

^{126}Pd β^- decay (23.0 ms) 2014Wa26

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	H. Iimura, J. Katakura, S. Ohya		NDS 180, 1 (2022)	1-Oct-2021

Parent: ^{126}Pd : $E=2406.4$ 10; $J^\pi=(10^+)$; $T_{1/2}=23.0$ ms 10; $Q(\beta^-)=8930$ SY; $\% \beta^-$ decay=72 8

^{126}Pd - $\% \beta^-$ decay: $\%IT=28$ 8 (2014Wa26).

2014Wa26: a high-spin isomer in ^{126}Pd produced in $^9\text{Be}(^{238}\text{U},\text{F})$ reaction at 345 MeV/nucleon at RIBF-RIKEN facility. Residual nuclei of interest were separated and identified using BigRIPS and ZeroDegree spectrometer. A total of 53,000 ^{126}Pd fragments were implanted in a highly segmented active stopper WAS3ABi. The gamma rays were detected using EURICA array with 12 Cluster-type HPGe detectors.

 ^{126}Ag Levels

E(level) [†]	Comments
0+z	E(level): this level may be the same as 0+x, or the ground state of ^{126}Ag .
194+z	
792+z?	
1534+z?	
1762+z?	
2121+z	

[†] Level energies between the 194+z level and the 2121+z level are uncertain due to ambiguous ordering of the transitions connecting these levels.

 $\gamma(^{126}\text{Ag})$

E_γ	I_γ^\ddagger	$E_i(\text{level})$	E_f
193.7	26 3	194+z	0+z
^x 203.7	11 2		
227.9 [†]	12 2	1762+z?	1534+z?
359.5 [†]	7 2	2121+z	1762+z?
598.1 [†]	13 2	792+z?	194+z
741.8 [†]	12 2	1534+z?	792+z?

[†] Ordering of the transitions in the 359.5-227.9-741.8-598.1 cascade is not determined.

[‡] Relative to 100 for 842.6 γ in the 48.6 ms decay of ^{126}Pd .

^x γ ray not placed in level scheme.

$^{126}\text{Pd} \beta^-$ decay (23.0 ms) 2014Wa26

Decay Scheme

Intensities: Relative I_γ

Legend

