Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	B. Singh, J. K. Tuli, E. Browne	NDS 170, 499 (2020)	8-Oct-2020

Q(β^-)=−4030 *SY*; S(n)=8150 *SY*; S(p)=2390 *SY*; Q(α)=7060 *SY* 2017Wa10

Estimated uncertainties (2017Wa10): ΔQ(β^-)=120, ΔS(n)=320, ΔS(p)=100, ΔQ(α)=50.

S(2n)=15290 *320*, S(2p)=6940 *110* (syst,2017Wa10).

2000Sa52, 2004Sa05 (also 2003Na10,2002As08,2000Sa52): production and identification of ^{233}Am in ^{233}U(^{6}Li,6n),E=63 MeV reaction, and mass separation using ISOL technique at JAERI. Measured α-α correlations, Eα, half-life, $\alpha\alpha$(t), α(x ray) coin following mass separation.

Additional information 1.

Theoretical studies: consult the NSR database at www.nndc.bnl.gov for seven references dealing with theoretical calculations about decay modes and half-lives.

^{233}Am Levels

E(level)	$T_{1/2}$	Comments
0	3.2 min *8*	%α=4.5 *15*; %ε+%β^+=95.5 *15* J^π: 5/2$^-$ from systematics (2017Au03) and theory (2019Mo01). $T_{1/2}$: from 2004Sa05. Theory $T_{1/2}(\alpha)$=100 min, $T_{1/2}(\varepsilon)$>100 s (2019Mo01). %α: >3 from 2004Sa05 (also 2002As08), based on α detection efficiency and Pu $K_{\alpha1}$ x ray; <6% from study of α chain in ^{237}Cf decay (2010Kh06). From these two values, evaluators deduce %α=4.5 *15*. %ε+%β^+=100−%α, assuming no SF decay.