

Adopted Levels

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

$Q(\beta^-)=-5570$ SY; $S(n)=7090$ SY; $S(p)=3340$ SY; $Q(\alpha)=7470$ 50 [2017Wa10](#)

Estimated uncertainties ([2017Wa10](#)): $\Delta Q(\beta^-)=240$, $\Delta S(n)=210$, $\Delta S(p)=310$.

$Q(\epsilon p)=1640$ 70, $S(2n)=16120$ 310(syst), $S(2p)=5590$ 70 ([2017Wa10](#)).

[2002CaZZ](#): production and identification from α - α correlations in $^{198}\text{Pt}(^{40}\text{Ar},5n),E=208$ MeV reaction, using SHIP facility at GSI.

A total of 12 α -decay chains were attributed to the decay of ^{233}Cm and $E\alpha=7340$ 10.

[2010Kh06](#): study of ^{233}Cm decay modes at GSI, where ^{233}Cm was obtained from α decay of ^{237}Cf .

Theoretical studies: consult the NSR database at www.nndc.bnl.gov for 11 references dealing with theoretical calculations about decay modes and half-lives, and one reference for mass systematics.

[Additional information 1](#).

 ^{233}Cm LevelsCross Reference (XREF) Flags

A ^{237}Cf α decay (0.8 s)

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>XREF</u>	<u>Comments</u>
0	23 s +13-6	A	$\% \alpha=20$ 10 (2010Kh06); $\% \epsilon + \% \beta^+=80$ 10 (2010Kh06) $T_{1/2}$: measured by 2010Kh06 from (^{237}Cf) α -correlated events. J^π : $3/2^+$ proposed from systematics (2017Au03); and also from $\Omega(\text{neutron})=3/2^+$ in theoretical calculations (2019Mo01). Two α lines of 7345 20 and 7254 20 with relative intensities of 0.7 3 and 0.3 +3-2, respectively, were observed by 2010Kh06 from the decay of ^{233}Cm .