

$^{100}\text{Mo}(^{18}\text{O},\text{p}2\text{n})$  1997Na24

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

$^{100}\text{Mo}(^{18}\text{O},\text{p}2\text{n})$  E=65 MeV. TASSC facility at Chalk River.

The target consisted of two self-supporting foils.

$\gamma$  coincidence data were acquired by means of a spectrometer which comprises 20 Compton-suppressed HPGe detectors and a

70-element BGO inner ball. Channel selection was provided by gating on charged particles detected with Half-miniball comprised of 44 CsI(Tl) detectors.

 $^{115}\text{In}$  Levels

E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$
0.0 <sup>‡</sup>	9/2 <sup>+</sup>	2393.0 <sup>‡</sup> 4	(19/2 <sup>+</sup> )	3038.91 <sup>#</sup> 25	(23/2 <sup>-</sup> )	4048.5 3	(27/2 <sup>-</sup> )
1290.61 <sup>‡</sup> 10	13/2 <sup>+</sup>	2529.7 <sup>‡</sup> 4	(21/2 <sup>+</sup> )	3384.6 <sup>#</sup> 3	(25/2 <sup>-</sup> )	4245.3 <sup>#</sup> 3	(29/2 <sup>-</sup> )
2136.81 <sup>#</sup> 15	(15/2 <sup>-</sup> )	2539.11 <sup>#</sup> 20	(19/2 <sup>-</sup> )	3475.7 <sup>‡</sup> 4	(25/2 <sup>+</sup> )	4698.6 <sup>‡</sup> 4	(29/2 <sup>+</sup> )
2283.01 <sup>#</sup> 18	(17/2 <sup>-</sup> )	2746.31 <sup>#</sup> 23	(21/2 <sup>-</sup> )	3822.1 <sup>#</sup> 3	(27/2 <sup>-</sup> )	4715.6 <sup>#</sup> 5	(31/2 <sup>-</sup> )
2309.71 <sup>‡</sup> 15	(17/2 <sup>+</sup> )	2905.5 <sup>‡</sup> 4	(23/2 <sup>+</sup> )	4035.5 <sup>‡</sup> 4	(27/2 <sup>+</sup> )		

<sup>†</sup> As given by the authors based on systematics and  $\gamma$  multiplicities.

<sup>‡</sup> Band(A): Positive-parity band.

<sup>#</sup> Band(B): Negative-parity band.

 $\gamma(^{115}\text{In})$ 

$E_{\gamma}$	$I_{\gamma}$	$E_i(\text{level})$	$J_i^{\pi}$	$E_f$	$J_f^{\pi}$	Mult. <sup>†</sup>	Comments
83.3 3	33.5 10	2393.0	(19/2 <sup>+</sup> )	2309.71	(17/2 <sup>+</sup> )	(M1,E2)	Mult.: DCO=0.895.
136.7 1	40 4	2529.7	(21/2 <sup>+</sup> )	2393.0	(19/2 <sup>+</sup> )	(M1,E2)	Mult.: DCO=0.910.
146.2 1	20 5	2283.01	(17/2 <sup>-</sup> )	2136.81	(15/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.833.
207.2 1	36.9 14	2746.31	(21/2 <sup>-</sup> )	2539.11	(19/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.813.
256.1 1	70.9 24	2539.11	(19/2 <sup>-</sup> )	2283.01	(17/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.835.
292.6 1	38.5 12	3038.91	(23/2 <sup>-</sup> )	2746.31	(21/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.800.
345.7 1	21.4 9	3384.6	(25/2 <sup>-</sup> )	3038.91	(23/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.922.
375.8 1	26.5 15	2905.5	(23/2 <sup>+</sup> )	2529.7	(21/2 <sup>+</sup> )	(M1,E2)	Mult.: DCO=0.931.
423.2 1	5.2 6	4245.3	(29/2 <sup>-</sup> )	3822.1	(27/2 <sup>-</sup> )		
437.5 1	7.5 7	3822.1	(27/2 <sup>-</sup> )	3384.6	(25/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.908.
470.3 3	3.1 5	4715.6	(31/2 <sup>-</sup> )	4245.3	(29/2 <sup>-</sup> )		
559.8 1	26.6 28	4035.5	(27/2 <sup>+</sup> )	3475.7	(25/2 <sup>+</sup> )	(M1,E2)	Mult.: DCO=0.992.
570.2 1	26.2 15	3475.7	(25/2 <sup>+</sup> )	2905.5	(23/2 <sup>+</sup> )	(M1,E2)	Mult.: DCO=0.971.
663.1 1	15.1 13	4698.6	(29/2 <sup>+</sup> )	4035.5	(27/2 <sup>+</sup> )		
663.9 1	19.6 10	4048.5	(27/2 <sup>-</sup> )	3384.6	(25/2 <sup>-</sup> )	(M1,E2)	Mult.: DCO=0.773.
846.2 1	54 7	2136.81	(15/2 <sup>-</sup> )	1290.61	13/2 <sup>+</sup>	(E1)	Mult.: DCO=0.762.
1019.1 1	43 6	2309.71	(17/2 <sup>+</sup> )	1290.61	13/2 <sup>+</sup>	(E2)	Mult.: DCO=1.216.
1290.6 1	100.0	1290.61	13/2 <sup>+</sup>	0.0	9/2 <sup>+</sup>	(E2)	Mult.: DCO=1.356.



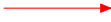
<sup>†</sup> From DCO ratios.

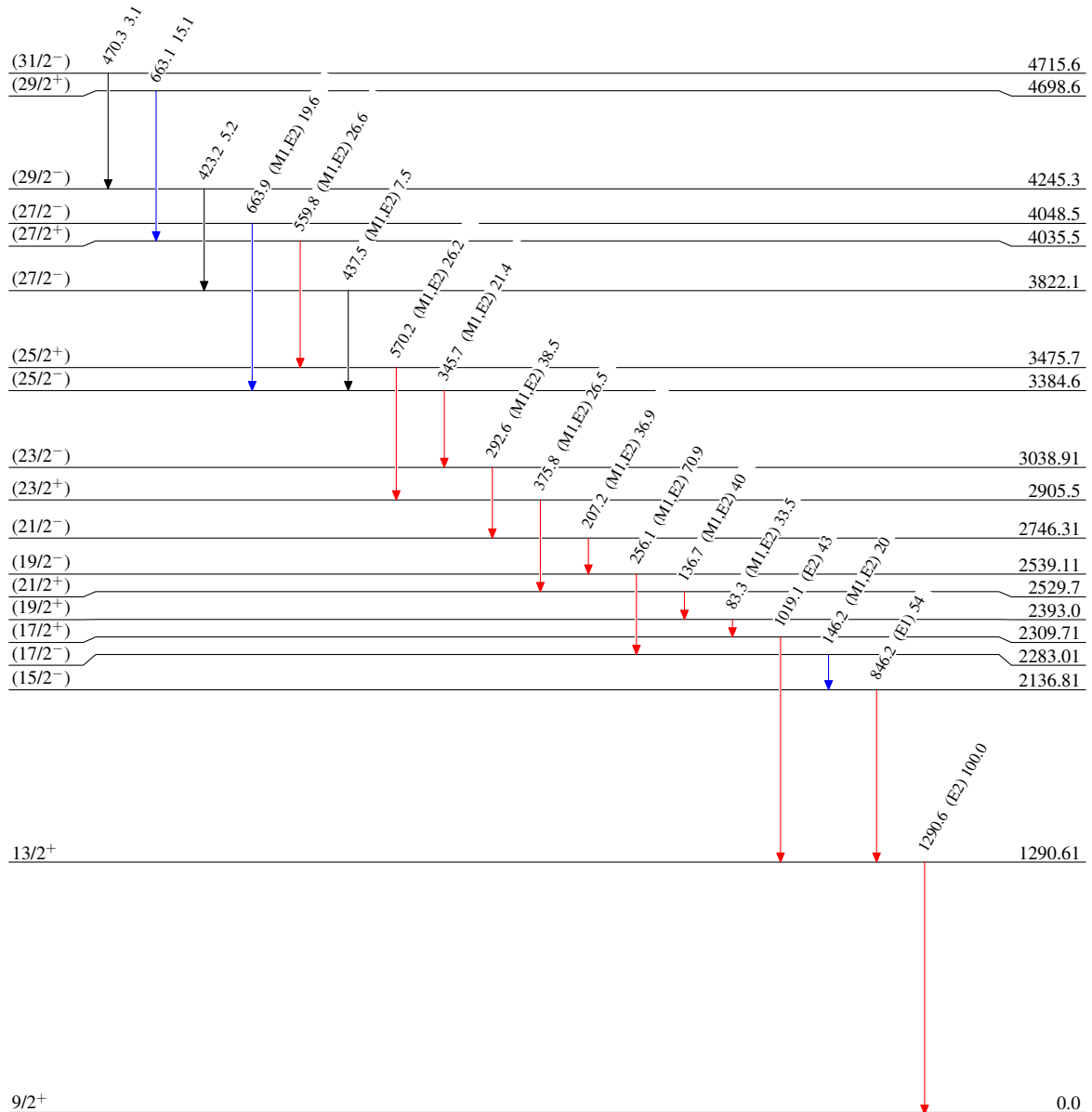
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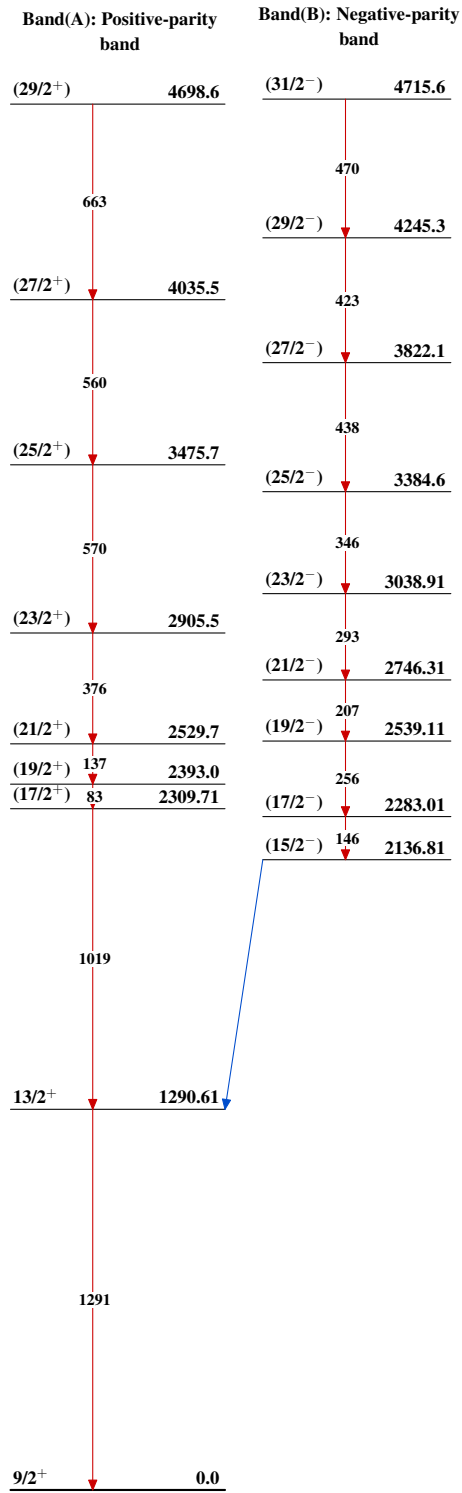
## Level Scheme

Intensities: Type not specified

## Legend

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



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