Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu and E. A. Mccutchan	NDS 175, 1 (2021)	1-May-2021

Q(β^-)=5310 *SY*; S(n)=4500 *SY*; S(p)=10910 *CA*; Q(α)=1210 *CA* 2021Wa16,2019Mo01
ΔQ(β^-)=450; ΔS(n)=500 (2021Wa16).
S(2n)=7390 (syst) *500*; Q(β^-n)=1920 (syst) *400* (2021Wa16).
S(p), Q(α) and S(2p)=20440 (theory, 2019Mo01).
2010Al24: ^{214}Hg nuclide was produced by the fragmentation of ^{238}U at an energy of 1 GeV/nucleon on a ^{9}Be target at GSI. Its identification was made on the basis of magnetic rigidity, velocity and time-of-flight, energy loss and its atomic number determined by FRagment Separatort (FRS) and associated detectors at different focal planes. The FRS magnet was tuned for ^{210}Au, ^{216}Pb, ^{219}Pb, ^{227}At and ^{229}At to be along its central trajectory. The probability of at least one of the events corresponding to ^{214}Hg was larger than 95%.

^{214}Hg Levels

E(level)	J$^\pi$	Comments
0	0$^+$	%β^-=100; %β^-n=? Only the β^- and β^--delayed neutron decays are expected. Calculated %β^-n=10 (2019Mo01). $T_{1/2}$: Experimental lower limit: 300 ns based on the minimum time-of-flight through FRS (2006Ca30); Actual halflife is expected to be much longer based on calcuated half-life for β decay: 5.5 s (2019Mo01). Production σ=0.247 nb with 10% statistical and 20% systematic uncertainties (2010Al24).