

Adopted Levels

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	C. Morse	NDS 182, 167 (2022)	14-Sep-2021

$Q(\beta^-)=-1633$ SY; $S(n)=4882$ SY; $S(p)=4864$ SY; $Q(\alpha)=9030$ SY [2021Wa16](#)

$\Delta Q(\beta^-)=799$, $\Delta S(n)=848$, $\Delta S(p)=748$, $\Delta Q(\alpha)=200$ ([2021WA16](#)).

$S(2n)=11260$ SY 743 ([2021WA16](#)).

Only a single event has been observed to produce ^{277}Hs . It was observed as the α -decay daughter of ^{281}Ds at GSI ([2011GA19](#))

as part of a chain of α -decaying nuclei terminated by spontaneous fission. Agreement between the properties of the prior decays in the chain with those in the literature allowed a positive identification of ^{277}Hs .

[2012HO12](#) tentatively identifies one chain (#1) including ^{277}Hs , but this assignment was later revised in [2016HO09](#).

Other: One decay chain containing ^{277}Hs is reported in [1999OG10](#), but these results have not been reproduced.

Half-lives, branching ratios, and α -decay energies in this evaluation have been computed from the individual events listed in the references above. Half-life uncertainties have been computed according to the method of [1984SC13](#). An additional 10 keV systematic uncertainty is assumed for the α -decay energies, which is added in quadrature to the averaged statistical uncertainty.

 ^{277}Hs LevelsCross Reference (XREF) Flags

A ^{281}Ds α decay (12 s)

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>XREF</u>	<u>Comments</u>
0	3 ms $+15-1$	A	%SF=100; % α ≤50 E(level): Assumed ground state. $T_{1/2}$: From one event.