

^{99}In ϵp decay (3.11 s) 2019Pa16,2012Lo08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh		NDS 164, 1 (2020)	15-Feb-2020

Parent: ^{99}In : $E=0$; $T_{1/2}=3.11$ s 6; $Q(\epsilon\text{p})=4400$ SY; $\% \epsilon\text{p}$ decay=0.29 3

^{99}In - $T_{1/2}$: From 2019Pa16 ($\beta\gamma$ and βp decay curves). Other: 3.1 s 2 (2012Lo08).

^{99}In - $Q(\epsilon\text{p})$: 4400 300 (syst,2017Wa10).

^{99}In - $\% \epsilon\text{p}$ decay: Measured $\% \beta^+\text{p}$ for ^{99}In decay is 0.29 3 (2019Pa16). Other: 0.9% 4 (2012Lo08).

2019Pa16: $E(^{124}\text{Xe})=345$ MeV/nucleon beam incident on a 740 mg/cm² thick ^9Be target at the RIKEN-RIBF facility. The identification of the nuclide of interest was made through the BigRIPS separator and the ZeroDegree spectrometer by determining the atomic number and the mass-to-charge ratio of the ion using the tof-B ρ - ΔE method. The secondary beam was stopped in the double-sided silicon strip detector of the WAS3ABi spectrometer. The γ rays were detected by EURICA array comprising of 84 HPGe detectors. Measured $E\gamma$, $\beta\gamma$ -coin, βp -coin, $\beta\text{p}\gamma$ -coin, half-lives by $\beta\gamma(t)$, $\beta\text{p}(t)$. Comparisons with previous experimental data and shell-model calculations.

2012Lo08: ^{99}In produced in fragmentation of $E=120$ MeV/nucleon ^{112}Sn beam on a 195 mg/cm² ^9Be target at NSCL-MSU. Fragments separated by the A1900 Fragment Separator and the Radio Frequency Fragment Separator (RFFS). Ions were implanted in the double-sided silicon strip detector (DSSD). Detection system: NSCL Beta Counting System in conjunction with the SeGA Array of 16 HPGe detectors. Measured β and γ spectra, $E(\text{p})$, $I(\text{p})$, $\beta\gamma$ -coin, βp -coin, half-life, β -delayed proton emission probability. A total of 183 βp coin events identified.

Details of the decay scheme are not available.