

$^{168}\text{Er}(^{24}\text{Mg},4n\gamma)$ **1983Ha15**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley		NDS 150, 1 (2018)	1-Feb-2018

1983Ha15: E=125 MeV. Measured E_γ , I_γ , $\gamma\gamma$, $\gamma(t)$ using five Ge(Li) (not Compton-suppressed) detectors and single planar Ge detector.

^{188}Hg Levels

E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	$T_{1/2}$
0.0 [#]	0 ⁺	1909.83 ^{&} 17	5 ⁻	2724.5 [#] 4	12 ⁺	134 ns 15
412.80 [#] 10	2 ⁺	1969.80 [@] 19	8 ⁺	3069.0 [@] 5	12 ⁺	
880.7 [@] 3	2 ⁺	2201.47 ^{&} 19	7 ⁻	3161.9 [#] 4	14 ⁺	
1004.89 [#] 14	4 ⁺	2422.9 [#] 3	8 ⁺	3687.9 [@] 5	14 ⁺	
1207.86 [@] 20	4 ⁺	2470.77 ^{&} 21	9 ⁻	3821.6 [#] 4	16 ⁺	
1509.22 [@] 16	6 ⁺	2490.98 [@] 21	10 ⁺	4582.0 [#] 5	18 ⁺	
1777.26 [#] 22	6 ⁺	2662.91 [#] 24	10 ⁺	5306.0 [#] 5	20 ⁺	

[†] From a least-squares fit to E_γ .

[‡] From **1983Ha15**, based on previous observations.

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

[@] Band(B): $K^\pi=0^+$ band.

[&] Band(C): negative-parity band ($\alpha=1$).

$\gamma(^{188}\text{Hg})$

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
172.1 3		2662.91	10 ⁺	2490.98	10 ⁺	578.6 5	18 4	3069.0	12 ⁺	2490.98	10 ⁺
^x 184.2 4	8 2					592.1 1	76 8	1004.89	4 ⁺	412.80	2 ⁺
233.3 3	≤11	2724.5	12 ⁺	2490.98	10 ⁺	619.4 5	17 3	3687.9	14 ⁺	3069.0	12 ⁺
239.7 4		2662.91	10 ⁺	2422.9	8 ⁺	^x 640.3 4	8 2				
269.3 1	28 3	2470.77	9 ⁻	2201.47	7 ⁻	645.6 2	13 3	2422.9	8 ⁺	1777.26	6 ⁺
291.6 1	11 2	2201.47	7 ⁻	1909.83	5 ⁻	659.7 1	17 3	3821.6	16 ⁺	3161.9	14 ⁺
^x 297.3 3	14 3					^x 670.5 2	12 2				
301.3 2	6 2	1509.22	6 ⁺	1207.86	4 ⁺	692.6 3	19 4	2201.47	7 ⁻	1509.22	6 ⁺
327.1 2	7 2	1207.86	4 ⁺	880.7	2 ⁺	693.1 2		2662.91	10 ⁺	1969.80	8 ⁺
412.8 1	100 10	412.80	2 ⁺	0.0	0 ⁺	724.0 2	9 3	5306.0	20 ⁺	4582.0	18 ⁺
424.2 3	≤53 [‡]	2201.47	7 ⁻	1777.26	6 ⁺	^x 732.7 2	7 2				
437.4 1	28 3	3161.9	14 ⁺	2724.5	12 ⁺	760.4 2	7 2	4582.0	18 ⁺	3821.6	16 ⁺
460.6 1	41 4	1969.80	8 ⁺	1509.22	6 ⁺	772.3 2	18 4	1777.26	6 ⁺	1004.89	4 ⁺
467.6 5	25 [‡] 3	880.7	2 ⁺	412.80	2 ⁺	795.0 3	6 2	1207.86	4 ⁺	412.80	2 ⁺
^x 479.1 3	16 3					881		880.7	2 ⁺	0.0	0 ⁺
504.4 1	47 5	1509.22	6 ⁺	1004.89	4 ⁺	904.9 1	15 3	1909.83	5 ⁻	1004.89	4 ⁺
521.2 1	46 5	2490.98	10 ⁺	1969.80	8 ⁺	962.8 5	3 1	3687.9	14 ⁺	2724.5	12 ⁺
^x 540.5 2	22 2										

[†] Uncertainty=10% to 30% (**1983Ha15**). The evaluator assigns as follows: 10% for $I_\gamma>20$, 20% for $I_\gamma=10-20$, 30% for $I_\gamma<10$.

[‡] Probably an unresolved doublet.

^x γ ray not placed in level scheme.

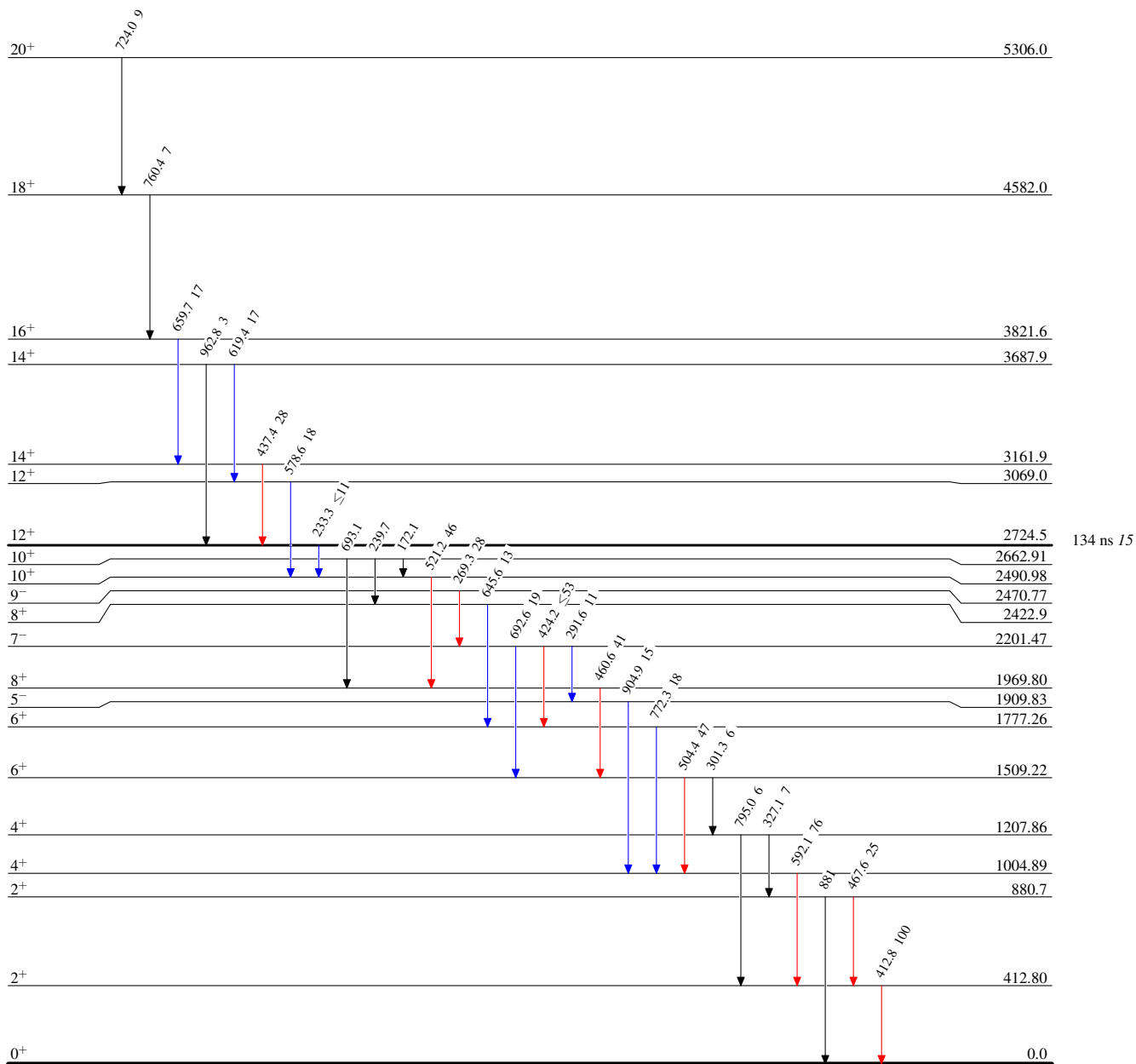
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Level Scheme

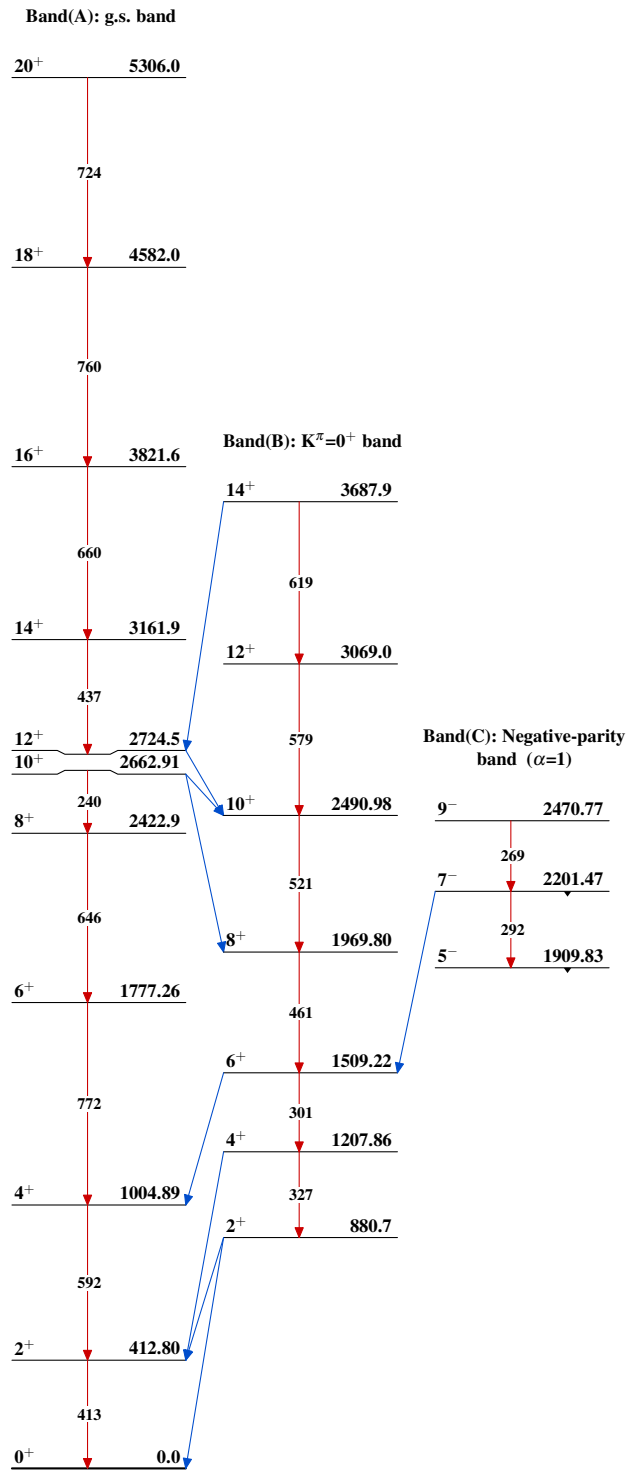
Intensities: Relative I_γ

Legend

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



$^{188}_{80}\text{Hg}_{108}$

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