

Adopted Levels

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

$Q(\beta^-) = -12960$  SY;  $S(n) = 12770$  SY;  $S(p) = 2230$  SY;  $Q(\alpha) = 3570$  SY [2017Wa10](#)

$\Delta Q(\beta^-) = 580$ ;  $\Delta S(n) = 500$ ;  $\Delta S(p) = 360$ ;  $\Delta Q(\alpha) = 420$  ([2017Wa10](#)).

$S(2n) = 23930$  syst 500;  $S(2p) = 2290$  syst 360;  $Q(\epsilon p) = 6480$  syst 340 ([2017Wa10](#)).

[2000So11](#): Produced via  $^{90}\text{Zr}(^{197}\text{Au}, X)$ , with  $E(^{197}\text{Au}) = 30$  MeV/nucleon. Fragments separated with the A1200 fragment separator and identified using time-of-flight,  $\Delta E/dx$ , E and magnetic rigidity measurements at the focal plane of the spectrometer. Production cross section determined to be 140  $\mu\text{b}$ .

 $^{136}\text{Gd}$  Levels

<u>E(level)</u>	<u><math>J^\pi</math></u>	<u><math>T_{1/2}</math></u>	<u>Comments</u>
0.0	$0^+$	$\geq 200$ ns	$T_{1/2}$ : lower limit from assumption that $T_{1/2}$ has to be of the same order or larger than the time of flight through the A1200 separator, which for this experiment was $\approx 200$ ns. E(level), $J^\pi$ : assuming that the observed events correspond to the ground state.