

(HI,xn γ) 1987Lu06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	K. Kitao, Y. Tendow and A. Hashizume		NDS 96,241 (2002)	1-Dec-2001

1987Lu06: $^{116}\text{Cd}(^7\text{Li},p2n\gamma)$ E=26,30,35,40 MeV; γ , off-beam γ , $T_{1/2}$.

The decay scheme is that proposed by 1987Lu06 based on the off-beam γ -spectrum measurement.

 ^{120}Sn Levels

E(level) [†]	J ^{π} [†]	$T_{1/2}$	Comments
0.0	0 ⁺	stable	
1171.265 15	2 ⁺		
2194.292 21	4 ⁺		
2284.16 6	5 ⁻		
2481.61 6	7 ⁻	11.8 μs 5	$T_{1/2}$: from ^{120}Sb ε decay (5.76 d).
2836.51 7	(8 ⁺)		
2902.21 21	(10 ⁺)	6.26 μs 11	$T_{1/2}$: from γ -multiscaling of the 354.9 γ .

[†] From Adopted Levels.

 $\gamma(^{120}\text{Sn})$

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	δ	α^\ddagger	$I_{(\gamma+ce)}$	Comments
65.7 2	2902.21	(10 ⁺)	2836.51	(8 ⁺)	(E2)		7.21	22	$\alpha(\text{K})=4.32$; $\alpha(\text{L})=2.32$; $\alpha(\text{M})=0.473$; $\alpha(\text{N}+..)=0.097$ $I_\gamma: I(354.9\gamma)/I(65.7\gamma)=8.7$ 10. Mult.: from intensity ratio of 65.7 γ and 354.9 γ if both γ 's occur in cascade.
89.87 16	2284.16	5 ⁻	2194.292	4 ⁺					
197.37 2	2481.61	7 ⁻	2284.16	5 ⁻					
354.90 5	2836.51	(8 ⁺)	2481.61	7 ⁻	D(+Q)	-0.2 2			Mult., δ : from Adopted Levels, gammas.
1023.048 18	2194.292	4 ⁺	1171.265	2 ⁺					
1171.25 2	1171.265	2 ⁺	0.0	0 ⁺					

[†] From adopted gammas, except for the 65.7 γ .

[‡] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

(HI,xn γ) 1987Lu06Level Scheme