^{199}Po

Brun et al. reported the observation of ^{199}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 ^{199}Po in (p,xn) reactions. Excitation functions and α spectra were measured following chemical separation. "Pour l'isotope 199 nous avons dû admettre deux isomères (T = 4.1 m pour α de 6.04 MeV et T = 5.5 m pour α de 5.93 MeV)." [For the isotope 199 we observed two isomers ($T_{1/2}$ = 4.1 min for a 6.4 MeV α and $T_{1/2}$ = 5.5 min for a 5.93 MeV α).] The second level 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 11 min (1954Ro39, 1962Be26), 12 min (1959At78, 1959At77) and 13(3) min (1961Fo05) to ^{199}Po were incorrect.

Adapted from reference (2013Fr04)

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