

---

 $^{138}\text{Sm}$   $\varepsilon$  decay [1973WeZK](#)

---

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jun Chen	NDS 146, 1 (2017)	30-Sep-2017

Parent:  $^{138}\text{Sm}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=3.1$  min 2;  $Q(\varepsilon)=3440$  30;  $\% \varepsilon + \% \beta^+$  decay=100.0

$^{138}\text{Sm}$ - $T_{1/2}$ : From Adopted Levels of  $^{138}\text{Sm}$ .

$^{138}\text{Sm}$ - $Q(\varepsilon)$ : From [2017Wa10](#).

[1973WeZK](#):  $^{138}\text{Sm}$  source was produced by 600-MeV proton bombardment of a Gd-La target. Assignment was based on mass separation and observation of Pm x-rays.

 $\gamma(^{138}\text{Pm})$  $E_\gamma^\dagger$  $^x 53.6$  $^x 74.7$ 

$^\dagger$  Only  $\gamma$  transitions with  $E < 120$  were studied.

$^x$   $\gamma$  ray not placed in level scheme.