Adopted Levels

History

Type Author Citation Literature Cutoff Date
Full Evaluation S. K. Basu, A. A. Sonzogni NDS 114, 435 (2013) 1-Apr-2013

 $Q(\beta^{-})=11730 \text{ (syst) } 500; S(n)=2991 \text{ (syst) } 565$ 2017Wa10

S(2n)=7402 (syst) 565; $Q(\beta^-n)=6879$ (syst) 593; $Q(\beta^-2n)=3.3\times10^{3(syst)}$ 405 2017Wa10

Additional information 1.

1987Ra12: Yield of ¹⁵⁰Cs was measured in U(p,X) E=600 MeV reaction using ISOLDE On-Line Mass Separator.

2000KoZH: ISOLDE On-Line Mass Separator. Measured E γ , I γ , En, In; deduced T_{1/2}, nuclear magnetic moments, β -delayed neutron emission probabilities.

2017Wu04: The 150 Cs nuclide was produced at the RIBF-RIKEN facility using the 9 Be(238 U,F) reaction at E=345 MeV/nucleon. Two experiments, optimized for the transmission of 158 Nd and 170 Dy ions, were carried out with average beam intensities of 7 pnA and 12 pnA, respectively. The identification of the nuclide of interest was made in the BigRIPS separator by determining the atomic number and the mass-to-charge ratio of the ion using the TOF-B ρ - Δ E method. The reaction products were transported through the ZeroDegree Spectrometer and implanted into the beta-counting system WAS3ABi that was surrounded by the EURICA array comprising of 84 HPGe detectors. The typical implantation rate was 100 ions/s. Measured: implanted ion- β --t, implanted ion- β -- γ -t and implanted ions- γ -t correlations. Deduced: $T_{1/2}$.

¹⁵⁰Cs Levels

E(level) $T_{1/2}$ 0.0 84 ms 8 $\%\beta^-=10$ Comments

 $\%\beta^{-}=100; \%\beta^{-}n=20 10$

 $\%\beta^-$: Only β^- decay mode is expected.

 $T_{1/2}$: From 2017Wu04, using a fit to the implanted ion- β^- t spectrum using the least-squares and maximum-likelihood methods. The data analysis included contributions from the parent, daughter and grand-daughter decays, as well as a constant background. $T_{1/2}$ =0.0844 s 82 is reported in 2017Wu04. Other: 82 ms 7 using β n(t) in 2000KoZH.

 $\%\beta^-$ n: From 2000KoZH.