^{127}In IT decay (9 μs) 2004Sc42

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

Parent: ^{127}In: E=2364 *60*; J^π=(29/2$^+$); $T_{1/2}$=9 μs *2*; %IT decay=100.0

2004Sc42: ^{239}Pu(n,F),^{241}Pu(n,F) E=th, on-line mass separation; fission fragment-ce(t), fission fragment-γ(t), X-ce coin, $\gamma\gamma$ coin, $\gamma\gamma$(t).

^{127}In Levels

E(level)[†]	J^π[‡]	$T_{1/2}$[#]	Comments
0.0	(9/2$^+$)		
1863 *58*	(21/2$^-$)	1.04 s *10*	$T_{1/2}$: From the adopted value.
2085? *58*	(23/2$^-$)		E(level): The order of 221.3-233.4 γ-ray cascade is uncertain. E(level)=2097 is possible.
2317? *59*	(25/2$^+$)		
2364? *60*	(29/2$^+$)	9 μs *2*	

[†] From Adopted Levels.
[‡] From the comparison with shell model and systematics (2004Sc42).
[#] From fission fragments-γ delayed coincidence method.

γ(^{127}In)

E_γ	I_γ[†#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α[‡]	Comments
47.0 *5*	4.05 *24*	2364?	(29/2$^+$)	2317?	(25/2$^+$)	E2	23.1 *10*	α(K)=10.7 *4*; α(L)=10.0 *6*; α(M)=2.05 *11*; α(N+..)=0.351 *19* α(N)=0.343 *19*; α(O)=0.0076 *4* Mult.: From X-ray/ce(L)=1.2 3.
221.3 *5*		2085?	(23/2$^-$)	1863	(21/2$^-$)			
233.4 *5*		2317?	(25/2$^+$)	2085?	(23/2$^-$)			

[†] Normalized to total transition intensity=100 (evaluator).
[‡] Theoretical conversion coefficients are calculated using BrIcc code for the multipolarity indicated.
[#] For absolute intensity per 100 decays, multiply by 1.00 *6*.

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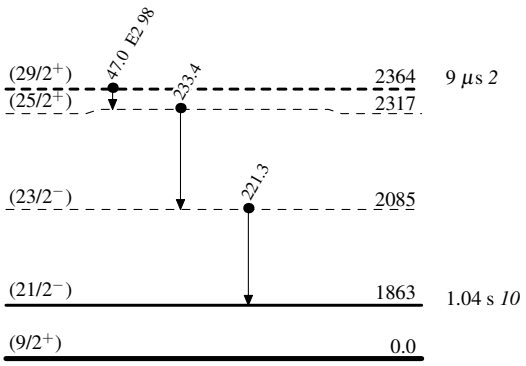
Legend

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

%IT=100.0

● Coincidence



$^{127}_{49}In_{78}$