

${}^9\text{Be}({}^{112}\text{Sn}, X\gamma)$ 2012Lo08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

${}^{91}\text{Rh}$ produced from fragmentation of a ${}^{112}\text{Sn}$ beam at $E=120$ MeV/nucleon on a 195 mg/cm 2 ${}^9\text{Be}$ target at the National Superconducting Cyclotron Laboratory (NSCL); fragments separated by the A1900 Fragment Separator and the Radio Frequency Fragment Separator (RFFS), then implanted in a double-sided silicon strip detector (DSSD); NSCL Beta Counting System used in conjunction with the SeGA Array of 16 HPGe detectors; measured $E\gamma$, $I\gamma$, β spectra, $E(p)$, $I(p)$, $\beta\gamma$ -coin, βp -coin, $\gamma\beta p$ -coin, half-life, β -delayed proton emission probability.

A total of 12 βp coin events were identified.

 ${}^{91}\text{Rh}$ Levels

E(level)	J^π	$T_{1/2}$	Comments
0	(9/2 $^+$)	1.60 s 15	$\% \beta^+ p = 1.3$ 5 (2012Lo08) $T_{1/2}$: listed by 2012Lo08 as weighted average of 1.47 s 22 (2004De40) and 1.7 s 2 (2001Ki13). J^π : from Adopted Levels. From systematics, 2012Au07 suggest 7/2 $^+$. $\% \beta^+ p$: measured by 2012Lo08 assuming the half-life value 1.60 s 15 and based on observation of 12 βp coincidence events.