

$^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma)$ 2003Po11

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev	NDS 113, 1315 (2012)		1-Aug-2011

A 20 mg/cm² ^{208}Pb target was used. The beam at E=85 MeV was provided by the Vivitron accelerator of IReS. Euroball IV array comprised of 15 Cluster Ge detectors at backward hemisphere with respect to the beam, 26 Clover Ge detectors at 90⁰, and 30 tapered single-crystal Ge detectors located at forward angles was used. $\approx 7 \times 10^8$ triple- γ and higher coincidence events were recorded. Measured: $E\gamma$, $I\gamma$, $\gamma\gamma$, and $\gamma\gamma\gamma$.

The level scheme differs from the adopted one. Specifically, the 58 γ -65 γ cascade is reversed compared to the Adopted Levels.

 ^{110}Rh Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0+x	(5 ⁺)	28.0 s 13	Additional information 1. $T_{1/2}$: From Adopted Levels.
158.80+x 20	(6 ⁻)		
216.5+x 5	(7 ⁻)		
281.2+x [‡] 6	(8 ⁻)		
467.5+x [#] 7	(9 ⁻)		
766.8+x [‡] 7	(10 ⁻)		
1024.5+x [#] 7	(11 ⁻)		
1386.6+x [‡] 7	(12 ⁻)		
1761.6+x [#] 8	(13 ⁻)		
2159.2+x [‡] 9	(14 ⁻)		

[†] From 2003Po11.

[‡] Band(A): $\pi g_{9/2} \otimes \nu h_{11/2}$, $\alpha=0$.

[#] Band(a): $\pi g_{9/2} \otimes \nu h_{11/2}$, $\alpha=1$.

 $\gamma(^{110}\text{Rh})$

E_γ [†]	I_γ [†]	$E_i(\text{level})$	J^π_i	E_f	J^π_f	E_γ [†]	I_γ [†]	$E_i(\text{level})$	J^π_i	E_f	J^π_f
57.7 4		216.5+x	(7 ⁻)	158.80+x	(6 ⁻)	374.8 4	10 3	1761.6+x	(13 ⁻)	1386.6+x	(12 ⁻)
64.7 4		281.2+x	(8 ⁻)	216.5+x	(7 ⁻)	397.6 5	4 2	2159.2+x	(14 ⁻)	1761.6+x	(13 ⁻)
158.8 2		158.80+x	(6 ⁻)	0+x	(5 ⁺)	486.3 7	7 2	766.8+x	(10 ⁻)	281.2+x	(8 ⁻)
186.2 2	100 10	467.5+x	(9 ⁻)	281.2+x	(8 ⁻)	557.4 7	18 4	1024.5+x	(11 ⁻)	467.5+x	(9 ⁻)
257.6 2	36 5	1024.5+x	(11 ⁻)	766.8+x	(10 ⁻)	619.8 5	13 3	1386.6+x	(12 ⁻)	766.8+x	(10 ⁻)
299.3 2	60 6	766.8+x	(10 ⁻)	467.5+x	(9 ⁻)	737.3 7	8 2	1761.6+x	(13 ⁻)	1024.5+x	(11 ⁻)
362.1 3	24 4	1386.6+x	(12 ⁻)	1024.5+x	(11 ⁻)	772.8 7	4 2	2159.2+x	(14 ⁻)	1386.6+x	(12 ⁻)

[†] From 2003Po11.

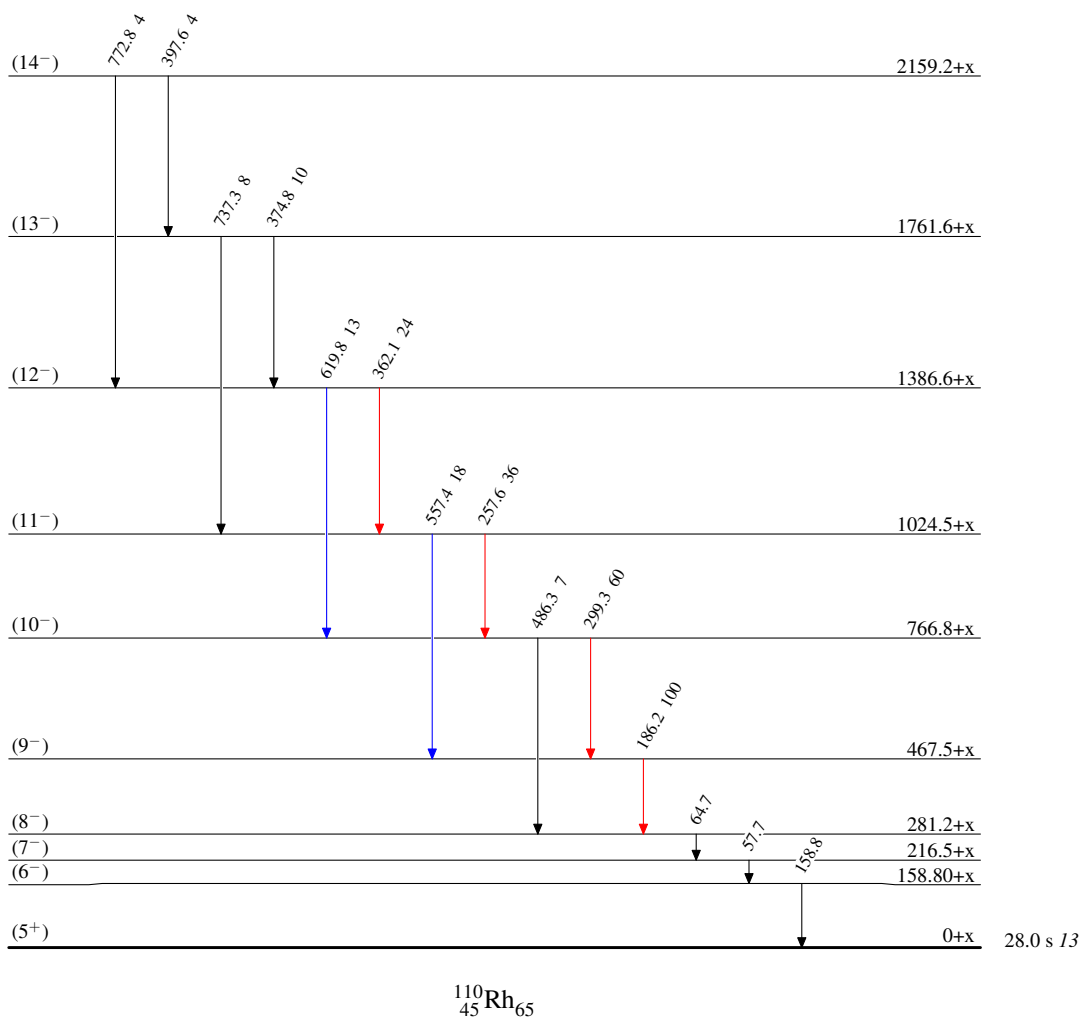
$^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma)$ 2003Po11

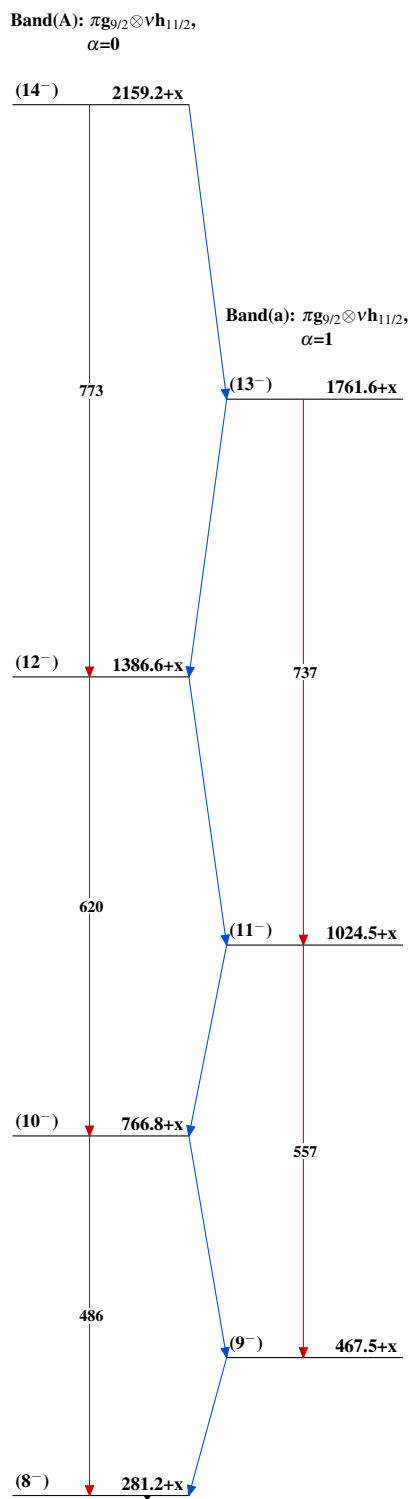
Level Scheme

Intensities: Relative I_γ

Legend

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



$^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma) \quad 2003\text{Po11}$

 $^{110}_{45}\text{Rh}_{65}$