

$^{238}\text{U}(\alpha, \text{F}\gamma)$ 2007St19

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu		NDS 109, 1655 (2008)	1-Apr-2008

The level scheme is that proposed by 2007St19.

2007St19,2006StZW: $^{238}\text{U}(\alpha, \text{F}\gamma)$, E=30 MeV; measured γ , $\gamma\gamma$ -(fragment) γ -coin; deduced levels, J, π , Gammasphere.

2005Ka45: $^{238}\text{U}(\alpha, \text{F}\gamma)$.

 ^{124}Cd Levels

E(level) [†]	J ^{π}
0.0 [‡]	0 ⁺
613.0 [‡] 10	(2 ⁺)
1385.0 [‡] 15	(4 ⁺)
1845.8 [#] 17	(5 ⁻)
2139.3 [‡] 17	(6 ⁺)
2384.5 [#] 18	(7 ⁻)
2674.3 [‡] 20	(8 ⁺)
2777.5 [#] 20	(9 ⁻)
2938.3 [‡] 22	(10 ⁺)
3664.3 [‡] 24	(12 ⁺)

[†] From a least-squares fit to E γ 's assuming $\Delta(E\gamma)=1$ keV for each γ ray.

[‡] Band(A): g.s. band.

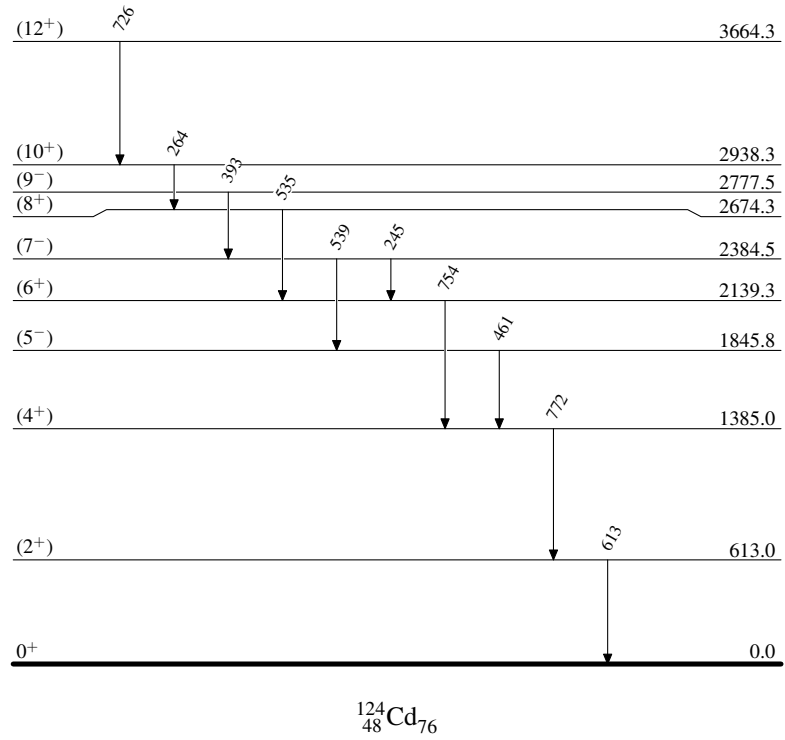
[#] Band(B): 5⁻ band.

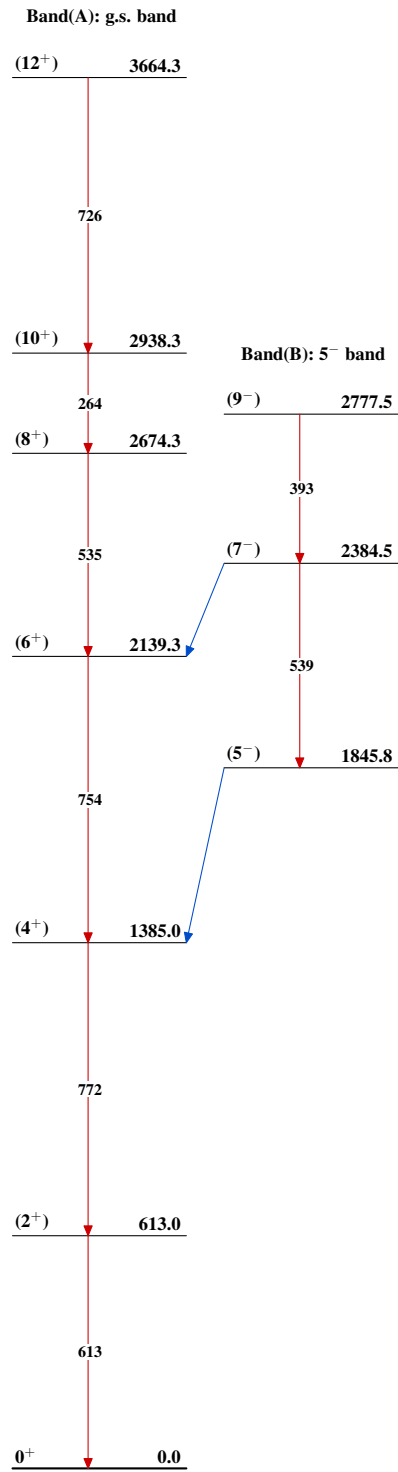
 $\gamma(^{124}\text{Cd})$

E γ	E _i (level)	J _i ^{π}	E _f	J _f ^{π}
245	2384.5	(7 ⁻)	2139.3	(6 ⁺)
264	2938.3	(10 ⁺)	2674.3	(8 ⁺)
393	2777.5	(9 ⁻)	2384.5	(7 ⁻)
461	1845.8	(5 ⁻)	1385.0	(4 ⁺)
535	2674.3	(8 ⁺)	2139.3	(6 ⁺)
539	2384.5	(7 ⁻)	1845.8	(5 ⁻)
613	613.0	(2 ⁺)	0.0	0 ⁺
726	3664.3	(12 ⁺)	2938.3	(10 ⁺)
754	2139.3	(6 ⁺)	1385.0	(4 ⁺)
772	1385.0	(4 ⁺)	613.0	(2 ⁺)

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Level Scheme



$^{238}\text{U}(\alpha, \text{F}\gamma)$ 2007St19 $^{124}_{48}\text{Cd}_{76}$