

## $^{222}\text{Ac}$

Meinke et al. reported the observation of  $^{222}\text{Ac}$  in the 1949 paper “Three additional collateral alpha-decay chains” (1949Me54). Thorium was bombarded with 150 MeV deuterons from the Berkeley 184-inch cyclotron. The  $\alpha$ -decay chains from  $^{226}\text{Pa}$  was measured following chemical separation. “Although the mass type has not yet been identified through known daughters as above, general considerations with regard to the method of formation and half-life of the parent substance, and the energies of all the members of the series suggest a collateral branch of the  $4n+2$  family:  ${}_{91}\text{Pa}^{226} \xrightarrow{\alpha} {}_{89}\text{Ac}^{222} \xrightarrow{\alpha} {}_{87}\text{Fr}^{218} \xrightarrow{\alpha} {}_{85}\text{At}^{214} \xrightarrow{\alpha} {}_{88}\text{Bi}^{210}(\text{RaE}).$ ”

Adapted from reference (2013Fr03)

1949Me54 W. W. Meinke, A. Ghiorso, and G. T. Seaborg, *Phys. Rev.* **75**, 314 (1949).

2013Fr03 C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 345 (2013).

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