^{55}Mn(^{30}Si,2αnγ) 1997Pa35

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

1997Pa35: E=130 MeV delivered by Tandem XTU accelerator at Legnaro. Measured Eγ, Iγ, $\gamma\gamma$, (particle)γ coin, $\gamma\gamma(\theta)$(DCO) using GASP array of 40 escape-suppressed Ge detectors and an inner BGO ball. Charged particles were detected by ΔE-E silicon ISIS ball. Target was 400 μg/cm^2 thick ^{55}Mn foil. Deduced high-spin levels, J, π, multipolarity, bands. Comparison with cranked-shell model calculations.

^{76}Br Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	Comments
0.0[g]	1$^-$		
45.4[f] 5	2$^-$		
102.2[#] 6	4$^+$	1.31 s 2	%IT>99.4 $T_{1/2}$: from Adopted Levels.
212.5[g] 4	3$^-$		
244.4[@] 6	5$^+$		
301.7[b] 5	4$^-$		
356.3[#] 6	6$^+$		
363.3[f] 5	4$^-$		
425.7 6	(4,5)		
466.4[c] 5	5$^-$		
583.2[e] 5	5$^-$		
592.4[g] 5	5$^-$		
594.7[@] 6	7$^+$		
687.7[b] 5	6$^-$		
688.1[#] 7	8$^+$		
790.6[f] 6	6$^-$		
988.1[e] 6	7$^-$		
1025.0[c] 6	7$^-$		
1120.5[@] 7	9$^+$		
1292.6[g] 6	7$^-$		
1338.4[b] 6	8$^-$		
1511.5[#] 8	10$^+$		
1542.6[f] 6	8$^-$		
1747.4[e] 6	9$^-$		
1824.5[c] 6	9$^-$		
1994.0[@] 8	11$^+$		
2056.9[g] 6	9$^-$		
2080.5[&] 9	10$^{(+)}$		
2218.4[d] 6	10$^-$		
2357.2[f] 7	10$^-$		
2578.4[a] 11	(11$^+$)		
2627.0[#] 8	12$^+$		
2688.7[e] 6	11$^-$		
2736.2[c] 7	11$^-$		
2883.1[g] 7	11$^-$		
3106.2[&] 11	(12$^+$)		
3109.0[@] 9	13$^+$		

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^{55}Mn(^{30}Si,2αnγ) 1997Pa35 (continued)

^{76}Br Levels (continued)

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
3257.1[f] 7	12⁻	4942.5[g] 8	15⁻	7388?[&] 3	(18⁺)	10871[#] 3	(22⁺)
3285.8[d] 7	12⁻	5533.8[d] 8	16⁻	7595.2[@] 15	19⁺	11289.9[e] 15	(23⁻)
3642.3[a] 12	(13⁺)	5555.0[#] 11	(16⁺)	7680.8[e] 9	19⁻	11452.5[@] 20	(23⁺)
3705.9[e] 7	13⁻	5762.4[f] 8	16⁻	8035[a] 4	(19⁺)	12564.6[d] 25	(24⁻)
3776.2[g] 7	13⁻	5794.7[&] 24	(16⁺)	8124.2[g] 22	(19⁻)	12955[#] 4	(24⁺)
4002.4[#] 10	14⁺	5934.0[@] 13	17⁺	8702.1[d] 12	(20⁻)	13439.5[e] 17	(25⁻)
4301.9[d] 7	14⁻	6166.7[e] 8	17⁻	8960.9[#] 16	(20⁺)	13609[@] 3	(25⁺)
4364.7[&] 13	(14⁺)	6384.7[a] 25	(17⁺)	9092[f] 3	(20⁻)	14795[d] 4	(26⁻)
4403.9[f] 7	14⁻	6391.2[g] 8	(17⁻)	9390.4[e] 12	(21⁻)	15866[@] 4	(27⁺)
4435.1[@] 10	15⁺	7009.8[d] 9	18⁻	9430.0[@] 18	(21⁺)	15955[e] 3	(27⁻)
4852.4[e] 8	15⁻	7208.5[#] 14	(18⁺)	10216[g] 3	(21⁻)	18328?[@] 4	(29⁺)
4903.7[a] 15	(15⁺)	7308.5[f] 22	(18⁻)	10541.6[d] 14	(22⁻)		

† From a least-squares fit to Eγ data.

‡ As proposed in 1997Pa35, based on band structures and multipolarities from DCO ratios, and previous assignments for low-lying levels.

Band(A): $K^\pi=4^+,\alpha=0$. Band built on $\pi g_{9/2}\otimes\nu g_{9/2}$ with possible Nilsson orbitals $\pi 3/2[431]$ and $\nu 5/2[422]$. Observed crossing at $\hbar\omega\approx0.82$ MeV in both the signature partners is assigned to the alignment of the second $g_{9/2}$ neutron, and at $\hbar\omega\approx1.09$ MeV in the odd-spin sequence to the alignment of $g_{9/2}$ proton.

@ Band(a): $K^\pi=4^+,\alpha=1$. For configurations and alignments, see comments for $\alpha=0$ signature partner.

& Band(B): Band based on $10^{(+)},\alpha=0$. Moment of inertia and signature inversion is similar to that for low-spin members of $K^\pi=4^+$ band. This band may be based on a configuration with a triaxial minimum.

a Band(b): Band based on $10^{(+)},\alpha=1$.

b Band(C): $K^\pi=4^-,\alpha=0$. Configuration=$\pi g_{9/2}\otimes\nu p_{3/2}$ or $\pi g_{9/2}\otimes\nu f_{5/2}$.

c Band(c): $K^\pi=4^-,\alpha=1$. Configuration=$\pi g_{9/2}\otimes\nu p_{3/2}$ or $\pi g_{9/2}\otimes\nu f_{5/2}$.

d Band(D): $K^\pi=5^-,\alpha=0$. Configuration=$\pi g_{9/2}\otimes\nu p_{3/2}$ or $\pi g_{9/2}\otimes\nu f_{5/2}$.

e Band(d): $K^\pi=5^-,\alpha=1$. Configuration=$\pi g_{9/2}\otimes\nu p_{3/2}$ or $\pi g_{9/2}\otimes\nu f_{5/2}$.

f Band(E): $K^\pi=1^-,\alpha=0$. Configuration=$\pi 3/2[312]\otimes\nu 5/2[422]$. Band crossing at $\hbar\omega\approx0.39$ MeV due to the alignment of a pair of $g_{9/2}$ protons.

g Band(e): $K^\pi=1^-,\alpha=1$. See comment for $\alpha=0$ signature partner.

γ(^{76}Br)

DCO values are for 90° and 36° (or 144°) geometry with gates on ΔJ=2, quadrupole transitions. Expected ratios are: 1.0 for stretched quadrupoles and 0.5 for stretched dipoles.

Eγ†	Iγ†	Ei(level)	Jiπ	Ef	Jfπ	Mult.‡	α&	Comments
45.48[@] 2		45.4	2⁻	0.0	1⁻	M1[@]	1.057	α(K)=0.933 14; α(L)=0.1052 15; α(M)=0.01675 24; α(N)=0.001547 22
57.11[@] 2		102.2	4⁺	45.4	2⁻	M2[@]	9.58	α(K)=8.10 12; α(L)=1.262 18; α(M)=0.205 3; α(N)=0.0183 3
89.5 4	2.5 10	301.7	4⁻	212.5	3⁻	D		DCO=0.57 15
93.5 5	42.0 18	688.1	8⁺	594.7	7⁺	D		DCO=0.56 8
103.3 4	6.4 5	466.4	5⁻	363.3	4⁻	D		DCO=0.52 6
104.8 5	12.0 8	687.7	6⁻	583.2	5⁻	D		DCO=0.60 10
112.1 5	90 3	356.3	6⁺	244.4	5⁺	D		DCO=0.61 10

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^{55}Mn(^{30}Si,2αnγ) 1997Pa35 (continued)

γ(^{76}Br) (continued)

E_γ [†]	I_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [‡]	Comments
124.0 *5*	7.4 *8*	425.7	(4,5)	301.7	4^-		
142.4 *5*	100.0	244.4	5^+	102.2	4^+	D	DCO=0.59 *8* Additional information 1.
151.0 *4*	10.0 *6*	363.3	4^-	212.5	3^-	D	DCO=0.65 *8*
157.4 *5*	4.5 *6*	583.2	5^-	425.7	(4,5)		
164.8 *5*	34.1 *15*	466.4	5^-	301.7	4^-	D	DCO=0.51 *5*
166.6 *5*	23.0 *10*	592.4	5^-	425.7	(4,5)		
167.0 *4*	11.0 *8*	212.5	3^-	45.4	2^-	D	DCO=0.68 *10*
198.2 *4*	25.0 *12*	790.6	6^-	592.4	5^-	D	DCO=0.56 *8*
199.3 *4*	37.0 *18*	301.7	4^-	102.2	4^+	(D)[#]	DCO=0.67 *10*
212.5 *4*	≤1.0	212.5	3^-	0.0	1^-		
219.9 *5*	7.5 *8*	583.2	5^-	363.3	4^-	D	DCO=0.70 *12*
221.4 *5*	22.0 *15*	687.7	6^-	466.4	5^-	D	DCO=0.70 *12*
221.7 *5*	11.7 *8*	466.4	5^-	244.4	5^+	D[#]	DCO=0.58 *8*
229.1 *4*	6.1 *8*	592.4	5^-	363.3	4^-	D	DCO=0.54 *8*
238.3 *5*	44.0 *20*	594.7	7^+	356.3	6^+	D	DCO=0.59 *8*
250.1 *4*	2.2 *8*	1542.6	8^-	1292.6	7^-		
254.5 *5*	9.1 *8*	356.3	6^+	102.2	4^+	Q	DCO=0.95 *6*
262.2 *6*	3.4 *5*	687.7	6^-	425.7	(4,5)	D	DCO=0.75 *15*
300.3 *5*	3.0 *10*	2357.2	10^-	2056.9	9^-	D	DCO=0.48 *10*
301.0 *4*	10.4 *6*	988.1	7^-	687.7	6^-	D	DCO=0.58 *8*
313.3 *5*	3.6 *8*	1338.4	8^-	1025.0	7^-		
318.0 *4*	6.5 *8*	363.3	4^-	45.4	2^-	Q	DCO=0.85 *15*
330.9 *5*	13.1 *8*	687.7	6^-	356.3	6^+	D[#]	DCO=1.02 *10*
331.8 *5*	36.2 *15*	688.1	8^+	356.3	6^+	Q	DCO=0.91 *10*
337.1 *5*	12.0 *8*	1025.0	7^-	687.7	6^-	D	DCO=0.57 *8*
350.4 *5*	9.0 *8*	594.7	7^+	244.4	5^+	Q	DCO=1.01 *10*
350.4 *6*	9.2 *15*	1338.4	8^-	988.1	7^-	D	DCO=0.45 *10*
364.1 *5*	1.7 *7*	466.4	5^-	102.2	4^+		
371.0 *5*	5.0 *8*	583.2	5^-	212.5	3^-	Q	DCO=1.11 *10*
374.0 *5*	3.0 *8*	3257.1	12^-	2883.1	11^-		
380.1 *5*	≤1.0	592.4	5^-	212.5	3^-		
386.2 *5*	4.3 *8*	687.7	6^-	301.7	4^-	Q	DCO=1.10 *10*
390.9 *5*	25.1 *10*	1511.5	10^+	1120.5	9^+	(D)	DCO=0.77 *15*
404.8 *5*	4.0 *10*	988.1	7^-	583.2	5^-	Q	DCO=0.98 *8*
409.0 *5*	8.2 *6*	1747.4	9^-	1338.4	8^-	D	DCO=0.61 *10*
420.1 *5*	4.8 *8*	3705.9	13^-	3285.8	12^-	D	DCO=0.50 *8*
427.3 *5*	≤1.0	790.6	6^-	363.3	4^-		
432.4 *5*	35.4 *18*	1120.5	9^+	688.1	8^+	D	DCO=0.41 *10*
432.7 *5*	6.2 *8*	4435.1	15^+	4002.4	14^+		
443.1 *5*	2.0 *8*	687.7	6^-	244.4	5^+		
470.2 *5*	5.0 *10*	2688.7	11^-	2218.4	10^-	D	DCO=0.51 *8*
471.0 *5*	6.5 *8*	2218.4	10^-	1747.4	9^-	D	DCO=0.60 *8*
482.0 *5*	8.3 *9*	3109.0	13^+	2627.0	12^+		
482.4 *5*	30.0 *20*	1994.0	11^+	1511.5	10^+	(D)	DCO=0.84 *15*
486.1 *6*	2.3 *10*	1824.5	9^-	1338.4	8^-		
497.8 *8*	3.2 *10*	2578.4	(11^+)	2080.5	$10^{(+)}$		
502.0 *5*	4.5 *6*	1292.6	7^-	790.6	6^-	D	DCO=0.62 *10*
514.3 *5*	1.5 *5*	2056.9	9^-	1542.6	8^-		
519.3 *5*	13.0 *8*	3776.2	13^-	3257.1	12^-	D	DCO=0.45 *10*
521.0 *5*	4.0 *8*	3257.1	12^-	2736.2	11^-	D	DCO=0.46 *8*
521.4 *5*	6.0 *8*	988.1	7^-	466.4	5^-		
525.9[a] *5*	5.0[a] *16*	1120.5	9^+	594.7	7^+		
525.9[a] *5*	4.0[a] *15*	2883.1	11^-	2357.2	10^-	D	DCO=0.62 *8*
526.3 *5*	5.2 *6*	4301.9	14^-	3776.2	13^-		

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^{55}Mn(^{30}Si,2αnγ) 1997Pa35 (continued)

γ(^{76}Br) (continued)

E_γ †	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult. ‡	Comments
527.9 *8*	1.0 *5*	3106.2	(12^+)	2578.4	(11^+)		
536.0 *8*	≤1.0	3642.3	(13^+)	3106.2	(12^+)		
538.6 *5*	6.0 *6*	4942.5	15^-	4403.9	14^-	D	DCO=0.46 *10*
539 *b*	≤1.0	4903.7	(15^+)	4364.7	(14^+)		
550.6 *5*	5.5 *6*	4852.4	15^-	4301.9	14^-	D	DCO=0.54 *8*
558.5 *5*	11.5 *10*	1025.0	7^-	466.4	5^-	Q	DCO=1.02 *8*
591.1 *5*	4.0 *6*	5533.8	16^-	4942.5	15^-	D	DCO=0.56 *8*
595.8 *5*	7.0 *9*	4301.9	14^-	3705.9	13^-		
596 *b*		3285.8	12^-	2688.7	11^-		E_γ: from level-scheme Fig. 1 in 1997Pa35.
618.6 *5*	2.2 *6*	7009.8	18^-	6391.2	(17^-)		
627.5 *6*	3.6 *8*	4403.9	14^-	3776.2	13^-		
628.7 *5*	≤1.0	6391.2	(17^-)	5762.4	16^-		
632.9 *5*	3.0 *8*	6166.7	17^-	5533.8	16^-		
633.0 *5*	17.4 *12*	2627.0	12^+	1994.0	11^+	D	DCO=0.42 *15*
650.4 *6*	21.0 *14*	1338.4	8^-	687.7	6^-	Q	DCO=0.95 *8*
670.9 *5*	2.5 *4*	7680.8	19^-	7009.8	18^-		
700.2 *5*	3.0 *10*	1292.6	7^-	592.4	5^-	Q	DCO=0.92 *10*
722 *1*	≤1.0	4364.7	(14^+)	3642.3	(13^+)		
722.3 *5*	4.6 *9*	1747.4	9^-	1025.0	7^-		
752.1 *5*	19.0 *10*	1542.6	8^-	790.6	6^-	Q	DCO=1.02 *10*
759.4 *5*	13.2 *8*	1747.4	9^-	988.1	7^-	Q	DCO=1.01 *8*
764.4 *5*	3.0 *8*	2056.9	9^-	1292.6	7^-	Q	DCO=0.96 *10*
799.4 *6*	23.0 *15*	1824.5	9^-	1025.0	7^-	Q	DCO=0.95 *8*
814.6 *5*	14.0 *8*	2357.2	10^-	1542.6	8^-	Q	DCO=0.87 *12*
819.9 *5*	≤1.0	5762.4	16^-	4942.5	15^-		
823.3 *6*	36.0 *20*	1511.5	10^+	688.1	8^+	Q	DCO=1.12 *10*
826.2 *5*	3.2 *8*	2883.1	11^-	2056.9	9^-	Q	DCO=1.12 *12*
836.5 *6*	≤1.0	1824.5	9^-	988.1	7^-		
864.1 *5*	3.2 *5*	2688.7	11^-	1824.5	9^-		
873.7 *6*	5.8 *6*	1994.0	11^+	1120.5	9^+	Q	DCO=0.99 *8*
880.0 *6*	12.5 *9*	2218.4	10^-	1338.4	8^-	Q	DCO=1.03 *10*
893.3 *5*	3.5 *6*	3776.2	13^-	2883.1	11^-	Q	DCO=1.08 *10*
893.4 *6*	7.6 *8*	4002.4	14^+	3109.0	13^+		
899.9 *5*	18.0 *10*	3257.1	12^-	2357.2	10^-	Q	DCO=1.02 *10*
911.7 *6*	12.3 *8*	2736.2	11^-	1824.5	9^-	Q	DCO=1.06 *10*
941.2 *5*	13.0 *8*	2688.7	11^-	1747.4	9^-	Q	DCO=1.12 *10*
960.0 *5*	7.5 *12*	2080.5	$10^{(+)}$	1120.5	9^+	D	DCO=0.54 *10*
969.5 *5*	4.3 *8*	3705.9	13^-	2736.2	11^-		
988.8 *6*	6.2 *12*	2736.2	11^-	1747.4	9^-		
1015.9 *6*	5.2 *8*	4301.9	14^-	3285.8	12^-	Q	DCO=0.98 *10*
1017.1 *6*	15.7 *10*	3705.9	13^-	2688.7	11^-	Q	DCO=1.03 *10*
1025.7 *8*	3.8 *14*	3106.2	(12^+)	2080.5	$10^{(+)}$		
1038.8 *8*	4.0 *8*	3257.1	12^-	2218.4	10^-	Q	DCO=0.98 *10*
1040 *2*	3.0 *9*	3776.2	13^-	2736.2	11^-		
1063.9 *8*	3.0 *8*	3642.3	(13^+)	2578.4	(11^+)		
1067.2 *8*	5.2 *10*	3285.8	12^-	2218.4	10^-		
1115.0 *6*	24.0 *16*	3109.0	13^+	1994.0	11^+	Q	DCO=0.95 *10*
1115.4 *6*	24.8 *18*	2627.0	12^+	1511.5	10^+	Q	DCO=0.90 *12*
1119.9 *6*	2.0 *6*	5555.0	(16^+)	4435.1	15^+		
1146.4 *6*	9.7 *6*	4852.4	15^-	3705.9	13^-	Q	DCO=0.99 *8*
1146.8 *6*	8.5 *10*	4403.9	14^-	3257.1	12^-	Q	DCO=1.15 *12*
1166.1 *6*	6.7 *8*	4942.5	15^-	3776.2	13^-	Q	DCO=1.02 *10*
1232.2 *7*	13.0 *6*	5533.8	16^-	4301.9	14^-	Q	DCO=1.02 *10*
1258.7 *8*	3.0 *10*	4364.7	(14^+)	3106.2	(12^+)		
1261.3 *9*	2.0 *8*	4903.7	(15^+)	3642.3	(13^+)		

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^{55}Mn(^{30}Si,2αnγ) 1997Pa35 (continued)

γ(^{76}Br) (continued)

E_γ [†]	I_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [‡]	Comments
1314.5 *8*	12.0 *8*	6166.7	17^-	4852.4	15^-	Q	DCO=1.10 *12*
1326.1 *8*	21.4 *15*	4435.1	15^+	3109.0	13^+	Q	DCO=1.13 *12*
1358.5 *8*	6.0 *5*	5762.4	16^-	4403.9	14^-	Q	DCO=0.91 *12*
1375.4 *8*	12.4 *12*	4002.4	14^+	2627.0	12^+	Q	DCO=0.98 *10*
1430 *2*	1.0 *5*	5794.7	(16^+)	4364.7	(14^+)		
1448.6 *8*	5.7 *8*	6391.2	(17^-)	4942.5	15^-		
1476.1 *8*	13.9 *8*	7009.8	18^-	5533.8	16^-	Q	DCO=0.96 *10*
1481 *2*	1.0 *5*	6384.7	(17^+)	4903.7	(15^+)		
1498.9 *8*	16.3 *10*	5934.0	17^+	4435.1	15^+	Q	DCO=1.02 *12*
1514.1 *8*	7.6 *8*	7680.8	19^-	6166.7	17^-	Q	DCO=1.03 *12*
1546 *2*	2.0 *5*	7308.5	(18^-)	5762.4	16^-		
1552.6 *8*	10.1 *12*	5555.0	(16^+)	4002.4	14^+		
1593 [*b*]	≤1.0	7388?	(18^+)	5794.7	(16^+)		
1650	≤1.0	8035	(19^+)	6384.7	(17^+)		
1653.5 *8*	8.7 *8*	7208.5	(18^+)	5555.0	(16^+)		
1661.2 *8*	16.0 *15*	7595.2	19^+	5934.0	17^+	Q	DCO=0.99 *15*
1692.2 *8*	5.6 *8*	8702.1	(20^-)	7009.8	18^-		
1709.6 *8*	8.0 *10*	9390.4	(21^-)	7680.8	19^-		
1733 *2*	1.5 *4*	8124.2	(19^-)	6391.2	(17^-)		
1752.3 *9*	6.3 *10*	8960.9	(20^+)	7208.5	(18^+)		
1784 *2*	≤1.0	9092	(20^-)	7308.5	(18^-)		
1834.7 *9*	12.9 *16*	9430.0	(21^+)	7595.2	19^+		
1839.5 *8*	3.0 *8*	10541.6	(22^-)	8702.1	(20^-)		
1899.5 *8*	4.5 *10*	11289.9	(23^-)	9390.4	(21^-)		
1910 *2*	6.1 *8*	10871	(22^+)	8960.9	(20^+)		
2022.5 *8*	9.6 *10*	11452.5	(23^+)	9430.0	(21^+)		
2023 *2*	1.6 *6*	12564.6	(24^-)	10541.6	(22^-)		
2084 *2*	1.0 *5*	12955	(24^+)	10871	(22^+)		
2092 *2*	≤1.0	10216	(21^-)	8124.2	(19^-)		
2149.5 *8*	3.5 *8*	13439.5	(25^-)	11289.9	(23^-)		
2156 *2*	3.0 *10*	13609	(25^+)	11452.5	(23^+)		
2230 *2*	1.0 *5*	14795	(26^-)	12564.6	(24^-)		
2257 *2*	1.0 *5*	15866	(27^+)	13609	(25^+)		
2462 [*b*]	≤1.0	18328?	(29^+)	15866	(27^+)		
2515 *2*	2.0 *8*	15955	(27^-)	13439.5	(25^-)		

[†] From 1997Pa35.
[‡] From DCO ratios, mult=Q indicates stretched quadrupole (most likely E2) and mult=D indicates ΔJ=1, dipole.
[#] ΔJ=0, dipole transition.
[@] From Adopted dataset.
[&] 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.
[*a*] Multiply placed with intensity suitably divided.
[*b*] Placement of transition in the level scheme is uncertain.

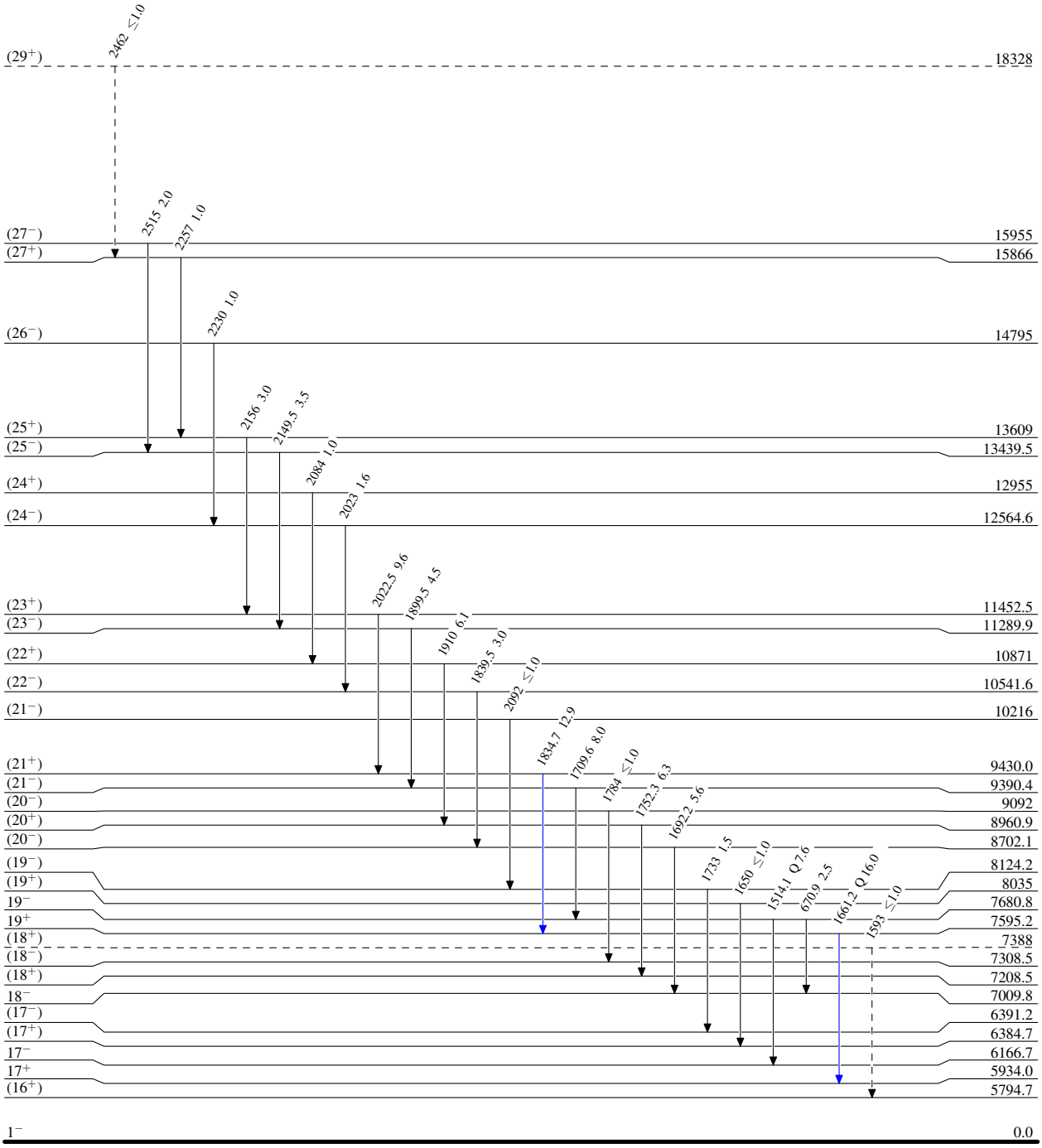
^{55}Mn(^{30}Si,2αnγ) 1997Pa35

Level Scheme

Intensities: Relative I_γ

Legend

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



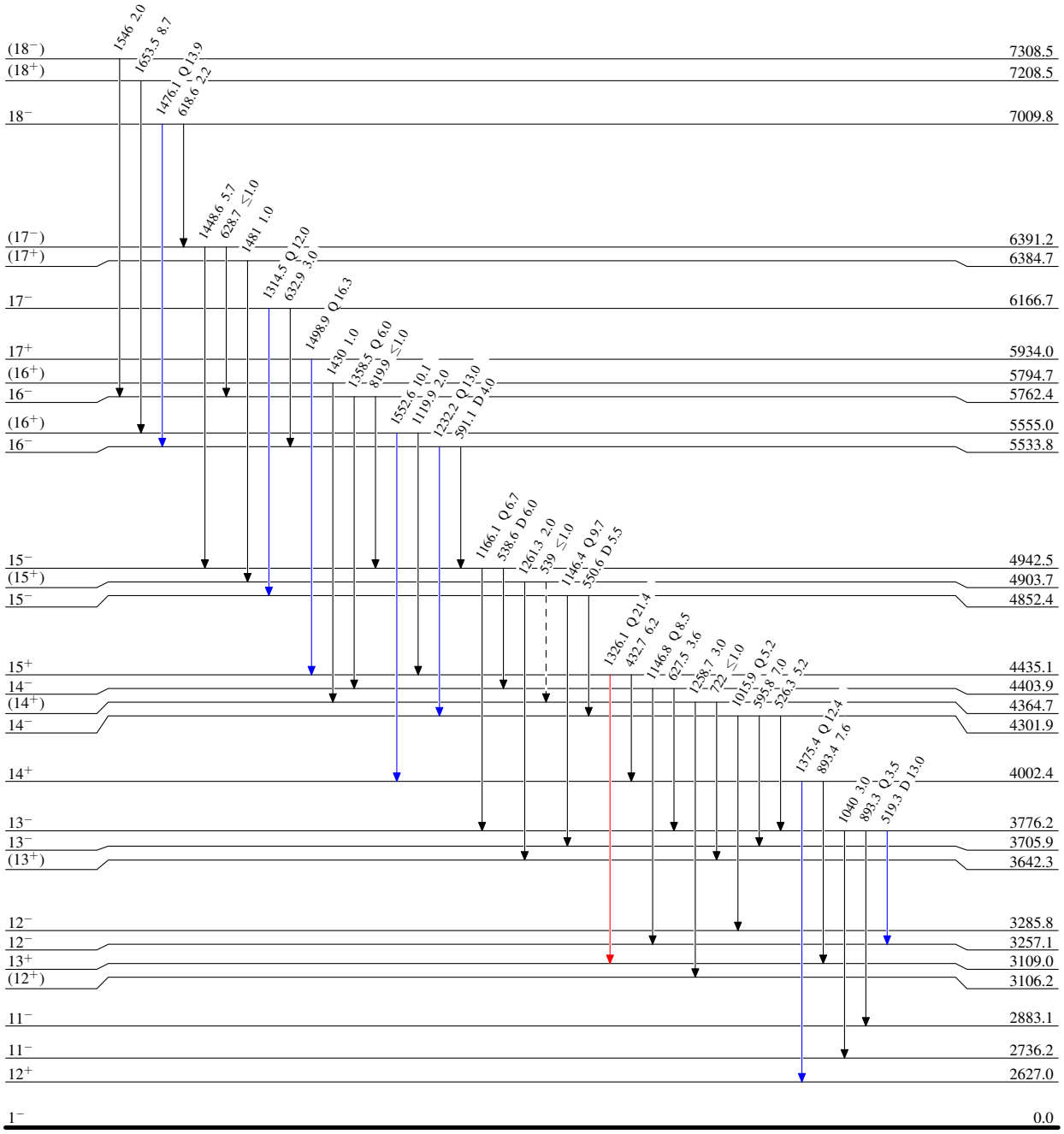
$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35

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)



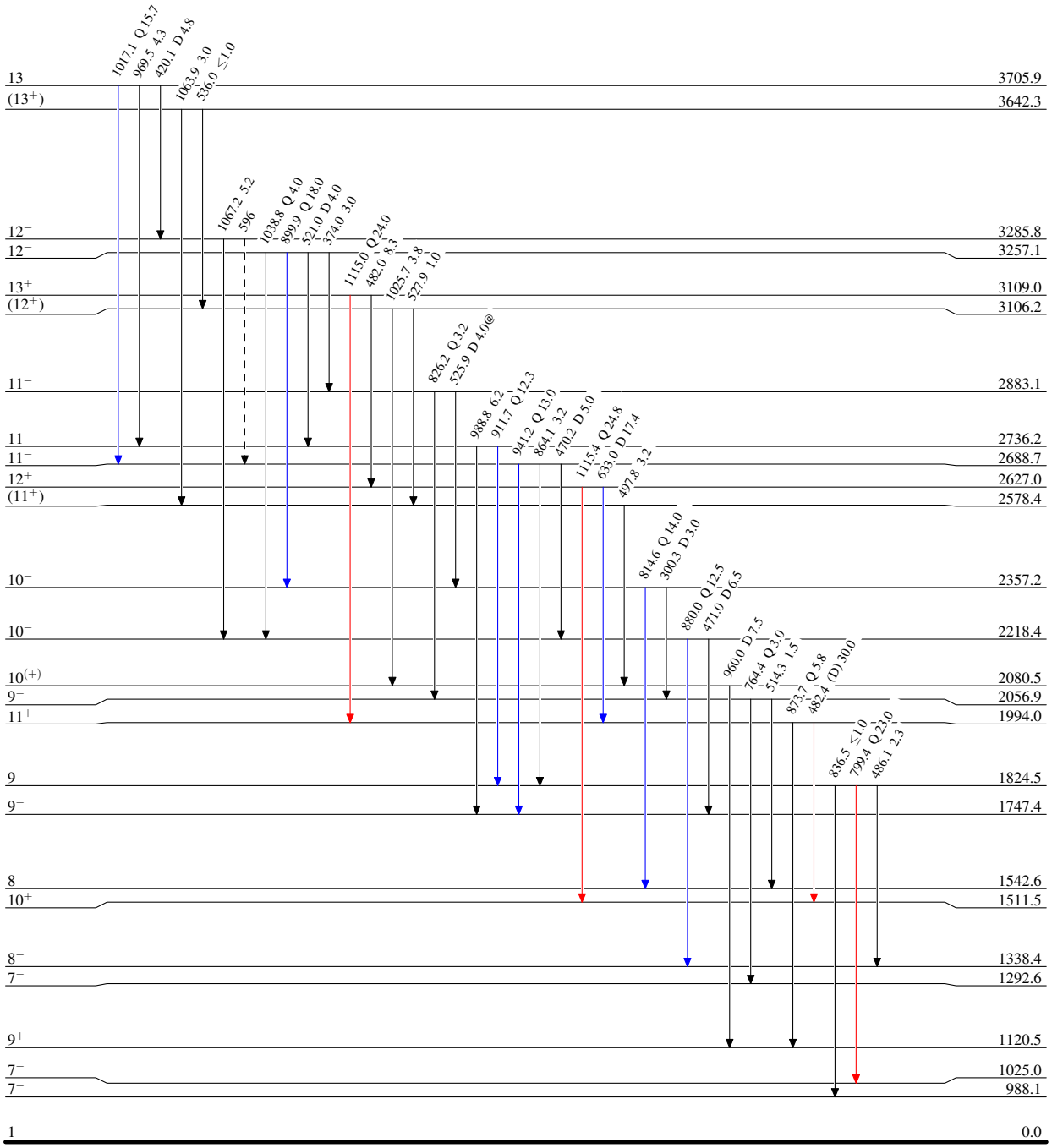
$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35

Level Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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)



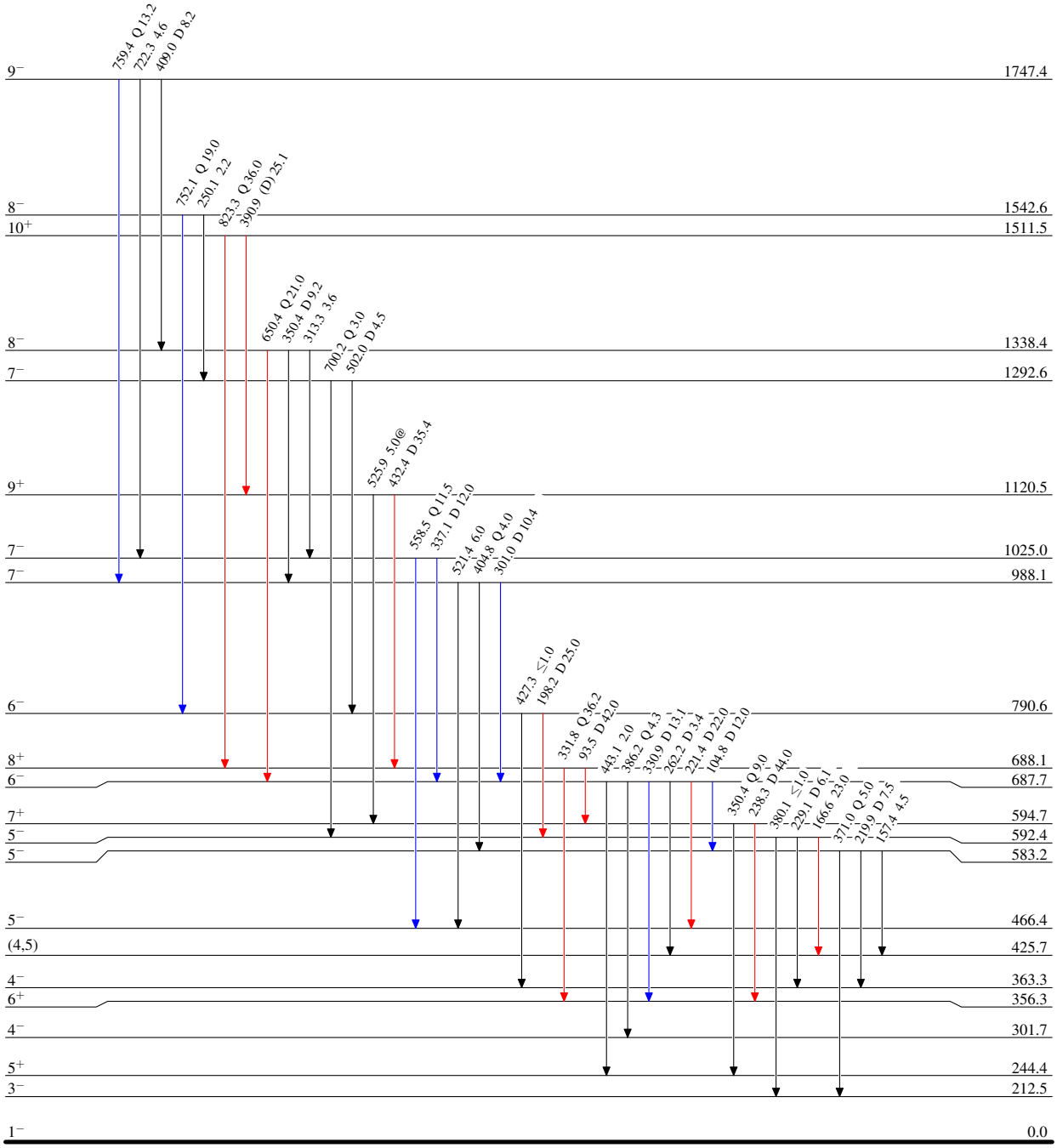
$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35

Level Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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



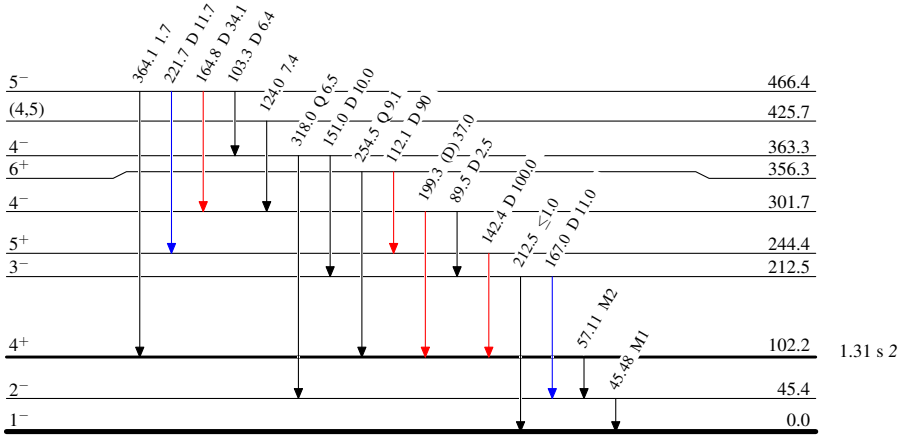
$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35

Level Scheme (continued)

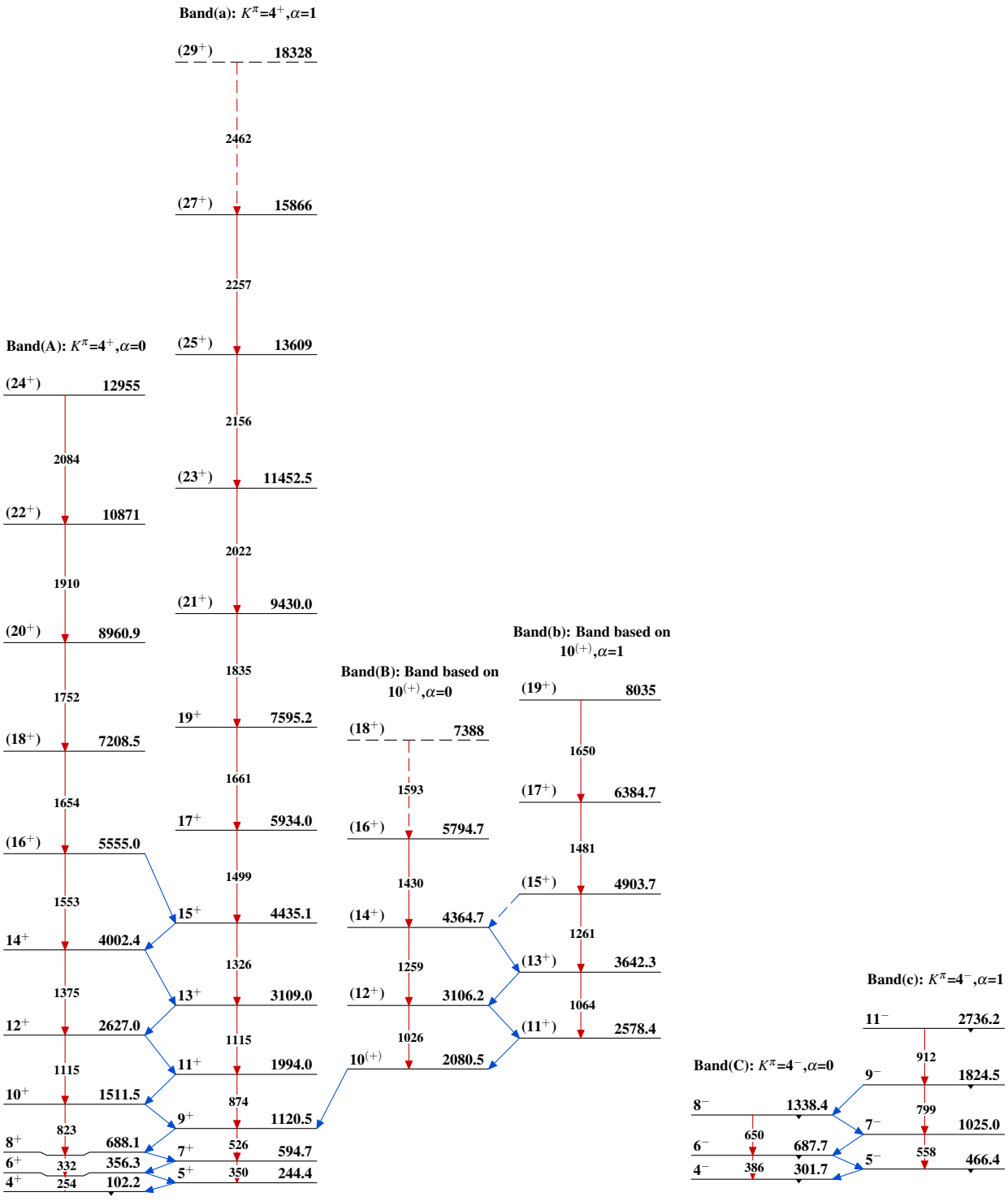
Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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



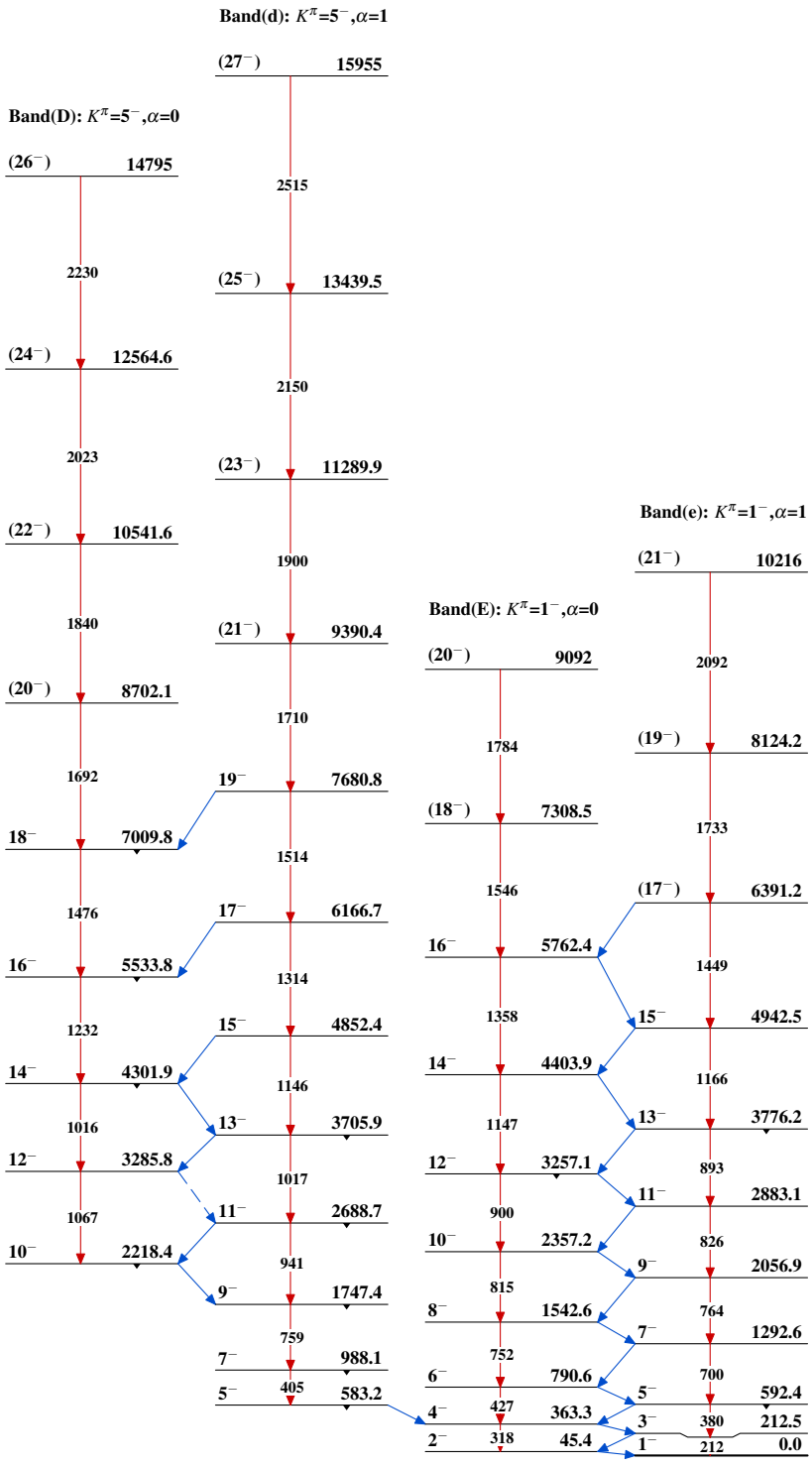
$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35



$^{76}_{35}Br_{41}$

^{55}Mn(^{30}Si,2αnγ) 1997Pa35 (continued)



$^{76}_{35}Br_{41}$