

$^{120}\text{Rh}$   $\beta^-$  decay (132 ms) 2004Wa26

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	30-Jun-2017

Parent:  $^{120}\text{Rh}$ :  $E=0$ ;  $T_{1/2}=132$  ms 5;  $Q(\beta^-)=11470$  SY;  $\% \beta^-$  decay=100.0

$^{120}\text{Rh}$ - $T_{1/2}$ : From  $^{120}\text{Rh}$  Adopted Levels.

$^{120}\text{Rh}$ - $Q(\beta^-)$ : 11470 200 (syst,2017Wa10).

$^{120}\text{Rh}$ - $\% \beta^-$  decay: Assumed  $\% \beta^- = 100$ ,  $\% \beta^- n \leq 5.4$  (2004Mo06).

2004Wa26:  $^{120}\text{Rh}$  were produced in the fragmentation of a 120 MeV/nucleon  $^{136}\text{Xe}$  beam incident on a Be target. The resulting fragments were separated using the A1900 FRS spectrometer. The desired fragments were implanted in the NSCL  $\beta$  counting system which included a double-sided Si strip detector (DSSD) to correlate implants of known Z and A with subsequent  $\beta$ -decay events. Measured  $E_\gamma$ , delayed  $\beta$  gated  $\gamma$  rays, ( $^{120}\text{Rh}$  fragment) $\gamma$  coin. See also thesis by 2006ToZW.

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

E(level)	$J^\pi$
0	$0^+$
438	$(2^+)$
1056	$(4^+)$

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

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Comments
438	438	$(2^+)$	0	$0^+$	
618 <sup>†</sup>	1056	$(4^+)$	438	$(2^+)$	$E_\gamma$ : tentative placement; no $(438\gamma)(618\gamma)$ evidence observed, but $\gamma$ near this energy confirmed by 2007St19 and 2013Wa28 in reaction based $\gamma$ -ray spectroscopy.

<sup>x</sup>911

<sup>x</sup>1123

<sup>†</sup> Placement of transition in the level scheme is uncertain.

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

$^{120}\text{Rh}$   $\beta^-$  decay (132 ms) 2004Wa26Decay Scheme

## Legend

