Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 121, 561 (2014)	31-Mar-2014

Q(β^-)=5482 12; S(n)=3680 13; S(p)=7890 SY; Q(α)=2540 SY 2012Wa38
ΔS(p)=150 (syst), ΔQ(α)=300 (syst) 2012Wa38.

^{210}Tl Levels

Cross Reference (XREF) Flags

A ^{214}Bi α decay (19.9 min)

E(level)[#]	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	(5$^+$)[†]	1.30 min 3	A	%β^-=100; %β^-n=0.007 $+7-4$ %β^-n: From 1961St20. T$_{1/2}$: from 1964We06. Other values: 1.32 min (1931Cu01), 1.3 min (1937De03), 1.50 min 25 (1957Ko42).
62.5 10	(4$^+$)[†]		A	
253.6 15	(4$^+$,5$^+$)[‡]		A	
335[@] 3	(6$^+$)[‡]		A	
499[@] 4	(4$^+$,5$^+$)[‡]		A	
583[@] 4	(3$^+$)[‡]		A	

[†] In analogy with levels in ^{208}Tl and Hf(α) from ^{214}Bi (J$^\pi$=1$^-$) g.s.; members of Configuration=((π 3s$_{1/2}$)$^{-1}$ (ν 2g$_{9/2}$)).
[‡] From Hf(α) syst; primarily multiplet Configuration=((π 2d$_{3/2}$)$^{-1}$ (ν 2g$_{9/2}$)).
[#] From γ-ray energies, unless otherwise specified.
[@] From Eα in ^{214}Bi α decay.

γ(^{210}Tl)

E$_i$(level)	J$^\pi_i$	E$_\gamma$[†]	I$_\gamma$	E$_f$	J$^\pi_f$	Mult.	α[‡]	Comments
62.5	(4$^+$)	62.5	100	0.0	(5$^+$)	(M1)	6.20	Mult.: from ce data in ^{214}Bi α decay.
253.6	(4$^+$,5$^+$)	191.1	100	62.5	(4$^+$)			

[†] From ^{214}Bi α decay.
[‡] 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.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level