

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 108,681 (2007)	1-Jun-2006

$Q(\beta^-)=2.05\times10^3$ 4; $S(n)=5.50\times10^3$ 4; $S(p)=9.4\times10^3$ syst; $Q(\alpha)=2.42\times10^3$ syst [2012Wa38](#)

Note: Current evaluation has used the following Q record 2130 SY5610 syst [2003Au03](#).

$\Delta Q(\beta^-)=630$ syst, $\Delta S(n)=680$ syst ([2003Au03](#)).

Assignment: $^{238}\text{U}(1 \text{ GeV p}, X)$ ms ([1992Bo44](#)). Identified β from daughter ^{234}Ac . Others: [1992MeZV](#), [1993MeZW](#), [1990BeZB](#), [1990MeZQ](#).

Theory/Calculations:

[1995Ru10](#): Relativistic Mean Field theory.

[1986Da03](#): Interacting Boson Model, α clustering.

[1982Du16](#): Cranked hfb model.

[1982Le19](#): Potential energy minima.

 ^{234}Ra Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	30 s 10	% β^- =100 No fission fragments were detected (1992MeZV). An upper limit of $1\times10^{-4}\%$ for β -delayed SF decay branch was given by 1992MeZV . From $Q(\alpha)$ systematics of 1985Wa02 , $Q(\alpha)(^{234}\text{Ra})<3$ MeV. Therefore, ^{234}Ra is expected to decay predominantly by β to ^{234}Ac . $T_{1/2}$: β measurement of 1992Bo44 . Others: 1993MeZW , 1992MeZV .