^{208}Pb(^{48}Ca,Xγ) 2004Wr01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 166, 1 (2020)	20-Apr-2020

2004Wr01: Produced using deep-inelastic and multinucleon transfer reactions. Pulsed beam with E(^{48}Ca)=305 MeV; detectors: GAMMASPHERE spectrometer; measured: γγ coin, γγ(t), Eγ; deduced: level scheme, $T_{1/2}$.

^{205}Tl Levels

E(level)†	Jπ‡	$T_{1/2}$‡	Comments
0.0	1/2+		
204.0 *10*	3/2+		
924.0 *15*	7/2+		
1430.0 *18*	9/2+		
1484.0 *20*	11/2−		
2054.0 *23*	15/2−		
2394.0 *25*	17/2−		
2551 *3*	19/2−		
3290 *3*	25/2+	2.6 μs *2*	$T_{1/2}$: From Adopted Levels. configuration: $\pi(h^{-1}_{11/2})\otimes\nu(p^{-1}_{1/2},i^{-1}_{13/2})$.
3618 *3*	29/2+		configuration: $\pi(h^{-1}_{11/2})\otimes\nu(f^{-1}_{5/2},i^{-1}_{13/2})$.
4835 *4*	35/2−	235 ns *10*	$T_{1/2}$: From 2256γ-1217γ(Δt) + 2256γ-328γ(Δt) in 2004Wr01. configuration: $\pi(h^{-1}_{11/2})\otimes\nu(i^{-2}_{13/2})$.
7091 *4*	41/2+		configuration: $[\pi(h^{-1}_{11/2})\otimes\nu(i^{-2}_{13/2})]\otimes 3^-$. Assignment is tentative.
7331 *4*			
7898 *4*			
8033 *4*			
8408 *4*			

† From a least-squares fit to Eγ.
‡ From 2004Wr01.

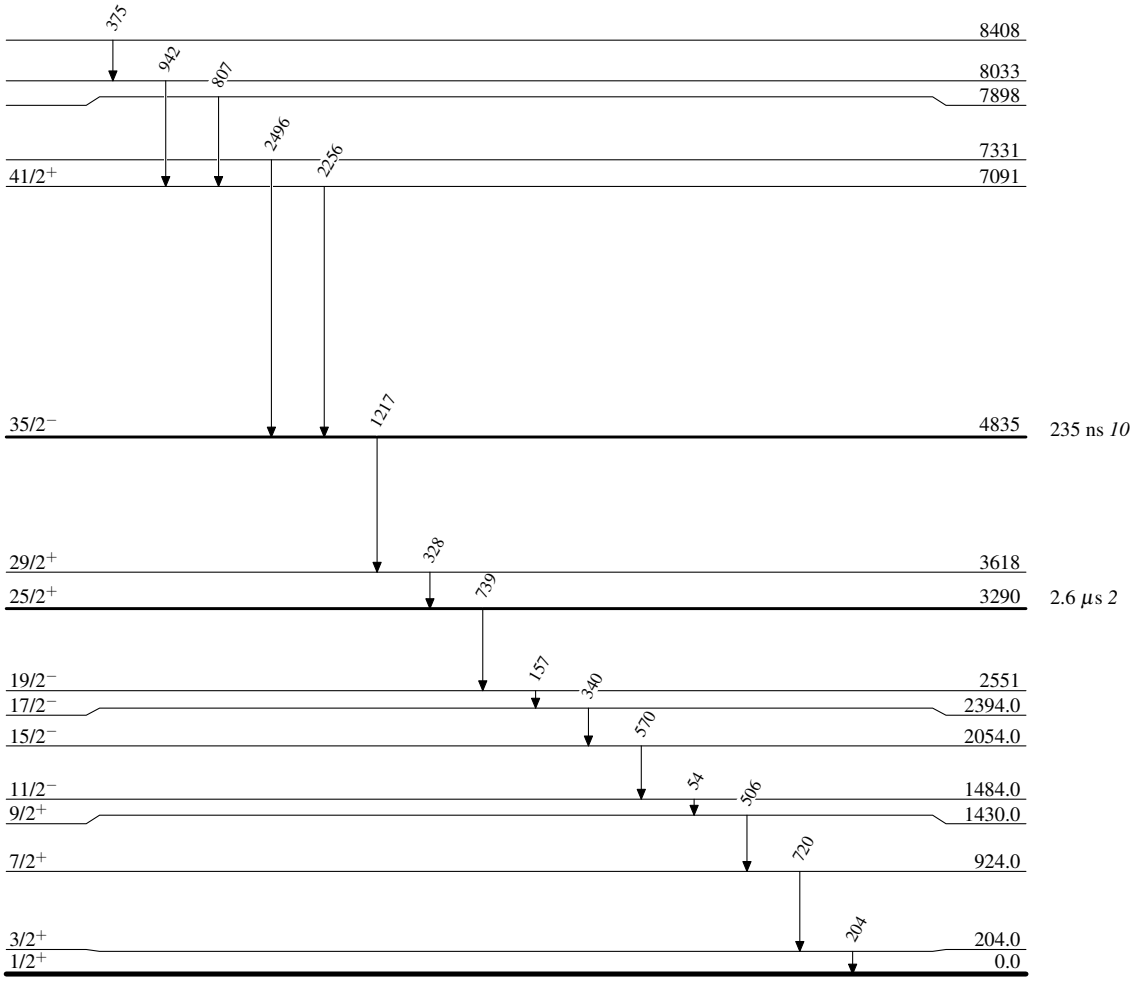
γ(^{205}Tl)

Eγ†	E_i(level)	J^π_i	E_f	J^π_f	Eγ†	E_i(level)	J^π_i	E_f	J^π_f
54 *1*	1484.0	11/2−	1430.0	9/2+	720 *1*	924.0	7/2+	204.0	3/2+
157 *1*	2551	19/2−	2394.0	17/2−	739 *1*	3290	25/2+	2551	19/2−
204 *1*	204.0	3/2+	0.0	1/2+	807 *1*	7898		7091	41/2+
328 *1*	3618	29/2+	3290	25/2+	942 *1*	8033		7091	41/2+
340 *1*	2394.0	17/2−	2054.0	15/2−	1217 *1*	4835	35/2−	3618	29/2+
375 *1*	8408		8033		2256 *1*	7091	41/2+	4835	35/2−
506 *1*	1430.0	9/2+	924.0	7/2+	2496 *1*	7331		4835	35/2−
570 *1*	2054.0	15/2−	1484.0	11/2−					

† From 2004Wr01.

^{208}Pb(^{48}Ca,Xγ) 2004Wr01

Level Scheme



$^{205}_{81}Tl_{124}$