

$^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma)$ **2013As07**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. A. McCutchan and A. A. Sonzogni		NDS 115, 135 (2014)	1-Nov-2013

$E(^{18}\text{O})=85$ MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$, $\gamma\gamma(\theta)$ using Euroball array consisting of 15 cluster Ge detectors, 26 clover Ge detectors, 30 tapered single-crystal Ge detectors. Cross coincidences with γ -ray transitions in complementary fragments used as a check of the assignment of transitions to ^{88}Kr .

^{88}Kr Levels

$E(\text{level})^\dagger$	J^π^\ddagger	$T_{1/2}^\#$	$E(\text{level})^\dagger$	J^π^\ddagger	$T_{1/2}^\#$	$E(\text{level})^\dagger$	J^π^\ddagger	$E(\text{level})^\dagger$
0.0	0^+		3160.5 5	(5)		4342.1 6	(8)	6108.2 13
775.1 2	2^+		3166.7 5	(6)		4478.2 8		6233.0 8
1643.5 3	4^+		3294.3 5	(5,6)	≤ 1 ps	4857.0 6		7490.1 11
2103.2 4	(4^+)		3903.8 6			5192.5 7	(9)	7969.0 12
2854.5 5	(5)	≤ 1 ps	3920.4 5	(7)		5856.2 8		

† From a least-squares fit to $E\gamma$, by evaluators.

‡ From the Adopted Levels.

$^\#$ Estimated by **2013As07** based on observed Doppler broadening of the 440- and 751-keV γ rays.

$\gamma(^{88}\text{Kr})$

E_γ	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ‡	Comments
421.6 4	3.0 15	4342.1	(8)	3920.4	(7)		
439.8 3	15 4	3294.3	(5,6)	2854.5	(5)	D	
459.7 2	34 7	2103.2	(4^+)	1643.5	4^+	D	Mult.: stretched Q or $\Delta J=0$, D from $\gamma\gamma(\theta)$; the former is excluded by considering the decay of the 1328 γ .
478.9 4	1.7 8	7969.0		7490.1			
574.4 4	5 2	4478.2		3903.8			
609.5 4	6 2	3903.8		3294.3	(5,6)		
751.2 3	17 4	2854.5	(5)	2103.2	(4^+)	D	
753.7 3	13 3	3920.4	(7)	3166.7	(6)	D	
759.9 3	20 5	3920.4	(7)	3160.5	(5)	Q	
775.1 2	100	775.1	2^+	0.0	0^+		
850 1	1.5 7	5192.5	(9)	4342.1	(8)		
868.4 2	90 13	1643.5	4^+	775.1	2^+		
936.6 4	9 3	4857.0		3920.4	(7)		I_γ : 9.0 3 given in 2013As07 is likely a typo given the overall uncertainties assigned to comparable transitions.
999.2 4	4 2	5856.2		4857.0			
1040.5 5	5 2	6233.0		5192.5	(9)		
1175.5 7	2 1	4342.1	(8)	3166.7	(6)		
1191.2 5	6 2	3294.3	(5,6)	2103.2	(4^+)		
1257.1 7	2.5 12	7490.1		6233.0			
1272.1 5	10 3	5192.5	(9)	3920.4	(7)		
1328.1 5	7 2	2103.2	(4^+)	775.1	2^+		
1517.0 4	21 4	3160.5	(5)	1643.5	4^+	D	
1523.2 4	17 4	3166.7	(6)	1643.5	4^+	Q	
1630 1	1.5 7	6108.2		4478.2			

† Relative intensity normalized to $I_\gamma(775\gamma)=100$.

‡ From $\gamma\gamma(\theta)$.

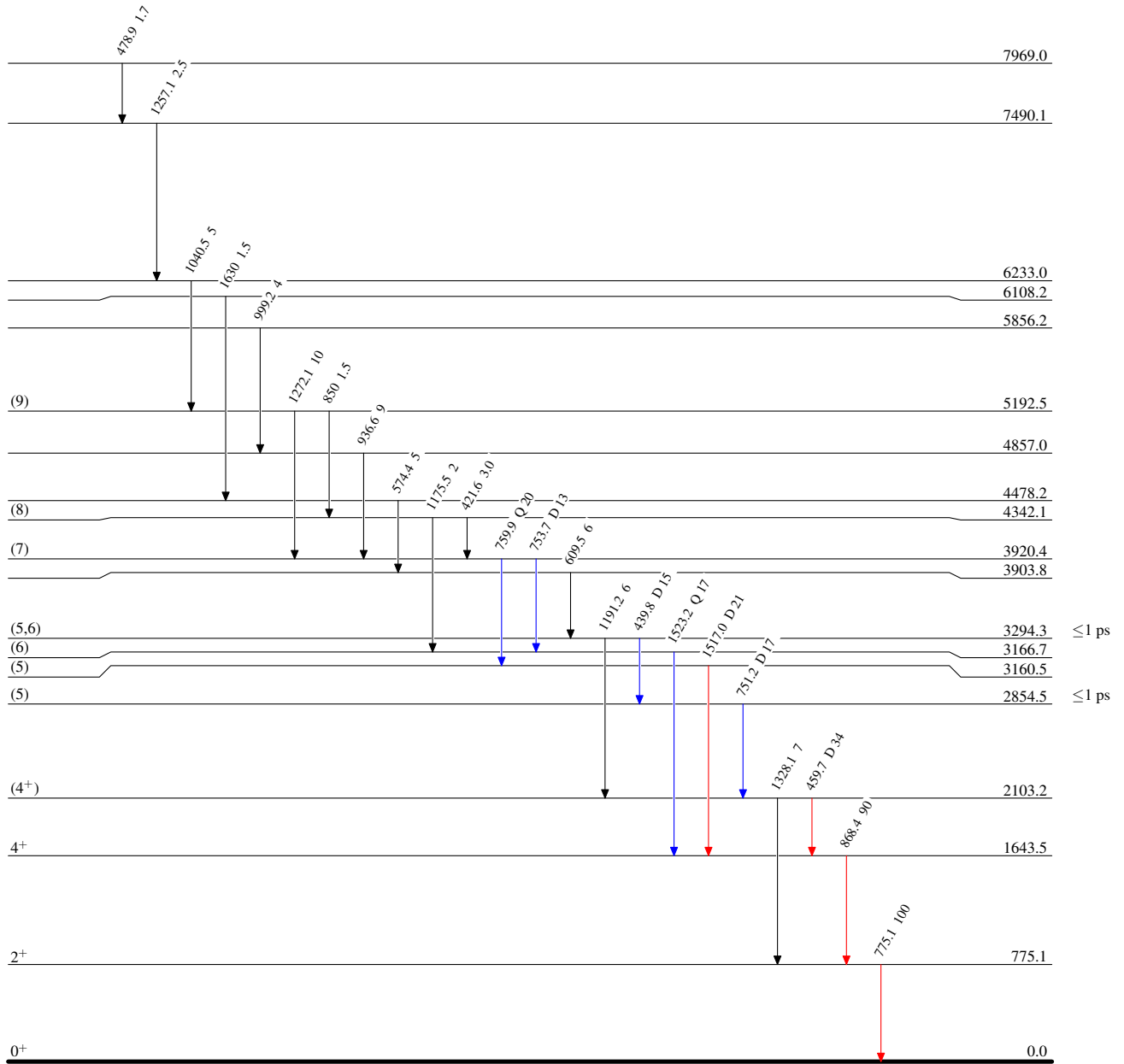
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Level Scheme

Intensities: Relative I_γ

Legend

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



$^{88}_{36}\text{Kr}_{52}$