

Adopted Levels

<u>Type</u>	<u>History</u>		<u>Literature Cutoff Date</u>
	<u>Author</u>	<u>Citation</u>	
Full Evaluation	E. A. Mccutchan	ENSDF	1-Jun-2022

$Q(\beta^-)=7.4\times 10^3$ SY; $S(n)=3.3\times 10^3$ SY; $S(p)=9060$ SY; $Q(\alpha)=1.2\times 10^3$ SY [2021Wa16](#)

$Q(\beta^-n)=2510$ (syst) 300 ([2021Wa16](#)).

[2010Al24](#): ^{208}Au nuclide produced in $^9\text{Be}(^{238}\text{U},X)$ reaction with $E = 1$ GeV/nucleon produced by the SIS synchrotron at GSI facility. Fragments were analyzed with the Fragment Recoil Separator (FRS) and identified using magnetic rigidity, velocity, time-of-flight, energy loss and atomic number of the fragments.

 ^{208}Au Levels

<u>E(level)</u>	<u>Comments</u>
0	<p>$\% \beta^- = 100$; $\% \beta^- n = ?$ Production $\sigma = 0.748$ nb (from e-mail reply of Oct 29, 2010 from H. Alvarez-Pol, which also stated that further analysis was in progress). The β^- and delayed neutron decay are the only decay modes expected. Calculated $\% \beta^- n = 4$ (2019Mo01). E(level): it is assumed that the observed fragments correspond to nuclei in their ground state. From A/Z plot (figure 1 in 2010Al24), 15 or 18 events are assigned to ^{208}Au. $T_{1/2}$: > 300 ns from time-of-flight as given in 2006Ca30 for a similar setup. Actual half-life is expected to be much larger as suggested by the calculated value of 9.5 s (2019Mo01).</p>