Adopted Levels

Type Author Citation Literature Cutoff Date
Full Evaluation F. G. Kondev ENSDF 25-Feb-2010

 $S(n)=9.59\times10^3 \ 8; \ S(p)=4.5\times10^2 \ syst; \ Q(\alpha)=7598 \ 20$ 2012Wa38

Note: Current evaluation has used the following Q record 9636 syst 533 syst 7598 21 2003Au03,2010An01.

 $Q(\alpha)$: 7598 keV 21 from $E\alpha = 7350$ keV 20 to the 80-keV state in 2010An01. $Q(\alpha) = 7567$ keV 220 in 2003Au03.

Production: 144 Sm(40 Ca,5n), E=232 MeV (2010An01), with a production cross section of 179 Pb=140 pb 40. Identification: twelve events were observed with one being Er- α_1 (179 Pb)- α_2 (175 Hg)- α_2 (171 Pt).

¹⁷⁹Pb Levels

E(level) J^{π} $T_{1/2}$ 0.0 $(9/2^{-})$ 3.5 ms +14-8

Comments

 J^{π} : Favored α -decay to the (9/2⁻) excited state in ¹⁷⁵Hg, following by 80 keV, M1 transition to the (7/2⁻) ground state of ¹⁷⁵Hg. The assignment is tentative.

 $T_{1/2}$: From 7350 $\alpha(t)$ in 2010An01.

 $E\alpha = 7350 \text{ keV } 20 \text{ (2010An01)}.$

%α=100

configuration: Likely $vh_{9/2}$ configuration. The assignment is tentative.