

Adopted Levels

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	E. A. McCutchan	NDS 113,1735 (2012)	1-Mar-2012

$Q(\beta^-)=1.34\times 10^4$  syst;  $S(n)=4.5\times 10^3$  syst [2012Wa38](#)

Note: Current evaluation has used the following Q record 13100 syst 4470 syst [2011AuZZ](#).

$\Delta Q(\beta^-)=860$ ,  $\Delta S(n)=920$ .

$S(2n)=6679$  syst 861,  $Q(\beta^-n)=9897$  syst 805 ([2011AuZZ](#)).

The only information on  $^{68}\text{Cr}$  is its observation following the fragmentation of  $^{76}\text{Ge}$  at 132 MeV/nucleon ([2009Ta05,2009Ta24](#)).

Fragments were identified by multiple  $\Delta E$  signals, total energy, magnetic rigidity, and time of flight using the A1900 fragment separator combined with the S800 separator.

 $^{68}\text{Cr}$  Levels

<u>E(level)</u>	<u>J<math>^\pi</math></u>	<u>T<math>_{1/2}</math></u>	<u>Comments</u>
0.0	0 <sup>+</sup>	>360 ns	$\% \beta^- = 100$ ; $\% \beta^- n > 0$ E(level): assuming that observed events correspond to the g.s. T $_{1/2}$ : limiting value from 360 ns time of flight through the separator as in <a href="#">2005St29</a> (similar experimental setup as <a href="#">2009Ta05</a> ). Actual half life is expected to be much longer as suggested by the calculated value of 26 ms ( <a href="#">1997Mo25</a> ). This level is expected to undergo $\beta$ -delayed neutron emission with a calculated value of $\% \beta^- n = 15$ ( <a href="#">1997Mo25</a> ).