^{206}Pb(α,2nγ)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

1970Na11 E=29 MeV.
1970Ya03 E=30 MeV.
1976Ha56 E=25-30 MeV.
1985Ro07 E=44 MeV.
The decay scheme given by 1970Ya03 includes only the 177, 660, and 686 γ's following decay of the 1528 isomer. Additional gammas reported by 1970Ya03 (but unplaced) have been incorporated by the evaluator on the basis of the decay scheme reported In ^{209}Bi(p,2nγ).

^{208}Po Levels

E(level)	J$^{\pi}$[†]	$T_{1/2}$	Comments
0.0	0^+		
686	2^+		
1346 *2*	4^+		
1524 *2*	6^+	4.8 ns *5*	$T_{1/2}$: from α,γ(t) (1976Ha56).
1528 *2*	8^+	350 ns *20*	g=0.924 *5* $T_{1/2}$: from α,γ(t) (1976Ha56). Others: 1970Ya03 (380 ns *100*), 1968Tr06 (380 ns *90*). g-factor: from $\alpha,\gamma(\theta$,H,t) (1976Ha56). Value is corrected for diamagnetism (−1.9% 2) and Knight shift (1.4% 4). Uncorrected value is 0.919 *1*. Other uncorrected values: 0.911 *5* (1970Na11), 0.919 *4* (1975ReZW).
1582 *2*	4^+		
2160	8^+		
2241	9^+		
2369	7^-		
2555	10^+		
2703	11^-	8.0 ns *1*	g=1.101 *13* (1985Ro07) $T_{1/2}$: from 1985Ro07. g: corrected for Knight shift (1.2% 4) and diamagnetic shielding (−1.79%).

[†] Spin and parity values are those given under Adopted Levels.

γ(^{208}Po)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	Comments
(4.02 *3*)	1528	8^+	1524	6^+	E2	E_γ: from ^{208}At ε decay.
148 *1*	2703	11^-	2555	10^+	E1	
177.6	1524	6^+	1346	4^+	E2	E_γ: from 1976Ha56.
314 *1*	2555	10^+	2241	9^+	M1+E2	
[x]564 *1*						
632 *1*	2160	8^+	1528	8^+	M1+E2	
660 *1*	1346	4^+	686	2^+	E2	
686 *1*	686	2^+	0.0	0^+	E2	
713 *1*	2241	9^+	1528	8^+	M1+E2	
[x]804 *1*						
845 *1*	2369	7^-	1524	6^+	E1	
896 *1*	1582	4^+	686	2^+	E2	
1026 *1*	2555	10^+	1528	8^+	E2	

[†] From 1970Ya03, except for the 4.02γ As noted.

Continued on next page (footnotes at end of table)

^{206}Pb(α,2nγ) (continued)

$\gamma(^{208}Po)$ (continued)

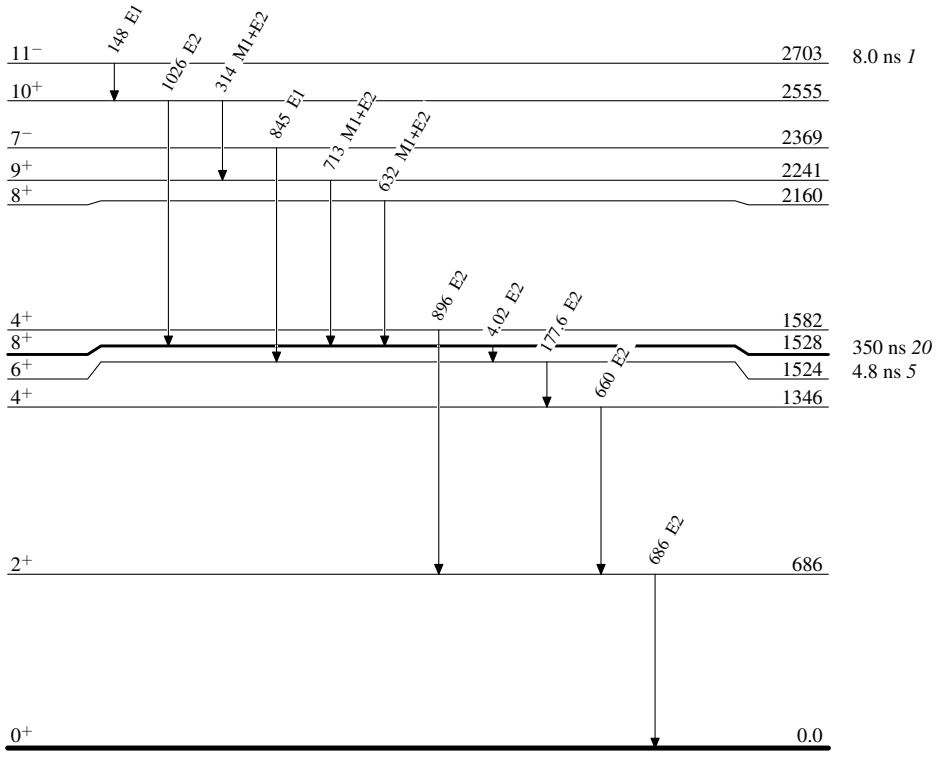
‡ From Adopted Gammas.
^{x} γ ray not placed in level scheme.

^{206}Pb(α,2nγ)

Legend

γ Decay (Uncertain)

Level Scheme



$^{208}_{84}Po_{124}$