

(HI,xn γ) 2000Bu06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 515 (2012)	1-Jan-2012

2000Bu06: $^{176}\text{Yb}(^{28}\text{Si},\text{f})$ E=145 MeV. Measured: γ , $\gamma\gamma$, $\gamma(\theta)$ using EUROAM2 array which consisted of 15 large escape-suppressed Ge detectors and 24 escape-suppressed “clover” Ge detectors.

1990DuZW: $^{232}\text{Th}(^{18}\text{O},\text{xn}\gamma)$. Measured prompt γ -rays emitted by fission fragments from ^{246}Cf fissioning system.

The identification is based on gating on $2^+ - 0^+$ known transitions but also on the fact that complementary fragments are in coin (Cd,Sn).

1990DuZW have given g.s. band up to 12^+ .

2004Ju03: $^{110}\text{Pd}(^7\text{Li},2\text{np})$, $(^7\text{Li},4\text{n})$, E=32, 35, 40 MeV, no details are available.

The level scheme is as given by **2000Bu06**.

 ^{114}Cd Levels

E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]
0 [#]	0 ⁺	2298.9 [@] 4	5 ⁻	3282.6 [@] 4	(9 ⁻)	4256.4 ^{&} 5	(12 ⁺)
558.50 [#] 20	2 ⁺	2668.8 [#] 4	8 ⁺	3504.0 ^{&} 5	(10 ⁺)	4604.2 [#] 6	(14 ⁺)
1283.9 [#] 3	4 ⁺	2735.2 [@] 4	(7 ⁻)	3711.7 [#] 5	12 ⁺	4605.2 [@] 5	(13 ⁻)
1990.6 [#] 4	6 ⁺	3143.5 [#] 5	10 ⁺	4027.3 [@] 5	(11 ⁻)		

[†] From E γ 's, assuming $\Delta(E\gamma)=0.2$ keV.

[‡] Authors' values based on band assignments.

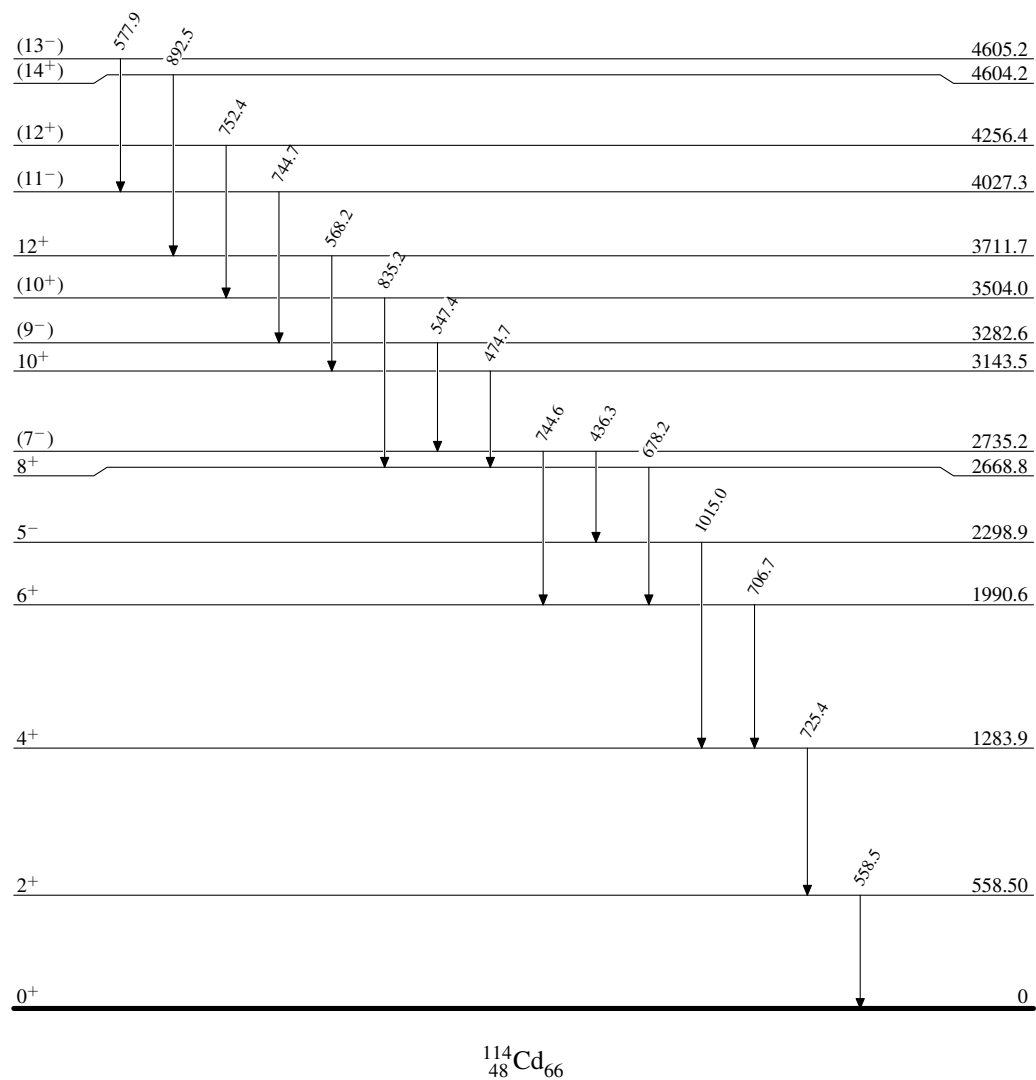
[#] Band(A): g.s. band.

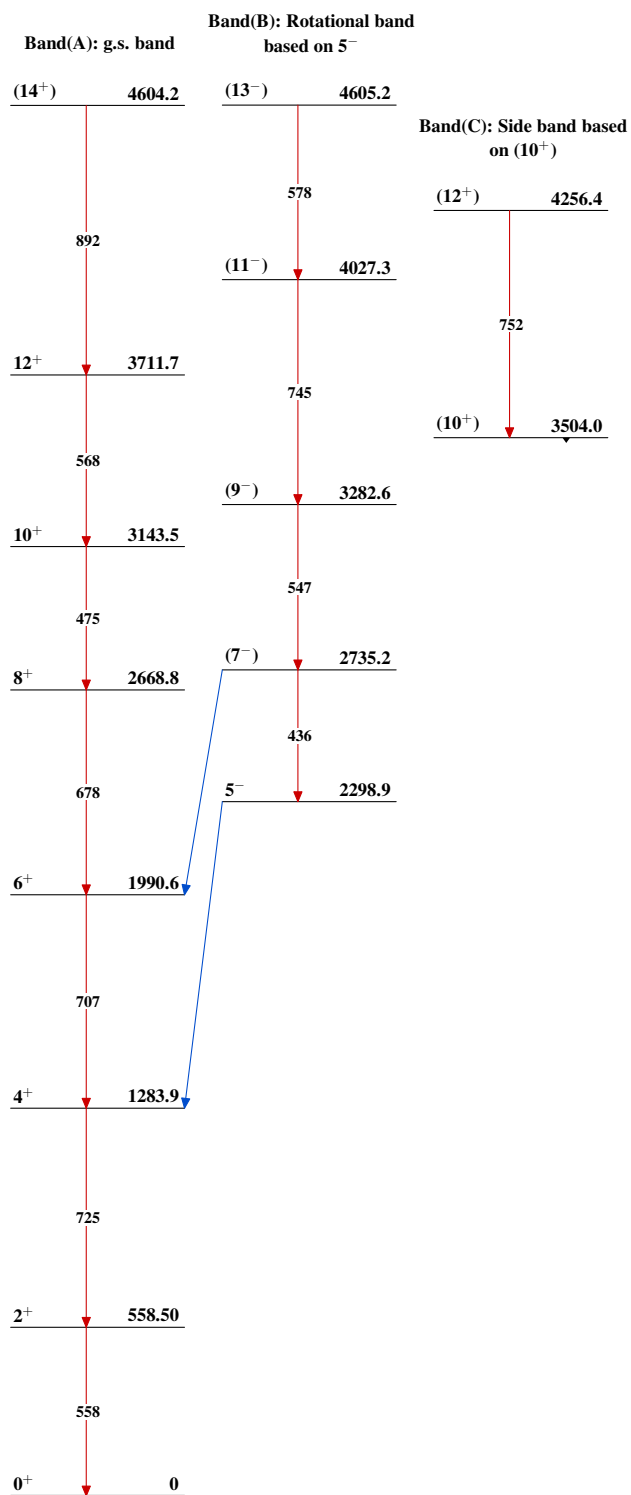
[@] Band(B): Rotational band based on 5^- .

[&] Band(C): Side band based on (10^+) .

 $\gamma(^{114}\text{Cd})$

E γ	E _i (level)	J π _i	E _f	J π _f	E γ	E _i (level)	J π _i	E _f	J π _f
436.3	2735.2	(7 ⁻)	2298.9	5 ⁻	725.4	1283.9	4 ⁺	558.50	2 ⁺
474.7	3143.5	10 ⁺	2668.8	8 ⁺	744.6	2735.2	(7 ⁻)	1990.6	6 ⁺
547.4	3282.6	(9 ⁻)	2735.2	(7 ⁻)	744.7	4027.3	(11 ⁻)	3282.6	(9 ⁻)
558.5	558.50	2 ⁺	0	0 ⁺	752.4	4256.4	(12 ⁺)	3504.0	(10 ⁺)
568.2	3711.7	12 ⁺	3143.5	10 ⁺	835.2	3504.0	(10 ⁺)	2668.8	8 ⁺
577.9	4605.2	(13 ⁻)	4027.3	(11 ⁻)	892.5	4604.2	(14 ⁺)	3711.7	12 ⁺
678.2	2668.8	8 ⁺	1990.6	6 ⁺	1015.0	2298.9	5 ⁻	1283.9	4 ⁺
706.7	1990.6	6 ⁺	1283.9	4 ⁺					

(HI,xn γ) 2000Bu06Level Scheme

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