

$^{241}\text{Am}(^{209}\text{Bi}, ^{210}\text{Po}\gamma)$ 2002AbZV

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, E. Browne		NDS 109, 2439 (2008)	31-Jul-2008

One-proton pickup channel.

2002AbZV: E=1450 MeV ($\approx 14\%$ above the Coulomb barrier for projectile-target combination). Measured γ , $\gamma\gamma$ using GAMMASPHERE array with 101 Compton-suppressed Ge detectors.

 ^{240}Pu Levels

E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]
0.0 [#]	0 ⁺	498.3 [#] 6	8 ⁺	1748.2 [#] 8	16 ⁺
42.824 [#] 8	2 ⁺	748.7 [#] 6	10 ⁺	2154.4 [#] 9	18 ⁺
141.7 [#] 3	4 ⁺	1042.8 [#] 7	12 ⁺	2593.2 [#] 9	20 ⁺
294.7 [#] 5	6 ⁺	1376.9 [#] 8	14 ⁺	3063.5 [#] 10	22 ⁺
				3562.2 [#] 10	24 ⁺

[†] From E γ 's; $\Delta E\gamma=0.3$ keV assumed for each γ -ray when not stated.

[‡] As given by 2002AbZV in their figure 5.20, based on assignment to g.s. band. The assignments are the same in 'Adopted Levels', except that above 500 keV, all are placed in parentheses due to lack of strong supporting arguments.

[#] Band(A): g.s. band.

 $\gamma(^{240}\text{Pu})$

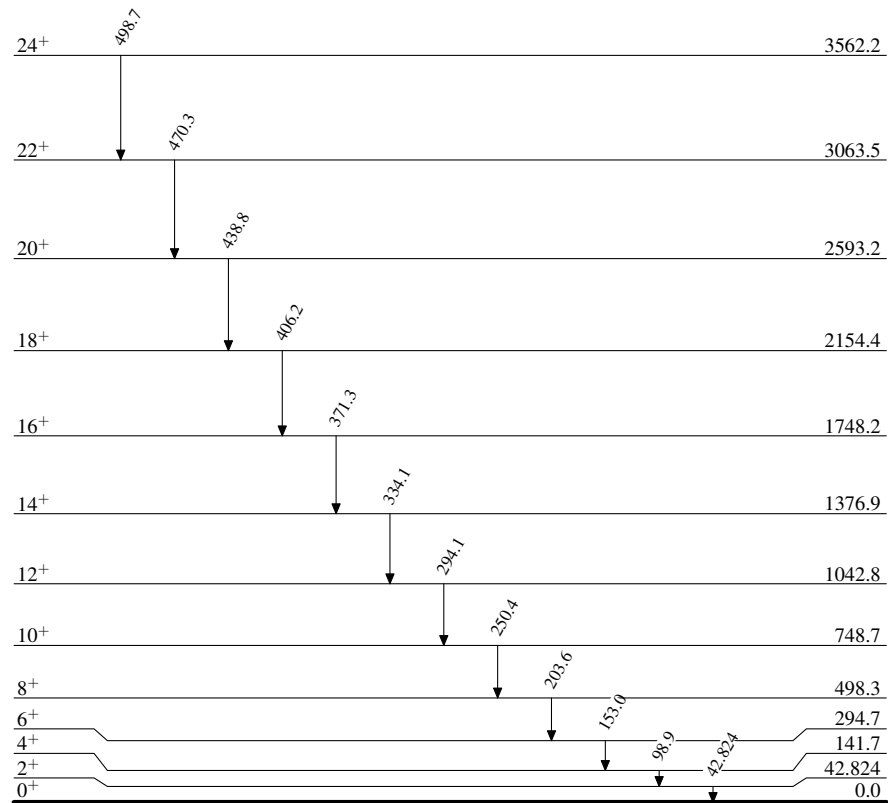
E γ [†]	E _i (level)	J _i π	E _f	J _f π	E γ [†]	E _i (level)	J _i π	E _f	J _f π
42.824 [‡] 8	42.824	2 ⁺	0.0	0 ⁺	334.1	1376.9	14 ⁺	1042.8	12 ⁺
98.9	141.7	4 ⁺	42.824	2 ⁺	371.3	1748.2	16 ⁺	1376.9	14 ⁺
153.0	294.7	6 ⁺	141.7	4 ⁺	406.2	2154.4	18 ⁺	1748.2	16 ⁺
203.6	498.3	8 ⁺	294.7	6 ⁺	438.8	2593.2	20 ⁺	2154.4	18 ⁺
250.4	748.7	10 ⁺	498.3	8 ⁺	470.3	3063.5	22 ⁺	2593.2	20 ⁺
294.1	1042.8	12 ⁺	748.7	10 ⁺	498.7	3562.2	24 ⁺	3063.5	22 ⁺

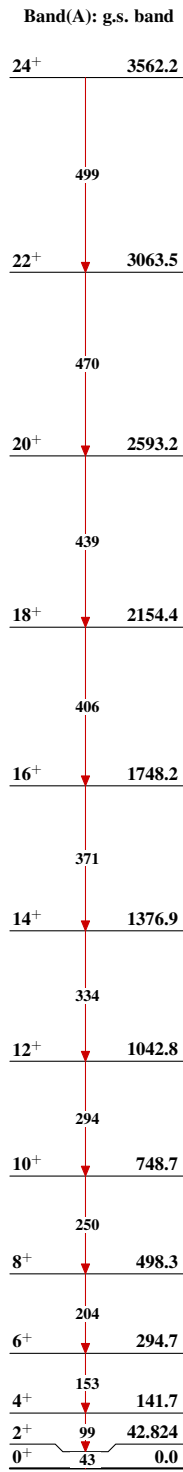
[†] From figure 5.20 of 2002AbZV.

[‡] From 'adopted gammas'.

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Level Scheme

 $^{240}_{94}\text{Pu}_{146}$

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