

$^9\text{Be}(^{136}\text{Xe}, X\gamma)$  2007Ho22

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. Hashizume	NDS 112, 1647 (2011)	1-Oct-2009

E=120 MeV/A  $^{136}\text{Xe}$  beam provided by National Superconducting Cyclotron Lab (NSCL) at MSU. Fragment separator.  
Time-of-flight: plastic scintillator. Ge array, Si detectors for fragment detection: fragment- $\gamma$  coin, E $\gamma$ , I $\gamma$ ,  $\gamma(t)$ .

 $^{127}\text{Cd}$  Levels

E(level) <sup>†‡</sup>	J $^{\pi}$	Comments
0+x	11/2 <sup>-</sup>	E(level): assumed as $\beta$ decaying isomer (2007Ho22).
738.70+x 20	(15/2 <sup>-</sup> )	
1560.1+x 8	(19/2 <sup>-</sup> )	
2331.0+x 9	(23/2 <sup>-</sup> )	
3239.9+x 11	(27/2 <sup>-</sup> )	
y		Microsecond isomer from observation of delayed $\gamma$ rays.

<sup>†</sup> From E $\gamma$ 's.

<sup>‡</sup> From a least-squares fit to E( $\gamma$ 's) fixing the 0+x level.

 $\gamma(^{127}\text{Cd})$ 




E $_{\gamma}$	I $_{\gamma}$	E $_i$ (level)	J $_i^{\pi}$	E $_f$	J $_f^{\pi}$
738.7 2	100 16	738.70+x	(15/2 <sup>-</sup> )	0+x	11/2 <sup>-</sup>
770.9 4	56 16	2331.0+x	(23/2 <sup>-</sup> )	1560.1+x	(19/2 <sup>-</sup> )
821.4 7	73 19	1560.1+x	(19/2 <sup>-</sup> )	738.70+x	(15/2 <sup>-</sup> )
908.9 6	50 15	3239.9+x	(27/2 <sup>-</sup> )	2331.0+x	(23/2 <sup>-</sup> )

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## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

-   $I_\gamma < 2\% \times I_\gamma^{max}$
-   $I_\gamma < 10\% \times I_\gamma^{max}$
-   $I_\gamma > 10\% \times I_\gamma^{max}$

