Adopted Levels

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

Q(β^-)=−2060 *SY*; S(n)=5119 *SY*; S(p)=4526 *SY*; Q(α)=9473 *SY* 2021Wa16
ΔQ(β^-)=918, ΔS(n)=896, ΔS(p)=776, ΔQ(α)=208 (2021WA16).
S(2n)=11894 SY *780*, S(2p)=7805 SY *776* (2021WA16).

^{281}Ds has been observed as the α-decay daughter of ^{285}Cn at JINR (2000OG05,2002OG09,2004OG07), GSI (2011GA19,2012HO12) and RIKEN (2017KA66); and in gas-phase chemistry experiments at JINR (2010WI14) and GSI (2014YA33). Events were identified by the observation of chains of α-decaying nuclei terminated by spontaneous fission. Comparison of the properties of the decay chains with those in the literature allowed individual decays to be assigned to specific nuclei.

Other: One decay chain containing ^{281}Ds 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.

^{281}Ds Levels

Cross Reference (XREF) Flags

A ^{285}Cn α decay (33 s)

E(level)	$T_{1/2}$	XREF	Comments
0	12 s *+4−2*	A	%SF=94; %α=6 E(level): Assumed ground state. $T_{1/2}$: From 18 events.