¹²⁰Rh β^- decay (132 ms) 2004Wa26

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

¹²⁰Rh-T_{1/2}: From ¹²⁰Rh Adopted Levels.

¹²⁰Rh-Q(β^-): 11470 200 (syst,2017Wa10).

¹²⁰Rh-%β[−] decay: Assumed %β[−]=100, %β[−]n≤5.4 (2004Mo06).

2004Wa26: 120 Rh were produced in the fragmentation of a 120 MeV/nucleon 136 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 β counting system which included a double-sided Si strip detector (DSSD) to correlate implants of known Z and A with subsequent β-decay events. Measured Eγ, delayed β gated γ rays, (120 Rh fragment)γ coin. See also thesis by 2006ToZW.

¹²⁰Pd Levels

E(level)	J^{π}
0	0+
438	(2^{+})
1056	(4^{+})

γ (120Pd)

E_{γ}	$E_i(level)$	J_i	\mathbf{E}_f \mathbf{J}_f	Comments
438	438	(2^{+})	$0 0^{+}$	
618 [†]	1056	(4 ⁺)	438 (2+)	E_{γ} : tentative placement; no (438 γ)(618 γ) evidence observed, but γ near this energy confirmed by 2007St19 and 2013Wa28 in reaction based γ -ray spectroscopy.
^x 911				
^x 1123				

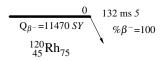
[†] Placement of transition in the level scheme is uncertain.

 $^{^{}x}$ γ ray not placed in level scheme.

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Decay Scheme

Legend



---- γ Decay (Uncertain)

