

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

$S(n)=5919$ SY; $S(p)=2948$ SY; $Q(\alpha)=1.056\times 10^4$ 7 [2021Wa16](#)

$\Delta S(n)=770$, $\Delta S(p)=669$ ([2021WA16](#)).

$S(2p)=4983$ SY 736, $Q(\epsilon p)=1228$ SY 863 ([2021WA16](#)).

^{285}Fl has been observed in the $^{242}\text{Pu}(^{48}\text{Ca},5n)$ reaction at LBNL ([2010EL06](#)) and the $^{240}\text{Pu}(^{48}\text{Ca},3n)$ reaction at JINR

([2015UT02,2018UT02](#)). Events were identified based on the observation of chains of α -decaying nuclei terminated by spontaneous fission. The observed decay properties were compared to those in the literature in order to assign decays to specific nuclei.

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}Fl Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0	101 ms +59-27	$\% \alpha = 100$; $\% \text{SF} \leq 12.5$ E(level): Assumed ground state. $T_{1/2}$: From seven events.