

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

$Q(\beta^-) = -4600$ SY; $S(n) = 5869$ SY; $S(p) = 2485$ SY; $Q(\alpha) = 1.137 \times 10^4$ 5 [2021Wa16](#)

$\Delta Q(\beta^-) = 424$, $\Delta S(n) = 447$, $\Delta S(p) = 506$ ([2021WA16](#)).

$S(2n) = 13810$ SY 172, $S(2p) = 3984$ SY 310, $Q(\epsilon p) = 1992$ SY 529 ([2021WA16](#)).

^{273}Ds has been observed as the α -decay daughter of ^{277}Cn at GSI ([1996HO13,2002HO11](#)) and RIKEN ([2007MO09,2013SU04](#)).

Chains of correlated α -decays were observed, and the properties of these chains were compared to previous studies in order to assign specific decays to individual nuclei.

[1996HO13](#) reports two chains containing ^{273}Ds , but the data was reanalyzed in [2002HO11](#) and one chain was found to be reported in error.

[1996LA12](#) reports several chains which are assigned to the decay of ^{273}Ds . However, the properties of these chains, especially the total decay time, are not in good agreement with other published results.

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.

 ^{273}Ds LevelsCross Reference (XREF) Flags

A ^{277}Cn α decay (0.61 ms)

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>XREF</u>	<u>Comments</u>
0	0.19 ms $+14-6$	A	$\% \alpha = 100$; $\% \text{SF} < 17$ E(level): Assumed ground state. $T_{1/2}$: From five events.