^{54}Cr(p,γ) 1978We12,1980We01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 109, 787 (2008)	30-Apr-2007

E=1040-2560 keV, Ge(Li) (2.8-keV FWHM at 2615 keV); measured σ(E; Eγ,θ).

1978We12: deduced level energies and Iγ for both resonance and bound states; the Q value of the reaction was found to be 8067.2 keV *4*.

1980We01: the same authors as 1978We12, deduced J of 11 bound states using $\sigma(\theta)$ techniques, $T_{1/2}$ of 26 bound states (from attenuation factors), δ and multiplicity of 10 γ transitions from corresponding bound states.

All date are from 1978We12, except as noted.

^{55}Mn Levels

See 1978We12 for≈335 resonances.

E(level)†	J$^\pi$	$T_{1/2}$&	Comments
0.0	5/2$^-$		
125.9 *4*			
984.4 *6*			
1292.6 *11*			
1528.5 *4*	$^-$	62 fs *13*	
1884.7 *5*	7/2$^-$	19 fs *3*	
2199.8 *5*	7/2$^-$	24 fs *3*	
2215.1 *10*			
2252.6 *7*	3/2$^-$	18 fs *3*	
2266.5 *6*	5/2$^-$	125 fs *21*	
2366.4 *5*		21 fs *3*	
2426.4 *11*		0.35 ps *+35−14*	
2563.6 *9*	3/2$^-$	8 fs *2*	
2726.2 *9*	3/2,7/2	>693 fs	
2752.7 *7*		22 fs *3*	
2873.4 *8*	1/2$^-$	83 fs *14*	J$^\pi$: from Adopted Levels. Authors value J=5/2.
2952.5 *8*	3/2$^-$	12 fs *2*	J$^\pi$: from Adopted Levels. Authors value J=7/2$^-$.
2977.0 *8*	3/2$^-$,5/2$^-$,7/2$^-$	125 fs *21*	J$^\pi$: from Adopted Levels. Authors value J=7/2.
2992.8 *8*	(5/2,7/2)	10 fs *2*	
3004.9 *10*		17 fs *3*	
3036.4 *8*			$T_{1/2}$: $T_{1/2}$=17 fs *3* for 2910.4-keV transition; $T_{1/2}$=83 fs *21* for 769.9-keV transition.
3040.1 *11*		0.17 ps *+26−7*	
3051.0 *8*			
3070.0 *10*		24 fs *8*	
3080.1 *7*	(3/2)$^-$	30 fs *6*	J$^\pi$: from Adopted Levels. Authors′ value is J=(3/2,5/2,7/2).
3158.3 *8*			
3195.4 *10*		17 fs *5*	
3263.3 *8*			
3268.6 *7*			
3351.4 *8*			
3383.0 *10*			
3423.9 *9*		111 fs *35*	
3431.8 *10*		22 fs *4*	
3528.1 *10*			
3531.9 *10*			
3610.9 *11*			
3662.1 *8*			
3703.7 *8*		13 fs *4*	
3753.4 *10*			

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

^{55}Mn Levels (continued)

E(level)†	$T_{1/2}$&	E(level)†	E(level)†
3772.1 *6*		S(p)+1263.8‡ *4*	S(p)+1873.1‡ *8*
3832.1 *8*		S(p)+1282.5‡ *3*	S(p)+1901.6‡ *10*
3883.1 *7*		S(p)+1347.7‡ *4*	S(p)+1909.6‡ *8*
3946.1 *11*		S(p)+1362.3‡ *3*	S(p)+1911.8‡ *11*
3983.2 *11*		S(p)+1370.3‡ *4*	S(p)+1923.8‡ *11*
4003.1 *8*	3 fs *1*	S(p)+1385.4‡ *7*	S(p)+1934.6‡ *8*
4052.1 *9*		S(p)+1471.7‡ *6*	S(p)+1939.9 *8*
4091 *2*		S(p)+1491.6‡ *6*	S(p)+1941.3‡ *11*
4113.1 *8*		S(p)+1551.0‡ *7*	S(p)+1953.1‡ *8*
4217.2 *10*		S(p)+1568.5‡ *10*	S(p)+1955.4‡ *11*
4234.2 *10*		S(p)+1577.2‡ *7*	S(p)+1963.6‡ *8*
4429.2 *8*		S(p)+1641.4‡ *8*	S(p)+1968.0‡ *11*
4493.2 *12*		S(p)+1666.2‡ *9*	S(p)+1975.9‡ *10*
4544.2 *8*		S(p)+1681.1‡ *9*	S(p)+1978.5 *12*
4600.1 *12*		S(p)+1700.7‡ *9*	S(p)+1985.1‡ *9*
4648.2 *8*		S(p)+1707.3 *12*	S(p)+1989.5‡ *12*
4746.2 *10*		S(p)+1711.4 *12*	S(p)+1994.2‡ *9*
4925.2 *8*		S(p)+1714.1 *12*	S(p)+2010.6‡ *12*
4929.1 *9*		S(p)+1721.0‡ *9*	S(p)+2026.2‡ *10*
5186.3 *10*		S(p)+1731.9‡ *12*	S(p)+2036.2‡ *10*
S(p)+1078.3# *3*		S(p)+1747.8‡ *10*	S(p)+2041.6‡ *10*
S(p)+1098.8‡ *3*		S(p)+1774.2‡ *10*	S(p)+2064.4‡ *10*
S(p)+1130.3‡ *3*		S(p)+1787.1‡ *10*	S(p)+2080.1‡ *11*
S(p)+1134.4‡ *5*		S(p)+1788.0‡ *13*	S(p)+2087.9‡ *11*
S(p)+1203.6‡ *5*		S(p)+1827.2‡ *13*	S(p)+2164.9‡ *12*
S(p)+1211.1 *5*		S(p)+1835.6‡ *10*	S(p)+2244.7‡ *13*
S(p)+1217.9‡ *5*		S(p)+1839.1‡ *10*	S(p)+2279.0‡ *13*
S(p)+1227.9‡ *5*		S(p)+1854.2‡ *9*	S(p)+2300.9‡ *13*
S(p)+1248.4‡ *4*		S(p)+1860.7‡ *9*	S(p)+2538.3‡@ *17*

† S(p)+E(p)(lab); S(p)=8067.2 *4* (1978We12) for resonance states.
‡ See 1978We12 for additional resonances observed between these resonances.
# See 1978We12 for two resonances observed below this energy.
@ See 1978We12 for five resonances lying above this energy.
& DSAM, from 1980We01.

γ(^{55}Mn)

Evaluator has omitted the γ transitions with branching less than 1%.

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ #	Comments
125.9	100	125.9		0.0	5/2$^-$			
697.7	53 *5*	3423.9		2726.2	3/2,7/2			
713.7	25 *3*	3080.1	(3/2)$^-$	2366.4				
738.0	40 *2*	2266.5	5/2$^-$	1528.5	$^-$	M1+E2	+0.16 *19*	Additional information 5.
769.9	100	3036.4		2266.5	5/2$^-$			
858.5	90 *3*	984.4		125.9				
868.0	27 *6*	2752.7		1884.7	7/2$^-$			
896.9	25 *10*	3263.3		2366.4				
897.9	100	2426.4		1528.5	$^-$			
984.4	10 *3*	984.4		0.0	5/2$^-$			
1068.8	25 *4*	3268.6		2199.8	7/2$^-$			
1166.7	100	1292.6		125.9				
1215.3	46 *7*	2199.8	7/2$^-$	984.4				
1344.9	77 *6*	2873.4	1/2$^-$	1528.5	$^-$			
1383.9	34 *4*	3268.6		1884.7	7/2$^-$			
1402.5	3 *1*	1528.5	$^-$	125.9				
1448.5	27 *8*	2977.0	3/2$^-$,5/2$^-$,7/2$^-$	1528.5	$^-$			
1462.3	80 *10*	3662.1		2199.8	7/2$^-$			
1488.5	26 *3*	4052.1		2563.6	3/2$^-$			
1503.9	51 *12*	3703.7		2199.8	7/2$^-$			
1505.6	15 *10*	3772.1		2266.5	5/2$^-$			
1516.7	33 *7*	3883.1		2366.4				
1519.5	15 *10*	3772.1		2252.6	3/2$^-$			
1522.5	70 *10*	3051.0		1528.5	$^-$			
1528.4	97 *1*	1528.5	$^-$	0.0	5/2$^-$	M1+E2	+0.20 *6*	Additional information 1.
1551.6	64 *3*	3080.1	(3/2)$^-$	1528.5	$^-$	M1+E2	−0.70 *16*	Additional information 11.
1572.3	15 *5*	3772.1		2199.8	7/2$^-$			
1629.8	59 *7*	3158.3		1528.5	$^-$			
1632.3	50 *10*	3832.1		2199.8	7/2$^-$			
1740.1	41 *4*	3268.6		1528.5	$^-$			
1758.7	30 *3*	1884.7	7/2$^-$	125.9				
1884.6	70 *3*	1884.7	7/2$^-$	0.0	5/2$^-$	M1+E2	+0.16 *1*	Additional information 2.
1887.4	40 *5*	3772.1		1884.7	7/2$^-$			
2008.3	33 *3*	2992.8	(5/2,7/2)	984.4				
2167.4	74 *3*	4052.1		1884.7	7/2$^-$			
2199.7	54 *7*	2199.8	7/2$^-$	0.0	5/2$^-$	M1+E2	+0.27 *1*	Additional information 3.
2215.1	100	2215.1		0.0	5/2$^-$			
2228.4	25 *10*	4113.1		1884.7	7/2$^-$			
2240.4	67 *3*	2366.4		125.9				
2252.5	100	2252.6	3/2$^-$	0.0	5/2$^-$	M1(+E2)	0.00 *1*	Additional information 4.
2266.4	60 *2*	2266.5	5/2$^-$	0.0	5/2$^-$	M1+E2	−0.15 *1*	Additional information 6.
2347.5	40 *10*	4600.1		2252.6	3/2$^-$			
2354.6	35 *7*	3883.1		1528.5	$^-$			
2366.3	33 *3*	2366.4		0.0	5/2$^-$			
2417.6	100	3946.1		1528.5	$^-$			
2562.6 @		4091		1528.5	$^-$			
2562.7	80 *10*	4929.1		2366.4				
2563.5	100	2563.6	3/2$^-$	0.0	5/2$^-$	M1+E2	+0.09 *1*	Additional information 7.

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ #	Comments
2626.7	45 *6*	2752.7		125.9				
2676.5	20 *10*	4929.1		2252.6	$3/2^-$			
2726.1	100	2726.2	3/2,7/2	0.0	$5/2^-$	M1+E2	+0.06 *6*	Additional information 8.
2752.6	28 *6*	2752.7		0.0	$5/2^-$			
2826.5	79 *5*	2952.5	$3/2^-$	125.9				
2866.8	67 *3*	2992.8	(5/2,7/2)	125.9				
2873.3	23 *6*	2873.4	$1/2^-$	0.0	$5/2^-$			
2910.4	100	3036.4		125.9				
2914.1	100	3040.1		125.9				
2925.0	30 *10*	3051.0		125.9				
2952.4	21 *5*	2952.5	$3/2^-$	0.0	$5/2^-$			
2976.9	73 *8*	2977.0	$3/2^-$,$5/2^-$,$7/2^-$	0.0	$5/2^-$	M1+E2	+0.29 *4*	Additional information 9.
3004.8	100	3004.9		0.0	$5/2^-$			Additional information 10.
3015.6	25 *5*	4544.2		1528.5	$^-$			
3018.6	12 *2*	4003.1		984.4				
3069.9	100	3070.0		0.0	$5/2^-$			
3080.0	11 *3*	3080.1	$(3/2)^-$	0.0	$5/2^-$			
3119.6	30 *10*	4648.2		1528.5	$^-$			
3158.2	41 *7*	3158.3		0.0	$5/2^-$			
3195.3	100	3195.4		0.0	$5/2^-$			
3225.4	65 *9*	3351.4		125.9				
3263.2	75 *10*	3263.3		0.0	$5/2^-$			
3297.9	47 *5*	3423.9		125.9				
3351.3	35 *9*	3351.4		0.0	$5/2^-$			
3382.9	100	3383.0		0.0	$5/2^-$			
3396.6	52 *9*	4925.2		1528.5	$^-$			
3431.7	100	3431.8		0.0	$5/2^-$			
3484.9	100	3610.9		125.9				
3508.6	100	4493.2		984.4				
3528	100	3528.1		0.0	$5/2^-$			
3531.8	100	3531.9		0.0	$5/2^-$			
3662	20 *10*	3662.1		0.0	$5/2^-$			
3703.6	49 *12*	3703.7		0.0	$5/2^-$			
3706.1	50 *10*	3832.1		125.9				
3753.3	100	3753.4		0.0	$5/2^-$			
3772	15 *5*	3772.1		0.0	$5/2^-$			
3857.1	100	3983.2		125.9				
3883	32 *7*	3883.1		0.0	$5/2^-$			
4003	88 *2*	4003.1		0.0	$5/2^-$			
4062	3	S(p)+1203.6						
4069	1	S(p)+1211.1						
4113	25 *10*	4113.1		0.0	$5/2^-$			
4217	100	4217.2		0.0	$5/2^-$			
4234	100	4234.2		0.0	$5/2^-$			
4303.1	39 *7*	4429.2		125.9				
4429	61 *7*	4429.2		0.0	$5/2^-$			
4502	11	S(p)+1203.6						
4509	3	S(p)+1211.1						
4517	1	S(p)+1666.2						
4544	75 *5*	4544.2		0.0	$5/2^-$			
4580	4	S(p)+1282.5						
4648	70 *10*	4648.2		0.0	$5/2^-$			
4682	3	S(p)+1568.5						
4697	2	S(p)+1078.3						
4711	4	S(p)+1211.1						
4746	100	4746.2		0.0	$5/2^-$			

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	J^π_f
4752	3	S(p)+1134.4		
4828	5	S(p)+1721.0		
4834	9	S(p)+1217.9		
4925	48 *9*	4925.2	0.0	5/2$^-$
4983	4	S(p)+1370.3		
5021	7	S(p)+1211.1		
5029	3	S(p)+1217.9		
5070	2	S(p)+1681.1		
5103	5	S(p)+1666.2		
5109	5	S(p)+1282.5	4234.2	
5118	2	S(p)+1681.1		
5123	3	S(p)+1078.3		
5143	3	S(p)+1098.8		
5162	2	S(p)+1551.0		
5173	4	S(p)+1681.1		
5178	2	S(p)+1134.4		
5186	100	5186.3	0.0	5/2$^-$
5217	13	S(p)+1263.8	4113.1	
5235	4	S(p)+1134.4		
5243	14	S(p)+1078.3		
5244	7	S(p)+1700.7		
5257	1	S(p)+1714.1		
5259	7	S(p)+1217.9		
5263	15	S(p)+1098.8		
5274	4	S(p)+1666.2		
5299	5	S(p)+1347.7	4113.1	
5309	8	S(p)+1211.1		
5321	9	S(p)+1370.3	4113.1	
5321	3	S(p)+1714.1		
5329	6	S(p)+1788.0		
5346	12	S(p)+1248.4		
5372	3	S(p)+1989.5		
5374	1	S(p)+1551.0		
5390	3	S(p)+1227.9		
5393	3	S(p)+1787.1		
5394	4	S(p)+1788.0		
5473	3	S(p)+1130.3		
5477	3	S(p)+1134.4		
5486	2	S(p)+1666.2		
5500	9	S(p)+1227.9		
5500	3	S(p)+1551.0	4113.1	
5507	3	S(p)+1347.7		
5509	3	S(p)+1217.9	3772.1	
5521	7	S(p)+1362.3		
5523	4	S(p)+1721.0		
5528	3	S(p)+1491.6		
5548	3	S(p)+2010.6		
5588	1	S(p)+1551.0		
5604	12	S(p)+1263.8		
5604	4	S(p)+1568.5		
5605	5	S(p)+1681.1		
5613	3	S(p)+1577.2		
5622	7	S(p)+1282.5		
5646	2	S(p)+1700.7	4113.1	
5648	3	S(p)+1130.3		
5648	3	S(p)+1491.6		
5649	5	S(p)+1134.4		
5651	7	S(p)+1666.2	4091	
5659	1	S(p)+1714.1	4113.1	
5666	5	S(p)+1721.0	4113.1	
5674	1	S(p)+1641.4		
5694	2	S(p)+1078.3		
5700	5	S(p)+1666.2		
5709	9	S(p)+1370.3		
5717	6	S(p)+1901.6		
5720	7	S(p)+1203.6		
5723	1	S(p)+1385.4		
5727	2	S(p)+1211.1		
5746	3	S(p)+1714.1		
5751	3	S(p)+1835.6		
5754	5	S(p)+1700.7		
5754	5	S(p)+1721.0		
5757	2	S(p)+1666.2	3983.2	
5765	5	S(p)+1731.9		
5772	2	S(p)+1681.1	3983.2	
5780	7	S(p)+1747.8		
5794	5	S(p)+1282.5		
5794	3	S(p)+1641.4		
5817	4	S(p)+1203.6		
5819	5	S(p)+1551.0		
5820	3	S(p)+1666.2		
5824	1	S(p)+1211.1		
5835	3	S(p)+1681.1		
5849	11	S(p)+1227.9		
5854	3	S(p)+1700.7		
5867	1	S(p)+1714.1		
5872	2	S(p)+1362.3		
5875	2	S(p)+2080.1		
5876	9	S(p)+1263.8		
5885	3	S(p)+1854.2		
5894	2	S(p)+1975.9		
5895	3	S(p)+1385.4		
5903	5	S(p)+1873.1		
5928	8	S(p)+2010.6		
5939	2	S(p)+1787.1		
5943	5	S(p)+1282.5		
5973	23	S(p)+1362.3		
5973	5	S(p)+1641.4		
5978	2	S(p)+1714.1		
5980	4	S(p)+1471.7		
5982	6	S(p)+1953.1		
5995	3	S(p)+1385.4		
5999	3	S(p)+1491.6		
5999	9	S(p)+1666.2		
6004	2	S(p)+1975.9		
6005	3	S(p)+1854.2		
6013	2	S(p)+1985.1		
6018	2	S(p)+2080.1		
6022	3	S(p)+1994.2		
6046	7	S(p)+1078.3		
6046	2	S(p)+1714.1		
6051	9	S(p)+1901.6		
6057	3	S(p)+2080.1	4091	
6066	1	S(p)+1098.8		

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	J_f^π
6075	4	S(p)+1078.3	3070.0	
6088	5	S(p)+1577.2		
6089	14	S(p)+1078.3	3051.0	
6095	13	S(p)+1098.8	3070.0	
6096	8	S(p)+1130.3		
6099	3	S(p)+1491.6		
6101	11	S(p)+1134.4		
6106	3	S(p)+2080.1		
6118	1	S(p)+1787.1		
6141	3	S(p)+1134.4		
6142	3	S(p)+1994.2		
6144	2	S(p)+1134.4	3051.0	
6147	6	S(p)+1774.2		
6149	8	S(p)+1078.3	2992.8	(5/2,7/2)
6165	3	S(p)+1835.6		
6167	1	S(p)+1551.0		
6170	2	S(p)+1098.8	2992.8	(5/2,7/2)
6173	5	S(p)+2026.2		
6176	5	S(p)+1211.1		
6180	8	S(p)+1491.6	3383.0	
6183	8	S(p)+1217.9		
6184	2	S(p)+1854.2		
6189	5	S(p)+1860.7		
6192	3	S(p)+1227.9		
6200	4	S(p)+1130.3	2992.8	(5/2,7/2)
6202	2	S(p)+1873.1		
6203	5	S(p)+1134.4	2992.8	(5/2,7/2)
6205	5	S(p)+1211.1	3070.0	
6212	5	S(p)+1203.6	3051.0	
6212	7	S(p)+1217.9	3070.0	
6212	3	S(p)+1788.0		
6218	2	S(p)+1714.1		
6220	3	S(p)+1211.1	3051.0	
6221	3	S(p)+1227.9	3070.0	
6222	2	S(p)+1714.1		
6227	5	S(p)+1217.9	3051.0	
6227	9	S(p)+1968.0		
6228	3	S(p)+1134.4	2977.0	$3/2^-$,$5/2^-$,$7/2^-$
6228	15	S(p)+1263.8		
6229	5	S(p)+1721.0		
6236	1	S(p)+1227.9	3051.0	
6242	23	S(p)+1248.4	3070.0	
6246	1	S(p)+1282.5		
6252	6	S(p)+1078.3		
6253	9	S(p)+1641.4		
6256	6	S(p)+1248.4		
6256	5	S(p)+1282.5		
6269	6	S(p)+1941.3		
6269	4	S(p)+2010.6		
6277	5	S(p)+2080.1		
6290	13	S(p)+1282.5		
6294	3	S(p)+1641.4		
6295	2	S(p)+1227.9	3004.9	
6295	14	S(p)+1968.0		
6303	9	S(p)+1130.3		
6307	12	S(p)+1134.4		
6309	17	S(p)+1347.7		
6311	5	S(p)+1707.3		
6318	4	S(p)+1714.1		
6321	6	S(p)+1994.2		
6324	22	S(p)+1362.3		
6325	5	S(p)+2538.3		
6326	3	S(p)+1714.1		
6331	3	S(p)+1909.6		
6336	6	S(p)+1731.9		
6340	3	S(p)+1347.7	3070.0	
6344	6	S(p)+1731.9		
6345	4	S(p)+2087.9		
6347	9	S(p)+1385.4		
6349	10	S(p)+1282.5	3004.9	
6353	4	S(p)+1362.3	3080.1	$(3/2)^-$
6354	3	S(p)+1347.7		
6361	10	S(p)+1939.9		
6366	2	S(p)+1681.1	3383.0	
6368	3	S(p)+1362.3		
6372	9	S(p)+1370.3	3070.0	
6375	6	S(p)+1203.6		
6383	2	S(p)+1211.1		
6390	10	S(p)+1217.9		
6391	3	S(p)+1788.0		
6399	3	S(p)+1227.9		
6399	5	S(p)+1714.1	3383.0	
6400	5	S(p)+1078.3		
6405	2	S(p)+2080.1		
6408	5	S(p)+1641.4		
6413	1	S(p)+1347.7	3004.9	
6414	2	S(p)+1641.4		
6419	10	S(p)+1248.4		
6420	8	S(p)+1098.8	2752.7	
6432	3	S(p)+1471.7		
6434	2	S(p)+1263.8		
6449	2	S(p)+1681.1		
6451	7	S(p)+1491.6		
6453	4	S(p)+1953.1		
6455	3	S(p)+2036.2		
6461	7	S(p)+1471.7	3080.1	$(3/2)^-$
6461	7	S(p)+1860.7		
6474	7	S(p)+1700.7		
6476	10	S(p)+1471.7	3070.0	
6479	1	S(p)+1975.9		
6480	6	S(p)+1491.6	3080.1	$(3/2)^-$
6483	4	S(p)+2064.4		
6486	7	S(p)+1835.6	3423.9	
6495	1	S(p)+1491.6	3070.0	
6496	5	S(p)+1203.6		
6510	5	S(p)+1827.2	3383.0	
6510	4	S(p)+1909.6		
6517	19	S(p)+1347.7		
6522	2	S(p)+1681.1		
6526	3	S(p)+1491.6	3036.4	
6530	5	S(p)+1211.1	2752.7	
6531	2	S(p)+1362.3		
6532	3	S(p)+1923.8		
6536	3	S(p)+1217.9	2752.7	

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ[†]	I_γ[‡]	E_i(level)	E_f	J^π_f
6539	8	S(p)+1370.3		
6543	5	S(p)+1934.6		
6553	1	S(p)+1787.1		
6554	3	S(p)+1385.4		
6554	3	S(p)+1491.6	3004.9	
6556	2	S(p)+1568.5	3080.1	$(3/2)^-$
6559	2	S(p)+1681.1	3195.4	
6559	1	S(p)+1787.1		
6559	3	S(p)+1909.6	3423.9	
6561	3	S(p)+1911.8	3423.9	
6561	3	S(p)+1953.1		
6562	14	S(p)+1078.3		
6563	3	S(p)+1955.4		
6565	3	S(p)+1577.2	3080.1	$(3/2)^-$
6566	12	S(p)+1248.4	2752.7	
6566	3	S(p)+2064.4		
6571	9	S(p)+1568.5	3070.0	
6571	21	S(p)+1963.6		
6575	1	S(p)+1975.9		
6577	7	S(p)+2080.1		
6579	5	S(p)+1491.6	2977.0	$3/2^-,5/2^-,7/2^-$
6579	4	S(p)+1577.2		
6582	13	S(p)+1263.8	2752.7	
6583	31	S(p)+1098.8		
6597	6	S(p)+1641.4		
6600	4	S(p)+1282.5	2752.7	
6600	3	S(p)+1835.6		
6610	6	S(p)+1839.1		
6613	5	S(p)+2538.3	3983.2	
6614	6	S(p)+1551.0	3004.9	
6614	4	S(p)+1774.2		
6617	6	S(p)+1134.4		
6619	5	S(p)+1854.2		
6622	15	S(p)+2300.9	3753.4	
6624	1	S(p)+1854.2		
6626	4	S(p)+1641.4	3080.1	$(3/2)^-$
6637	3	S(p)+1681.1		
6638	7	S(p)+1551.0	2977.0	$3/2^-,5/2^-,7/2^-$
6640	3	S(p)+2041.6		
6641	6	S(p)+1641.4		
6648	3	S(p)+2041.6		
6657	5	S(p)+1700.7		
6658	2	S(p)+1491.6		
6658	7	S(p)+2010.6	3423.9	
6666	3	S(p)+1827.2		
6677	35	S(p)+1721.0		
6678	3	S(p)+1362.3	2752.7	
6681	5	S(p)+1681.1		
6685	26	S(p)+1203.6		
6692	8	S(p)+1211.1		
6698	1	S(p)+1666.2	3036.4	
6699	7	S(p)+1078.3		
6699	1	S(p)+1714.1	3080.1	$(3/2)^-$
6700	6	S(p)+1641.4	3004.9	
6701	3	S(p)+1385.4	2752.7	
6701	5	S(p)+1700.7		
6706	3	S(p)+1721.0	3080.1	$(3/2)^-$

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ [†]	I_γ [‡]	E_i(level)	E_f	J_f^π	Comments
6707	1	S(p)+1707.3			
6707	4	S(p)+1711.4			
6709	2	S(p)+1227.9			
6710	2	S(p)+1714.1			
6711	7	S(p)+1711.4			
6711	2	S(p)+1873.1			
6714	1	S(p)+1714.1			
6716	7	S(p)+1731.9	3080.1	$(3/2)^-$	
6718	9	S(p)+1955.4			
6720	5	S(p)+1098.8			
6720	6	S(p)+2041.6	3383.0		
6721	7	S(p)+1721.0			
6724	4	S(p)+1955.4			
6725	2	S(p)+1641.4	2977.0	$3/2^-,5/2^-,7/2^-$	
6725	2	S(p)+1681.1			
6728	11	S(p)+1248.4			
6729	3	S(p)+1774.2			
6729	2	S(p)+1854.2	3195.4		
6732	2	S(p)+1747.8	3080.1	$(3/2)^-$	
6739	5	S(p)+1901.6			
6741	5	S(p)+1681.1			
6742	6	S(p)+1788.0			
6744	4	S(p)+1263.8			
6747	2	S(p)+1747.8			
6749	6	S(p)+1911.8			
6752	3	S(p)+1721.0	3036.4		
6757	7	S(p)+1714.1			
6758	1	S(p)+1774.2	3080.1	$(3/2)^-$	
6758	2	S(p)+2080.1	3383.0		
6759	3	S(p)+1078.3			
6759	2	S(p)+1471.7			
6760	3	S(p)+1700.7	3004.9		
6763	19	S(p)+1282.5			
6769	2	S(p)+1774.2			
6770	2	S(p)+1711.4	3004.9		
6771	4	S(p)+1787.1	3080.1	$(3/2)^-$	
6773	1	S(p)+1714.1	3004.9		
6773	1	S(p)+1774.2			
6778	3	S(p)+1491.6			
6778	6	S(p)+1747.8	3036.4		
6780	3	S(p)+1721.0	3004.9		
6781	6	S(p)+1827.2			
6782	3	S(p)+1787.1	3070.0		
6782	6	S(p)+1788.0	3080.1	$(3/2)^-$	
6786	2	S(p)+1471.7	2752.7		
6786	4	S(p)+1788.0	3070.0		
6786	2	S(p)+1911.8	3195.4		
6788	3	S(p)+2026.2			Additional information 12.
6798	1	S(p)+1714.1	2977.0	$3/2^-,5/2^-,7/2^-$	
6804	3	S(p)+1641.4			
6805	15	S(p)+1491.6	2752.7		
6806	5	S(p)+1747.8	3004.9		
6807	13	S(p)+1854.2			
6808	9	S(p)+2041.6			
6810	4	S(p)+1827.2	3080.1	$(3/2)^-$	
6816	3	S(p)+1774.2			
6818	5	S(p)+1835.6	3080.1	$(3/2)^-$	

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	J_f^π
6821	3	S(p)+1827.2		
6822	2	S(p)+1839.1	3080.1	$(3/2)^-$
6825	1	S(p)+1827.2	3070.0	
6825	10	S(p)+2064.4		
6827	13	S(p)+1347.7		
6829	4	S(p)+1835.6		
6830	2	S(p)+1666.2		
6831	8	S(p)+1747.8	2977.0	$3/2^-,5/2^-,7/2^-$
6832	4	S(p)+1774.2	3004.9	
6833	6	S(p)+1835.6	3070.0	
6833	4	S(p)+1839.1		
6836	11	S(p)+1217.9		
6836	4	S(p)+1854.2	3080.1	$(3/2)^-$
6837	4	S(p)+1839.1	3070.0	
6839	4	S(p)+2244.7		
6841	18	S(p)+1362.3		
6842	1	S(p)+1860.7	3080.1	$(3/2)^-$
6844	6	S(p)+1681.1		
6845	5	S(p)+1787.1	3004.9	
6846	2	S(p)+1227.9		
6846	6	S(p)+1788.0	3004.9	
6847	1	S(p)+1854.2		
6849	8	S(p)+1370.3		
6852	3	S(p)+1854.2	3070.0	
6853	12	S(p)+1860.7		
6854	2	S(p)+1568.5		
6855	6	S(p)+1873.1	3080.1	$(3/2)^-$
6857	3	S(p)+1860.7	3070.0	
6862	11	S(p)+1909.6		
6864	4	S(p)+1551.0	2752.7	
6864	5	S(p)+1901.6		
6864	6	S(p)+1911.8		
6866	6	S(p)+1248.4		
6866	4	S(p)+1873.1		
6868	4	S(p)+1827.2	3036.4	
6868	3	S(p)+1839.1	3036.4	
6870	8	S(p)+1707.3		
6870	1	S(p)+1873.1	3070.0	
6873	4	S(p)+1078.3	2266.5	$5/2^-$
6873	8	S(p)+2279.0		
6880	10	S(p)+1098.8		
6881	4	S(p)+1263.8		
6881	5	S(p)+1568.5	2752.7	
6883	2	S(p)+1854.2	3036.4	
6884	2	S(p)+1721.0		
6884	6	S(p)+1827.2	3004.9	
6886	5	S(p)+1934.6		
6889	4	S(p)+1577.2	2752.7	
6891	4	S(p)+1909.6	3080.1	$(3/2)^-$
6892	7	S(p)+1835.6	3004.9	
6893	2	S(p)+1911.8	3080.1	$(3/2)^-$
6893	3	S(p)+1941.3		
6894	11	S(p)+1098.8	2266.5	$5/2^-$
6894	4	S(p)+1731.9		
6894	4	S(p)+1901.6	3080.1	$(3/2)^-$
6896	3	S(p)+1217.9		
6896	2	S(p)+1839.1	3004.9	
6898	1	S(p)+1901.6	3070.0	
6900	7	S(p)+1282.5		
6902	1	S(p)+1909.6		
6904	8	S(p)+1953.1		
6905	4	S(p)+1909.6	3070.0	
6905	4	S(p)+1923.8	3080.1	$(3/2)^-$
6906	7	S(p)+1227.9		
6908	1	S(p)+1911.8	3070.0	
6910	2	S(p)+1130.3		
6910	4	S(p)+1854.2	3004.9	
6914	2	S(p)+1134.4		
6915	7	S(p)+1934.6	3080.1	$(3/2)^-$
6916	1	S(p)+1923.8		
6917	13	S(p)+1835.6	2992.8	(5/2,7/2)
6919	2	S(p)+1923.8	3070.0	
6920	8	S(p)+1839.1	2992.8	(5/2,7/2)
6921	1	S(p)+1939.9	3080.1	$(3/2)^-$
6922	2	S(p)+1941.3	3080.1	$(3/2)^-$
6922	7	S(p)+2087.9		
6924	46	S(p)+1130.3	2266.5	$5/2^-$
6924	9	S(p)+2164.9		
6926	7	S(p)+1248.4		
6927	4	S(p)+1975.9		
6928	30	S(p)+1134.4	2266.5	$5/2^-$
6929	3	S(p)+1873.1	3004.9	
6929	5	S(p)+1901.6	3040.1	
6930	4	S(p)+1934.6	3070.0	
6932	4	S(p)+1939.9	3070.0	
6933	6	S(p)+1941.3		
6934	5	S(p)+1953.1	3080.1	$(3/2)^-$
6936	5	S(p)+1955.4	3080.1	$(3/2)^-$
6937	2	S(p)+1909.6	3040.1	
6937	1	S(p)+1941.3	3070.0	
6939	6	S(p)+1911.8	3040.1	
6941	6	S(p)+1901.6	3036.4	
6944	3	S(p)+1953.1		
6944	11	S(p)+1963.6	3080.1	$(3/2)^-$
6947	5	S(p)+1955.4		
6948	3	S(p)+1787.1		
6948	3	S(p)+1953.1	3070.0	
6948	20	S(p)+1968.0	3080.1	$(3/2)^-$
6949	6	S(p)+1788.0		
6949	3	S(p)+1909.6		
6951	5	S(p)+1641.4	2752.7	
6951	1	S(p)+1955.4	3070.0	
6955	7	S(p)+1963.6		
6959	2	S(p)+1963.6	3070.0	
6959	7	S(p)+1968.0		
6959	2	S(p)+2087.9	3195.4	
6961	9	S(p)+2010.6		
6963	3	S(p)+1968.0	3070.0	
6964	6	S(p)+1347.7		
6965	6	S(p)+1985.1	3080.1	$(3/2)^-$
6967	6	S(p)+1491.6		
6969	4	S(p)+1989.5	3080.1	$(3/2)^-$
6971	2	S(p)+1975.9	3070.0	
6976	2	S(p)+1985.1		

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	J_f^π	E_γ †	I_γ ‡	E_i(level)	E_f	J_f^π
6978	6	S(p)+1362.3			7068	3	S(p)+1909.6		
6979	12	S(p)+1923.8	3004.9		7069	2	S(p)+1787.1		
6979	11	S(p)+1939.9	3036.4		7073	3	S(p)+2036.2	3036.4	
6980	2	S(p)+1985.1	3070.0		7073	8	S(p)+2080.1	3070.0	
6980	2	S(p)+1989.5			7079	4	S(p)+2026.2	3004.9	
6984	11	S(p)+1700.7			7081	4	S(p)+2087.9	3070.0	
6984	1	S(p)+1989.5	3070.0		7082	2	S(p)+1774.2	2752.7	
6986	3	S(p)+1370.3			7085	11	S(p)+1471.7		
6986	7	S(p)+2036.2			7088	4	S(p)+2010.6	2992.8	(5/2,7/2)
6989	8	S(p)+1909.6	2992.8	(5/2,7/2)	7089	5	S(p)+2036.2	3004.9	
6989	1	S(p)+1994.2	3070.0		7094	3	S(p)+2041.6	3004.9	
6990	3	S(p)+2010.6	3080.1	$(3/2)^-$	7095	2	S(p)+1787.1	2752.7	
6991	3	S(p)+1681.1	2752.7		7104	2	S(p)+2080.1	3040.1	
6991	4	S(p)+2041.6			7105	2	S(p)+1491.6		
6992	4	S(p)+1911.8	2992.8	(5/2,7/2)	7111	4	S(p)+1953.1		
6994	2	S(p)+1955.4	3036.4		7112	3	S(p)+2087.9	3040.1	
6996	6	S(p)+1203.6			7113	11	S(p)+1641.4		
6996	24	S(p)+1217.9			7113	2	S(p)+1955.4		
6996	15	S(p)+1941.3	3004.9		7113	2	S(p)+2036.2	2992.8	(5/2,7/2)
6997	4	S(p)+1714.1			7121	3	S(p)+1963.6		
6999	5	S(p)+1839.1			7123	6	S(p)+1347.7		
7001	8	S(p)+1385.4			7126	16	S(p)+1968.0		
7001	2	S(p)+2010.6			7127	4	S(p)+2538.3		
7003	3	S(p)+1211.1			7132	4	S(p)+2080.1	3004.9	
7003	4	S(p)+1923.8	2992.8	(5/2,7/2)	7133	2	S(p)+1975.9		
7005	4	S(p)+2010.6	3070.0		7135	4	S(p)+1827.2	2752.7	
7006	3	S(p)+1227.9			7136	6	S(p)+1978.5		
7008	3	S(p)+1953.1	3004.9		7137	2	S(p)+1347.7		
7010	2	S(p)+1955.4	3004.9		7138	2	S(p)+1362.3		
7015	4	S(p)+1989.5	3040.1		7139	7	S(p)+1666.2		
7016	4	S(p)+2026.2	3080.1	$(3/2)^-$	7140	3	S(p)+2087.9	3004.9	
7017	3	S(p)+1707.3	2752.7		7143	2	S(p)+1835.6	2752.7	
7018	2	S(p)+1963.6	3004.9		7143	3	S(p)+1985.1		
7020	9	S(p)+1860.7			7146	17	S(p)+1370.3		
7020	7	S(p)+1994.2	3040.1		7146	4	S(p)+1839.1	2752.7	
7020	3	S(p)+2026.2	3070.0		7147	7	S(p)+1989.5		
7022	3	S(p)+1968.0	3004.9		7151	2	S(p)+1994.2		
7024	3	S(p)+1714.1	2752.7		7152	5	S(p)+1362.3		
7029	4	S(p)+2080.1			7154	7	S(p)+1681.1		
7030	3	S(p)+1721.0	2752.7		7160	16	S(p)+1370.3		
7030	3	S(p)+1975.9	3004.9		7161	7	S(p)+1385.4		
7032	5	S(p)+1873.1			7161	5	S(p)+1854.2	2752.7	
7032	3	S(p)+1953.1	2992.8	(5/2,7/2)	7164	5	S(p)+2087.9	2992.8	(5/2,7/2)
7035	5	S(p)+2041.6	3070.0		7165	5	S(p)+1491.6		
7037	6	S(p)+2087.9			7167	15	S(p)+1860.7	2752.7	
7039	3	S(p)+1985.1	3004.9		7173	17	S(p)+1700.7		
7041	3	S(p)+1263.8			7174	53	S(p)+1385.4		
7041	18	S(p)+1731.9	2752.7		7179	17	S(p)+1707.3		
7043	7	S(p)+1568.5			7180	3	S(p)+1568.5		
7043	3	S(p)+1989.5	3004.9		7181	3	S(p)+1901.6		
7046	6	S(p)+1370.3			7183	11	S(p)+1711.4		
7048	13	S(p)+1994.2	3004.9		7186	8	S(p)+1714.1		
7055	19	S(p)+1263.8			7187	3	S(p)+2164.9	3040.1	
7057	3	S(p)+1747.8	2752.7		7189	11	S(p)+1577.2		
7058	5	S(p)+2080.1	3080.1	$(3/2)^-$	7189	4	S(p)+1909.6		
7060	1	S(p)+1282.5			7191	18	S(p)+2244.7		
7066	9	S(p)+2041.6	3040.1		7193	4	S(p)+1721.0		

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	J^π_f
7203	5	S(p)+1923.8		
7204	12	S(p)+1731.9		
7215	16	S(p)+2164.9		
7232	3	S(p)+1953.1		
7234	13	S(p)+2279.0		
7236	1	S(p)+2080.1		
7240	2	S(p)+1934.6	2752.7	
7240	17	S(p)+2164.9	2992.8	(5/2,7/2)
7246	22	S(p)+2300.9		
7251	7	S(p)+1641.4		
7254	2	S(p)+1975.9		
7257	9	S(p)+1978.5		
7258	6	S(p)+1953.1		
7259	12	S(p)+1471.7		
7259	4	S(p)+1788.0		
7263	1	S(p)+1985.1		
7264	8	S(p)+2279.0	3080.1	$(3/2)^-$
7267	2	S(p)+1989.5		
7268	4	S(p)+1963.6		
7276	11	S(p)+1666.2		
7289	1	S(p)+1985.1		
7289	5	S(p)+2300.9	3080.1	$(3/2)^-$
7294	3	S(p)+1989.5	2752.7	
7294	24	S(p)+2244.7		
7297	8	S(p)+1827.2		
7305	16	S(p)+1835.6		
7309	14	S(p)+1839.1		
7310	6	S(p)+1700.7		
7311	2	S(p)+1641.4		
7312	2	S(p)+1471.7		
7313	3	S(p)+2036.2		
7314	4	S(p)+2010.6		
7317	6	S(p)+1707.3		
7321	4	S(p)+2300.9	3051.0	
7323	1	S(p)+1714.1		
7324	7	S(p)+1854.2		
7329	18	S(p)+1860.7		
7330	3	S(p)+1721.0		
7338	15	S(p)+1551.0		
7340	10	S(p)+1568.5		
7341	10	S(p)+1731.9		
7342	2	S(p)+1873.1		
7345	5	S(p)+2041.6		
7349	27	S(p)+1577.2		
7349	9	S(p)+2300.9		
7354	14	S(p)+1568.5		
7356	6	S(p)+1747.8		
7363	17	S(p)+1577.2		
7364	6	S(p)+1203.6		
7370	2	S(p)+1700.7		
7378	3	S(p)+1909.6		
7380	2	S(p)+1911.8		
7382	2	S(p)+1774.2		
7383	1	S(p)+1714.1		
7383	4	S(p)+2080.1		
7392	7	S(p)+1923.8		
7396	9	S(p)+1788.0		
7397	6	S(p)+2244.7		
7402	3	S(p)+1934.6		
7410	2	S(p)+1641.4		
7421	4	S(p)+1953.1		
7423	4	S(p)+1955.4		
7424	1	S(p)+1641.4		
7436	12	S(p)+1666.2		
7441	3	S(p)+1282.5		
7442	3	S(p)+1774.2		
7443	5	S(p)+1975.9		
7446	23	S(p)+1978.5		
7450	26	S(p)+1666.2		
7451	22	S(p)+1681.1		
7452	10	S(p)+1985.1		
7452	4	S(p)+2300.9		
7456	3	S(p)+1788.0		
7456	11	S(p)+1989.5		
7461	9	S(p)+1994.2		
7462	7	S(p)+1854.2		
7465	9	S(p)+1681.1		
7466	3	S(p)+2164.9		
7467	3	S(p)+1860.7		
7470	5	S(p)+1700.7		
7477	11	S(p)+1707.3		
7479	3	S(p)+1873.1		
7481	3	S(p)+1711.4		
7483	2	S(p)+1714.1		
7484	9	S(p)+1700.7		
7490	43	S(p)+1707.3		
7490	3	S(p)+1721.0		
7492	6	S(p)+2026.2		
7494	19	S(p)+1711.4		
7494	12	S(p)+1827.2		
7497	4	S(p)+1714.1		
7503	2	S(p)+1835.6		
7504	5	S(p)+1721.0		
7507	21	S(p)+2538.3		
7508	4	S(p)+2041.6		
7514	13	S(p)+1731.9		
7516	6	S(p)+1747.8		
7517	2	S(p)+1681.1		
7522	9	S(p)+1854.2		
7530	7	S(p)+1747.8		
7530	2	S(p)+2064.4		
7539	4	S(p)+1873.1		
7540	19	S(p)+1934.6		
7546	26	S(p)+1941.3		
7547	4	S(p)+1711.4		
7550	2	S(p)+1714.1		
7552	5	S(p)+2279.0		
7553	4	S(p)+2087.9		
7556	17	S(p)+1774.2		
7567	21	S(p)+1901.6		
7568	5	S(p)+1963.6		
7570	5	S(p)+1788.0		
7572	6	S(p)+1968.0		
7575	3	S(p)+1909.6		

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_f	E_γ †	I_γ ‡	E_i(level)	E_γ †	I_γ ‡	E_i(level)
7577	6	S(p)+1911.8		7734	2	S(p)+1217.9	7983	46	S(p)+1471.7
7578	7	S(p)+2279.0		7734	4	S(p)+1955.4	7984	1	S(p)+1835.6
7583	7	S(p)+1978.5		7740	5	S(p)+1975.9	7988	4	S(p)+1839.1
7589	3	S(p)+1923.8		7741	16	S(p)+2279.0	8003	12	S(p)+1491.6
7589	1	S(p)+1985.1		7742	3	S(p)+1909.6	8004	8	S(p)+2244.7
7594	2	S(p)+1989.5		7742	4	S(p)+1963.6	8008	7	S(p)+1860.7
7597	3	S(p)+1078.3		7743	7	S(p)+1978.5	8018	4	S(p)+2244.7
7597	7	S(p)+1827.2		7744	1	S(p)+1227.9	8021	5	S(p)+1873.1
7599	2	S(p)+1994.2		7746	5	S(p)+1968.0	8038	13	S(p)+2279.0
7600	6	S(p)+1934.6		7749	4	S(p)+1985.1	8049	2	S(p)+1901.6
7602	2	S(p)+1835.6		7750	7	S(p)+2087.9	8052	8	S(p)+2279.0
7606	6	S(p)+1839.1		7754	1	S(p)+1975.9	8057	1	S(p)+1909.6
7606	3	S(p)+1941.3		7757	2	S(p)+1978.5	8059	8	S(p)+1911.8
7606	13	S(p)+2538.3	3004.9	7758	4	S(p)+1994.2	8059	13	S(p)+2300.9
7609	4	S(p)+1774.2		7762	6	S(p)+2300.9	8062	18	S(p)+1551.0
7614	5	S(p)+2010.6		7763	17	S(p)+1985.1	8073	5	S(p)+2300.9
7616	3	S(p)+1835.6		7764	9	S(p)+1248.4	8078	16	S(p)+1568.5
7618	<1	S(p)+1098.8		7766	2	S(p)+2164.9	8081	2	S(p)+1934.6
7620	3	S(p)+1839.1		7767	2	S(p)+1989.5	8087	26	S(p)+1577.2
7629	20	S(p)+2164.9		7771	11	S(p)+1939.9	8087	9	S(p)+1939.9
7630	2	S(p)+2026.2		7772	23	S(p)+1994.2	8088	3	S(p)+1941.3
7632	2	S(p)+1968.0		7773	4	S(p)+1941.3	8102	3	S(p)+1955.4
7635	13	S(p)+1854.2		7774	6	S(p)+2010.6	8135	2	S(p)+1989.5
7640	3	S(p)+1860.7		7779	6	S(p)+1263.8	8140	2	S(p)+1994.2
7643	30	S(p)+1978.5		7787	6	S(p)+1955.4	8148	12	S(p)+1641.4
7645	2	S(p)+2041.6		7788	6	S(p)+2010.6	8174	2	S(p)+1666.2
7646	2	S(p)+1491.6		7797	5	S(p)+1282.5	8181	11	S(p)+2036.2
7648	10	S(p)+1130.3		7803	4	S(p)+2026.2	8186	1	S(p)+2041.6
7649	2	S(p)+1985.1		7805	8	S(p)+2041.6	8189	3	S(p)+1681.1
7652	6	S(p)+1134.4		7806	13	S(p)+2538.3	8192	3	S(p)+2538.3
7653	1	S(p)+1873.1		7818	12	S(p)+2041.6	8208	8	S(p)+1700.7
7654	2	S(p)+1989.5		7825	1	S(p)+1994.2	8208	2	S(p)+2064.4
7661	21	S(p)+1827.2		7827	3	S(p)+2064.4	8214	6	S(p)+1707.3
7667	2	S(p)+1901.6		7832	3	S(p)+2538.3	8219	44	S(p)+1711.4
7673	3	S(p)+1839.1		7841	3	S(p)+2064.4	8221	10	S(p)+1714.1
7675	7	S(p)+1909.6		7844	16	S(p)+2244.7	8228	4	S(p)+1721.0
7677	2	S(p)+1911.8		7850	6	S(p)+2087.9	8239	4	S(p)+1731.9
7681	2	S(p)+1901.6		7856	7	S(p)+2026.2	8280	29	S(p)+1774.2
7682	8	S(p)+2080.1		7856	3	S(p)+2080.1	8292	13	S(p)+2538.3
7689	11	S(p)+1909.6		7861	19	S(p)+1347.7	8293	9	S(p)+1787.1
7689	7	S(p)+1923.8		7864	5	S(p)+2087.9	8294	10	S(p)+1788.0
7690	4	S(p)+2026.2		7865	2	S(p)+1714.1	8305	6	S(p)+2538.3
7691	4	S(p)+1911.8		7866	3	S(p)+2036.2	8307	1	S(p)+2164.9
7700	4	S(p)+1934.6		7871	2	S(p)+2041.6	8333	4	S(p)+1827.2
7703	12	S(p)+1923.8		7876	1	S(p)+1362.3	8340	10	S(p)+1835.6
7705	4	S(p)+2041.6		7882	2	S(p)+1731.9	8344	7	S(p)+1839.1
7706	3	S(p)+1873.1		7884	3	S(p)+1370.3	8359	14	S(p)+1854.2
7707	5	S(p)+2244.7		7893	2	S(p)+2064.4	8365	8	S(p)+1860.7
7713	3	S(p)+1934.6		7898	6	S(p)+1385.4	8377	9	S(p)+1873.1
7718	3	S(p)+1953.1		7898	9	S(p)+1747.8	8405	4	S(p)+1901.6
7719	12	S(p)+1939.9		7909	2	S(p)+2080.1	8413	13	S(p)+1909.6
7720	16	S(p)+1203.6		7916	4	S(p)+2087.9	8415	5	S(p)+1911.8
7720	6	S(p)+1941.3		7937	6	S(p)+1787.1	8427	4	S(p)+1923.8
7720	5	S(p)+1955.4		7937	3	S(p)+1788.0	8438	14	S(p)+1934.6
7727	43	S(p)+1211.1		7938	3	S(p)+2279.0	8443	15	S(p)+1939.9
7727	1	S(p)+2064.4		7940	5	S(p)+2164.9	8444	10	S(p)+1941.3
7732	36	S(p)+1953.1		7976	3	S(p)+1827.2	8455	3	S(p)+1953.1

Continued on next page (footnotes at end of table)

^{54}Cr(p,γ) 1978We12,1980We01 (continued)

$\gamma(^{55}Mn)$ (continued)

E_γ †	I_γ ‡	E_i(level)	E_γ †	I_γ ‡	E_i(level)	E_γ †	I_γ ‡	E_i(level)
8458	11	S(p)+1955.4	9590	29	S(p)+1551.0	9889	2	S(p)+1985.1
8466	3	S(p)+1963.6	9591	1	S(p)+1681.1	9893	3	S(p)+1860.7
8470	5	S(p)+1968.0	9606	25	S(p)+1568.5	9898	22	S(p)+1994.2
8478	60	S(p)+1975.9	9610	1	S(p)+1700.7	9905	4	S(p)+1873.1
8481	7	S(p)+1978.5	9615	<1	S(p)+1577.2	9914	1	S(p)+2010.6
8487	22	S(p)+1985.1	9621	1	S(p)+1711.4	9931	35	S(p)+2026.2
8491	6	S(p)+1989.5	9623	1	S(p)+1714.1	9933	10	S(p)+1901.6
8496	2	S(p)+1994.2	9677	2	S(p)+1641.4	9940	36	S(p)+2036.2
8512	7	S(p)+2010.6	9682	7	S(p)+1774.2	9941	3	S(p)+1909.6
8528	10	S(p)+2026.2	9695	37	S(p)+1787.1	9943	28	S(p)+1911.8
8537	2	S(p)+2036.2	9696	12	S(p)+1788.0	9945	10	S(p)+2041.6
8543	6	S(p)+2041.6	9702	1	S(p)+1666.2	9955	33	S(p)+1923.8
8565	26	S(p)+2064.4	9717	6	S(p)+1681.1	9966	26	S(p)+1934.6
8580	19	S(p)+2080.1	9734	7	S(p)+1827.2	9967	23	S(p)+2064.4
8588	11	S(p)+2087.9	9736	4	S(p)+1700.7	9971	2	S(p)+1939.9
8664	19	S(p)+2164.9	9743	<1	S(p)+1707.3	9972	4	S(p)+1941.3
8742	12	S(p)+2244.7	9743	2	S(p)+1835.6	9983	2	S(p)+2080.1
8776	9	S(p)+2279.0	9746	3	S(p)+1839.1	9984	3	S(p)+1953.1
8797	17	S(p)+2300.9	9747	5	S(p)+1711.4	9986	7	S(p)+1955.4
8999	2	S(p)+1078.3	9749	20	S(p)+1714.1	9990	4	S(p)+2087.9
9050	2	S(p)+1130.3	9756	1	S(p)+1721.0	9994	38	S(p)+1963.6
9125	2	S(p)+1078.3	9767	13	S(p)+1731.9	9998	8	S(p)+1968.0
9146	<1	S(p)+1098.8	9767	6	S(p)+1860.7	10006	1	S(p)+1975.9
9176	13	S(p)+1130.3	9779	41	S(p)+1873.1	10009	9	S(p)+1978.5
9181	3	S(p)+1134.4	9782	39	S(p)+1747.8	10015	22	S(p)+1985.1
9248	5	S(p)+1203.6	9807	15	S(p)+1901.6	10020	46	S(p)+1989.5
9263	5	S(p)+1217.9	9808	12	S(p)+1774.2	10024	<1	S(p)+1994.2
9272	50	S(p)+1227.9	9815	6	S(p)+1909.6	10040	27	S(p)+2010.6
9286	4	S(p)+1370.3	9817	15	S(p)+1911.8	10056	13	S(p)+2026.2
9292	4	S(p)+1248.4	9821	21	S(p)+1787.1	10065	25	S(p)+2036.2
9308	<1	S(p)+1263.8	9822	10	S(p)+1788.0	10066	1	S(p)+2164.9
9325	6	S(p)+1282.5	9829	3	S(p)+1923.8	10071	4	S(p)+2041.6
9389	3	S(p)+1347.7	9845	25	S(p)+1939.9	10093	21	S(p)+2064.4
9404	2	S(p)+1362.3	9846	11	S(p)+1941.3	10109	12	S(p)+2080.1
9405	2	S(p)+1491.6	9860	2	S(p)+1827.2	10116	25	S(p)+2087.9
9412	4	S(p)+1370.3	9860	27	S(p)+1955.4	10144	1	S(p)+2244.7
9426	4	S(p)+1385.4	9868	11	S(p)+1835.6	10192	4	S(p)+2164.9
9464	8	S(p)+1551.0	9872	22	S(p)+1839.1	10270	2	S(p)+2244.7
9511	1	S(p)+1471.7	9873	2	S(p)+1968.0	10304	10	S(p)+2279.0
9531	6	S(p)+1491.6	9880	9	S(p)+1975.9	10558	14	S(p)+2538.3
9551	3	S(p)+1641.4	9887	2	S(p)+1854.2			

† Nominal values were calculated by evaluator from differences between level energies. Corrections due to nuclear recoil have been made. For most γ transitions, the corrections are less than 1 keV.

‡ Percent branching ratio.

Phase convention of 1970Kr03 (Krane and Steffen).

@ Placement of transition in the level scheme is uncertain.

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme

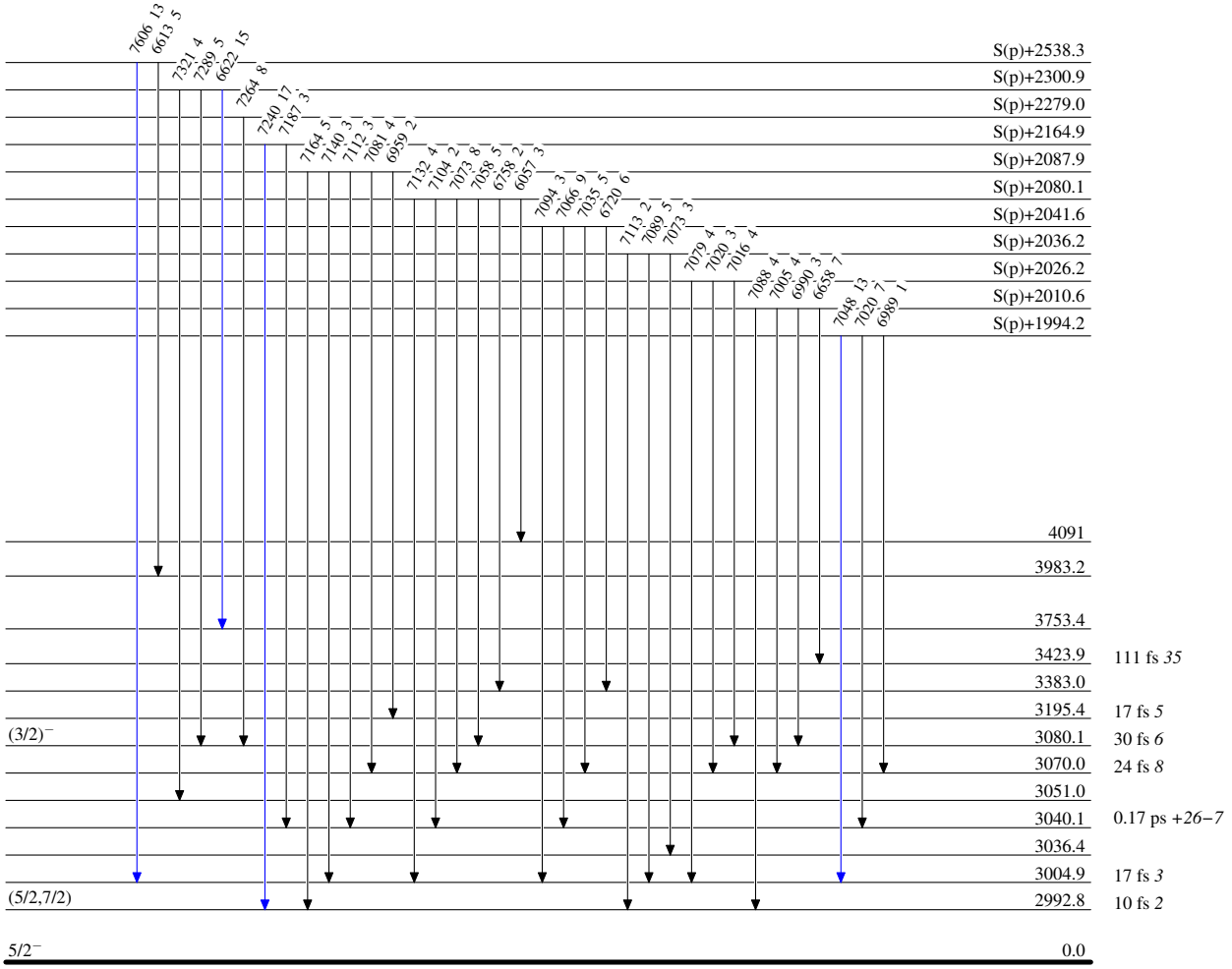
Intensities: Relative I_γ

Legend

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

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

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

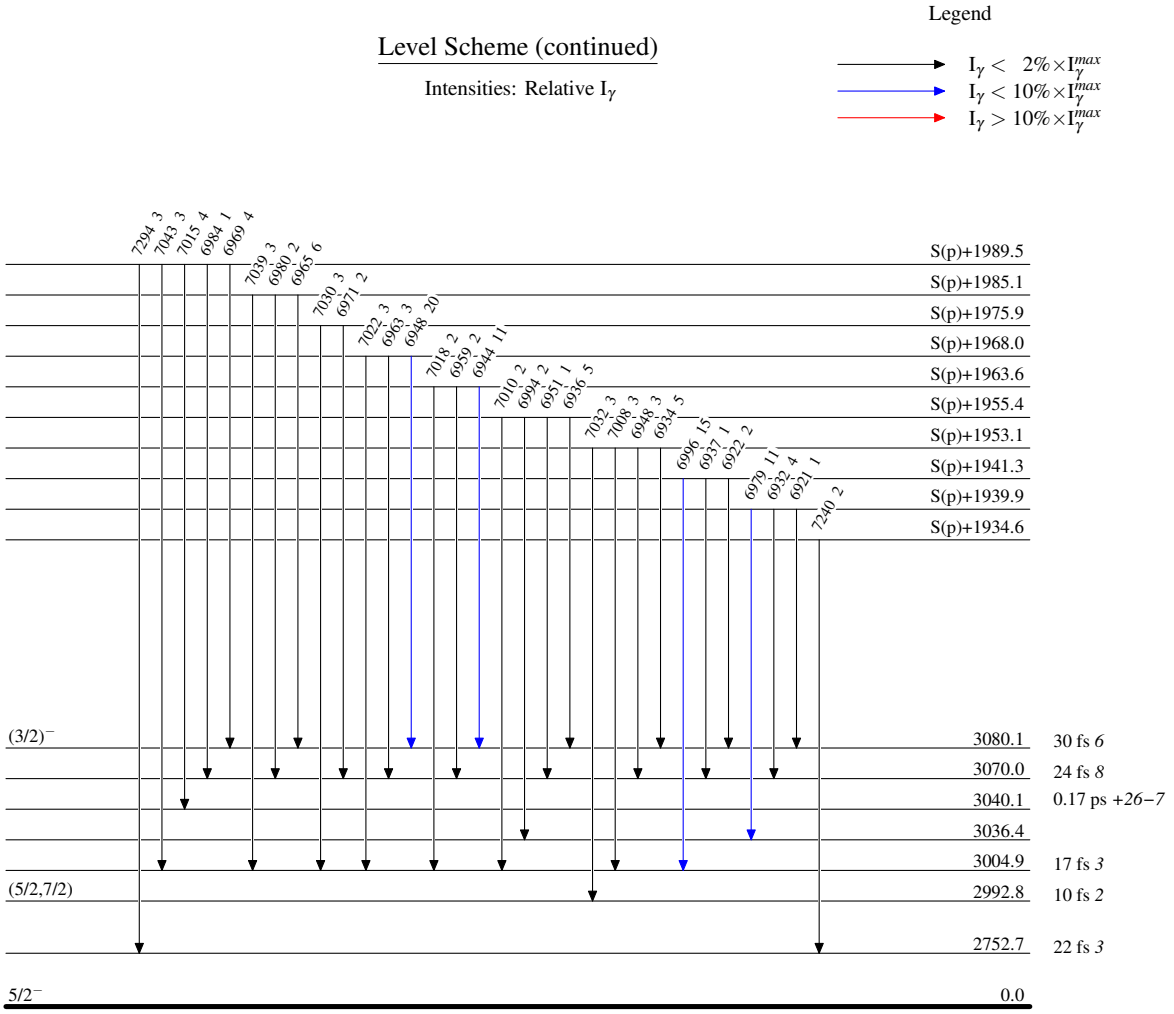


$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

Intensities: Relative I_γ

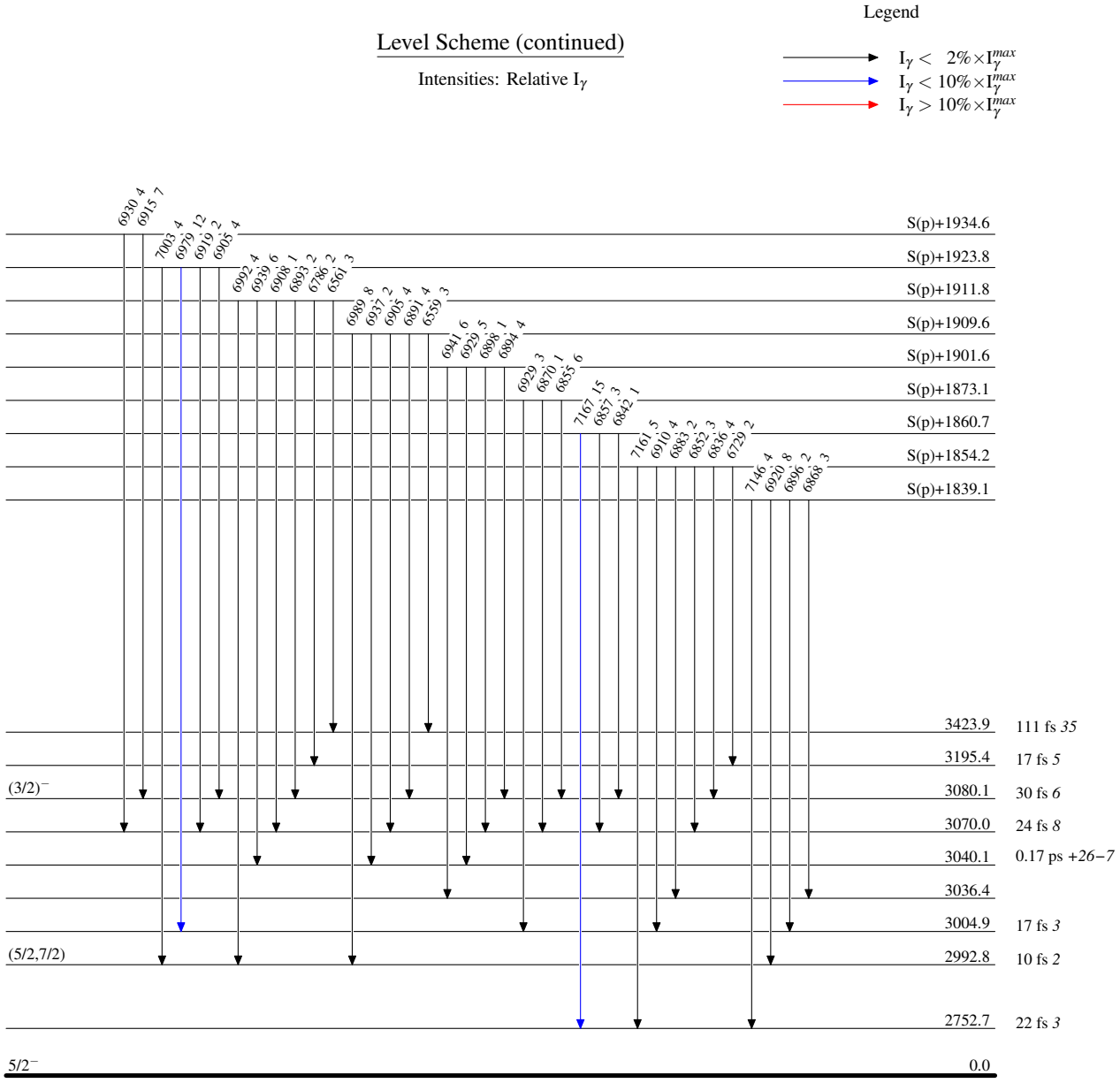


$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

Intensities: Relative I_γ



$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

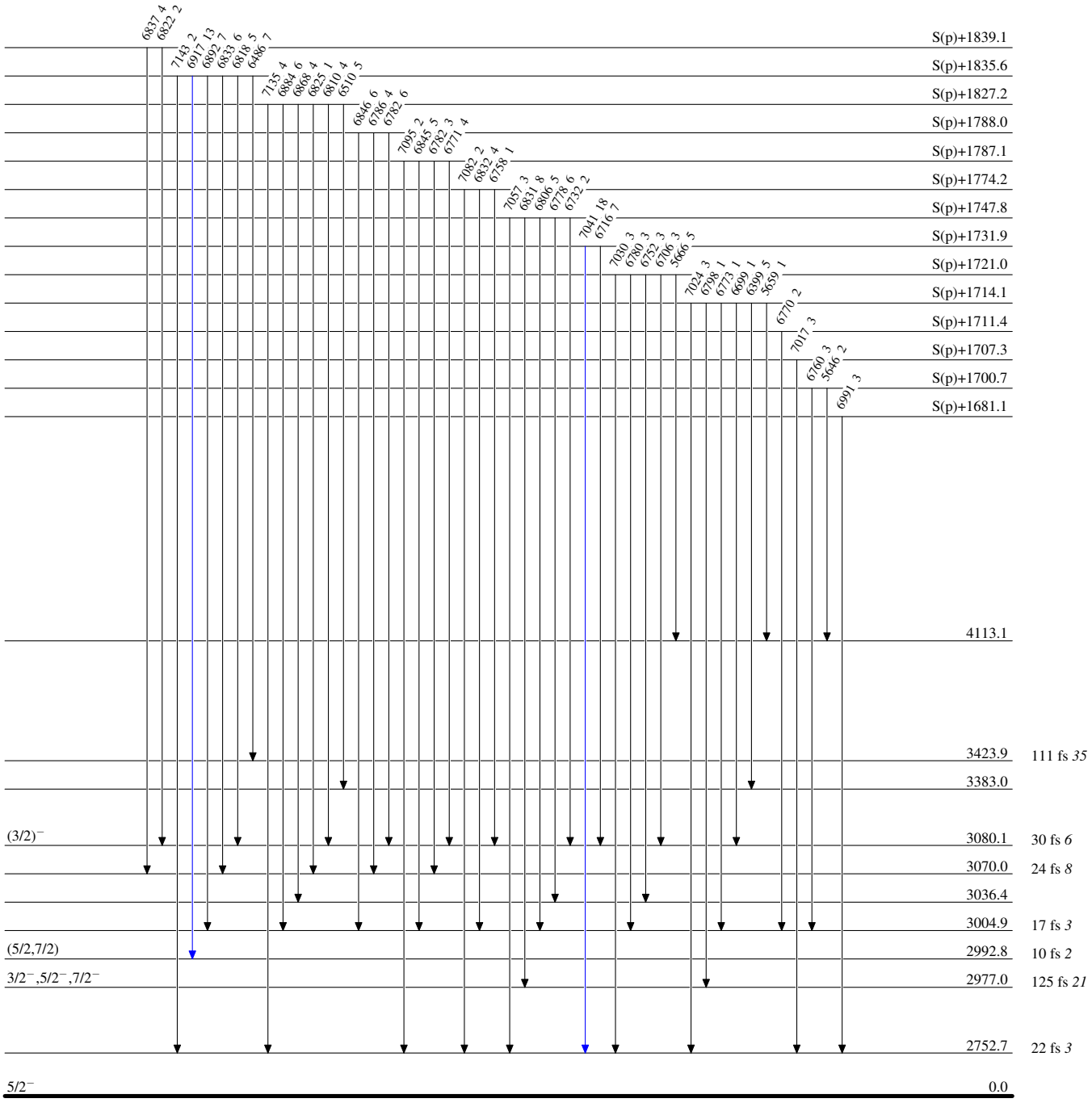
Intensities: Relative I_γ

Legend

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

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

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



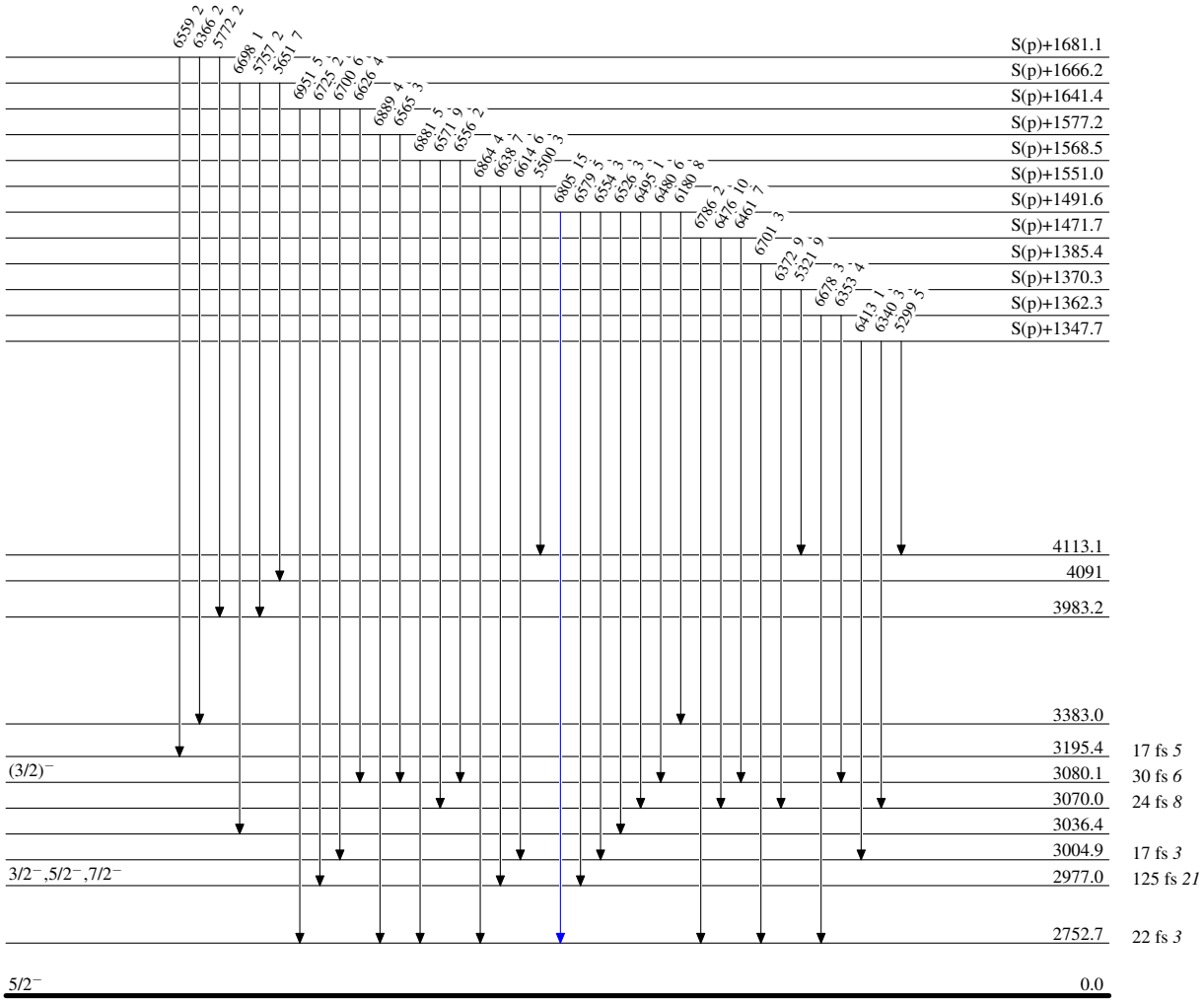
$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

Intensities: Relative I_γ

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

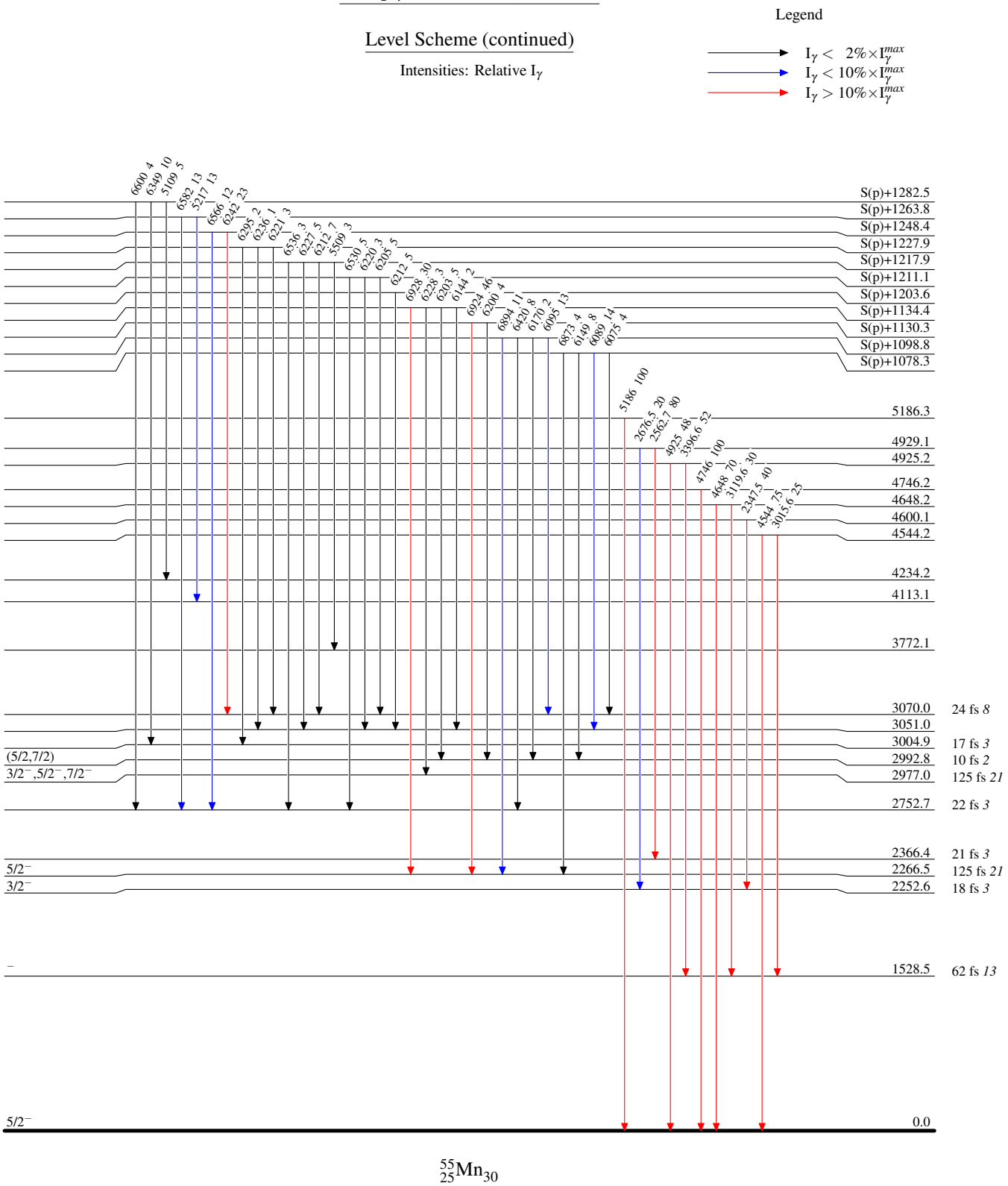


$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

Intensities: Relative I_γ



$^{55}_{25}Mn_{30}$

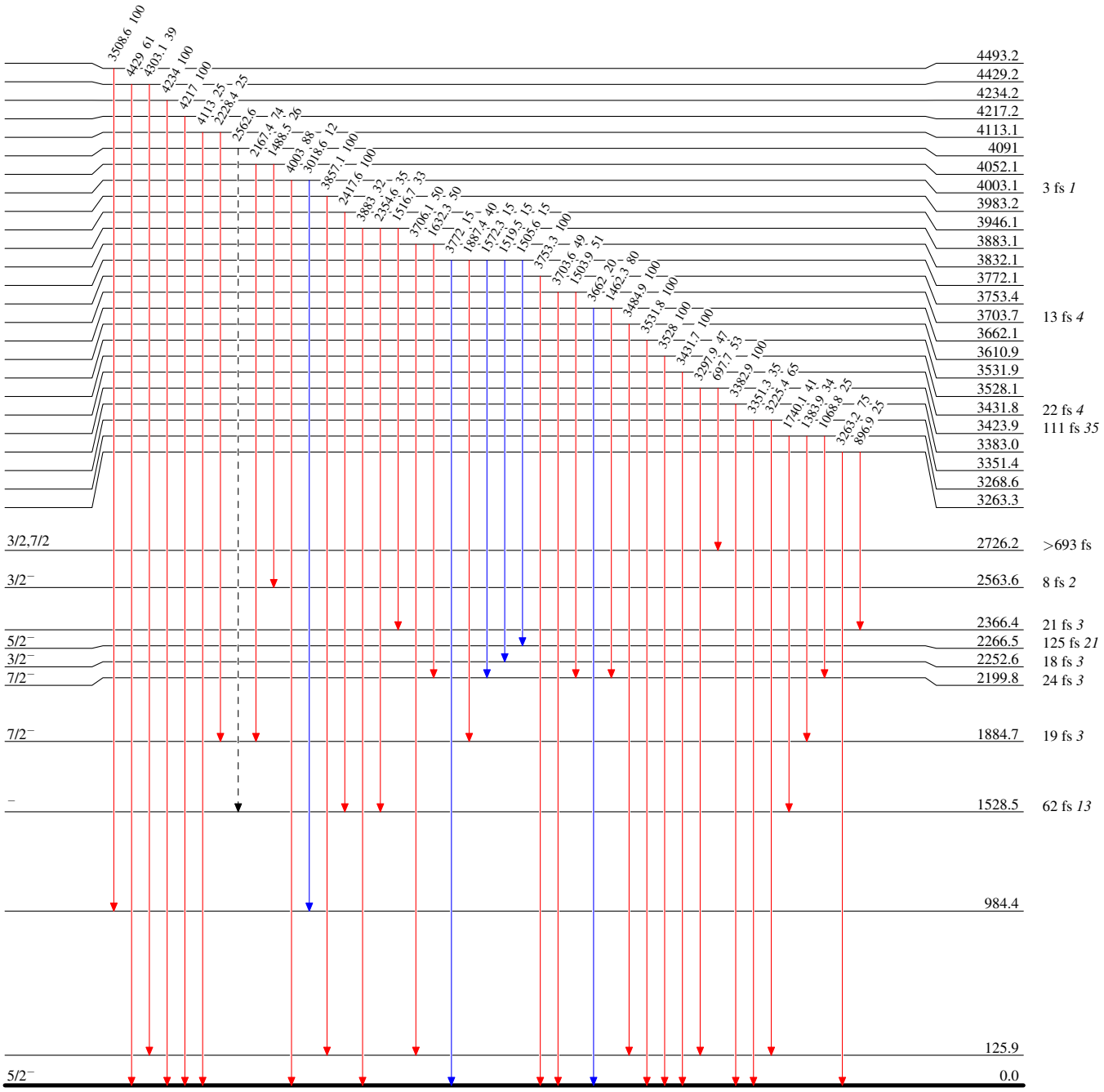
^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



$^{55}_{25}Mn_{30}$

^{54}Cr(p,γ) 1978We12,1980We01

Level Scheme (continued)

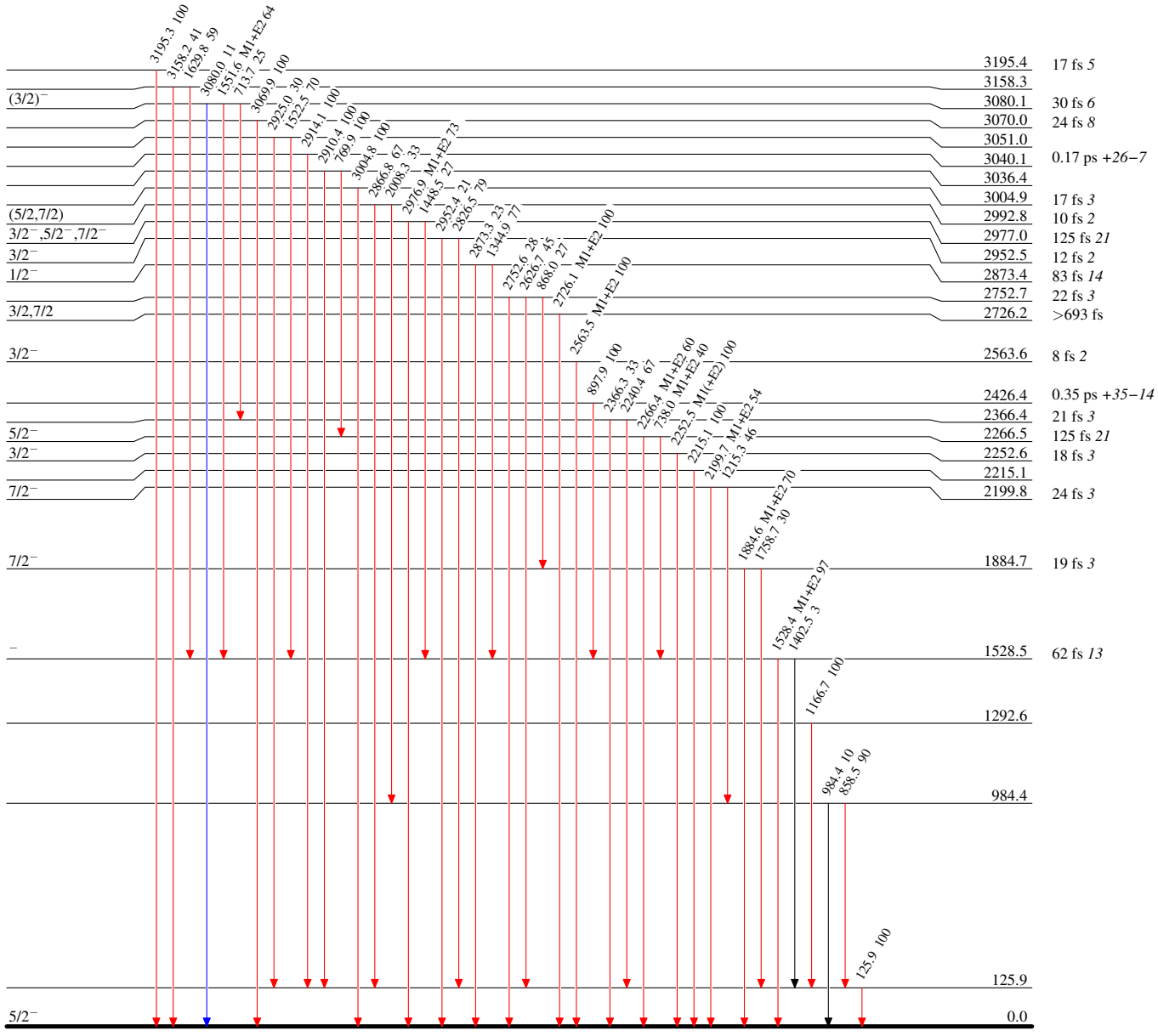
Intensities: Relative I_γ

Legend

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

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

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



$^{55}_{25}Mn_{30}$