^{197}Po

Brun et al. reported the observation of ^{197}Po in the 1965 paper "Caractéristiques des désintégrations alpha des isotopes légers du polonium" (1965Br17). Bismuth targets were irradiated with 80−155 MeV protons from the Orsay synchrocyclotron forming ^{197}Po in (p,xn) reactions. Excitation functions and α spectra were measured following chemical separation. "...pour ^{197}Po deux isomères ont été trouvés, l'un de T = 58 s (alpha de 6.27 MeV environ) et l'autre de T = 29 pour lequel la raie alpha de 6.37 MeV est au moins trois fois plus intense." [...two isomeric states were found in ^{197}Po, one with $T_{1/2}$ = 58 s (6.27 MeV α) and the other with $T_{1/2}$ = 29 s with a 6.37 MeV α which is at least three times more intense.] The first half-life corresponds to the ground state. The group had reported half-lives of these polonium isotopes a year earlier (1964Br23), however, the mass assignments were incorrect. Also, tentative assignments of 4 min to ^{197}Po (1954Ro39, 1959At78, 1959At77) were incorrect.

Adapted from reference (2013Fr04)

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