n) reactions. ^{230}U was populated by subsequent β decay. Alpha-decay spectra were measured following chemical separation. "A U^{230} decay curve is shown in [the figure]. A 'least squares' treatment of the data yielded 20.8 days for the half-life."

Adapted from reference (2013Fr03)

1948St42 M. H. Studier and E. K. Hyde, Phys. Rev. **74**, 591 (1948).
2013Fr03 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).

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