^{207}Pb IT decay

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski	NDS 112, 707 (2011)	1-Aug-2010

Parent: ^{207}Pb: E=1633.368 *5*; $J^{\pi}=13/2^{+}$; $T_{1/2}$=0.806 s *5*; %IT decay=100.0

^{207}Pb Levels

E(level)†	J^{π}‡	$T_{1/2}$	Comments
0	$1/2^{-}$	stable	
569.7028 *20*	$5/2^{-}$		
1633.368 *5*	$13/2^{+}$	0.806 s *5*	$T_{1/2}$: Weighted average of 0.81 s *4*, 0.775 s *38* (1986Al11), 0.810 s *8* (1973Sa22), 0.80 s *1* (1971Sc38), 0.77 s *3* (1971Gl09), 0.81 s *2* (1961Gl16), 0.84 s *2* (1956Ca50), 0.799 s *13* (1955Be24), 0.80 s *2* (1952Ho41), 0.82 s *2* (1951La18). Others: 0.743 s *22* (1967Yu01), 0.797 s (1958Fa08), 0.948 s *14* (1956Ve10), 0.8 s *1* (1954Re33), 0.88 s *10* (1953Fr17).

† From a least-squares fit to Eγ.
‡ From the Adopted Levels.

$\gamma(^{207}Pb)$

E_γ#	I_γ@&	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.#	δ‡#	α†	Comments
569.698 *2*	97.9 *14*	569.7028	$5/2^{-}$	0	$1/2^{-}$	E2		0.0216	α(K)=0.01583 *23*; α(L)=0.00439 *7*; α(M)=0.001081 *16* α(N)=0.000274 *4*; α(O)=5.21×10^{-5} *8*; α(P)=4.29×10^{-6} *6*
1063.656 *3*	88.8 *13*	1633.368	$13/2^{+}$	569.7028	$5/2^{-}$	M4+E5	+0.02 *1*	0.1257	α(K)=0.0942 *14*; α(L)=0.0238 *4*; α(M)=0.00589 *9* α(N)=0.001508 *22*; α(O)=0.000296 *5*; α(P)=2.87×10^{-5} *4*

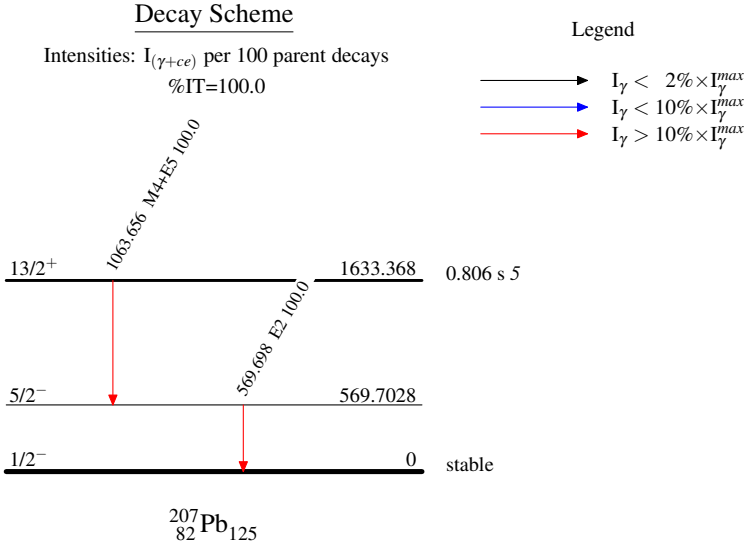
† Additional information 1.
‡ If No value given it was assumed δ=1.00 for E2/M1, δ=1.00 for E3/M2 and δ=0.10 for the other multipolarities.
# From adopted gammas.
@ From Ti(570γ)=Ti(1064γ)=100, and α's.
& Absolute intensity per 100 decays.

^{207}Pb IT decay

Decay Scheme

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

%IT=100.0



$^{207}_{82}Pb_{125}$