#### <sup>95</sup>Mo( $n,\gamma$ ) E=thermal 1970He27

History								
Туре	Author	Citation	Literature Cutoff Date					
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 109,2501 (2008)	1-Apr-2008					

<sup>96</sup>Mo Levels

 $J(^{95}Mo) = 5/2^+$ .

Measured: E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ , and  $\gamma\gamma(\theta)$  (1970He27); circular pol (1970Ei03,1971DjZZ).

2007ChZX provides a comprehensive list of gamma rays and their corresponding cross sections for materials following neutron capture at thermal energies.

E(level) <sup>†</sup>	Jπ‡	E(level) <sup>†</sup>	$J^{\pi \ddagger}$	E(level) <sup>†</sup>	Jπ‡	E(level) <sup>†</sup>	J <sup>π‡</sup>
0	$0^{+}$	2234.58 10	3-	2734.52 12	4+	3133.75 16	
778.27 8	2+	2426.23 14	$2^{+}$	2754.46 19	6+	3178.4 <i>3</i>	3-
1147.93 <i>13</i>	$0^{+}$	2438.35 11	5+	2786.85 19		3186.77 21	4+
1497.81 8	2+	2440.61 15	6+	2790.28 13		3202.78 14	
1625.94 9	2+	2481.04 12	$(2^+,3)$	2818.43 16		3283.94 24	
1628.15 9	4+	2500.9 <i>3</i>	(1)	2975.16 12	5+	3334.95 20	
1869.56 9	4+	2540.44 12	$(3^{+})$	2986.91 20		3416.66 19	4+
1978.25 10	3+	2594.19 12	3+	3024.61 13	2+	3441.61 21	4+
2095.58 13	2+	2624.54 22	5+	3053.15 17	$(4^{+})$	3551.6 <i>3</i>	3
2219.34 10	4+	2700.01 14	$2^{+}$	3087.31 24		9154.15 <i>13</i>	2 <sup>+</sup> ,3 <sup>+</sup> #

 $^{\dagger}$  From least-squares fit to Ey.

<sup>±</sup> Adopted values.
<sup>#</sup> s wave n-capture state from 5/2<sup>+</sup> target.

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# $\gamma$ (<sup>96</sup>Mo)

No primary  $\gamma$  to g.s. was found (I $\gamma$ <0.002) (1970He27). See 1970He27 for the results of  $\gamma\gamma(\theta)$ .

$E_{\gamma}$	$I_{\gamma}^{@}$	E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_f = J_f^{\pi}$	Comments
159.63 14	0.050.5	2700.01	2+	2540.44 (3+	
192.7.2	0.020.5	2786.85	_	2594.19 3+	, ,
<sup>x</sup> 203.8 2	0.040 5				
x206.1 3	0.020 5				
218.98 13	0.050 5	2438.35	5+	2219.34 4+	
229.9 6	0.02 1	3416.66	4+	3186.77 4+	
<sup>x</sup> 235.9 3	0.03 1				
<sup>x</sup> 239.4 3	0.04 1				
241.2 2	0.55 <i>3</i>	1869.56	4+	1628.15 4+	
241.2 2	0.55 <i>3</i>	2219.34	4+	1978.25 3+	
<sup>x</sup> 259.2 5	0.010 5				
<sup>x</sup> 266.8 4	0.015 5				
<sup>x</sup> 279.50 14	0.16 <i>1</i>				
283.0 2	0.025 5	3416.66	4+	3133.75	
<sup>x</sup> 288.5 2	0.02 1				
293.9 4	0.015 5	2734.52	4+	2440.61 6+	
298.7 <i>3</i>	0.020 5	3053.15	$(4^{+})$	$2754.46 \ 6^+$	
349.7 2	0.18 2	1978.25	3+	1628.15 4+	$I_{\gamma}$ : from Branching of 350 $\gamma$ and 1200 $\gamma$ in $\varepsilon$ decay of 52 min <sup>96</sup> Tc.
349.7 2	0.61 6	2219.34	4+	1869.56 4+	$I_{\gamma}$ : from $I_{\gamma}$ (doublet 350 $\gamma$ ) and I(350 $\gamma$ ) from 1978 level.
352.3 2	0.19 2	1978.25	3+	$1625.94 \ 2^+$	
364.90 13	0.34 3	2234.58	3-	1869.56 4+	
369.67 12	0.98 5	1147.93	$0^{+}$	778.27 2+	
371.63 13	0.30 2	1869.56	4+	$1497.81 \ 2^+$	
405.1 3	0.04 1	2624.54	5+	2219.34 4+	
<sup>x</sup> 406.5 3	0.05 1				
423.9 <sup><i>a</i></sup> 4	0.025 10	3178.4	3-	2754.46 6+	
434.6 2	0.08 1	2975.16	5+	2540.44 (3+	)
459.88 12	0.37 2	2438.35	5+	1978.25 3+	
468.3 <i>3</i>	0.12 5	3202.78		2734.52 4+	
480.5 2	0.87 15	1978.25	3+	$1497.81 \ 2^+$	
x516.1 9	0.03 3				
555.5 2	0.10 2	2790.28		2234.58 3-	
568.80 12	0.76 5	2438.35	5+	1869.56 4+	
591.19 <i>13</i>	0.78 5	2219.34	4+	1628.15 4+	
593.2 2	0.37 5	2219.34	4+	1625.94 2+	
593.2 2	0.37 5	3133.75		2540.44 (3+	)

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From ENSDF

# <sup>95</sup>Mo( $n,\gamma$ ) E=thermal 1970He27 (continued)

## $\gamma$ (<sup>96</sup>Mo) (continued)

$E_{\gamma}$	$I_{\gamma}^{@}$	E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$\mathbf{E}_{f}$	$\mathbf{J}_f^{\pi}$	Mult. <sup>‡</sup>	$\delta^{\#}$	α <b>&amp;</b>
608 67 11	3 60 20	2234 58	3-	1625 94	$2^{+}$	(E1)		0.00095
611.4.2	0.30.3	2481.04	$(2^+3)$	1869 56	$\frac{2}{4^{+}}$	(11)		0.00072
615.8.2	0.25 3	2594 19	3+	1978.25	3+			
626.8.3	0.06.2	3053 15	$(4^+)$	2426.23	2+			
705 7 2	0.09 1	3186 77	4+	2481.04	$(2^+3)$			
x709.7.6	0.025 10	5100.77	·	2101.01	(2,5)			
719.53 11	8.9.5	1497.81	$2^{+}$	778.27	$2^{+}$	(M1+E2)	+0.44 + 3 - 4	0.00170
721 57 15	077.8	2219 34	$\frac{-}{4^+}$	1497.81	$\frac{-}{2^+}$	(111112)		0100170
736.86 11	3.50.20	2234.58	3-	1497.81	$\frac{-}{2^+}$			
740.7.2	0.29.5	2975.16	5+	2234.58	3-			
740.7 2	0.29 5	3334.95	U	2594.19	3+			
746.8 9	0.06 5	3186.77	4+	2440.61	6+			
755.6 2	0.32 2	2975.16	5+	2219.34	4 <sup>+</sup>			
778.26 10	62.00	778.27	2+	0	$0^{+}$			
x790.57 12	0.62.5							
800.36 13	0.33 3	2426.23	2+	1625.94	2+			
810.8 2	0.23 5	2438.35	5+	1628.15	4+			
812.48 13	0.66 5	2440.61	6+	1628.15	4+			
<sup>x</sup> 819.5 2	0.16 3							
847.67 11	10.6 6	1625.94	2+	778.27	2+	(M1+E2)	-1.05 + 9 - 10	0.00116
849.95 11	13.3 7	1628.15	4+	778.27	$2^{+}$	× /		
853.03 15	1.18 10	2481.04	$(2^+,3)$	1628.15	4+			
864.82 12	0.50 3	2734.52	4+	1869.56	4+			
<sup>x</sup> 882.8 4	0.06 2							
891.5 2	0.09 2	2986.91		2095.58	2+			
<sup>x</sup> 902.4 4	0.06 2							
914.6 <i>3</i>	0.11 3	2540.44	$(3^{+})$	1625.94	2+			
914.6 <i>3</i>	0.11 3	3133.75		2219.34	4+			
<sup>x</sup> 925.5 5	0.06 2							
928.4 5	0.06 3	2426.23	2+	1497.81	2+			
<sup>x</sup> 934.7 5	0.04 3							
<sup>x</sup> 944.2 4	0.07 3							
947.8 <i>3</i>	0.09 2	2095.58	2+	1147.93	$0^{+}$			
960.7 <i>3</i>	0.12 3	3441.61	4+	2481.04	$(2^+,3)$			
966.3 2	0.29 5	2594.19	3+	1628.15	4+			
968.21 12	0.99 5	2594.19	3+	1625.94	2+			
968.21 12	0.99 5	3202.78		2234.58	3-			
976.2 6	0.05 3	3416.66	4+	2440.61	6+			
983.1 2	0.17 3	2481.04	$(2^+, 3)$	1497.81	$2^{+}$			
991.7 <i>4</i>	0.09 3	3087.31		2095.58	$2^{+}$			
997.3 <i>2</i>	0.29 3	2975.16	5+	1978.25	3+			

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### <sup>95</sup>Mo( $n,\gamma$ ) E=thermal 1970He27 (continued)

# $\gamma$ (<sup>96</sup>Mo) (continued)

Eγ	Ι <sub>γ</sub> @	E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_f$	$\mathbf{J}_{f}^{\pi}$	Mult. <sup>‡</sup>	δ#	α <b>&amp;</b>
1003.677	0.05 3	2500.9	(1)	1497.81	2+			
<sup>x</sup> 1013.2 3	0.09.3		(-)		_			
1042.7 2	0.23 3	2540.44	$(3^{+})$	1497.81	$2^{+}$			
1046.2 2	0.16 3	3024.61	2+	1978.25	3+			
1049.6 5	0.06 3	3283.94		2234.58	3-			
<sup>x</sup> 1052.7 2	0.17 3							
1074.1 <i>3</i>	0.16 5	2700.01	$2^{+}$	1625.94	$2^{+}$			
1091.30 11	6.27 40	1869.56	4+	778.27	$2^{+}$	(E2+M3)	-0.06 + 5 - 6	0.00057
1096.7 5	0.25 10	2594.19	3+	1497.81	$2^{+}$			
1106.44 <i>13</i>	0.92 5	2734.52	4+	1628.15	4+			
1109.1 5	0.12 5	2734.52	4+	1625.94	$2^{+}$			
1109.1 5	0.12 5	3087.31		1978.25	3+			
1126.3 2	0.17 3	2754.46	6+	1628.15	$4^{+}$			
<sup>x</sup> 1138.5 5	0.06 3							
1155.4 2	0.19 5	3024.61	2+	1869.56	4+			
1164.50 14	0.48 5	2790.28		1625.94	$2^{+}$			
1190.23 14	0.75 5	2818.43		1628.15	$4^{+}$			
1200.1 4	3.44 30	1978.25	3+	778.27	$2^{+}$	(M1+E2)	+0.40 + 10 - 9	0.00048
1202.1 2	0.72 8	2700.01	2+	1497.81	$2^{+}$			
<sup>x</sup> 1238.1 2	0.42 5							
<sup>x</sup> 1240.9 4	0.14 5							
<sup>x</sup> 1301.0 5	0.09 5							
<sup>x</sup> 1307.9 4	0.11 5							
1317.33 12	2.79 15	2095.58	2+	778.27	$2^{+}$			
1320.9 5	0.09 5	2818.43		1497.81	$2^{+}$			
1320.9 5	0.09 5	3416.66	4+	2095.58	$2^{+}$			
1346.8 2	0.34 5	2975.16	5+	1628.15	4+			
1352.9 <sup>†</sup> 3	0.17 5	2500.9	(1)	1147.93	$0^+$			
1360.4 4	0.12 5	2986.91		1625.94	$2^{+}$			
<sup>x</sup> 1386.0 2	0.31 5							
1396.3 2	0.43 5	3024.61	2+	1628.15	$4^{+}$			
1398.4 <i>3</i>	0.33 5	3024.61	2+	1625.94	$2^{+}$			
<sup>x</sup> 1404.3 4	0.10 5							
1425.1 2	0.35 5	3053.15	$(4^{+})$	1628.15	4+			
<sup>x</sup> 1434.7 8	0.06 5							
1440.9 2	0.43 5	2219.34	4+	778.27	$2^{+}$			
1456.2 <i>3</i>	0.33 10	2234.58	3-	778.27	$2^{+}$			
1459.0 5	0.37 10	3087.31		1628.15	$4^{+}$			
1461.1 8	0.24 10	3087.31		1625.94	$2^{+}$			
1463.3 4	0.24 10	3441.61	4+	1978.25	3+			
1497.84 <i>11</i>	3.76 20	1497.81	2+	0	$0^{+}$			

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### $\gamma$ (<sup>96</sup>Mo) (continued)

$E_{\gamma}$	$I_{\gamma}^{@}$	$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$\mathbf{E}_{f}$	$\mathbf{J}_f^{\pi}$	Mult. <sup>‡</sup>	$\delta^{\#}$
1507.9.3	0.30.5	3133.75		1625.94	$2^{+}$		
x1528.0 4	0.30 8				_		
<sup>x</sup> 1592.9 3	0.19.5						
x1607.5 4	0.17 5						
<sup>x</sup> 1611.8.3	0.34.5						
1625.7 3	0.97.5	1625.94	$2^{+}$	0	$0^{+}$		
1647.6.3	0.56.5	2426.23	$\frac{-}{2^{+}}$	778.27	2+		
1657.6.3	0.31 5	3283.94		1625.94	$2^{+}$		
1702.8.3	0.55 5	2481.04	$(2^+,3)$	778.27	$2^{+}$		
1709.0 4	0.22.5	3334.95	(_ ,= )	1625.94	$2^{+}$		
1761.8.3	0.56 8	2540.44	$(3^{+})$	778.27	$2^{+}$		
<sup>x</sup> 1793.9.5	0.16.5		(- )				
1815.4 4	0.19 5	2594.19	3+	778.27	$2^{+}$		
1815.4 4	0.19.5	3441.61	4+	1625.94	$2^{+}$		
<sup>x</sup> 1826.8.5	0.17.5						
1846.3 3	0.66 8	2624.54	5+	778.27	$2^{+}$		
<sup>x</sup> 1856.1 4	0.20.5						
x1877.2 4	0.25 8						
1918.6.5	0.20 8	3416.66	4+	1497.81	$2^{+}$		
1923.2 3	0.68 8	3551.6	3	1628.15	4+	(M1+E2)	0.22 18
<sup>x</sup> 1957.2 3	0.44 5					× /	
2008.5 3	0.53 8	2786.85		778.27	$2^{+}$		
2011.8 3	0.57 8	2790.28		778.27	$2^{+}$		
<sup>x</sup> 2066.8 7	0.18 8						
x2112.1 3	0.41 8						
<sup>x</sup> 2132.4 9	0.12 8						
<sup>x</sup> 2151.7 4	0.23 5						
2208.6 7	0.16 10	2986.91		778.27	$2^{+}$		
<sup>x</sup> 2377.3 8	0.32 5						
2401.9 10	0.52 8	3178.4	3-	778.27	$2^{+}$		
<sup>x</sup> 2488.4 15	0.09 5						
<sup>x</sup> 2502.2 15	0.19 5						
2507.6 15	0.28 5	3283.94		778.27	$2^{+}$		
x2585.4 12	0.26 5						
<sup>x</sup> 2639.7 15	0.22 5						
2663.8 15	1.24 20	3441.61	4+	778.27	$2^{+}$		
<sup>x</sup> 4874.9 4	0.11 1						
x4880.1 4	0.19 2						
<sup>x</sup> 4886.3 4	0.13 1						
<sup>x</sup> 4891.4 <i>12</i>	0.016 8						
<sup>x</sup> 4907.4 4	0.13 1						

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# $\gamma$ (<sup>96</sup>Mo) (continued)

Eγ	$I_{\gamma}^{@}$	$E_i$ (level)	$E_{\gamma}$	$I_{\gamma}^{@}$	E <sub>i</sub> (level)	$\mathbf{J}_i^{\pi}$	$E_f$	$\mathbf{J}_f^{\pi}$
<sup>x</sup> 4914.3.5	0.095 8		x5227.2 8	0.021 8				
<sup>x</sup> 4919.9.5	0.067 8		x5247.2.5	0.61 4				
x4924.2 4	0.50 4		x5252.8 5	0.055 8				
<sup>x</sup> 4933.6 4	0.69 4		<sup>x</sup> 5260.8 8	0.034 8				
<sup>x</sup> 4941.6 4	0.22 2		<sup>x</sup> 5264.8 8	0.042 8				
<sup>x</sup> 4952.0 5	0.088 15		<sup>x</sup> 5279.5 10	0.017 8				
<sup>x</sup> 4956.2 4	0.26 2		<sup>x</sup> 5284.3 5	0.25 2				
<sup>x</sup> 4974.5 5	0.076 8		<sup>x</sup> 5317.4 5	0.097 8				
<sup>x</sup> 4985.4 5	0.063 8		<sup>x</sup> 5326.2 5	0.066 8				
<sup>x</sup> 4991.0 5	0.19 2		<sup>x</sup> 5332.3 5	0.077 10				
<sup>x</sup> 4999.9 5	0.15 1		<sup>x</sup> 5347.6 5	0.054 8				
<sup>x</sup> 5003.8 6	0.044 8		<sup>x</sup> 5377.1 5	0.035 5				
<sup>x</sup> 5008.9 5	0.17 1		<sup>x</sup> 5389.6 5	0.11 3				
<sup>x</sup> 5014.2 9	0.026 8		<sup>x</sup> 5395.8 5	0.092 8				
<sup>x</sup> 5018.4 5	0.058 8		<sup>x</sup> 5404.8 5	0.25 2				
<sup>x</sup> 5027.4 5	0.055 8		<sup>x</sup> 5418.8 5	0.055 8				
<sup>x</sup> 5038.9 12	0.025 15		x5424.1 10	0.017 8				
<sup>x</sup> 5042.3 5	0.26 2		<sup>x</sup> 5428.6 5	0.10 1				
<sup>x</sup> 5057.2 5	0.039 8		<sup>x</sup> 5447.3 7	0.042 8				
<sup>x</sup> 5062.8 5	0.14 <i>1</i>		<sup>x</sup> 5459.1 5	0.15 1				
<sup>x</sup> 5072.2 5	0.081 8		<sup>x</sup> 5464.5 7	0.038 8				
<sup>x</sup> 5077.4 5	0.076 8		x5468.2 8	0.029 8				
<sup>x</sup> 5089.6 8	0.02 1		<sup>x</sup> 5474.8 5	0.091 1				
x5096.3 5	0.06 1		<sup>x</sup> 5485.7 5	0.092 1				
<sup>x</sup> 5104.4 9	0.05 2		<sup>x</sup> 5517.1 7	0.025 5				
<sup>x</sup> 5107.8 5	0.14 2		<sup>x</sup> 5524.7 6	0.031 5				
<sup>x</sup> 5118.1 5	0.17 2		<sup>x</sup> 5531.1 6	0.49 5				
<sup>x</sup> 5124.4 9	0.045 2		<sup>x</sup> 5544.4 5	0.53 3				
x5127.3 5	0.21 2		x5566.1 5	0.10 1				
x5133.2 5	0.037 8		5601.9 5	0.93 5	9154.15	2+,3+	3551.6	3
x5140.8 5	0.15 1		<sup>x</sup> 5613.8 6	0.16 3				
x5148.0 <i>14</i>	0.010 8		<sup>x</sup> 5650.1 5	0.24 2				
x5160.9 5	0.048 8		x5660.5 6	0.018 1				
<sup>x</sup> 5172.9 5	0.064 1		<sup>x</sup> 5671.3 6	0.05 1				
x5177.4 5	0.11 1		x5682.7 6	0.05 1				
<sup>x</sup> 5187.3 11	0.018 10		*5689.4 8	0.05 2				
^5193.3 5	0.092 10		^5693.9 5	0.11 2				
^5196.5.9	0.029 10		^5/05.7 6	0.05 1	015:15	<b>a</b> ± a±	0.1.1. · · ·	4
~5202.4 <i>11</i>	0.015 8		5712.3 5	1.82.9	9154.15	2+,3+	3441.61	4-
^5215.7 5	0.18 2		*5720.8 10	0.066 15				
^5222.1 5	0.12 1		^5727.0 9	0.038 8				

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 $^{96}_{42}\mathrm{Mo}_{54}$ -6

#### $\gamma$ (<sup>96</sup>Mo) (continued)

Eγ	Ι <sub>γ</sub> @	E <sub>i</sub> (level)	$\mathbf{J}_i^\pi$	$E_f$	$\mathbf{J}_f^{\pi}$	Eγ	Ι <sub>γ</sub> @	$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$E_f$	$\mathbf{J}_f^{\pi}$
5737.6 5	0.47 3	9154.15	$2^+, 3^+$	3416.66	4+	6335.2 5	0.038 5	9154.15	$2^+, 3^+$	2818.43	
<sup>x</sup> 5760.9 9	0.025 8		)-			<sup>x</sup> 6347.9 8	0.02 1		,-		
x5780.1 5	0.033 5					6363.9 5	0.80 4	9154.15	$2^+, 3^+$	2790.28	
<sup>x</sup> 5791.4 7	0.030 5					6367.2 6	0.075 20	9154.15	$2^+, 3^+$	2786.85	
5818.6 5	0.31 2	9154.15	$2^+, 3^+$	3334.95		<sup>x</sup> 6390.7 11	0.014 6				
<sup>x</sup> 5826.4 5	0.046 5					6418.2 6	0.024 5	9154.15	$2^+, 3^+$	2734.52	4+
<sup>x</sup> 5842.1 7	0.018 5					<sup>x</sup> 6449.7 8	0.021 5				
<sup>x</sup> 5854.5 5	0.037 5					6454.2 5	0.20 1	9154.15	$2^+, 3^+$	2700.01	2+
<sup>x</sup> 5862.2 6	0.021 5					<sup>x</sup> 6507.1 6	0.013 5				
5869.4 5	0.13 1	9154.15	$2^+, 3^+$	3283.94		6529.1 7	0.09 1	9154.15	$2^+, 3^+$	2624.54	5+
<sup>x</sup> 5876.3 5	0.047 5					6559.7 6	0.14 1	9154.15	$2^+, 3^+$	2594.19	3+
<sup>x</sup> 5900.8 5	0.027 5					<sup>x</sup> 6576.5 9	0.013 5				
x5908.1 13	0.010 5					x6583.2 12	0.010 5				
<sup>x</sup> 5914.6 10	0.023 8					6613.9 6	0.11 <i>I</i>	9154.15	$2^+, 3^+$	2540.44	(3 <sup>+</sup> )
x5921.0 5	0.035 5					6673.0 5	0.49 3	9154.15	$2^+, 3^+$	2481.04	$(2^+,3)$
<sup>x</sup> 5929.9 12	0.010 5					<sup>x</sup> 6705.2 7	0.016 5				
5951.6 5	0.62 3	9154.15	$2^+, 3^+$	3202.78		6715.5 6	0.045 5	9154.15	$2^+, 3^+$	2438.35	5+
5967.4 10	0.033 8	9154.15	$2^+, 3^+$	3186.77	4+	6728.1 6	0.078 10	9154.15	$2^+, 3^+$	2426.23	2+
5976.0 6	0.061 7	9154.15	$2^+, 3^+$	3178.4	3-	<sup>x</sup> 6743.9 9	0.012 5				
<sup>x</sup> 5987.5 10	0.011 5					<sup>x</sup> 6759.8 10	0.012 8				
<sup>x</sup> 5998.3 7	0.019 5					<sup>x</sup> 6767.5 12	0.014 5				
6019.8 5	0.20 2	9154.15	$2^+, 3^+$	3133.75		<sup>x</sup> 6787.0 9	0.012 5				
6066.4 5	0.17 4	9154.15	$2^+, 3^+$	3087.31		6919.4 5	4.20	9154.15	$2^+, 3^+$	2234.58	3-
6101.4 6	0.033 8	9154.15	$2^+, 3^+$	3053.15	$(4^{+})$	6934.5 12	0.046 15	9154.15	$2^+, 3^+$	2219.34	4+
6128.9 5	0.65 3	9154.15	$2^+, 3^+$	3024.61	2+	7058.4 8	0.021 5	9154.15	$2^+, 3^+$	2095.58	2+
6167.3 6	0.041 5	9154.15	$2^+, 3^+$	2986.91		7176.2 8	0.026 5	9154.15	$2^+, 3^+$	1978.25	3+
6178.7 5	0.10 1	9154.15	2+,3+	2975.16	5+	7528.1 6	0.94 4	9154.15	2+,3+	1625.94	2+
*6192.8 8	0.02 1					7656.4 7	0.13 1	9154.15	2+,3+	1497.81	2+
^6197.9 <i>17</i>	0.011 5					8375.8 8	0.78 4	9154.15	2+,3+	778.27	2*
*6203.2 9	0.018 5										

 $^{\dagger}$  Not placed by 1970He27, but placement is known from other experiment.

<sup>‡</sup> From  $\gamma\gamma(\theta)$ .

<sup>#</sup> From  $\gamma\gamma(\theta)$  if mult(778 $\gamma$ )=E2.

<sup>@</sup> For intensity per 100 neutron captures, multiply by 1.0 *3*.

<sup>&</sup> Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

<sup>*a*</sup> Placement of transition in the level scheme is uncertain.

 $x \gamma$  ray not placed in level scheme.



<sup>96</sup><sub>42</sub>Mo<sub>54</sub>

# <sup>95</sup>Mo(n,γ) E=thermal 1970He27







 $^{96}_{42}{
m Mo}_{54}$ 

# <sup>95</sup>Mo(n,γ) E=thermal 1970He27





<sup>96</sup><sub>42</sub>Mo<sub>54</sub>



