

(HI,xnγ) 1995HaZZ,1993Ar05,1990DuZW

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

1990DuZW: ²³²Th(¹⁸O,xnγ). Measured prompt γ-rays emitted by fission fragments from ²⁴⁶Cf fissioning system.

1993Ar05, 1995HaZZ: ²⁵²Cf(SF). Measured prompt γ-rays emitted by fission fragments.

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

¹¹⁴Pd Levels

E(level)	Jπ [†]	E(level)	Jπ [†]	E(level)	Jπ [†]	E(level)	Jπ [†]
0.0 [‡]	0 ⁺	1630.9 [@] 5	(5 ⁺)	2859.6 [‡] 7	10 ⁺	4146.9 [‡] 9	14 ⁺
332.7 [‡] 3	2 ⁺	1984.2 [@] 6	(6 ⁺)	2906.2 [@] 8	(9 ⁺)	4472.7 [#] 8	(13 ⁻)
694.8 [@] 3	(2 ⁺)	2183.6 [#] 6	(5 ⁻)	3104.6 [#] 6	(9 ⁻)	5011 [‡] 1	16 ⁺
852.3 [‡] 4	4 ⁺	2215.8 [‡] 6	8 ⁺	3338.3 [@] 12	(10 ⁺)	5256 [#] 1	(15 ⁻)
1012.1 [@] 4	(3 ⁺)	2290.5 [@] 6	(7 ⁺)	3442.8 [‡] 8	12 ⁺		
1320.1 [@] 4	(4 ⁺)	2598.8 [#] 6	(7 ⁻)	3504.4 [@] 9	(11 ⁺)		
1500.6 [‡] 6	6 ⁺	2655.2 [@] 12	(8 ⁺)	3737.9 [#] 7	(11 ⁻)		

[†] Based on band assignments.

[‡] Band(A): g.s. band.

[#] Band(B): negative parity band.

[@] Band(C): positive parity band.

γ(¹¹⁴Pd)

E _γ [†]	I _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	E _γ [†]	I _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π
159.8 4	[‡]	1012.1	(3 ⁺)	852.3 4 ⁺	659.6 4	4.2 5	2290.5	(7 ⁺)	1630.9	(5 ⁺)	
310.9 4	0.7 3	1630.9	(5 ⁺)	1320.1 (4 ⁺)	664.1 4	4.5 1	1984.2	(6 ⁺)	1320.1	(4 ⁺)	
317.2 4	14 2	1012.1	(3 ⁺)	694.8 (2 ⁺)	671 1	1.4 3	2655.2	(8 ⁺)	1984.2	(6 ⁺)	
332.6 4	100	332.7	2 ⁺	0.0 0 ⁺	679.4 4	9.5 15	1012.1	(3 ⁺)	332.7	2 ⁺	
362.1 4	19 2	694.8	(2 ⁺)	332.7 2 ⁺	683.1 4	0.4 2	3338.3	(10 ⁺)	2655.2	(8 ⁺)	
415.2 4	0.8 3	2598.8	(7 ⁻)	2183.6 (5 ⁻)	694.9 4	8.4 14	694.8	(2 ⁺)	0.0	0 ⁺	
467.8 4	0.8 3	1320.1	(4 ⁺)	852.3 4 ⁺	704.1 4	2.1 5	4146.9	14 ⁺	3442.8	12 ⁺	
505.8 4	2.4 5	3104.6	(9 ⁻)	2598.8 (7 ⁻)	715.1 4	13 2	2215.8	8 ⁺	1500.6	6 ⁺	
519.6 4	76 1	852.3	4 ⁺	332.7 2 ⁺	734.8 4	0.8 3	4472.7	(13 ⁻)	3737.9	(11 ⁻)	
583.2 4	6.0 10	3442.8	12 ⁺	2859.6 10 ⁺	778.5 4	0.5 2	1630.9	(5 ⁺)	852.3	4 ⁺	
598.2 4	2.4 5	3504.4	(11 ⁺)	2906.2 (9 ⁺)	783.1 4	0.4 2	5256	(15 ⁻)	4472.7	(13 ⁻)	
615.7 4	3.5 6	2906.2	(9 ⁺)	2290.5 (7 ⁺)	864.3 4	1.2 2	5011	16 ⁺	4146.9	14 ⁺	
618.7 4	18 3	1630.9	(5 ⁺)	1012.1 (3 ⁺)	878.3 4	0.3 1	3737.9	(11 ⁻)	2859.6	10 ⁺	
625.6 4	12 2	1320.1	(4 ⁺)	694.8 (2 ⁺)	888.7 4	1.4 4	3104.6	(9 ⁻)	2215.8	8 ⁺	
633.2 4	1.6 4	3737.9	(11 ⁻)	3104.6 (9 ⁻)	987.2 4	[‡]	1320.1	(4 ⁺)	332.7	2 ⁺	
643.9 4	11 2	2859.6	10 ⁺	2215.8 8 ⁺	1098.3 4	3.8 6	2598.8	(7 ⁻)	1500.6	6 ⁺	
648.4 4	35 2	1500.6	6 ⁺	852.3 4 ⁺	1331.2 4	3.1 5	2183.6	(5 ⁻)	852.3	4 ⁺	

[†] From 1995HaZZ. The three works agree for the g.s. band up to the 12⁺.

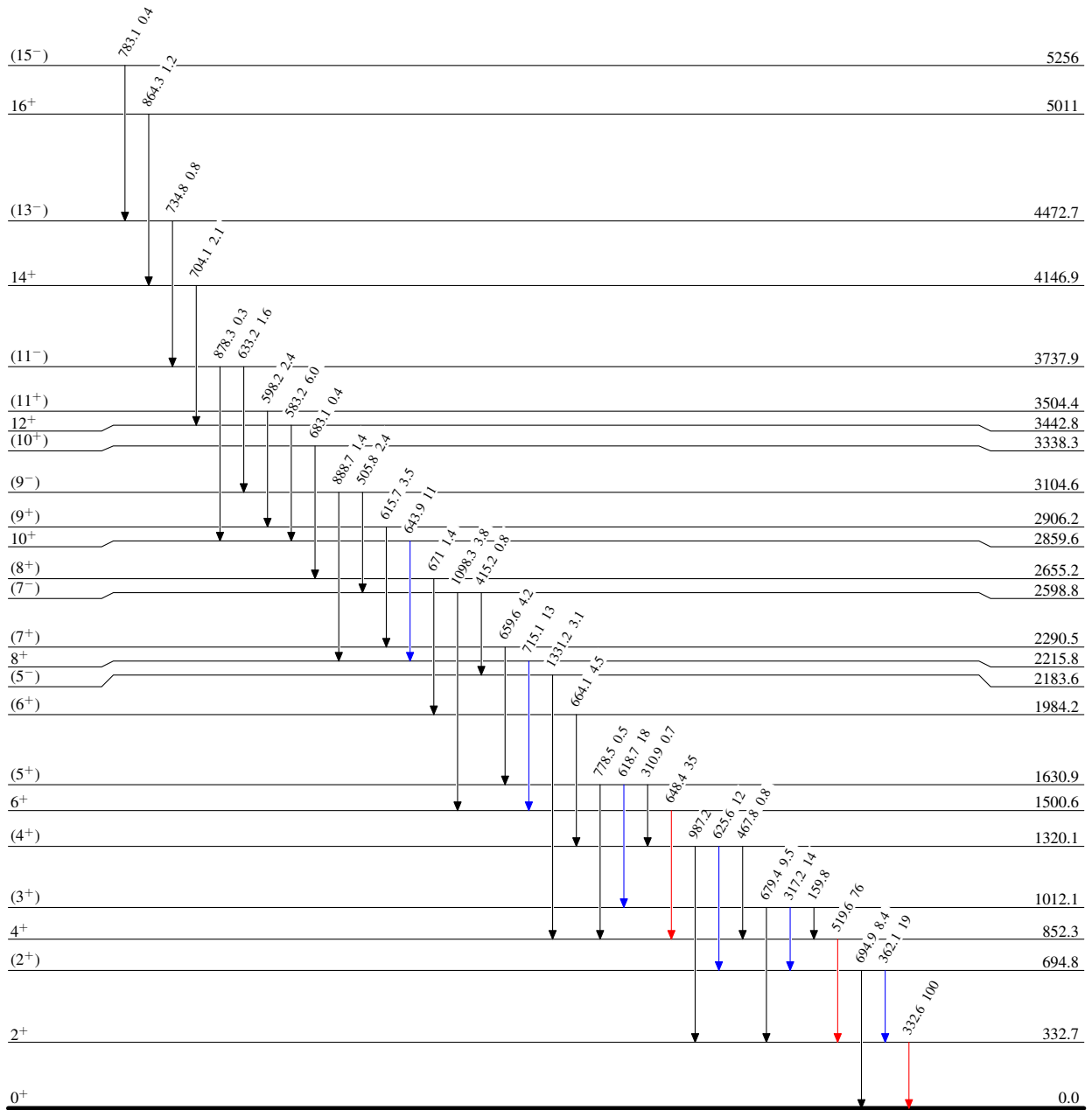
[‡] Weak.

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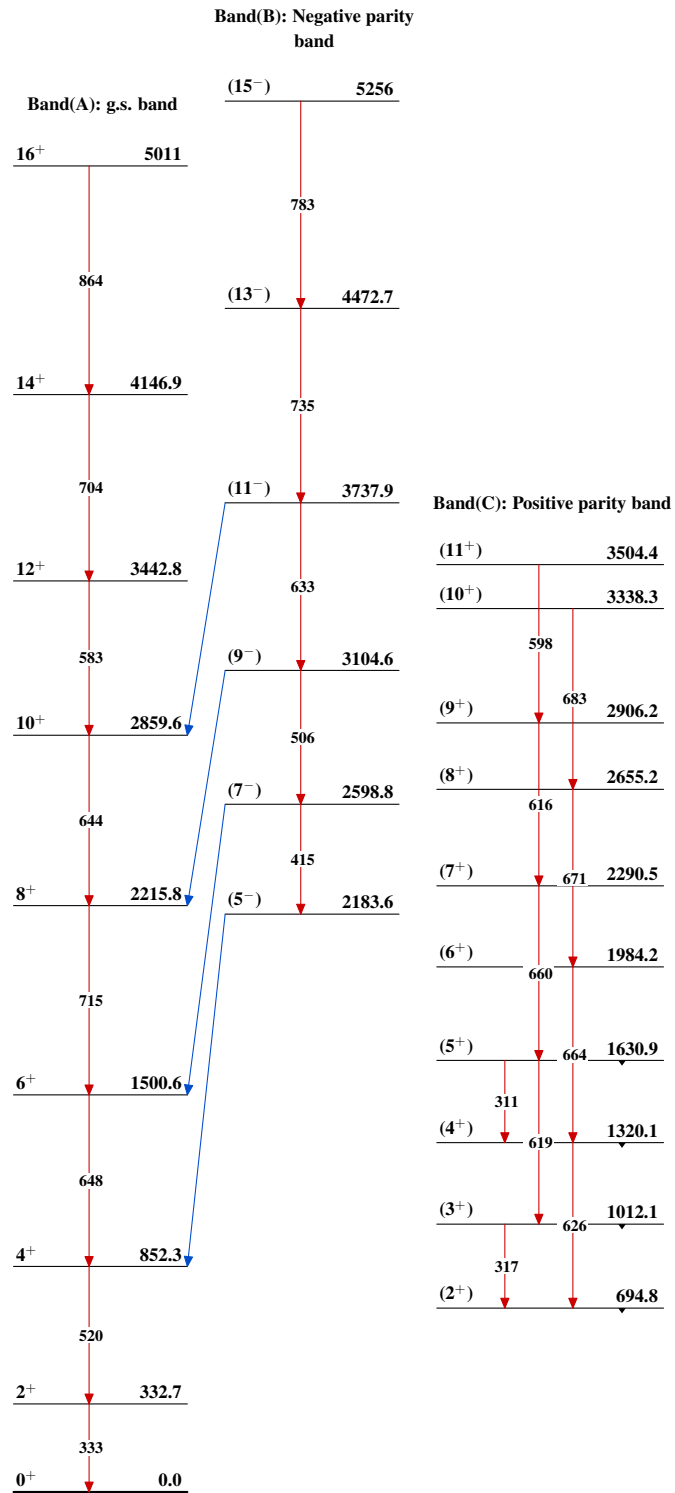
Level Scheme
Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



$^{114}_{46}\text{Pd}_{68}$

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