

$^{192}\text{Os}(^9\text{Be},5n\gamma)$ 1993Ce04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108, 1093 (2007)	1-Jan-2006

E=65 MeV. HERA detector array, measured γ , $\gamma\gamma$ -coin, directional correlation orientation (DCO) ratios.

 ^{196}Hg Levels

E(level) [‡]	J ^π #	E(level) [‡]	J ^π #	E(level) [‡]	J ^π #	E(level) [‡]	J ^π #
0.0	0 ⁺	6499.2 5	(24 ⁺)	6959.0 [†] 15	(25 ⁺)	7793.7 [†] 17	(28 ⁺)
5038.2 5	(21 ⁻)	6600.4 [†] 14	(23 ⁺)	7137.4 [†] 15	(26 ⁺)	8254.7 [†] 17	(29 ⁺)
6443.2 [†] 11	(22 ⁺)	6702.4 [†] 14	(24 ⁺)	7505.6 [†] 16	(27 ⁺)	8652.3 [†] 18	(30 ⁺)

[†] Band(A): a regular rotational-like $\Delta J=1$ oblate band with significantly Lower B(M1)/B(E2) branching ratios. The decay out of the band proceeds mainly into the J^π=19⁻ and 21⁻ states, but it is fragmented into several decay paths. 1993Ce04 tentatively assign a 1405-keV transition (which only carries about 20% of the total band intensity) as a linking transition from the lowest observed level in the band to J^π=21⁻ state. The band is strongly populated with an intensity of approximately 19% of 426 γ in this nucleus. The 509 γ and 1007 γ are tentatively assigned to decay out of the band.

[‡] From Adopted Levels.

Assigned positive parity tentatively based on a theoretical Configuration=((π h_{9/2})⁺²(π h_{11/2})⁻²(ν i_{13/2})⁻²) assignment. The tentative J=22 of the lowest observed state is in agreement with the assigned configuration as mentioned.

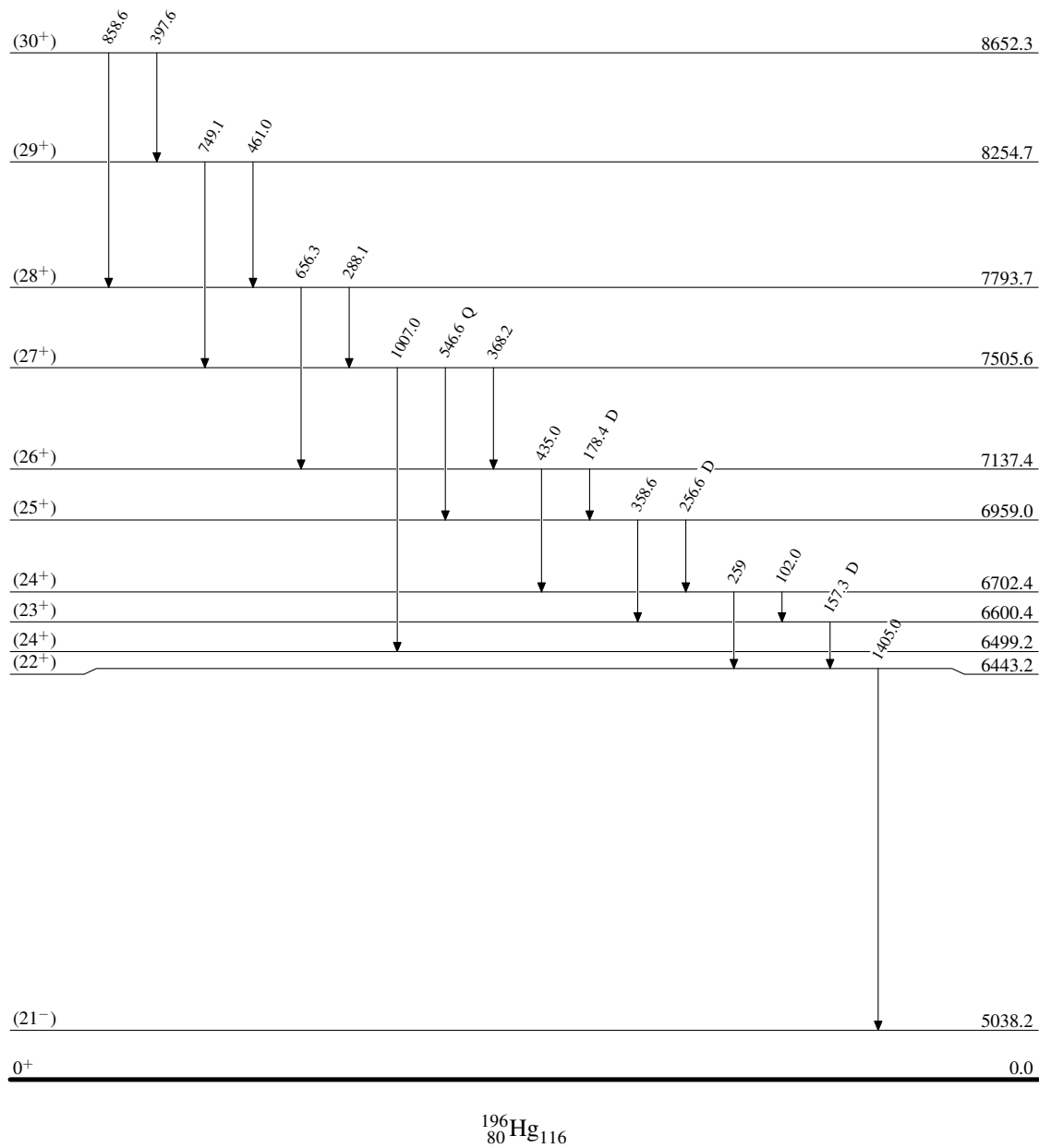
 $\gamma(^{196}\text{Hg})$

E _{γ}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult.	Comments
102.0	6702.4	(24 ⁺)	6600.4	(23 ⁺)		
157.3	6600.4	(23 ⁺)	6443.2	(22 ⁺)	D	Mult.: stretched dipole transition, DCO ratio R=0.50 15.
178.4	7137.4	(26 ⁺)	6959.0	(25 ⁺)	D	Mult.: stretched dipole transition, DCO ratio R=0.50 15.
256.6	6959.0	(25 ⁺)	6702.4	(24 ⁺)	D	Mult.: stretched dipole transition, DCO ratio R=0.50 15.
259	6702.4	(24 ⁺)	6443.2	(22 ⁺)		
288.1	7793.7	(28 ⁺)	7505.6	(27 ⁺)		
358.6	6959.0	(25 ⁺)	6600.4	(23 ⁺)		
368.2	7505.6	(27 ⁺)	7137.4	(26 ⁺)		
397.6	8652.3	(30 ⁺)	8254.7	(29 ⁺)		
435.0	7137.4	(26 ⁺)	6702.4	(24 ⁺)		
461.0	8254.7	(29 ⁺)	7793.7	(28 ⁺)		
^x 509.0						
546.6	7505.6	(27 ⁺)	6959.0	(25 ⁺)	Q	Mult.: stretched quadrupole transition, DCO ratio R=1.16 14.
656.3	7793.7	(28 ⁺)	7137.4	(26 ⁺)		
749.1	8254.7	(29 ⁺)	7505.6	(27 ⁺)		
858.6	8652.3	(30 ⁺)	7793.7	(28 ⁺)		
1007.0	7505.6	(27 ⁺)	6499.2	(24 ⁺)		Placed on level scheme by evaluator.
1405.0	6443.2	(22 ⁺)	5038.2	(21 ⁻)		Placed on level scheme by evaluator.

^x γ ray not placed in level scheme.

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Level Scheme



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