

^{116}Ag IT decay (9.3 s) 2009Ba52,2005Ba94

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111, 717 (2010)	1-Dec-2009

Parent: ^{116}Ag : E=128.8 l; $J^\pi=(6^-)$; $T_{1/2}=9.3$ s 3; %IT decay=8 4

^{116}Ag -%IT decay: %IT=8 4 (2005Ba94).

2005Ba94,2009Ba52: ^{116}Ag activity was produced by 40-MeV protons bombarding a $^{238}\text{UC}_x$ target installed at the On-Line Test Facility (OLTF) at the Holifield Radioactive Ion Beam Facility (HRIBF). Fission products was separated and deposited on a moving tape collector (MTC).

Previous measurement : 1971FO22, 1990FO07.

Measured E_γ , I_γ , $\gamma\gamma$, ce, $ce\gamma$ coin with the (CARDS) detector array, composed of the three segmented-clover Ge detectors, plastic scintillators and a high-resolution Si conversion-electron spectrometer (BESCA).

All data are from 2005Ba94, unless otherwise stated.

 ^{116}Ag Levels

E(level)	J^π	$T_{1/2}$	Comments
47.9 l	(3 ⁺)	20 s l	%IT=7 4; % β^- =93 4
128.8 l	(6 ⁻)	9.8 s l	E(level), J^π , $T_{1/2}$: From 2005Ba94. Likely configuration= $\pi 5/2[422] \otimes \nu 7/2[523]$ or $\pi 3/2[431] \otimes \nu 9/2[514]$.

 $\gamma(^{116}\text{Ag})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	$I_{(\gamma+ce)}^\dagger$	Comments
80.9 l	128.8	(6 ⁻)	47.9	(3 ⁺)	E3	8 4	K/L=0.82; M/L=0.25; $\alpha(\text{K})_{\text{exp}}=11.5$ (2005Ba94) B(E3)(W.u.)=0.011 3 α : from BrIcc code.

[†] For absolute intensity per 100 decays, multiply by 0.08 4.

 ^{116}Ag IT decay (9.3 s) 2009Ba52,2005Ba94Decay Scheme

%IT=84

