Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 160, 1 (2019)	21-Oct-2019

Q(β^-)=6868 *19*; S(n)=5.38×10^3 *11*; S(p)=10485 (syst) *201*; Q(α)=−4.5×10^3 *4* 2017Wa10
S(2n)=9989 *11*; S(2p)=23934 (syst) *201*; Q(β^-n)=2.34×10^3 *6* 2017Wa10
2017Wu04: ^{155}La nuclide produced at RIBF-RIKEN facility using ^{9}Be(^{238}U,F) reaction at E=345 MeV/nucleon. Two experiments, optimized for transmission of ^{158}Nd and ^{170}Dy ions, were carried out with average beam intensities of 7 pnA and 12 pnA, respectively. Identification of nuclide of interest was made in BigRIPS separator by determining the atomic number and the mass-to-charge ratio using the tof-Bρ-ΔE method. Reaction products transported through ZeroDegree Spectrometer and implanted into beta-counting system WAS3ABi surrounded by EURICA array comprising of 84 HPGe detectors. Typical implantation rate 100 ions/s. Measured: implanted ion-β^--t, implanted ion-β^--γ-t and implanted ions-γ-t correlations. Deduced: $T_{1/2}$.

^{155}Pr Levels

E(level)	$T_{1/2}$	Comments
0.0	1.47 s *3*	%β^-=100; %β^-n=? Only β^- decay mode is expected. J^π: (3/2$^-$) is predictible from systematics of known quasiparticle states in neighboring nuclei and the proposed configuration. Additional information 1. $T_{1/2}$: 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. configuration: π3/2[541] Nilsson orbital, tentatively expected based on systematics of known structures in neighboring, well-deformed nuclei.