

(HI,xn γ) 1996Po07,1990DuZW

Type	History		
	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2008

1996Po07: $^{96}\text{Zr}(^{18}\text{O},\text{xn}\gamma)$. Measured with 8 π Spectrometer (20 Compton suppressed detectors and 70 BGO).

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).

1997Re08: $^{110}\text{Pd}(^{86}\text{Kr},\text{xn}\gamma)$ E=395 MeV. Their data are consistent with those of **1996Po07**, only they assign a new level at 2842 keV, which decays via a 1071 γ to the 6^+ level.

 ^{108}Pd Levels

E(level)	J^π [†]	E(level)	J^π [†]	E(level)	J^π [†]	E(level)	J^π [†]
0.0 [‡]	0^+	2397.5 5	(8^+)	3350.5 [#] 4	10^+	4776.1 [@] 9	(13^-)
433.90 [‡] 10	2^+	2548.41 [‡] 20	8^+	3797.31 [‡] 25	12^+	4976.7 [#] 12	(14^+)
1048.10 [‡] 15	4^+	2762.2 [@] 4	$7^{(-)}$	3962.8 [@] 8	(11^-)	5688.7 [‡] 9	16^+
1771.20 [‡] 18	6^+	3256.41 [‡] 23	10^+	4158.3 [#] 10	(12^+)	6821.7 [‡] 9	18^+
2324.8 [@] 8	5^-	3280.6 [@] 4	$9^{(-)}$	4639.8 [‡] 5	14^+		

[†] From gated $\gamma(\theta)$ and proposed band structure with $J^\pi(2325)=5^-$ taken as known.

[‡] Band(A): g.s band.

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

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

 $\gamma(^{108}\text{Pd})$

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
433.9 1		433.90	2^+	0.0	0^+	802.1 3	24 4	3350.5	10^+	2548.41	8^+
437.4 10	15 2	2762.2	$7^{(-)}$	2324.8	5^-	807.8 9	18 4	4158.3	(12^+)	3350.5	10^+
518.4 2	29 3	3280.6	$9^{(-)}$	2762.2	$7^{(-)}$	813.3 4	12 5	4776.1	(13^-)	3962.8	(11^-)
540.9 1	31 3	3797.31	12^+	3256.41	10^+	818.4 7	<5	4976.7	(14^+)	4158.3	(12^+)
614.2 1	100 5	1048.10	4^+	433.90	2^+	842.5 4	29 3	4639.8	14^+	3797.31	12^+
626.3 4	23 3	2397.5	(8^+)	1771.20	6^+	991.0 3	27 3	2762.2	$7^{(-)}$	1771.20	6^+
682.2 6	25 3	3962.8	(11^-)	3280.6	$9^{(-)}$	1048.9 7	19 3	5688.7	16^+	4639.8	14^+
708.0 1	34 4	3256.41	10^+	2548.41	8^+	1133.0 2	12 3	6821.7	18^+	5688.7	16^+
723.1 1	85 5	1771.20	6^+	1048.10	4^+	1276.7 10	13 3	2324.8	5^-	1048.10	4^+
777.2 1	55 4	2548.41	8^+	1771.20	6^+						

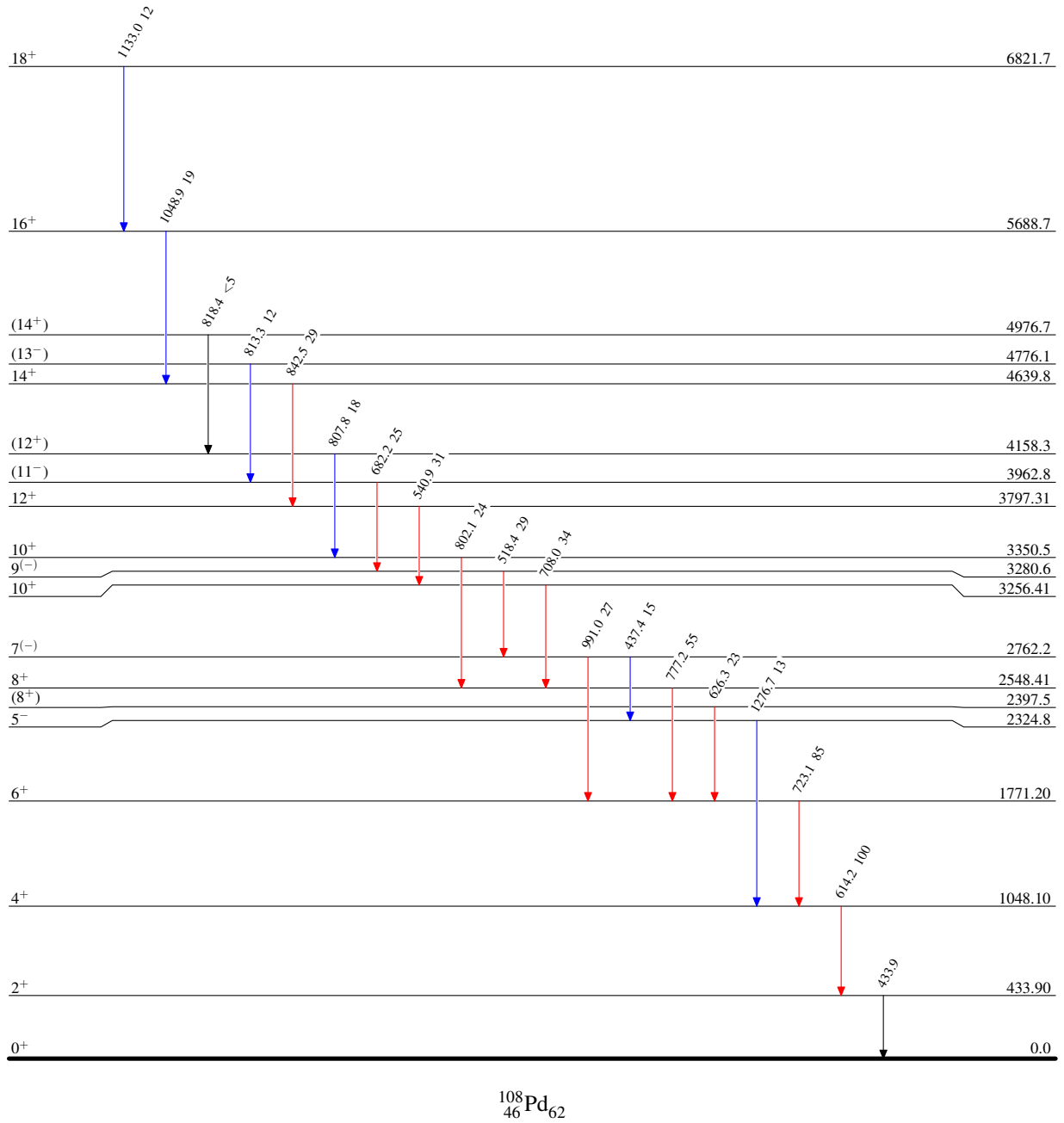
[†] From **1996Po07**.

(HI,xn γ) 1996Po07,1990DuZWLevel Scheme

Intensities: Type not specified

Legend

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

 $^{108}_{46}\text{Pd}_{62}$

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