Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 121, 561 (2014)	31-Mar-2014

Q(β^-)=7690 *SY*; S(n)=3270 *SY*; S(p)=9130 *CA*; Q(α)=1520 *CA* 2012Wa38,1997Mo25

ΔQ(β^-)=450 (syst), ΔS(n)=570 (syst) 2012Wa38.

Q(β^-) and S(n) from 2012Wa38, S(p) and Q(α) from 1997Mo25.

2010Al24: ^{210}Au was produced from ^{9}Be(^{238}U,X) fragmentation reaction with a beam energy of 1 GeV/nucleon; Target thickness 2500 mg/cm^2. The fragment residues were analyzed with the high resolving power magnetic spectrometer Fragment separator (FRS) at GSI. The identification of nuclei was made on the basis of magnetic rigidity, velocity, time-of-flight, energy loss and atomic number of the fragments using two plastic scintillators and two multisampling ionization chambers. Measured production cross sections.

^{210}Au Levels

E(level)	$T_{1/2}$	Comments
0	>300 ns	%β^-=?; %β^-n=? Production σ=0.131 nb (from e-mail reply of Oct 29, 2010 from H. Alvarez-Pol to B. Singh at McMaster). Also in figure 2 (2010Al24). Statistical uncertainty=10%, systematic uncertainty=20%. The β^- and delayed neutron decay are the only decay modes expected. Calculated %β^-n=13 (1997Mo25). E(level): it is assumed that the observed fragments correspond to nuclei in their ground state. From A/Z plot (figure 1 in 2010Al24), 3 or 4 events are assigned to ^{210}Au. $T_{1/2}$: lower limit 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 0.35 s for β decay and >10^{20} s for α decay (1997Mo25), and systematic value of 1 s for β decay (2012Au07). J$^\pi$: 1/2$^+$ for proton and 11/2$^+$ for neutron configuration predicted (1997Mo25).