

^{134}Ba IT decay (2.63 μs) [1980Mo27](#),[1982BeZY](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 103, 1 (2004)	31-Jul-2004

Parent: ^{134}Ba : E=2957.2 5; $J^\pi=(10^+)$; $T_{1/2}=2.63 \mu\text{s}$ 14; %IT decay=100.0

From $^{133}\text{Cs}(\alpha, p2n)$ E=55 MeV ([1980Mo27](#)), $^{124}\text{Sn}(^{13}\text{C}, 3n)$ E=48 MeV ([1982BeZY](#)).

 ^{134}Ba Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0.0	0 ⁺	stable	
604.7 3	2 ⁺		
1400.4 5	4 ⁺		
2211.1 6	(6 ⁺)		
2835.6 6	(8 ⁺)		
2956.9 7	(10 ⁺)	2.63 μs 14	$T_{1/2}$: from 1982BeZY .

[†] From Adopted Levels.

 $\gamma(^{134}\text{Ba})$

I γ normalization: From level scheme.

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	$\alpha^\#$	$I_{(\gamma+ce)}^\ddagger$	Comments
121.3 3	2956.9	(10 ⁺)	2835.6	(8 ⁺)	E2	0.981	100	$\alpha(K)=0.673$; $\alpha(L)=0.2429$; $\alpha(M)=0.0524$ Mult.: $\alpha(\text{exp})=1.7$ 10 from the intensity balance (1980Mo27).
604.7 3	604.7	2 ⁺	0.0	0 ⁺	E2	0.00599	100	$\alpha(K)=0.00503$; $\alpha(L)=0.00072$
624.5 3	2835.6	(8 ⁺)	2211.1	(6 ⁺)	(E2)	0.00552	100	$\alpha(K)=0.00464$; $\alpha(L)=0.00066$
795.7 3	1400.4	4 ⁺	604.7	2 ⁺	E2	0.00305	100	$\alpha(K)=0.00258$; $\alpha(L)=0.00035$
810.7 3	2211.1	(6 ⁺)	1400.4	4 ⁺	(E2)	0.00292	100	$\alpha(K)=0.00248$; $\alpha(L)=0.00033$

[†] From [1982BeZY](#), except as noted.

[‡] Absolute intensity per 100 decays.

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

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Decay Scheme

%IT=100.0

