

Adopted Levels

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

$Q(\beta^-)=6230$ (syst) 529; $S(n)=4851$ (syst) 531; $S(p)=13939$ (syst) 500; $Q(\alpha)=-4370$ (syst) 301 [2017Wa10](#)
 $S(2n)=8449$ (syst) 531; $S(2p)=25878$ (syst) 500; $Q(\beta^-n)=2248$ (syst) 361 [2017Wa10](#)

Additional information 1.

[2017Wu04](#): The ^{150}Ba nuclide was produced at the RIBF-RIKEN facility using the $^9\text{Be}(^{238}\text{U},\text{F})$ 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 - ΔE 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: $T_{1/2}$.

 ^{150}Ba Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	0.259 s 5	$\% \beta^- = 100$; $\% \beta^- n = ?$ $\% \beta^-$: 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 ground-daughter decays, as well as a constant background. Other: 0.3 s from 1987MaZY .