

^{122}La ϵ decay **1987GeZY**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

Parent: ^{122}La : E=0.0; $T_{1/2}$ =8.6 s 5; Q(ϵ)=10070 SY; % ϵ +% β^+ decay=100.0

1987GeZY: ^{92}Mo (^{36}Ar ,xnyp) ^{122}La He-jet, mass separation.

1992Mo13: ^{92}Mo (^{35}Cl ,2p3n) ^{122}La , $\beta\gamma$ (t); measured $T_{1/2}$.

 ^{122}Ba Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+		
196.1 3	2^+	297 ps 26	B(E2) \uparrow =2.81 28 $T_{1/2}$: from $\beta\gamma$ delayed coincidence using plastic and BaF ₂ scintillators (1992Mo13). B(E2) from $T_{1/2}$.
568.8 5	(4^+)		
939.5 3			
1167.8 5	(3^+)		
1271.8? 11			

 $\gamma(^{122}\text{Ba})$

E_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult.	$\alpha^\#$	Comments
196.1 3	196.1	2^+	0.0	0^+	(E2)	0.1853	$\alpha(K)$ =0.1432; $\alpha(L)$ =0.0332; $\alpha(M)$ =0.00705; $\alpha(N+..)$ =0.00184 Mult.: from adopted gammas.
372.7 3	568.8	(4^+)	196.1	2^+			
703 [‡] 1	1271.8?		568.8	(4^+)			
^x 742.8							
939.5 3	939.5		0.0	0^+			
971.7 3	1167.8	(3^+)	196.1	2^+			

[†] From **1987GeZY**; ΔE is assigned by evaluator; no detailed data are given by **1987GeZY**.

[‡] Seen in $\gamma\gamma$ -coincidence only.

[#] 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.

^x γ ray not placed in level scheme.

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Decay Scheme

