

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

$Q(\beta^-)=2576$ 13; $S(n)=5918$ 18; $S(p)=6478$ 16; $Q(\alpha)=3215$ 14 [2017Wa10](#)

$S(2n)=10597$ 18, $S(2p)=15350$ 15 ([2017Wa10](#)).

[1983Ch31](#): production and identification of ^{233}Ac in $^{238}\text{U}(p,4p2n), E=4$ GeV reaction, parent of ^{233}Th .

[1986Gi08](#): $W(^{238}\text{U}, X), E=2.7$ GeV, separation by a magnetic spectrometer.

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

[Additional information 1](#).

 ^{233}Ac Levels

E(level)	J^π	$T_{1/2}$	Comments
0	(1/2 ⁺)	143 s 10	$\% \beta^- = 100$ J^π : β feeding to the (1/2) ⁻ state in ^{233}Th suggests $J=1/2, 3/2$. $\pi 1/2[400]$ orbital was proposed by 1986Gi08 from analogy to ^{231}Ac . $T_{1/2}$: weighted average of 145 s 10 and 138 s 18 (1983Ch31). Both measurements used γ -ray decay curves.