

^{96}Ag ϵp decay:4.40 s 2003Ba39,1997Sc30

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111, 2555 (2010)	30-Jun-2009

Parent: ^{96}Ag : $E=y$; $J^\pi=(8^+)$; $T_{1/2}=4.40$ s 6; $Q(\epsilon\text{p})=6482$ SY; % ϵp decay=8.5 15

^{96}Ag - $T_{1/2}$: From 2003Ba39. Other: 4.50 s 6 (1997Sc30).

^{96}Ag - $Q(\epsilon\text{p})$: 6480 401 (syst,2009AuZZ).

2003Ba39: ^{96}Ag produced by $^{60}\text{Ni}(^{40}\text{Ca},\text{p}3\text{n})$; $E=4.35$ MeV/nucleon; separated by GSI online separator. Measured E_γ , I_γ , $\gamma\gamma$, β , $\beta\gamma$, $\beta\gamma\gamma$, delayed protons, x rays, $\text{p}\gamma$ coin using three different systems: 1. plastic scintillator combined with Ge array (15 detectors: two Clovers and one EUROBALL Cluster for $\beta\gamma$ and $\beta\gamma\gamma$ measurement. 2. Large NaI detector for total absorption spectrum (TAS) combined with a Ge detector and two Si detectors for $\beta\gamma$, βp , $\text{p}\gamma$ and $x\gamma$ events. 3. Two Si detector ΔE -E telescopes for delayed protons (FWHM=80 keV).

1997Sc30: ^{96}Ag produced by $^{60}\text{Ni}(^{40}\text{Ca},\text{p}3\text{n})$ $E=4.1$ MeV/nucleon. Measured E_γ , I_γ , $\gamma\gamma$, $x\gamma$, Ep , Ip , $\text{p}\gamma$ coin using Ge and Si(Li) detectors. No delayed protons reported from this isomer.

All data are from 2003Ba39.

$J, T_{1/2}$: From Adopted Levels.

 ^{95}Rh Levels

E(level)	J^π	$T_{1/2}$
0	$9/2^+$	5.02 min 10
1351	$13/2^+$	
1430? 20	$(11/2^+)$	
2080 10	$(15/2^+, 17/2^+)$	

 $\gamma(^{95}\text{Rh})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
729 ^{†‡} 10	2080	$(15/2^+, 17/2^+)$	1351	$13/2^+$
1351	1351	$13/2^+$	0	$9/2^+$
1430 ^{†‡} 20	1430?	$(11/2^+)$	0	$9/2^+$

[†] Uncertainties are from the energies of the delayed protons.

[‡] Placement of transition in the level scheme is uncertain.

Delayed Protons (^{95}Rh)

$E(^{95}\text{Rh})$	$I(\text{p})^\dagger$
0	71 14
1351	16 4
1430?	4.7 24
2080	5.3 14

[†] For absolute intensity per 100 decays, multiply by 0.085 15.

${}^{96}\text{Ag}$ ϵp decay: 4.40 s 2003Ba39,1997Sc30

Legend

Decay Scheme