

${}^9\text{Be}({}^{124}\text{Xe}, X\gamma)$  2017Pa35

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, E. A. Mccutchan		NDS 165, 1 (2020)	1-Mar-2020

**2017Pa35:**  $E({}^{124}\text{Xe})=345$  MeV/nucleon incident on a  $740$  mg/cm<sup>2</sup> thick  ${}^9\text{Be}$  target at the RIKEN-RIBF facility. Fragments identified using the BigRIPS separator and the ZeroDegree spectrometer by determining the atomic number and the mass-to-charge ratio of the ion using the tof-B $\rho$ - $\Delta E$  method. Secondary beam was stopped in the double-sided silicon strip detector of the WAS3ABi spectrometer. Measured:  $E\gamma$ ,  $I\gamma$ , implant- $\gamma(t)$  using the EURICA array consisting of 84 HP Ge detectors.

**2019Ha26:**  $E({}^{124}\text{Xe})=345$  MeV/nucleon incident on a thick  ${}^9\text{Be}$  target at the RIKEN-RIBF facility. Fragments identified using the BigRIPS separator and the ZeroDegree spectrometer by determining the atomic number and the mass-to-charge ratio of the ion using the tof-B $\rho$ - $\Delta E$  method. Secondary beam was stopped in the double-sided silicon strip detector of the WAS3ABi spectrometer. Measured:  $E\gamma$ ,  $I\gamma$ , implant- $\gamma(t)$  using the EURICA array consisting of 84 HP Ge detectors.

 ${}^{90}\text{Mo}$  Levels

E(level) <sup>†</sup>	J $\pi$ <sup>†</sup>	T <sub>1/2</sub>	Comments
0.0	0 <sup>+</sup>		
948.0	2 <sup>+</sup>		
2002.1	4 <sup>+</sup>		
2548.8	5 <sup>-</sup>		
2811.7	6 <sup>+</sup>		
2874.8	8 <sup>+</sup>	1.15 $\mu\text{s}$ 5	E(level): isomeric ratio R=61% 3 (2017Pa35). T <sub>1/2</sub> : from implant- $\gamma(t)$ in 2017Pa35, but the gating $\gamma$ -ray transitions were not specified by the authors. Also 1.14 $\mu\text{s}$ 5 from implant- $\gamma(t)$ in 2019Ha26.

<sup>†</sup> From the Adopted Levels. Level energies are rounded values.

 $\gamma({}^{90}\text{Mo})$ 

$E_\gamma$ <sup>†</sup>	$E_i(\text{level})$	J $\pi_i$	$E_f$	J $\pi_f$	Comments
63.2	2874.8	8 <sup>+</sup>	2811.7	6 <sup>+</sup>	$E_\gamma$ : other: 63 keV reported in 2017Pa35.
262.8	2811.7	6 <sup>+</sup>	2548.8	5 <sup>-</sup>	
546.7	2548.8	5 <sup>-</sup>	2002.1	4 <sup>+</sup>	
809.6	2811.7	6 <sup>+</sup>	2002.1	4 <sup>+</sup>	
948.0	948.0	2 <sup>+</sup>	0.0	0 <sup>+</sup>	
1054.1	2002.1	4 <sup>+</sup>	948.0	2 <sup>+</sup>	

<sup>†</sup> Rounded values from the Adopted Gammas.

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## Level Scheme

