

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 147, 382 (2018)	1-Dec-2017

S(n)=8160 SY; S(p)=2120 SY; Q(α)=8430 SY [2017Wa10](#)

Estimated uncertainties ([2017Wa10](#)): 80 for S(n), 90 for S(p), 70 for Q(α).

S(2n)=18090 110, S(2p)=2530 70, Q(ϵp)=5390 70 (syst, [2017Wa10](#)).

^{217}U evaluated by B. Singh.

[2000Ma65](#): assignment: $^{182}\text{W}(193\text{-MeV } ^{40}\text{Ar},5\text{n})$, recoil separator; parent of 215-ms ^{213}Th (7701-keV α).

[2005Le42](#): ^{217}U produced in $^{182}\text{W}(^{40}\text{Ar},5\text{n})$, E=186 MeV reaction, double-sided silicon detector. Measured E α , T $_{1/2}$. Only one questionable event assigned to ^{217}U .

[Additional information 1](#).

 ^{217}U Levels

E(level)	T $_{1/2}$	Comments
0	16 ms +21-6	<p>%α≈100; %ϵ+%β^+=?</p> <p>Only the α decay mode has been observed. Theoretical calculations give T$_{1/2}(\alpha)$=0.407 s, T$_{1/2}(\beta)$=6.62 s (1997Mo25), suggesting %ϵ+%β^+≈6%.</p> <p>E(level): the observed 16-ms activity is assumed to correspond to the ground state of ^{217}U.</p> <p>J$^{\pi}$: 1/2$^-$ proposed from systematics (2017Au03), (1/2$^-$) also listed in 2005Le42.</p> <p>T$_{1/2}$: 15.6 ms +213-57 from decay curve for 8005α (2000Ma65). Other: 0.19 ms +113-10 (2005Le42) for decay curve for 8024α with only one questionable event assigned to ^{217}U. Evaluator prefers to adopt T$_{1/2}$ measurement in 2000Ma65 as it is based on an unambiguous peak from $\alpha\alpha$-coincidence events showing four generations of α-decays.</p> <p>Measured Eα=8005 keV 20 (2000Ma65), 8024 keV 14 (2005Le42) from the decay of ^{217}U to ^{213}Th.</p>