

$^{120}\text{Pd}$   $\beta^-$  decay 1993Ja03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	K. Kitao, Y. Tendow and A. Hashizume		NDS 96, 241 (2002)	1-Dec-2001

Parent:  $^{120}\text{Pd}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=0.5$  s *I*;  $Q(\beta^-)=4880$  SY;  $\% \beta^-$  decay=100.0

1993Ja03:  $^{238}\text{U}(\text{p},\text{F})$   $E(\text{p})=20$  MeV, on-line mass separation;  $\gamma$ , K x ray, ce,  $\beta$ ;  $\gamma\gamma$ ,  $\gamma\text{X}$  coin, ceX coin, X $\beta\gamma$  coin.

The decay scheme is that proposed by 1993Ja03 as a partial one. 1993Ja03 suggested both levels at 300 and 806 keV to be fed by the Gamow-Teller transitions.

 $^{120}\text{Ag}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	$T_{1/2}$
0.0	3 <sup>(+)</sup>	1.23 s <i>4</i>
52.50 <i>20</i>	( <sup>+</sup> )	
210.6 <i>3</i>		
300.4 <i>5</i>	(1 <sup>+</sup> )	
805.8 <i>5</i>	(1 <sup>+</sup> )	

<sup>†</sup> From a least-squares fit to the  $E(\gamma$ 's) by the evaluators.

<sup>‡</sup> From Adopted Levels.

 $\gamma(^{120}\text{Ag})$ 

$E_\gamma$	$I_\gamma$ <sup>†#</sup>	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
52.5 <i>2</i>	39 <i>3</i>	52.50	( <sup>+</sup> )	0.0	3 <sup>(+)</sup>
<sup>x</sup> 68.9 <sup>‡</sup> <i>2</i>	36 <i>8</i>				
89.8 <sup>‡</sup> <i>3</i>	73 <i>10</i>	300.4	(1 <sup>+</sup> )	210.6	
<sup>x</sup> 101.7 <sup>‡</sup> <i>3</i>	54 <i>10</i>				
158.1 <i>2</i>	100 <i>8</i>	210.6		52.50 ( <sup>+</sup> )	
595.2 <sup>‡</sup> <i>4</i>	$\approx 37$	805.8	(1 <sup>+</sup> )	210.6	

<sup>†</sup> Relative to  $I(158\gamma)=100$ .

<sup>‡</sup> Overlap with  $\gamma$ 's from impurities. Intensity deduced from coincidence spectrum.

# Absolute intensity per 100 decays.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

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## Decay Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- Coincidence

