

$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ **1996As01**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

1996As01: 13.5, 15, 16.5, 18 MeV; 96.8% ^{96}Mo -enriched target. Measured $\text{p}\gamma$ -, $\text{p}\gamma\gamma$ -coin, $\text{E}\gamma$, $\text{I}\gamma$, $\gamma(\theta)$, DCO, excitation functions.

 ^{97}Tc Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	9/2 ⁺ #	1579.90 7	5/2	1925.46 12	
96.64 6	1/2 ⁺ #	1581.42 9	11/2 ⁺ ,13/2 ⁺ ,15/2 ⁺	1940.4 20	
215.77 4	7/2 ⁺	1582.23 9	(3/2,5/2,7/2)	1947.53 11	
324.42 5	5/2 ⁺	1585.7 2	(7/2 ⁺)	1949.05 9	
580.17 7	3/2 ⁻	1625.26 20		1964.35 13	
656.91 6	5/2 ⁻	1650.22 9	5/2 ⁺ ,7/2 ⁺	1976.64 13	
772.67 6	13/2 ⁺	1654.33 10	17/2 ⁺	1979.2 20	
777.97 8	7/2 ⁺ ,9/2 ⁺	1677.73 12	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	1987.2 15	
785.05 6	5/2 ⁺	1685.33 9	15/2 ⁽⁺⁾	1992.6 20	
832.72 6	11/2 ⁺	1690.10 11	5/2 ⁺ ,7/2 ⁺	1994.0 20	
855.43 5	7/2 ⁺	1693.09 11	5/2 ⁺ ,7/2 ⁺	2001.9 20	
861.82 6	9/2 ⁺	1697.9 2		2004.06 13	
939.84 8	1/2 ⁺ , (3/2 ⁻)	1706.96 13		2032.96 12	
946.94 8	3/2 ⁻	1707.44 11		2035.7 20	
969.78 8	7/2 ⁺	1720.8 2	5/2 ⁺	2048.32 13	
994.54 9	3/2 ⁺	1722.4 15	5/2 ⁺	2054.74 15	
1049.07 8	5/2 ⁻	1732.95 11	5/2 ⁽⁺⁾	2056.1 20	
1127.04 7	11/2 ⁺	1778.6 15		2059.6 20	
1141.29 7	3/2 ⁺ ,5/2 ⁺	1797.98 11		2067.0 20	
1199.59 6	9/2 ⁺	1801.23 11		2069.04 12	7/2 ⁻ ,9/2 ⁻
1219.99 7	7/2 ⁺	1815.17 12		2095.8 15	
1239.96 7	5/2 ⁻	1834.74 12	(9/2 ⁺),11/2 ⁺	2098.1 20	
1274.57 9	7/2 ⁻	1834.77 13	13/2 ⁻	2117.5 15	
1277.83 7	9/2 ⁻	1841.73 13	3/2 ⁺ , (5/2)	2119.70 12	
1310.18 11	7/2 ⁺ ,9/2 ⁺	1849.71 9	15/2 ⁺	2121.49 10	(17/2 ⁺)
1311.93 11		1850.41 12		2130.6 20	
1373.34 20	3/2 ⁻	1858.62 12		2134.8 20	
1380.04 8	9/2 ⁺	1862.30 11		2149.11 12	
1393.19 6	13/2 ⁺	1864.58 9		2257.3 20	
1400.97 12	3/2 ⁻ ,5/2 ⁻	1879.2 20	(17/2 ⁺)	2257.88 13	
1409.73 8	7/2 ⁺	1892.80 9	15/2 ⁺	2264.35 13	
1471.20 6	(7/2 ⁺),9/2 ⁺	1895.68 12		2331.1 20	
1512.21 9	5/2	1897.48 11	5/2 ⁺ ,7/2 ⁺ ,9/2 ⁺	2337.5 15	17/2 ⁻ #
1518.35 9	5/2 ⁻	1907.02 12		2417.6 20	
1523.26 8	7/2 ⁺	1913.8 2		2446.8 20	
1527.2 2		1919.2 2		2449.2 20	
1537.95 12	11/2 ⁺ ,13/2 ⁺	1922.5 20		2533.4 20	

[†] From least-squares fit on $\text{E}\gamma$'s (see also the comment on $\text{E}\gamma$ column in the γ table).

[‡] From **1996As01** based on branching ratios, excitation function, $\gamma(\theta)$, and DCO analyses, except where noted (can differ from values adopted in Adopted Levels, Gammas dataset).

From **1985Ha28** and **1993Ar09** As quoted by **1996As01**.

$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ **1996As01 (continued)** $\gamma(^{97}\text{Tc})$

E_γ [†]	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	Comments	
96.60	20	96.64	1/2 ⁻	0.0	9/2 ⁺			
109.2	3	324.42	5/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.07$ 16	
215.81	20	215.77	7/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=-0.11$ 2	
289.8	3	946.94	3/2 ⁻	656.91	5/2 ⁻	(M1+E2)	$A_2=0.09$ 27	
292.83	20	1239.96	5/2 ⁻	946.94	3/2 ⁻			
324.44	20	324.42	5/2 ⁺	0.0	9/2 ⁺		$A_2=0.04$ 2	
332.39	20	656.91	5/2 ⁻	324.42	5/2 ⁺		$A_2=0.44$ 18	
356.23	20	1141.29	3/2 ⁺ ,5/2 ⁺	785.05	5/2 ⁺	(M1+E2)	$A_2=0.02$ 4	
363.54	20	1834.74	(9/2 ⁺),11/2 ⁺	1471.20	(7/2 ⁺),9/2 ⁺	(M1+E2)	$A_2=-0.16$ 9	
366.69	20	946.94	3/2 ⁻	580.17	3/2 ⁻	(M1+E2)	$A_2=0.06$ 4	
366.92	20	1199.59	9/2 ⁺	832.72	11/2 ⁺			
392.13	20	1049.07	5/2 ⁻	656.91	5/2 ⁻	(M1+E2)	$A_2=0.09$ 2	
400.41	20	2054.74		1654.33	17/2 ⁺			
421.56	20	1199.59	9/2 ⁺	777.97	7/2 ⁺ ,9/2 ⁺			
422.37	20	1277.83	9/2 ⁻	855.43	7/2 ⁺			
426.41	20	1373.34	3/2 ⁻	946.94	3/2 ⁻			
429.13	20	1706.96		1277.83	9/2 ⁻		$A_2=0.21$ 6	
441.0	3	656.91	5/2 ⁻	215.77	7/2 ⁺			
456.65	20	1849.71	15/2 ⁺	1393.19	13/2 ⁺			
460.55	20	785.05	5/2 ⁺	324.42	5/2 ⁺	(M1+E2)	$A_2=0.09$ 3	
467.18	20	2121.49	(17/2 ⁺)	1654.33	17/2 ⁺			
468.96	20	1049.07	5/2 ⁻	580.17	3/2 ⁻	(M1+E2)	$A_2=0.08$ 10	
483.53	20	580.17	3/2 ⁻	96.64	1/2 ⁻	(M1+E2)	$A_2=-0.06$ 2	
483.79	20	1625.26		1141.29	3/2 ⁺ ,5/2 ⁺			
487.6	3	2337.5	17/2 ⁻	1849.71	15/2 ⁺			
503.0	3	2337.5	17/2 ⁻	1834.77	13/2 ⁻			
530.90	20	855.43	7/2 ⁺	324.42	5/2 ⁺			
531.23	20	1393.19	13/2 ⁺	861.82	9/2 ⁺			
547.36	20	1380.04	9/2 ⁺	832.72	11/2 ⁺	(M1+E2)	$A_2=-0.10$ 4	
556.94	20	1834.77	13/2 ⁻	1277.83	9/2 ⁻	(E2)	$A_2=0.29$ 5	
560.29	20	656.91	5/2 ⁻	96.64	1/2 ⁻		$A_2=0.13$ 2	
560.48	20	1393.19	13/2 ⁺	832.72	11/2 ⁺	(M1+E2)	$A_2=-0.28$ 5	
569.28	20	409	785.05	5/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.04$ 2
583.10	20	67	1239.96	5/2 ⁻	656.91	5/2 ⁻	(M1+E2)	$A_2=0.11$ 4
609.18	20	33	1471.20	(7/2 ⁺),9/2 ⁺	861.82	9/2 ⁺		$A_2=0.11$ 7
612.0	3	6	2446.8		1834.77	13/2 ⁻		
615.52	20	92	939.84	1/2 ⁺ , (3/2 ⁻)	324.42	5/2 ⁺		
615.57	20	22	1815.17		1199.59	9/2 ⁺		
615.66	20	14	1471.20	(7/2 ⁺),9/2 ⁺	855.43	7/2 ⁺	(M1+E2)	$A_2=0.22$ 10
617.17	20	39	832.72	11/2 ⁺	215.77	7/2 ⁺		
617.60	20	151	1274.57	7/2 ⁻	656.91	5/2 ⁻	(M1+E2)	$A_2=-0.12$ 3
620.63	20	30	1393.19	13/2 ⁺	772.67	13/2 ⁺	(M1+E2)	$A_2=0.21$ 7
620.81	20	274	1277.83	9/2 ⁻	656.91	5/2 ⁻	(E2)	$A_2=0.25$ 2
639.60	20	72	855.43	7/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.05$ 6
645.27	20	159	969.78	7/2 ⁺	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.03$ 3
645.78	20	39	861.82	9/2 ⁺	215.77	7/2 ⁺		
657.3	3	10	2067.0		1409.73	7/2 ⁺		
659.81	20	30	1239.96	5/2 ⁻	580.17	3/2 ⁻	(M1+E2)	$A_2=-0.12$ 5
670.14	20	337	994.54	3/2 ⁺	324.42	5/2 ⁺	(M1+E2)	$A_2=0.00$ 2
676.8	3	6	2331.1		1654.33	17/2 ⁺		
680.36	20	45	1650.22	5/2 ⁺ ,7/2 ⁺	969.78	7/2 ⁺	(M1+E2)	$A_2=-0.04$ 8
685.61	20	19	1625.26		939.84	1/2 ⁺ , (3/2 ⁻)		
694.45	20	22	1274.57	7/2 ⁻	580.17	3/2 ⁻	(E2)	$A_2=0.10$ 12
698.81	20	26	1976.64		1277.83	9/2 ⁻		
714.8	3	7	1992.6		1277.83	9/2 ⁻		

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$^{96}\text{Mo}(^3\text{He,pn}\gamma)$ 1996As01 (continued) $\gamma(^{97}\text{Tc})$ (continued)

E_γ †	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ‡	Comments
716.8 3	7	1373.34	3/2 ⁻	656.91	5/2 ⁻		
724.60 20	54	1049.07	5/2 ⁻	324.42	5/2 ⁺		$A_2=0.15$ 4
726.3 3	14	1720.8	5/2 ⁺	994.54	3/2 ⁺	(M1+E2)	$A_2=-0.18$ 8
728.1 3	27	1722.4	5/2 ⁺	994.54	3/2 ⁺		
748.75 20	38	1581.42	11/2 ⁺ ,13/2 ⁺ ,15/2 ⁺	832.72	11/2 ⁺	(M1+E2)	$A_2=0.32$ 7
752.4 3	24	1722.4	5/2 ⁺	969.78	7/2 ⁺	(M1+E2)	$A_2=-0.18$ 6
752.6 3	13	1409.73	7/2 ⁺	656.91	5/2 ⁻		
754.01 20	202	969.78	7/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=0.03$ 2
765.28 20	28	1537.95	11/2 ⁺ ,13/2 ⁺	772.67	13/2 ⁺	(M1+E2)	$A_2=-0.04$ 11
765.64 20	17	1892.80	15/2 ⁺	1127.04	11/2 ⁺		
772.65 20	557	772.67	13/2 ⁺	0.0	9/2 ⁺	(E2)	$A_2=0.29$ 2
777.90 20	51	777.97	7/2 ⁺ ,9/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=0.20$ 5
785.02 20	46	785.05	5/2 ⁺	0.0	9/2 ⁺		$A_2=0.03$ 9
794.86 20	18	1650.22	5/2 ⁺ ,7/2 ⁺	855.43	7/2 ⁺	(M1+E2)	$A_2=-0.04$ 8
808.70 20	36	1581.42	11/2 ⁺ ,13/2 ⁺ ,15/2 ⁺	772.67	13/2 ⁺	(M1+E2)	$A_2=0.37$ 4
816.78 20	182	1141.29	3/2 ⁺ ,5/2 ⁺	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.02$ 2
820.79 20	42	1400.97	3/2 ⁻ ,5/2 ⁻	580.17	3/2 ⁻	(M1+E2)	$A_2=0.10$ 3
823.5 3	8	2098.1		1274.57	7/2 ⁻		
832.71 20	367	832.72	11/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=0.37$ 3
843.27 20	193	939.84	1/2 ⁺ , (3/2 ⁻)	96.64	1/2 ⁻	(M1+E2)	$A_2=0.03$ 3
847.4 3	7	1841.73	3/2 ⁺ , (5/2)	994.54	3/2 ⁺		
850.19 20	208	946.94	3/2 ⁻	96.64	1/2 ⁻	(M1+E2)	$A_2=-0.04$ 4
852.65 20	39	1685.33	15/2 ⁽⁺⁾	832.72	11/2 ⁺	(E2)	$A_2=0.25$ 7
855.27 20	32	1512.21	5/2	656.91	5/2 ⁻	(M1+E2)	$A_2=0.06$ 4
855.38 20	360	855.43	7/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=-0.05$ 2
861.75 20	282	861.82	9/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=0.14$ 2
875.18 20	71	1199.59	9/2 ⁺	324.42	5/2 ⁺		$A_2=0.17$ 3
879.1 3	6	2533.4		1654.33	17/2 ⁺		
881.68 20	105	1654.33	17/2 ⁺	772.67	13/2 ⁺	(E2)	$A_2=0.34$ 4
895.41 20	60	1219.99	7/2 ⁺	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.12$ 3
897.87 20	17	994.54	3/2 ⁺	96.64	1/2 ⁻		
901.89 20	24	1841.73	3/2 ⁺ , (5/2)	939.84	1/2 ⁺ , (3/2 ⁻)	(M1+E2)	$A_2=-0.18$ 9
911.2 3	6	2449.2		1537.95	11/2 ⁺ ,13/2 ⁺		
911.24 20	62	1127.04	11/2 ⁺	215.77	7/2 ⁺	(E2)	$A_2=0.30$ 10
912.62 20	37	1685.33	15/2 ⁽⁺⁾	772.67	13/2 ⁺	(M1+E2)	$A_2=0.0$
915.64 20	16	1239.96	5/2 ⁻	324.42	5/2 ⁺		
923.20 20	23	1579.90	5/2	656.91	5/2 ⁻		
925.16 20	45	1582.23	(3/2,5/2,7/2)	656.91	5/2 ⁻		
925.42 20	18	1141.29	3/2 ⁺ ,5/2 ⁺	215.77	7/2 ⁺		
938.18 20	43	1518.35	5/2 ⁻	580.17	3/2 ⁻	(M1(+E2))	$A_2=-0.21$ 3
949.9 3	5	1274.57	7/2 ⁻	324.42	5/2 ⁺		
970.6 3	13	969.78	7/2 ⁺	0.0	9/2 ⁺		
980.05 20	11	2257.88		1277.83	9/2 ⁻		
983.81 20	101	1199.59	9/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.38$ 3
993.6 3	9	1778.6		785.05	5/2 ⁺		
999.65 20	20	1579.90	5/2	580.17	3/2 ⁻	D(+Q)	$A_2=-0.19$ 5
1004.39 20	22	1219.99	7/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=0.02$ 6
1008.91 20	12	1864.58		855.43	7/2 ⁺		
1009.52 20	20	2004.06		994.54	3/2 ⁺		
1012.5 3	8	1797.98		785.05	5/2 ⁺		
1020.6 3	9	1677.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	656.91	5/2 ⁻		
1024.20 20	24	1239.96	5/2 ⁻	215.77	7/2 ⁺		$A_2=-0.06$ 6
1024.2 3	9	1994.0		969.78	7/2 ⁺		
1024.51 20	13	1964.35		939.84	1/2 ⁺ , (3/2 ⁻)		
1049.0 3	19	1373.34	3/2 ⁻	324.42	5/2 ⁺		

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$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ **1996As01 (continued)** $\gamma(^{97}\text{Tc})$ (continued)

E_γ †	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ‡	Comments
1053.78	20	12	2048.32	994.54	3/2 ⁺		
1062.18	20	18	1277.83	215.77	7/2 ⁺		
1062.95	20	13	1895.68	832.72	11/2 ⁺		
1076.90	20	43	1849.71	772.67	13/2 ⁺	(M1+E2)	$A_2=-0.25$ 5
1085.25	20	21	1409.73	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.19$ 9
1093.69	20	28	1949.05	855.43	7/2 ⁺		
1094.40	20	65	1310.18	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.24$ 6
1096.15	20	24	1311.93	215.77	7/2 ⁺		
1097.55	20	21	1677.73	580.17	3/2 ⁻	(M1+E2)	$A_2=-0.05$ 5
1101.4	3	7	2095.8	994.54	3/2 ⁺		
1106.5	3	9	1879.2	772.67	13/2 ⁺	(E2)	$A_2=0.42$ 23
1120.24	20	21	1892.80	772.67	13/2 ⁺	(M1+E2)	$A_2=-0.04$ 8
1126.95	20	128	1127.04	0.0	9/2 ⁺	(M1+E2)	$A_2=-0.63$ 2
1134.35	20	23	1907.02	772.67	13/2 ⁺		
1143.0	3	10	2417.6	1274.57	7/2 ⁻		
1146.5	3	9	1979.2	832.72	11/2 ⁺		
1153.0	3	7	1732.95	580.17	3/2 ⁻		
1160.8	3	6	2130.6	969.78	7/2 ⁺		
1163.92	20	15	1949.05	785.05	5/2 ⁺		
1164.22	20	62	1380.04	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.42$ 4
1171.13	20	11	2032.96	861.82	9/2 ⁺		
1187.81	20	45	1512.21	324.42	5/2 ⁺	(M1+E2)	$A_2=0.04$ 8
1193.49	20	11	1850.41	656.91	5/2 ⁻		
1194.01	20	39	1409.73	215.77	7/2 ⁺	(M1+E2)	$A_2=0.06$ 4
1194.2	3	7	1518.35	324.42	5/2 ⁺		
1197.8	3	6	2059.6	861.82	9/2 ⁺		
1198.95	20	70	1523.26	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.24$ 6
1201.70	20	11	1858.62	656.91	5/2 ⁻		
1202.8	3	9	1527.2	324.42	5/2 ⁺		
1219.96	20	59	1219.99	0.0	9/2 ⁺	(M1+E2)	$A_2=0.06$ 10
1240.2	3	8	2095.8	855.43	7/2 ⁺		
1255.46	20	15	1579.90	324.42	5/2 ⁺		
1255.56	20	10	1471.20	215.77	7/2 ⁺		
1255.9	3	10	2117.5	861.82	9/2 ⁺		
1257.96	20	15	1582.23	324.42	5/2 ⁺		
1261.3	3	6	1585.7	324.42	5/2 ⁺	(M1+E2)	$A_2=-0.25$ 16
1265.6	3	6	1922.5	656.91	5/2 ⁻		
1268.54	20	19	1925.46	656.91	5/2 ⁻		
1276.68	20	64	1373.34	96.64	1/2 ⁻	(M1+E2)	$A_2=-0.03$ 4
1283.4	3	9	2056.1	772.67	13/2 ⁺		
1294.56	20	7	2264.35	969.78	7/2 ⁺		
1295.8	3	8	1512.21	215.77	7/2 ⁺		
1307.37	20	12	1523.26	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.15$ 5
1310.7	3	36	1310.18	0.0	9/2 ⁺	(M1+E2)	$A_2=0.16$ 11
1325.6	3	6	1650.22	324.42	5/2 ⁺	(M1+E2)	
1329.9	3	6	1987.2	656.91	5/2 ⁻		
1348.79	20	10	2121.49	772.67	13/2 ⁺	(E2)	$A_2=0.50$ 19
1362.1	3	8	2134.8	772.67	13/2 ⁺		
1363.99	20	12	1579.90	215.77	7/2 ⁺		
1366.2	3	7	1582.23	215.77	7/2 ⁺		
1368.5	3	9	1693.09	324.42	5/2 ⁺		
1378.8	3	8	2035.7	656.91	5/2 ⁻		
1383.01	20	16	1707.44	324.42	5/2 ⁺		
1393.33	20	97	1393.19	0.0	9/2 ⁺	(E2)	$A_2=0.25$ 6
1407.4	3	6	1987.2	580.17	3/2 ⁻		

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$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ **1996As01 (continued)**

$\gamma(^{97}\text{Tc})$ (continued)

E_γ †	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ‡	Comments
1412.11 20	16	2069.04	7/2 ⁻ ,9/2 ⁻	656.91	5/2 ⁻	(E2)	$A_2=0.30$ 38
1421.69 20	18	1518.35	5/2 ⁻	96.64	1/2 ⁻		
1421.7 3	9	2001.9		580.17	3/2 ⁻		
1471.35 20	78	1471.20	(7/2 ⁺),9/2 ⁺	0.0	9/2 ⁺	(M1+E2)	$A_2=0.19$ 7
1473.55 20	17	1797.98		324.42	5/2 ⁺		
1474.31 20	27	1690.10	5/2 ⁺ ,7/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.08$ 5
1476.80 20	14	1801.23		324.42	5/2 ⁺		
1477.31 20	33	1693.09	5/2 ⁺ ,7/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.03$ 5
1482.1 3	10	1697.9		215.77	7/2 ⁺		
1491.1 3	8	1815.17		324.42	5/2 ⁺		
1492.18 20	12	2149.11		656.91	5/2 ⁻		
1517.16 20	32	1732.95	5/2 ⁽⁺⁾	215.77	7/2 ⁺		$A_2=-0.04$ 2
1537.1 3	7	2117.5		580.17	3/2 ⁻		
1537.87 20	35	1862.30		324.42	5/2 ⁺		
1538.1 3	28	1537.95	11/2 ⁺ ,13/2 ⁺	0.0	9/2 ⁺		
1539.51 20	11	2119.70		580.17	3/2 ⁻		
1540.39 20	14	1864.58		324.42	5/2 ⁺		
1562.8 3	10	1778.6		215.77	7/2 ⁺		
1589.4 3	9	1913.8		324.42	5/2 ⁺		
1594.8 3	8	1919.2		324.42	5/2 ⁺		
1599.9 3	6	1815.17		215.77	7/2 ⁺		
1616.0 3	8	1940.4		324.42	5/2 ⁺		
1623.10 20	22	1947.53		324.42	5/2 ⁺		
1640.1 3	7	1964.35		324.42	5/2 ⁺		
1677.1 3	10	2257.3		580.17	3/2 ⁻		
1681.69 20	20	1897.48	5/2 ⁺ ,7/2 ⁺ ,9/2 ⁺	215.77	7/2 ⁺	(M1+E2)	$A_2=-0.18$ 9

† According to 1996As01, ΔE_γ of E_γ 's reported with two decimals is 0.05 keV, while less accurately measured E_γ 's are indicated by one decimal (for which the evaluator adopted $\Delta E_\gamma=0.1$ keV), which gave discrepant least-squares fit of levels to E_γ 's (χ -sq norm=8.4 > χ -sq critical= 1.4). ADOPTED here are $\Delta E_\gamma=0.2$ keV and $\Delta E_\gamma=0.3$ for the γ 's In the two respective categories, for which the discrepancy is removed latter category, which together with ΔE_γ 's of the former category, gave discrepant least-squares fit of levels to E_γ 's (χ -sq norm=8.4 > χ -sq critical= 1.4). ADOPTED here are ΔE_γ 's twice As large, for which the discrepancy is removed.

‡ Deduced by evaluator based on $\gamma(\theta)$, DCO, and excitation function from 1996As01. Because of the light projectile, the A_2 coefficients (A_4 's are not given) are smaller than the typical values, particularly for small spins, which makes the assignments weak.

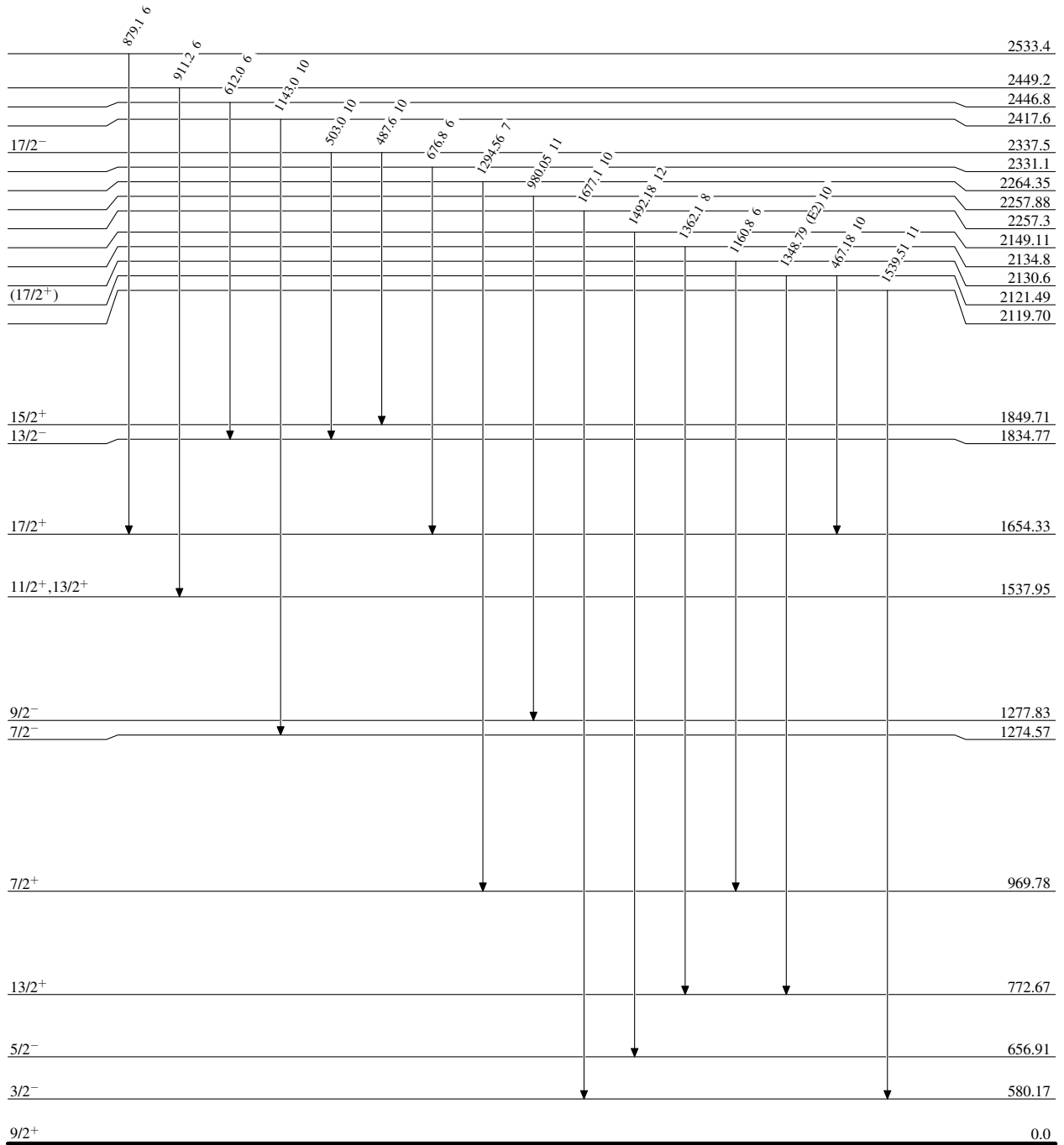
$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ 1996As01

Level Scheme

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

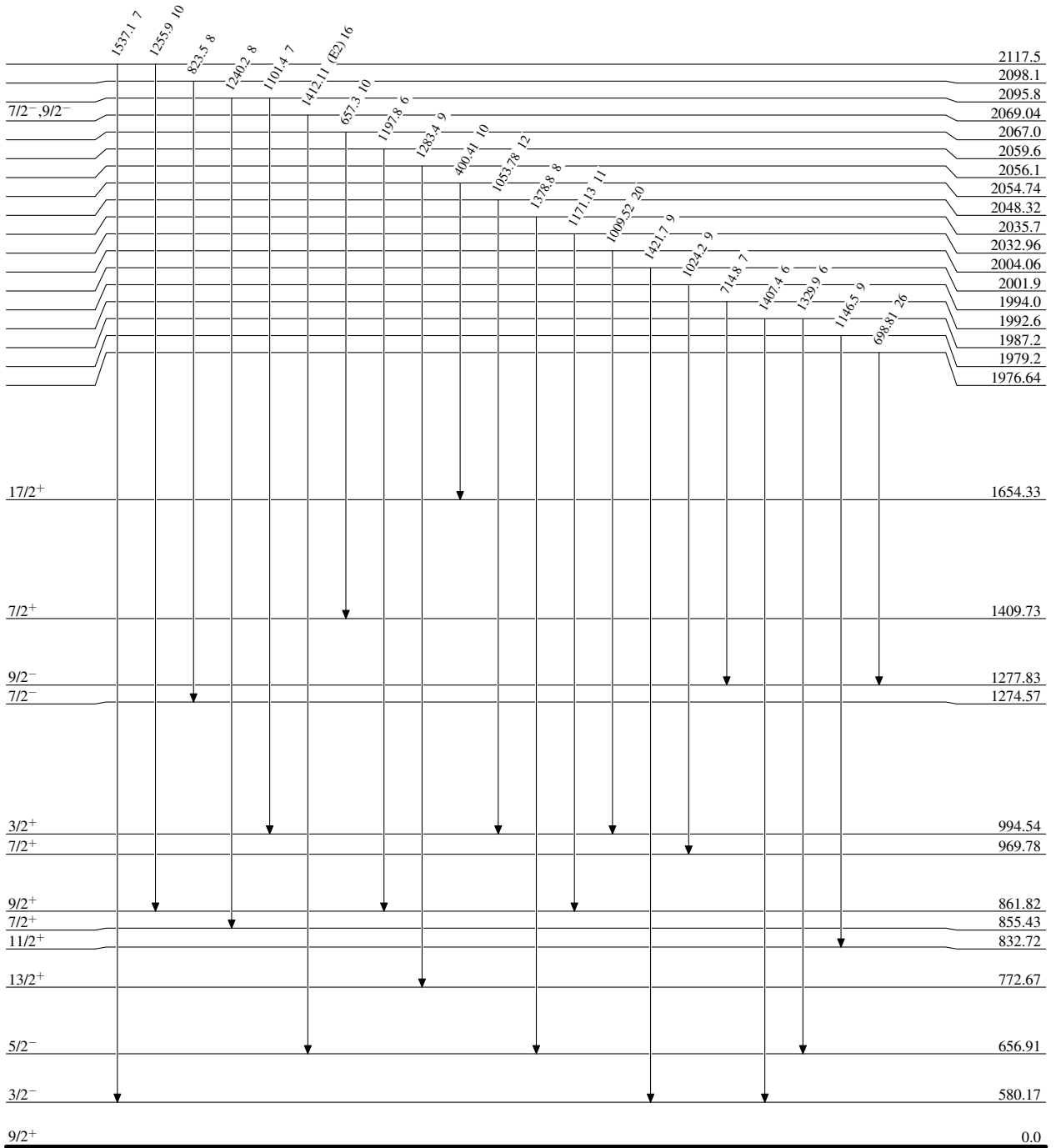
$^{96}\text{Mo}(^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

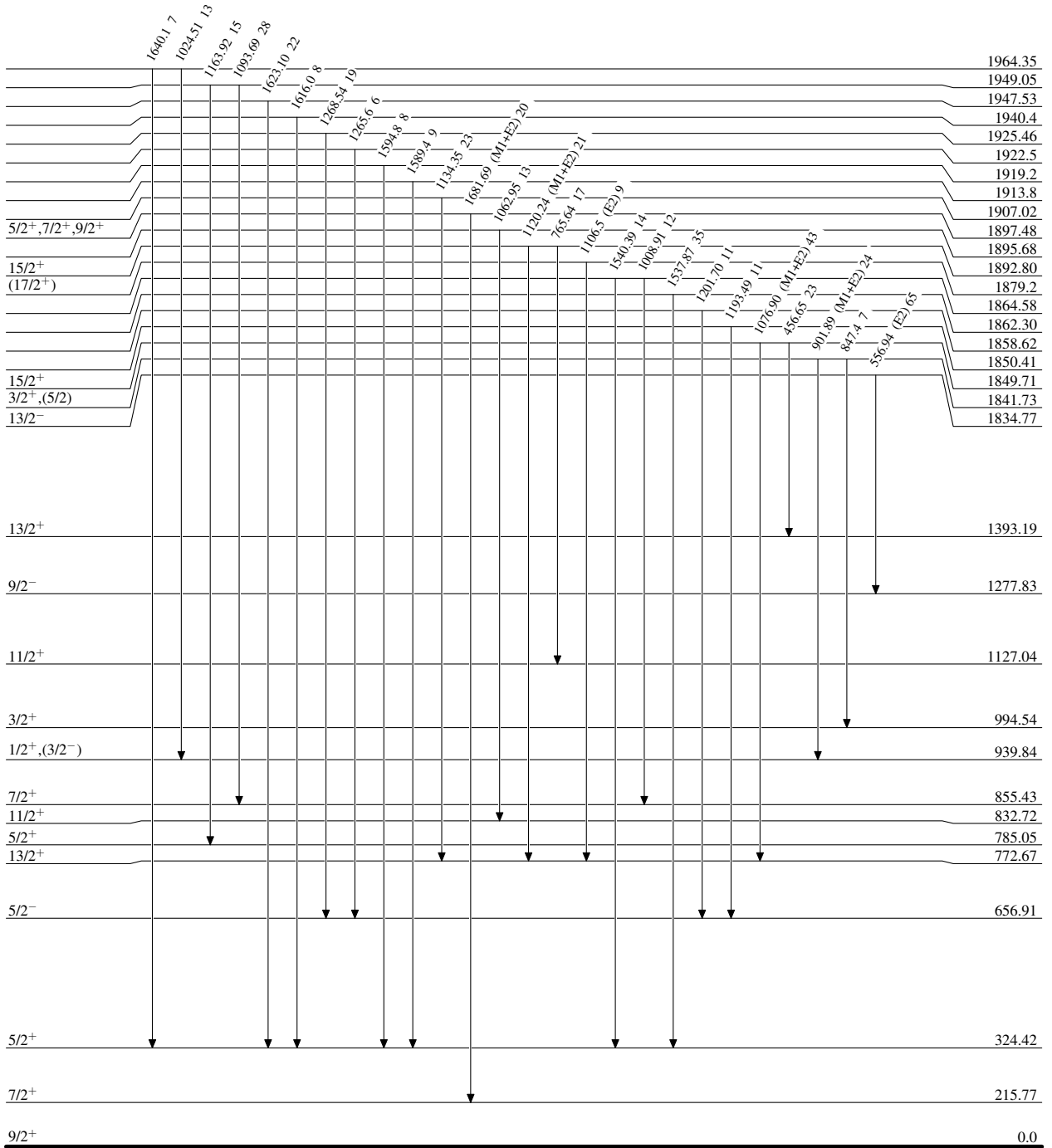
$^{96}\text{Mo}(^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

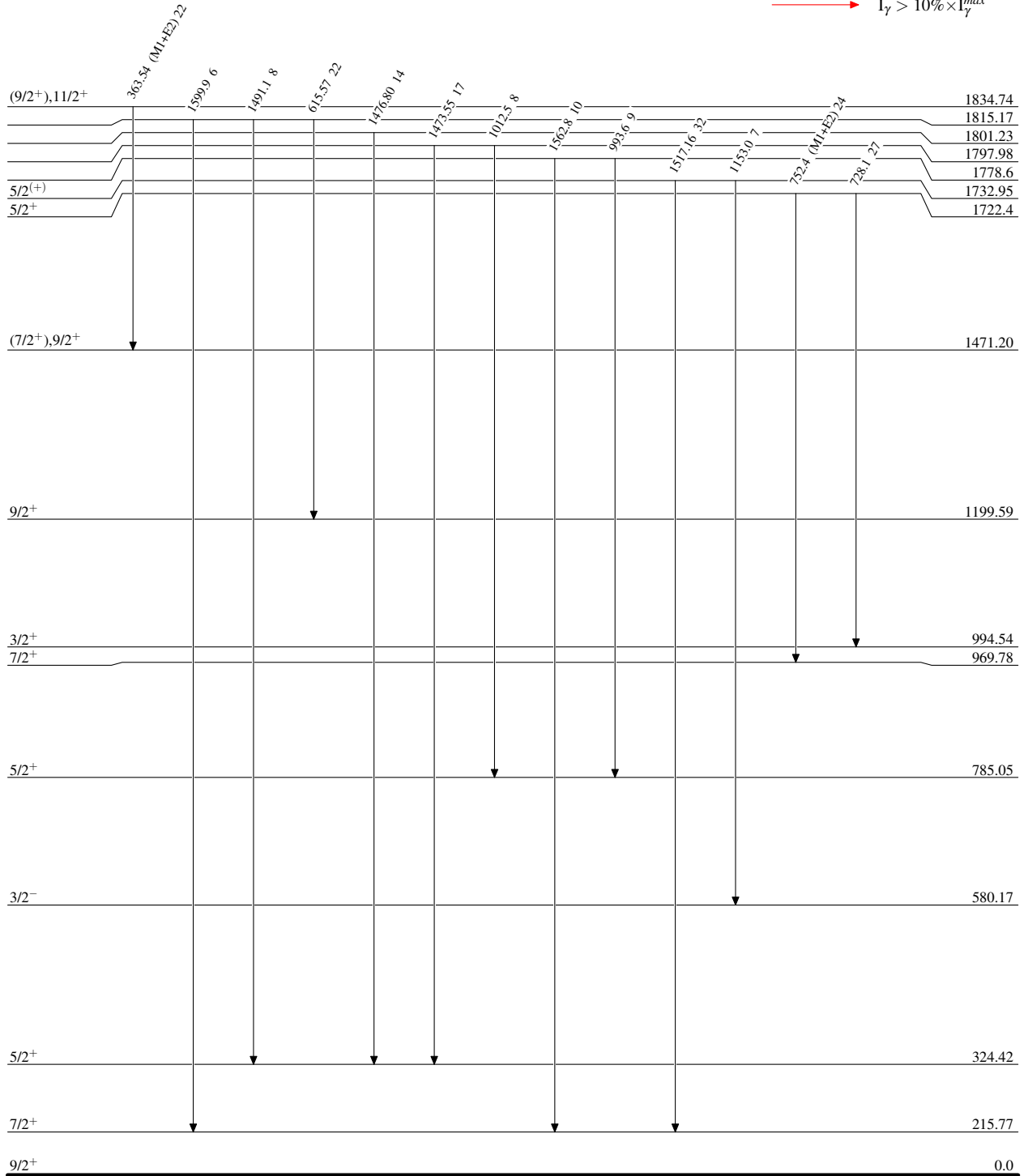
$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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

 $^{97}_{43}\text{Tc}_{54}$

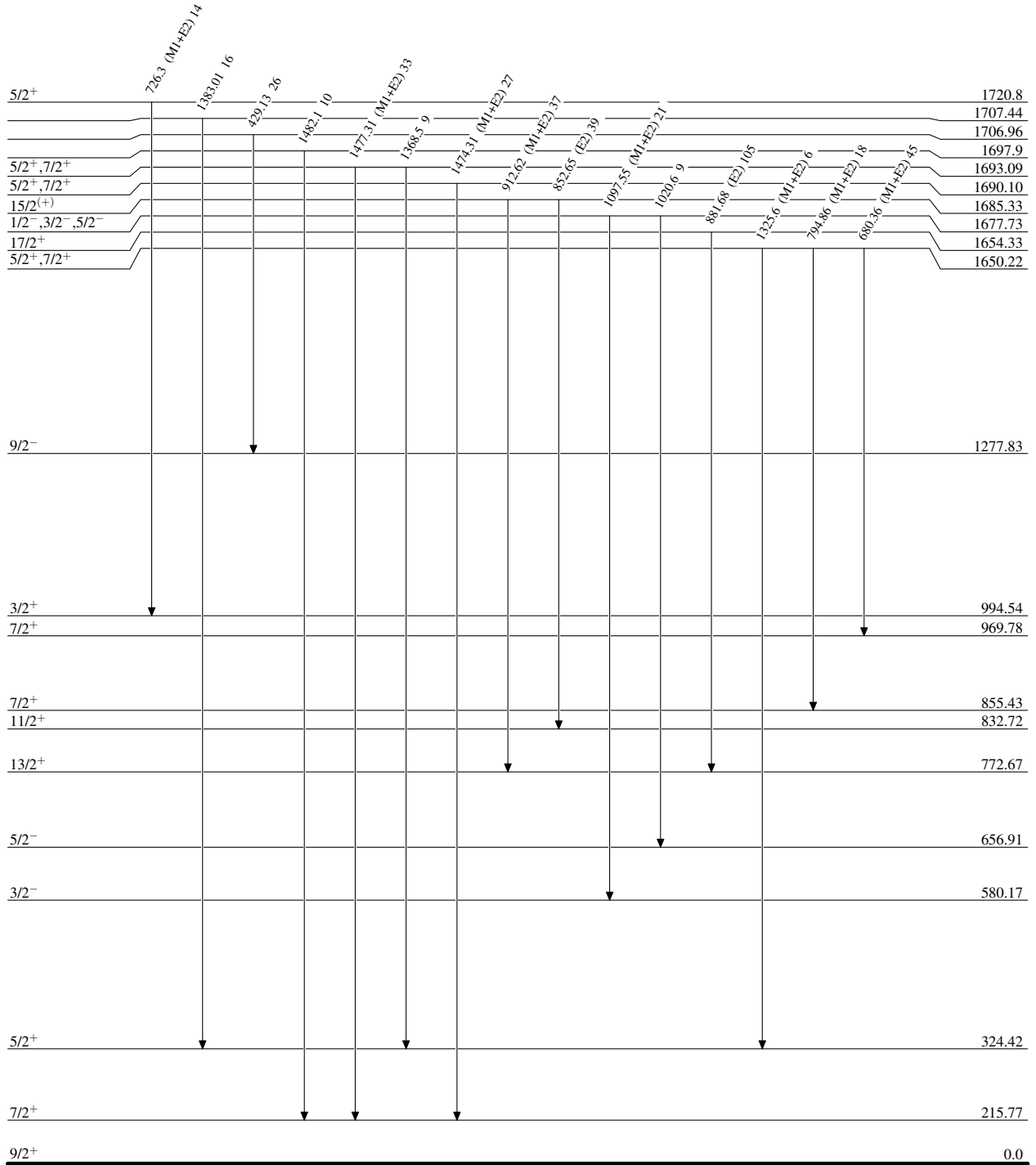
$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

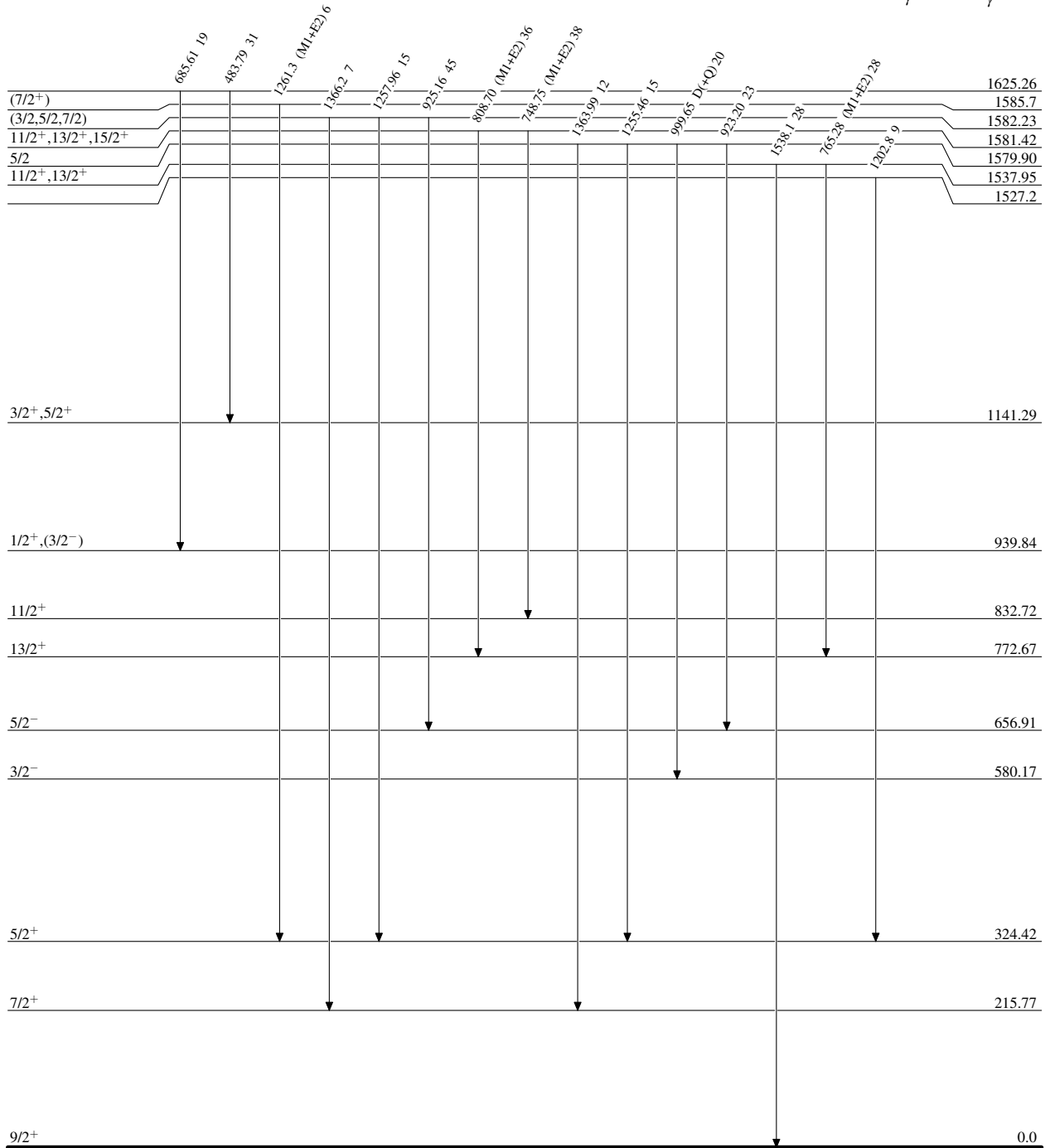
$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

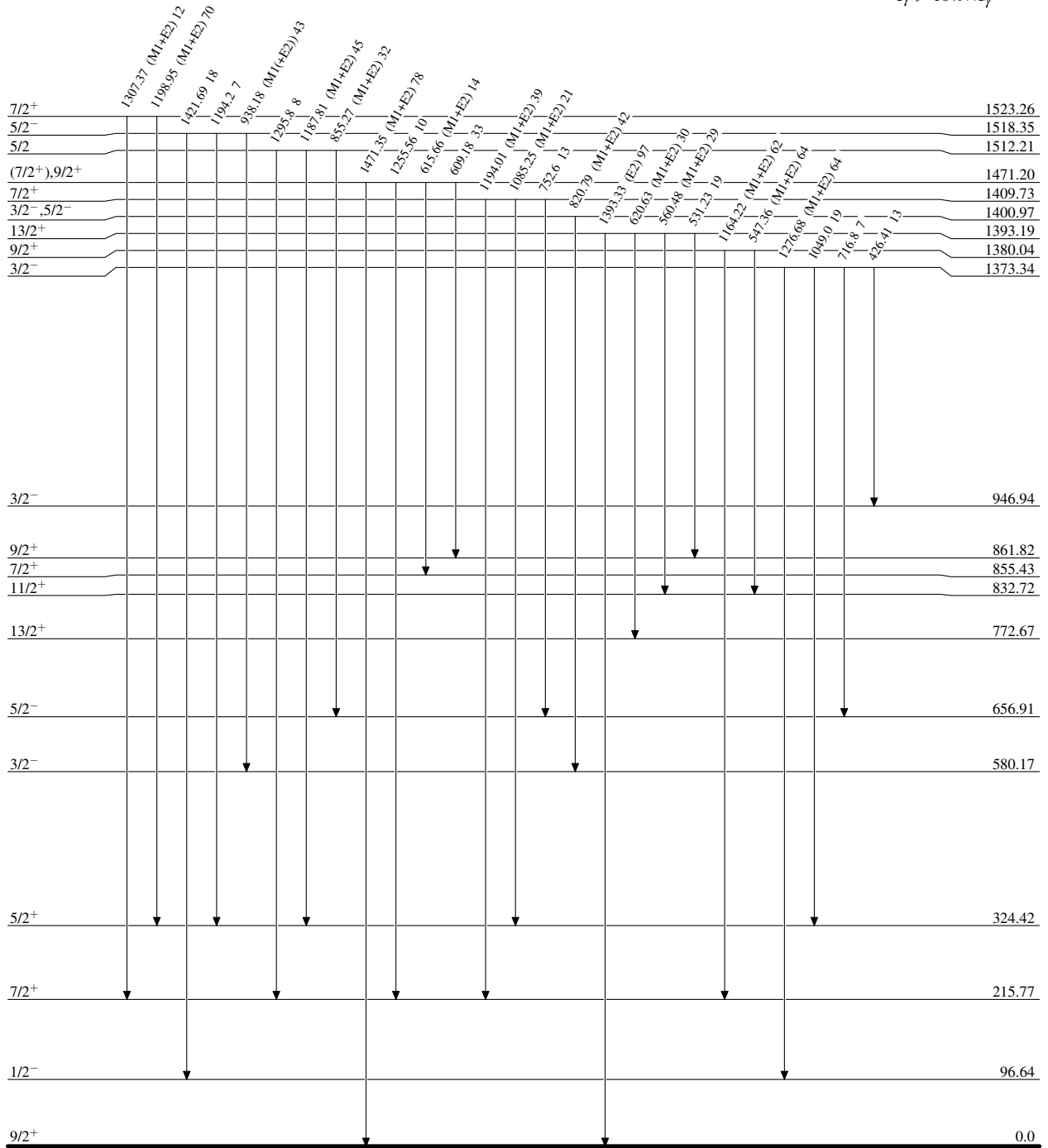
$^{96}\text{Mo}(\text{}^3\text{He,pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$

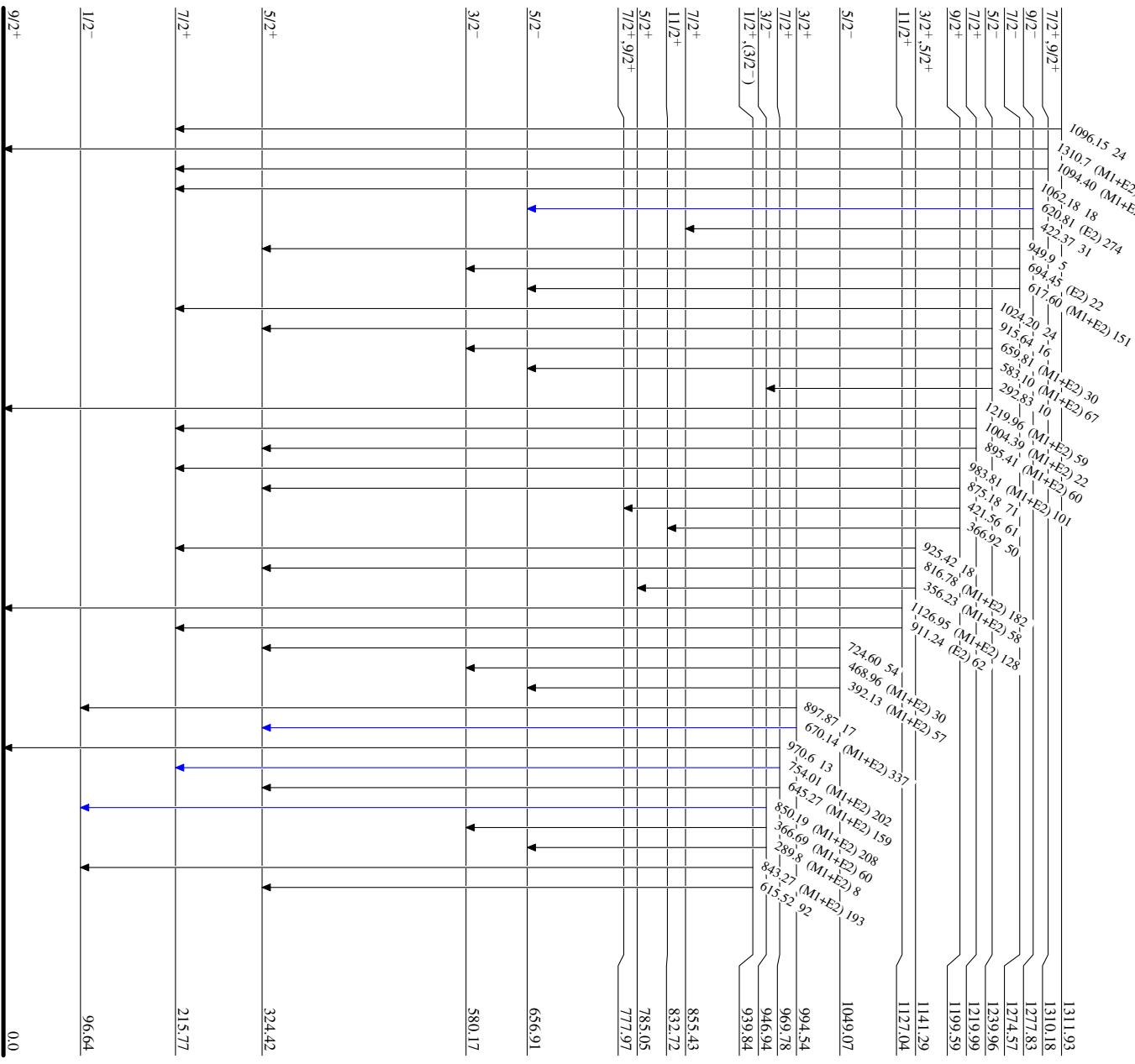
⁹⁶Mn(³He,pn γ) **1996As01**

Level Scheme (continued)

Intensities: Relative I _{γ}

Legend

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



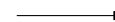


⁹⁷Tc₅₄
43

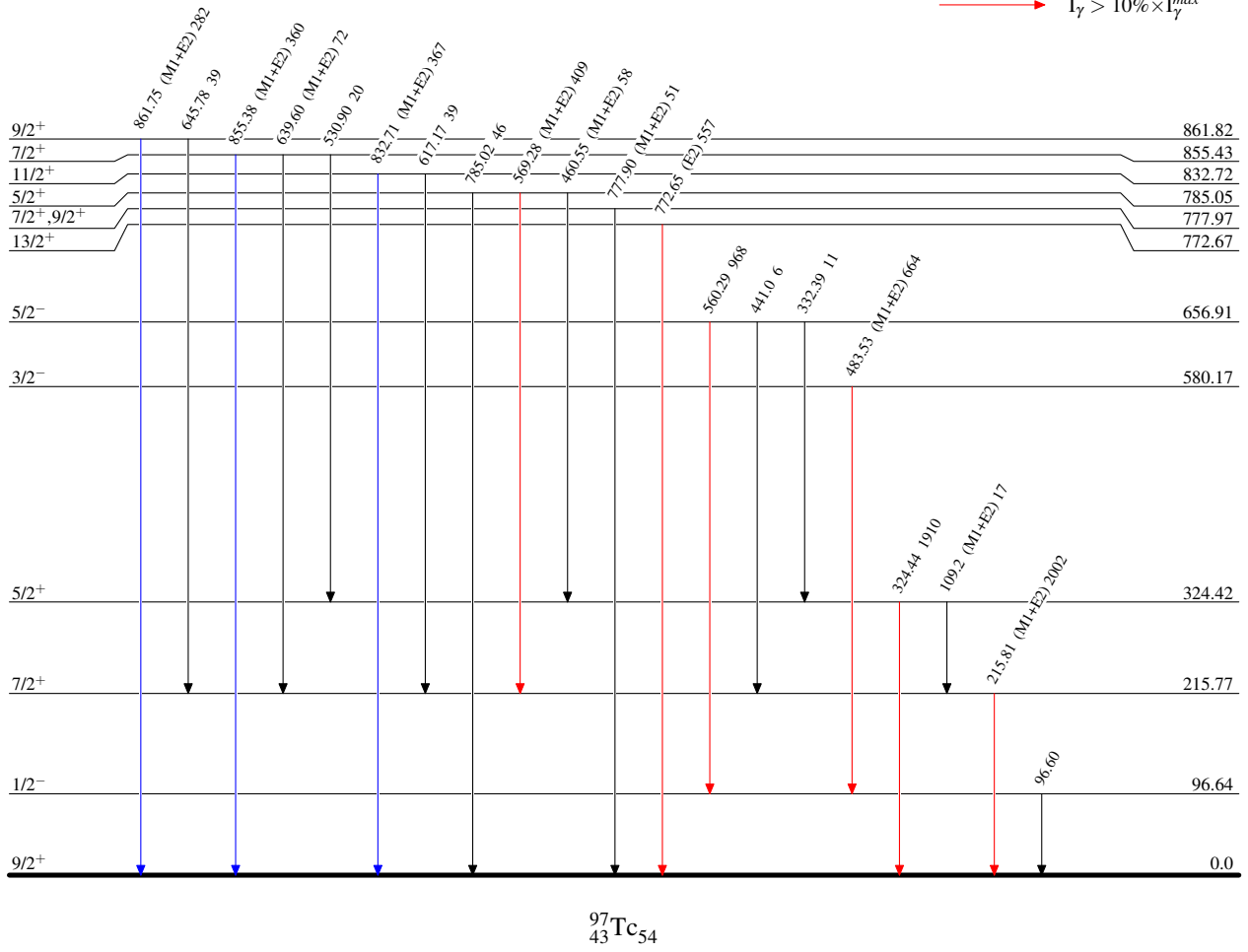
$^{96}\text{Mo}(\text{}^3\text{He},\text{pn}\gamma)$ 1996As01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{97}_{43}\text{Tc}_{54}$