^{152}Lu εp decay (0.7 s) 1988Ni02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

Parent: ^{152}Lu: E=0.0; J^π=(5$^-$,6$^-$); $T_{1/2}$=0.7 s *1*; Q(εp)=10070 *SY*; %εp decay=15 *7*

^{152}Lu-$T_{1/2}$: from 1987To02. Other: 0.6 s *1* (1988Ni02, from timing of protons from β^+p decay).

^{152}Lu-J^π: strong ε to ^{152}Yb (5$^-$), no ε to ^{152}Yb (3$^-$). Low log *ft* (4.4 *2*) suggests that the ε transition is a $\pi h_{11/2}$ to $\nu h_{11/2}$ allowed, favored transition.

^{152}Lu isotope produced by ^{96}Ru(^{58}Ni,pn) E=244 MeV reaction followed by mass separation. Measured delayed proton spectrum, proton-x and proton-γ coincidences, $T_{1/2}$(^{152}Lu).

No γ rays (in ^{151}Tm) in coincidences with protons were seen.

The proton spectrum shown by 1988Ni02 is structureless.

From proton spectrum, $T_{1/2}$=0.6 s *1* (1988Ni02).

%p=15 *7* (1988Ni02).

Q(εp)=10070 *200* (syst,2003Au03).

^{151}Tm Levels

E(level)	J^π	Comments
0.0?	(11/2$^-$)	J^π: from 'Adopted Levels'.