^{183}Pb

^{183}Pb was first observed in 1980 by Schrewe et al. in "Alpha decay of neutron-deficient isotopes with $78 \leq Z \leq 83$ including the new isotopes ^{183,184}Pb and ^{188}Bi" (1980Sc09). A 6.25 MeV/nucleon ^{48}Ti beam from the UNILAC accelerator at GSI impinged on an enriched ^{142}Nd target. ^{183}Pb was formed in the fusion evaporation reaction ^{142}Nd(^{48}Ti,7n) and stopped in a FEBIAD ion source. Following reionization and mass separation, the ions were implanted into a carbon foil and their α-decay was recorded. "In addition to the known alpha line of ^{183}Au and of ^{183}Hg and its alpha decay daughter ^{179}Pt, new high-energy alpha lines were observed. They were assigned to ^{183}Tl confirming earlier unpublished data, and to the new isotope ^{183}Pb." No half-life for the ^{183}Pb decay was measured. The α-decay energies of 6715(20) keV and 6798(25) keV correspond to decays from an isomeric state. Two additional α-decay energies corresponding to the ground state decay were reported six years later by Keller et al. (1986Ke03).

Adapted from reference (2013Fr04)

1980Sc09 U. J. Schrewe, P. Tidemand-Petersson, G. M. Gowdy, R. Kirchner *et al.*, Phys. Lett. B **91**, 46 (1980).

1986Ke03 J. G. Keller, K. H. Schmidt, F. P. Hessberger, G. Munzenberg *et al.*, Nucl. Phys. A **452**, 173 (1986).

2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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