^{136}La IT decay 2005Bh06

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

Parent: ^{136}La: E=259.3 *4*; J^{π}=(7$^-$); $T_{1/2}$=114 ms *5*; %IT decay=100.0

Data based on 2005Bh06, although there is signficant discrepancies between 2005Bh06 and earlier works. In addition, 2005Bh06 state that while they observe a weak 87.5γ both in coincidence with the 127.5γ and in the beam-off spectrum, the 127.5γ and 87.5γ are weak and thus, the excitation energy of the isomer should be considered as tentative.

Other: 1985Mo01. The level scheme proposed by 1985Mo01 agrees with 2005Bh06 only in the placement of the 21.8γ and 22.5γ. 1985Mo01 propose the following levels (with depopulating transitions). 140.0 (95.7γ), 158.3 (tentative 18.3γ), 173.5 (33.5γ), 230.1 (71.8γ) and 230+x (56.6+x and x transitions).

α: Additional information 1.

^{136}La Levels

E(level)	J^{π}[†]	$T_{1/2}$
0.0	1$^+$	9.87 min *3*
21.80 *20*	(2)$^+$	
44.3 *3*	(3)$^+$	
171.8 *3*	(3)$^+$	
259.3? *4*	(7$^-$)	114 ms *5*

[†] From the Adopted Levels.

γ(^{136}La)

E_γ	E_i(level)	J^{π}_i	E_f	J^{π}_f	Mult.[†]	α	Comments
21.8 *2*	21.80	(2)$^+$	0.0	1$^+$			
22.5 *2*	44.3	(3)$^+$	21.80	(2)$^+$			
87.5[‡] *2*	259.3?	(7$^-$)	171.8	(3)$^+$	[M4]	1.86×10^3 *4*	α(K)=580 *10*; α(L)=965 *20*; α(M)=249 *6*; α(N)=54.5 *12*; α(O)=7.84 *16*; α(P)=0.228 *5*
127.5 *2*	171.8	(3)$^+$	44.3	(3)$^+$	M1+E2		
150.2 *2*	171.8	(3)$^+$	21.80	(2)$^+$	M1+E2		

[†] From the Adopted Gammas.

[‡] Placement of transition in the level scheme is uncertain.

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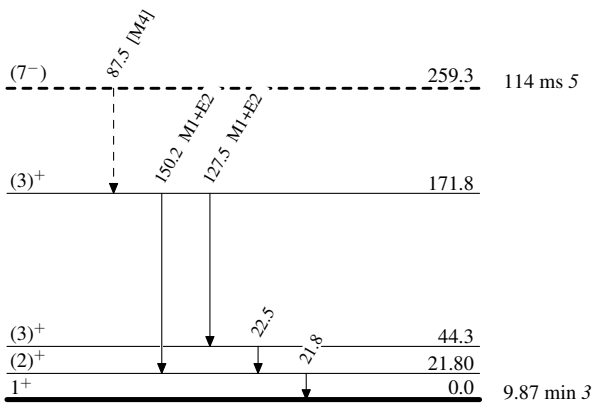
Legend

Decay Scheme

%IT=100.0

γ Decay (Uncertain)



$^{136}_{57}La_{79}$