^{135}Cs IT decay (53 min) 1962Wa22,1964Ha18,1982Bu07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Alexander A. Rodionov And Yuri L. Khazov	NDS 109, 517 (2008)	22-Jan-2008

Parent: ^{135}Cs: E=1633.3; $J^\pi=19/2^-$; $T_{1/2}$=53 min *2*; %IT decay=100.0
^{135}Cs-E: 1632.9 in 'Adopted Levels'.
Total decay energy calculated (by RADLIST code) from level scheme agrees with the expected value of 1633.3 keV.

^{135}Cs Levels

E(level)	J^π[†]	$T_{1/2}$	Comments
0.0	$7/2^+$		
787.2	$11/2^+$		
1633.3	$19/2^-$	53 min *2*	E(level): 1632.9 in 'Adopted Levels'. $T_{1/2}$: from weighted average of 53 min *2* (1962Wa22) and 53 min *3* (1964Ha18). Other: 1982Bu07.

[†] From 'Adopted Levels'.

$\gamma(^{135}Cs)$

E_γ[†]	I_γ[‡@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[&]	$I_{(\gamma+ce)}$[@]	Comments
787.2	99.7	787.2	$11/2^+$	0.0	$7/2^+$	E2	0.00294	100	ce(K)/(γ+ce)=0.00251 *4*; ce(L)/(γ+ce)=0.000337 *5*; ce(M)/(γ+ce)=6.90×10^{-5} *10*; ce(N+)/(γ+ce)=1.661×10^{-5} *24* ce(N)/(γ+ce)=1.452×10^{-5} *21*; ce(O)/(γ+ce)=1.99×10^{-6} *3*; ce(P)/(γ+ce)=9.26×10^{-8} *13* Additional information 1. α(K)exp=0.0027 *5* (1964Ha18).
846.1	96.0	1633.3	$19/2^-$	787.2	$11/2^+$	M4	0.0421	100	ce(K)/(γ+ce)=0.0336 *5*; ce(L)/(γ+ce)=0.00542 *8*; ce(M)/(γ+ce)=0.001137 *16*; ce(N+)/(γ+ce)=0.000274 *4* ce(N)/(γ+ce)=0.000240 *4*; ce(O)/(γ+ce)=3.28×10^{-5} *5*; ce(P)/(γ+ce)=1.495×10^{-6} *21* Additional information 2. K/L=6.1 *10* (1964Ha18), α(K)exp=0.037 *8* (1962Wa22).

[†] From 1982Bu07.
[‡] From intensity balance.
[#] From α(K)exp and K/L.
[@] 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 multipolarities, and mixing ratios, unless otherwise specified.

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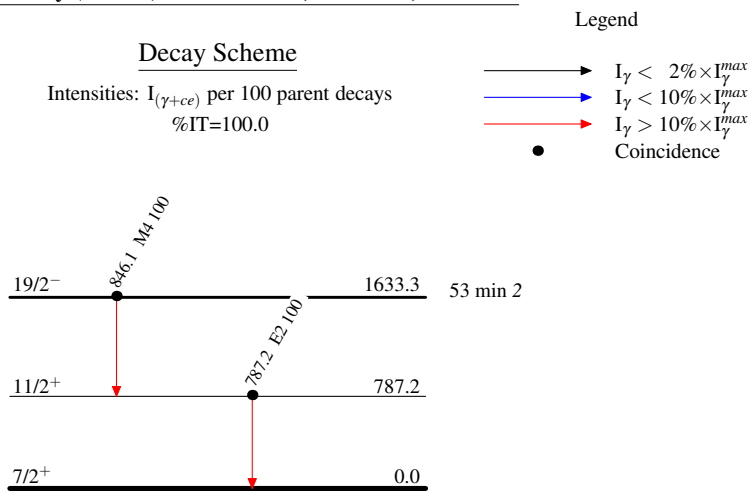
Decay Scheme

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

%IT=100.0



$^{135}_{55}Cs_{80}$