

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 141, 1 (2017)	1-Feb-2017

$Q(\beta^-)=6161$ 14; $S(n)=4863$ 15; $S(p)=9.92\times 10^3$ 3; $Q(\alpha)=-3.41\times 10^3$ 11 [2017Wa10](#)

$S(2n)=11068$ 15; $S(2p)=22100$ 3 [2017Wa10](#)

[Additional information 1.](#)

[1987Gr12](#), [1988GrZY](#), [1990An31](#) (same group): measured ^{252}Cf spontaneous fission products, on-line isotope separation, K X-ray decay rates, $E\gamma$, $I\gamma$, $\gamma\text{-}\gamma$ and $\beta\text{-}\gamma$ coin, $T_{1/2}$.

[2015YoZX](#), [2015YoZY](#) (same group): used reaction $^9\text{Be}(^{238}\text{U}, \text{F})$, $E=345$ MeV/nucleon, on-line isotope separation, and measured $E\gamma$, $I\gamma$, $E\beta$, $I\beta$, $T_{1/2}$ of isomers in μs range. Data are preliminary.

Observed in ^{252}Cf spontaneous fission followed by mass separation ([1987Gr12](#),[1990An31](#)).

 ^{158}Pm LevelsCross Reference (XREF) Flags

[A](#) ^{158}Pm IT decay

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>XREF</u>	<u>Comments</u>
0.0	4.8 s 5		$\% \beta^- = 100$ $T_{1/2}$: From 1987Gr12 (also 1990An31 and 1988GrZY by same authors). If the 121 γ is unique then $x=0$ and this level is the g.s.
x?		A	$\% \text{IT}=?$
121+x	>16 μs	A	E(level): 2015YoZX and 2015YoZY made no comment about the isomeric state energy, or whether the 121 γ is unique, therefore $x \geq 0$. $T_{1/2}$: from delayed γ -ray measurement with time window 16 μs by 2015YoZX and 2015YoZY . Both references state that $T_{1/2}$ is much greater than 16 μs .

 $\gamma(^{158}\text{Pm})$

<u>$E_i(\text{level})$</u>	<u>E_γ</u>	<u>E_f</u>	<u>Comments</u>
121+x	121	x?	E_γ : measured by 2015YoZX and 2015YoZY .

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