

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. Morse	NDS 182, 130 (2022).	14-Sep-2021

$Q(\beta^-)=-2275$ SY; $S(n)=4985$ SY; $S(p)=4559$ SY; $Q(\alpha)=9.45\times10^3$ 5 [2021Wa16](#)

$\Delta Q(\beta^-)=709$, $\Delta S(n)=756$, $\Delta S(p)=828$ ([2021WA16](#)).

$S(2n)=11418$ SY 701, $S(2p)=8006$ SY 715 ([2021WA16](#)).

²⁷⁵Hs has been observed as the α -decay daughter of ²⁷⁹Ds at JINR ([2004OG12,2006OG05](#)) and GSI ([2012HO12](#)). Chains of α -decaying nuclei, terminated by spontaneous fission, were observed and compared to previously published data to assign each decay to specific nuclei.

[2016HO09](#) revises the assignment of chain #1 in [2012HO12](#) to begin with ²⁹¹Lv, and identifies a missing α decay. Thus, what is labeled ²⁸¹Ds in that chain actually corresponds to ²⁷⁵Hs.

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.

²⁷⁵Hs Levels

Cross Reference (XREF) Flags

[A](#) ²⁷⁹Ds α decay (0.216 s)

E(level)	T _{1/2}	XREF	Comments
0	0.20 s +19-7	A	% α =100; %SF \leq 20 Assumed ground state. T _{1/2} : From four events.