Adopted Levels

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

Q(β^-)=−2682 *SY*; S(n)=5400 *SY*; S(p)=4173 *SY*; Q(α)=9388 *SY* 2021Wa16
ΔQ(β^-)=926, ΔS(n)=915, ΔS(p)=712, ΔQ(α)=116 (2021WA16).
S(2n)=12393 SY *797*, S(2p)=7321 SY *712* (2021WA16).

^{285}Cn has been observed as the α-decay daughter of ^{289}Fl 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 based on the observation of time- and position-correlated α-decay chains terminated by spontaneous fission. The decay properties of the chains were compared to those known in the literature to assign each decay to specific nuclei.

Other: One decay chain containing ^{285}Cn 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.

^{285}Cn Levels

Cross Reference (XREF) Flags

A ^{289}Fl α decay (2.4 s)

E(level)	$T_{1/2}$	XREF	Comments
0	33 s *+10−6*	A	%α=100; %SF<6 E(level): Assumed ground state. $T_{1/2}$: From 17 events.