^{41}K(n,γ) E=thermal 1985Kr06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen[#] and Balraj Singh	NDS 135, 1 (2016)	31-May-2016

1985Kr06: thermal neutron beam was produced from the ILL high-flux reactor. Target of a 610 mg KF powder (95.8% in ^{41}K). γ-rays were detected with the ILL curved-crystal Bragg spectrometer and pair spectrometer. Measured Eγ, Iγ. Deduced levels, branching ratios.

2013Fi01: E(n)=thermal provided by the 10-MW Budapest Reactor. Target=natural K. Measured Eγ, Iγ, total radiative neutron σ using a HPGe detector at Budapest reactor facility. Deduced levels, J, π, feedings. Monte Carlo simulations using computer code DICEBOX. Comparison with statistical model calculations, previous studies, and evaluations in the ENSDF database. Authors report energy and intensity data for 31 secondary and 12 primary transitions. The intensities are given in terms of absolute cross section σ_γ in b. See also 2011Fi11 for cross section measurement.

Additional information 1.

All date are from 1985Kr06 unless otherwise stated.

Others: 1967Ha28, 1970Jo04.

^{42}K Levels

E(level)[†]	J$^\pi$[#]	Comments
0.0	2^-	
106.828 *5*	3^-	
258.260 *6*	4^-	
638.726 *7*	3^-	
681.942 *8*	(2,3)	
699.087 *15*	5^-	
783.885 *11*	2^-	
841.937 *7*	3^-	
1110.744 *9*	3^+	
1143.593 *11*	4^+	
1197.904 *10*	4^-	
1254.821 *10*	2^-	J$^\pi$: $(2,3)^-$ in 2013Fi01.
1266.300 *9*	$(1,2,3)^-$	
1273.517 *12*	2^-	J$^\pi$: $(2^-,3,4^+)$ in 201Fi01.
1376.10 *9*	6^+	
1377.121 *10*	$(2,3)^-$	
1400.03 *4*	(2,3)	
1407.912 *10*	$(1^-,2,3)$	
1453.05 *4*	$(2^-,3,4^-)$	
1463.649 *14*	$(1^-,2,3)$	
1489.30 *8*	$(1^-$ to $5^-)$	
1513.069 *22*	$(1^-$ to $5^-)$	
1538.74 *7*	3^+	
1692.00 *4*	$(1^-$ to $4^-)$	
1723.44 *3*	$(2,3,4^+)$	
1745.613 *16*	$(2^+,3^+)$	
1816.879 *18*	$(2,3,4^-)$	J$^\pi$: (2,3) in 2013Fi01.
1842.971 *13*	$(1^-,2,3)$	
1861.893 *9*	2^-	
1913.460 *16*	$(2^-,3)$	
1937.492 *15*	$(1,2,3)^-$	
1987.979 *19*	$(0^-$ to $4^-)$	
2049.320 *14*	3^+	
2072.009 *12*	$(2,3)^-$	
2161.645 *22*	$(2^+,3,4^+)$	
2187.23 *4*	3^+	
2204.046 *24*	$(2^-,3,4^+)$	

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

^{42}K Levels (continued)

E(level)†	Jπ#	E(level)†	Jπ#	E(level)†	Jπ#	E(level)†	Jπ#
2238.589 *24*	(1,2,3)$^-$	3233.93 *4*	(3,4$^+$)	4036.86 *4*	3$^-$	4877.25 *4*	(0 to 4$^+$)
2251.062 *20*	(1$^-$,2,3)	3284.41 *4*	(2,3)$^-$	4039.96 *4*	(1,2,3)	4903.68 *7*	(3$^-$,4$^+$)
2366.172 *13*	(2,3)$^-$	3287.16 *3*	(2$^-$,3,4$^+$)	4053.87 *5*	(2,3)$^-$	4938.98 *6*	(1$^-$,2,3)
2388.835 *19*	3$^+$	3295.35 *7*	(2,3)	4103.72 *7*	(0$^-$ to 4$^+$)	4942.97 *4*	(1$^-$ to 4$^-$)
2401.798 *14*	(2,3)$^-$	3304.36 *3*	1$^+$	4105.74? *6*	(0$^-$ to 3)	4959.64 *8*	(0$^-$ to 4$^+$)
2422.155 *21*	(1$^-$,2,3)	3323.73 *6*	3$^-$	4128.34 *3*	3$^-$	5002.99 *4*	(1$^-$,2,3)
2482.147 *15*	(1,2,3)$^-$	3367.32 *4*	(1$^+$)	4152.35 *4*	(2$^-$,3,4$^+$)	5064.01 *4*	(1$^-$ to 4$^+$)
2573.63 *5*	(2,3)	3418.44 *3*	(2,3)$^-$	4154.70 *5*	(1$^-$,2,3)	5081.26 *6*	(1$^-$,2,3)
2606.996 *24*	(1$^-$,2,3)	3421.27 *4*	(0$^-$ to 3)	4179.43 *7*	(2$^-$,3,4$^+$)	5097.04 *4*	(0$^-$ to 3)
2627.847 *20*	(2$^-$,3)	3502.90 *4*	(2$^+$,3,4$^+$)	4259.10 *5*	(1$^-$,2,3)	5179.13 *5*	(0$^-$ to 4$^+$)
2644.289 *24*	3$^-$	3529.03 *7*	(0$^-$ to 3)	4389.78 *6*	(2$^-$,3,4$^+$)	5246.63 *5*	(1$^-$ to 4$^+$)
2653.79 *6*	(2$^-$,3)	3621.20 *3*	(2,3)	4416.60 *3*	(2,3)$^-$	5318.95 *6*	(2$^-$,3)
2718.098 *13*	(2$^-$,3)	3658.59 *4*	(2$^-$,3)	4428.28 *3*	(1$^+$,2,3)	5476.92 *9*	(1$^+$,2,3)
2765.960 *17*	(2$^+$,3)	3674.14 *3*	(1$^-$,2,3)	4443.14 *4*	(0$^-$ to 4$^+$)	5630.29 *8*	(4$^+$)
2862.78 *4*	(2$^-$,3)	3696.39 *5*	(3$^-$,4$^+$)	4481.07 *4*	(2,3)$^-$	5697.22 *4*	(1$^-$ to 4$^+$)
2878.009 *23*	3$^-$	3770.67? *6*	(0$^-$ to 3)	4556.68 *5*	(1$^-$,2,3)	5710.61 *3*	(2$^-$,3,4$^+$)
2917.10 *5*	(1$^-$ to 4$^+$)	3794.62 *3*	(0$^-$ to 3)	4576.26 *4*	(2,3)$^-$	5759.69 *4*	(1$^-$,2,3$^+$)
2926.09 *4*	(2,3)$^-$	3798.14 *6*	(2$^-$,3,4$^+$)	4590.56 *4*	(2$^-$,3,4$^+$)	5789.69 *4*	(0 to 4$^+$)
2938.60 *3*	(1$^-$,2,3)	3831.74? *5*	(1$^+$,2,3)	4612.82 *6*	(2$^+$,3)	5846.58 *8*	(1$^-$,2,3$^+$)
3008.33 *3*	3	3862.04 *5*	(1$^-$ to 4$^+$)	4660.71 *6*	(2$^-$,3)	5953.50 *3*	(1,2,3)
3014.46 *4*	(1,2,3)$^-$	3876.94 *4*	(1$^-$ to 4$^+$)	4715.40 *10*	(2$^-$,3)	5978.32 *4*	4$^+$
3021.108 *25*	(2,3)$^-$	3888.33 *4*	(2,3)$^-$	4748.54 *7*	3$^-$	(7533.80‡ *11*)	1$^+$,2$^+$@
3040.19 *5*	3$^-$	3890.09 *4*	(0$^-$ to 3)	4778.05 *6*	(1$^-$ to 4$^+$)		
3195.80 *4*	(2$^-$,3)	3934.62 *5*	(2$^-$,3)	4806.83 *3*	(1 to 3)$^-$		
3210.61 *6*	(1$^+$,2,3)	4013.89 *4*	(0$^-$ to 3)	4853.60 *4*	(0 to 3)$^-$		

† From least-squares fit to Eγ data. The evaluators increase the uncertainties to 0.5 keV for fitting purpose for the following γ-rays in order to get a reasonable reduced χ^2=2.3: 1166.808, 1606.95, 2319.70 and 4005.79.
‡ From 2012Wa38. Observed de-excitation intensity is 89% of g.s. feeding.
# From Adopted Levels.
@ s-wave capture in ^{41}K g.s. (J^π=3/2$^+$).

γ(^{42}K)

Iγ normalization: 0.95 *7* from Σ(Iγ to g.s.)=100. Thermal capture σ_n=1.46 *3* (2006MuZX).
Thermal capture σ_n=1.46 *3* (2006MuZX).

Eγ†	Iγ‡@	E_i(level)	J_i^π	E_f	J_f^π	Comments
106.817 *7*	33 *7*	106.828	3$^-$	0.0	2$^-$	Additional information 2.
151.431 *3*	10.7 *22*	258.260	4$^-$	106.828	3$^-$	Additional information 3.
198.33 *9*	0.37 *10*	1453.05	(2$^-$,3,4$^-$)	1254.821	2$^-$	
268.793 *8*	1.8 *4*	1110.744	3$^+$	841.937	3$^-$	Additional information 12.
275.93 *12*	0.18 *5*	3934.62	(2$^-$,3)	3658.59	(2$^-$,3)	
283.78 *12*	0.17 *4*	2765.960	(2$^+$,3)	2482.147	(1,2,3)$^-$	
289.21 *9*	0.22 *5*	1400.03	(2,3)	1110.744	3$^+$	
301.50 *14*	0.13 *3*	1143.593	4$^+$	841.937	3$^-$	
376.71 *5*	0.61 *14*	2238.589	(1,2,3)$^-$	1861.893	2$^-$	Additional information 30.
378.20 *5*	0.15 *4*	2366.172	(2,3)$^-$	1987.979	(0$^-$ to 4$^-$)	
380.473 *13*	2.5 *5*	638.726	3$^-$	258.260	4$^-$	Additional information 4.
395.2 *4*	0.14 *3*	1538.74	3$^+$	1143.593	4$^+$	

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

$\gamma(^{42}K)$ (continued)

E_γ [†]	I_γ [‡@]	E_i(level)	J_i^π	E_f	J_f^π	Comments
408.87 *15*	0.067 *18*	1861.893	2^-	1453.05	$(2^-,3,4^-)$	
413.16 *16*	0.059 *17*	1254.821	2^-	841.937	3^-	
428.71 *5*	0.20 *4*	1110.744	3^+	681.942	(2,3)	
431.566 *16*	2.9 *6*	1273.517	2^-	841.937	3^-	Additional information 19.
437.24 *18*	0.048 *14*	1692.00	$(1^-$ to $4^-)$	1254.821	2^-	
440.854 *18*	1.26 *25*	699.087	5^-	258.260	4^-	Additional information 8.
444.525 *19*	0.92 *19*	1143.593	4^+	699.087	5^-	Additional information 14.
450.97 *12*	0.069 *17*	2388.835	3^+	1937.492	$(1,2,3)^-$	
454.01 *3*	0.28 *6*	1861.893	2^-	1407.912	$(1^-,2,3)$	Additional information 25.
504.828 *16*	2.4 *4*	1143.593	4^+	638.726	3^-	Additional information 15.
531.908 *15*	5.7 *9*	638.726	3^-	106.828	3^-	Additional information 5.
537.17 *14*	0.044 *10*	2926.09	$(2,3)^-$	2388.835	3^+	
544.68 *21*	0.030 *8*	2482.147	$(1,2,3)^-$	1937.492	$(1,2,3)^-$	
550.30 *10*	0.062 *12*	1816.879	$(2,3,4^-)$	1266.300	$(1,2,3)^-$	
559.23 *3*	0.26 *4*	1197.904	4^-	638.726	3^-	
562.07 *4*	0.17 *3*	1816.879	$(2,3,4^-)$	1254.821	2^-	
569.475 *20*	0.60 *9*	1842.971	$(1^-,2,3)$	1273.517	2^-	
571.85 *5*	0.127 *20*	2388.835	3^+	1816.879	$(2,3,4^-)$	
575.04 *5*	0.117 *19*	681.942	(2,3)	106.828	3^-	
579.30 *6*	0.104 *17*	2422.155	$(1^-,2,3)$	1842.971	$(1^-,2,3)$	
584.40 *4*	0.47 *8*	1266.300	$(1,2,3)^-$	681.942	(2,3)	
595.618 *17*	0.83 *12*	1861.893	2^-	1266.300	$(1,2,3)^-$	Additional information 26.
602.046 *22*	0.38 *6*	1745.613	$(2^+,3^+)$	1143.593	4^+	
612.64 *5*	0.20 *3*	3014.46	$(1,2,3)^-$	2401.798	$(2,3)^-$	
612.65 *5*	0.81 *14*	1723.44	$(2,3,4^+)$	1110.744	3^+	
616.118 *14*	2.3 *4*	1254.821	2^-	638.726	3^-	Additional information 17.
618.20 *8*	0.095 *16*	3040.19	3^-	2422.155	$(1^-,2,3)$	
620.244 *16*	1.05 *16*	2482.147	$(1,2,3)^-$	1861.893	2^-	
621.727 *16*	1.34 *20*	1463.649	$(1^-,2,3)$	841.937	3^-	Additional information 22.
627.551 *15*	1.56 *23*	1266.300	$(1,2,3)^-$	638.726	3^-	
634.65 *6*	0.094 *15*	1273.517	2^-	638.726	3^-	
638.717 *14*	3.4 *5*	638.726	3^-	0.0	2^-	Additional information 6.
663.2 *5*	0.037 *8*	1937.492	$(1,2,3)^-$	1273.517	2^-	
671.149 *23*	0.30 *5*	1513.069	$(1^-$ to $5^-)$	841.937	3^-	
676.87 *11*	0.075 *14*	1376.10	6^+	699.087	5^-	
678.34 *6*	0.128 *21*	2401.798	$(2,3)^-$	1723.44	$(2,3,4^+)$	
681.932 *12*	15.5 *23*	681.942	(2,3)	0.0	2^-	Additional information 7.
695.189 *17*	0.92 *14*	1377.121	$(2,3)^-$	681.942	(2,3)	
706.98 *8*	0.059 *10*	2644.289	3^-	1937.492	$(1,2,3)^-$	
721.66 *16*	0.030 *7*	1987.979	$(0^-$ to $4^-)$	1266.300	$(1,2,3)^-$	
725.96 *3*	0.157 *24*	1407.912	$(1^-,2,3)$	681.942	(2,3)	
735.099 *14*	2.1 *3*	841.937	3^-	106.828	3^-	Additional information 10.
761.31 *8*	0.058 *10*	1400.03	(2,3)	638.726	3^-	
766.21 *9*	0.049 *9*	2627.847	$(2^-,3)$	1861.893	2^-	
783.903 *14*	2.8 *4*	783.885	2^-	0.0	2^-	Additional information 9.
806.00[&] *3*	0.18[&] *3*	2878.009	3^-	2072.009	$(2,3)^-$	
806.00[&] *3*	0.18[&] *3*	4039.96	(1,2,3)	3233.93	$(3,4^+)$	
811.49 *9*	0.050 *9*	3418.44	$(2,3)^-$	2606.996	$(1^-,2,3)$	
817.05 *5*	0.093 *15*	3021.108	$(2,3)^-$	2204.046	$(2^-,3,4^+)$	
828.462 *16*	1.22 *18*	2765.960	$(2^+,3)$	1937.492	$(1,2,3)^-$	
830.89 *9*	0.052 *9*	1513.069	$(1^-$ to $5^-)$	681.942	(2,3)	Additional information 23.
841.895 *13*	13.2 *20*	841.937	3^-	0.0	2^-	Additional information 11.
846.59 *5*	0.095 *15*	3008.33	3	2161.645	$(2^+,3,4^+)$	
851.01 *20*	0.021 *6*	1489.30	$(1^-$ to $5^-)$	638.726	3^-	
856.20 *3*	0.147 *23*	2718.098	$(2^-,3)$	1861.893	2^-	

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π	Comments
861.34 *6*	0.067 *11*	2606.996	$(1^-,2,3)$	1745.613	$(2^+,3^+)$	
874.088 *19*	0.52 *8*	2072.009	$(2,3)^-$	1197.904	4^-	
881.33 *11*	0.038 *7*	1723.44	$(2,3,4^+)$	841.937	3^-	
903.635 *21*	0.43 *6*	1745.613	$(2^+,3^+)$	841.937	3^-	
905.712 *19*	0.61 *9*	2049.320	3^+	1143.593	4^+	
912.69 *23*	0.019 *5*	2401.798	$(2,3)^-$	1489.30	$(1^-$ to $5^-)$	
920.81 *6*	0.072 *12*	2644.289	3^-	1723.44	$(2,3,4^+)$	
923.66 *19*	0.028 *6*	3862.04	$(1^-$ to $4^+)$	2938.60	$(1^-,2,3)$	
925.71 *24*	0.129 *20*	4428.28	$(1^+,2,3)$	3502.90	$(2^+,3,4^+)$	
[x]934.486 *25*	0.24 *4*					
939.605 *17*	1.15 *17*	1197.904	4^-	258.260	4^-	Additional information 16.
949.60 *20*	0.036 *9*	2204.046	$(2^-,3,4^+)$	1254.821	2^-	
951.11 *14*	0.051 *10*	3890.09	$(0^-$ to $3)$	2938.60	$(1^-,2,3)$	
958.215 *21*	0.43 *7*	2366.172	$(2,3)^-$	1407.912	$(1^-,2,3)$	
964.50 *9*	0.047 *8*	2878.009	3^-	1913.460	$(2^-,3)$	
972.20 *4*	0.108 *17*	2238.589	$(1,2,3)^-$	1266.300	$(1,2,3)^-$	
977.524 *18*	0.78 *12*	2251.062	$(1^-,2,3)$	1273.517	2^-	
986.45 *8*	0.059 *10*	4660.71	$(2^-,3)$	3674.14	$(1^-,2,3)$	
989.065 *21*	0.38 *6*	2366.172	$(2,3)^-$	1377.121	$(2,3)^-$	
993.863 *23*	0.30 *5*	2401.798	$(2,3)^-$	1407.912	$(1^-,2,3)$	
996.511 *16*	1.43 *21*	1254.821	2^-	258.260	4^-	
1001.005 *16*	1.49 *22*	1842.971	$(1^-,2,3)$	841.937	3^-	Additional information 24.
1011.62 *3*	0.21 *3*	2388.835	3^+	1377.121	$(2,3)^-$	
1015.233 *24*	0.61 *9*	1273.517	2^-	258.260	4^-	
1018.032 *21*	0.40 *6*	2161.645	$(2^+,3,4^+)$	1143.593	4^+	
1027.03 *16*	0.025 *5*	3890.09	$(0^-$ to $3)$	2862.78	$(2^-,3)$	
1034.90 *7*	0.081 *13*	2573.63	$(2,3)$	1538.74	3^+	
1036.83 *3*	0.20 *3*	1143.593	4^+	106.828	3^-	
1043.78 *13*	0.068 *14*	2187.23	3^+	1143.593	4^+	
1052.88 *3*	0.162 *25*	4942.97	$(1^-$ to $4^-)$	3890.09	$(0^-$ to $3)$	
1071.509 *20*	0.53 *8*	1913.460	$(2^-,3)$	841.937	3^-	
1076.51 *12*	0.041 *8*	2187.23	3^+	1110.744	3^+	
1080.17 *10*	0.041 *7*	3284.41	$(2,3)^-$	2204.046	$(2^-,3,4^+)$	
1084.48 *12*	0.039 *7*	1723.44	$(2,3,4^+)$	638.726	3^-	
1091.088 *18*	0.77 *12*	1197.904	4^-	106.828	3^-	
1110.767 *16*	2.0 *3*	1110.744	3^+	0.0	2^-	Additional information 13.
1121.70 *5*	0.24 *7*	2938.60	$(1^-,2,3)$	1816.879	$(2,3,4^-)$	Additional information 32.
1122.74 *5*	0.44 *9*	2388.835	3^+	1266.300	$(1,2,3)^-$	
1128.20 *3*	0.133 *20*	2401.798	$(2,3)^-$	1273.517	2^-	
1135.40 *7*	0.063 *10*	2401.798	$(2,3)^-$	1266.300	$(1,2,3)^-$	
1147.24 *22*	0.42 *6*	2401.798	$(2,3)^-$	1254.821	2^-	
1153.61 *3*	0.19 *3*	1937.492	$(1,2,3)^-$	783.885	2^-	
1155.99 *8*	0.066 *11*	4443.14	$(0^-$ to $4^+)$	3287.16	$(2^-,3,4^+)$	
1166.808 *25*	0.30 *5*	1273.517	2^-	106.828	3^-	
1179.921 *16*	1.64 *25*	1861.893	2^-	681.942	$(2,3)$	Additional information 27.
1195.02 *13*	0.033 *6*	1453.05	$(2^-,3,4^-)$	258.260	4^-	
1197.99 *3*	0.17 *3*	1197.904	4^-	0.0	2^-	
1204.080 *19*	0.68 *10*	1987.979	$(0^-$ to $4^-)$	783.885	2^-	
1207.363 *17*	1.44 *22*	2049.320	3^+	841.937	3^-	
1213.51 *13*	0.042 *8*	4152.35	$(2^-,3,4^+)$	2938.60	$(1^-,2,3)$	
1217.32 *14*	0.060 *12*	3421.27	$(0^-$ to $3)$	2204.046	$(2^-,3,4^+)$	
1223.29 *5*	0.084 *13*	1861.893	2^-	638.726	3^-	
1229.89 *3*	0.157 *24*	2606.996	$(1^-,2,3)$	1377.121	$(2,3)^-$	
1254.80 *3*	0.79 *13*	1254.821	2^-	0.0	2^-	
1255.52 *3*	2.0 *3*	1937.492	$(1,2,3)^-$	681.942	$(2,3)$	
1266.305 *15*	3.7 *6*	1266.300	$(1,2,3)^-$	0.0	2^-	Additional information 18.

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

$\gamma(^{42}K)$ (continued)

E_γ[†]	I_γ[‡@]	E_i(level)	J_i^π	E_f	J_f^π	Comments
1301.008 *20*	0.51 *8*	1407.912	$(1^-,2,3)$	106.828	3^-	
1319.32 *23*	0.23 *4*	2161.645	$(2^+,3,4^+)$	841.937	3^-	
1329.81 *16*	0.030 *6*	3696.39	$(3^-,4^+)$	2366.172	$(2,3)^-$	
1340.942 *23*	0.35 *5*	2718.098	$(2^-,3)$	1377.121	$(2,3)^-$	
1352.02 *7*	0.144 *22*	2606.996	$(1^-,2,3)$	1254.821	2^-	
1361.535 *23*	0.35 *5*	2627.847	$(2^-,3)$	1266.300	$(1,2,3)^-$	
1368.70 *23*	0.20 *3*	3418.44	$(2,3)^-$	2049.320	3^+	
1377.065 *16*	3.1 *5*	1377.121	$(2,3)^-$	0.0	2^-	Additional information 20.
1382.2 *3*	0.014 *4*	1489.30	$(1^-$ to $5^-)$	106.828	3^-	
1391.4 *3*	0.18 *3*	3233.93	$(3,4^+)$	1842.971	$(1^-,2,3)$	
1399.78 *9*	0.59 *9*	1400.03	(2,3)	0.0	2^-	
1403.48 *5*	0.090 *14*	2187.23	3^+	783.885	2^-	
1407.898 *16*	3.0 *5*	1407.912	$(1^-,2,3)$	0.0	2^-	Additional information 21.
1430.74 *16*	0.028 *5*	3418.44	$(2,3)^-$	1987.979	$(0^-$ to $4^-)$	
1433.274 *19*	0.71 *11*	2072.009	$(2,3)^-$	638.726	3^-	
1451.745 *19*	0.74 *11*	2718.098	$(2^-,3)$	1266.300	$(1,2,3)^-$	
1454.53 *12*	0.95 *14*	2862.78	$(2^-,3)$	1407.912	$(1^-,2,3)$	
1463.59 *3*	0.25 *4*	1463.649	$(1^-,2,3)$	0.0	2^-	
1470.09 *6*	0.075 *12*	2878.009	3^-	1407.912	$(1^-,2,3)$	
1473.00 *7*	0.067 *11*	2926.09	$(2,3)^-$	1453.05	$(2^-,3,4^-)$	
1485.60[&] *8*	0.063[&] *10*	2862.78	$(2^-,3)$	1377.121	$(2,3)^-$	
1485.60[&] *8*	0.063[&] *10*	2938.60	$(1^-,2,3)$	1453.05	$(2^-,3,4^-)$	
1500.37 *13*	0.073 *15*	2644.289	3^-	1143.593	4^+	
1501.85 *21*	0.048 *12*	3014.46	$(1,2,3)^-$	1513.069	$(1^-$ to $5^-)$	
1509.92 *4*	0.101 *16*	4877.25	(0 to 4^+)	3367.32	(1^+)	
1520.28 *4*	0.17 *3*	2718.098	$(2^-,3)$	1197.904	4^-	
1555.50 *4*	0.119 *18*	(7533.80)	$1^+,2^+$	5978.32	4^+	
1558.72 *3*	0.20 *3*	3304.36	1^+	1745.613	$(2^+,3^+)$	
1565.47[&] *5*	0.080[&] *12*	3502.90	$(2^+,3,4^+)$	1937.492	$(1,2,3)^-$	
1565.47[&] *5*	0.080[&] *12*	4428.28	$(1^+,2,3)$	2862.78	$(2^-,3)$	
1568.99 *12*	0.040 *7*	2251.062	$(1^-,2,3)$	681.942	(2,3)	
1571.82 *4*	0.19 *3*	3621.20	(2,3)	2049.320	3^+	
1572.9 *3*	0.12 *3*	4806.83	(1 to 3)$^-$	3233.93	$(3,4^+)$	
1574.5 *3*	0.12 *3*	3418.44	$(2,3)^-$	1842.971	$(1^-,2,3)$	
1580.32 *3*	0.30 *5*	(7533.80)	$1^+,2^+$	5953.50	(1,2,3)	
1585.10 *4*	0.127 *19*	1692.00	$(1^-$ to $4^-)$	106.828	3^-	
1596.62 *23*	0.20 *3*	2862.78	$(2^-,3)$	1266.300	$(1,2,3)^-$	
1602.08 *4*	0.24 *4*	3674.14	$(1^-,2,3)$	2072.009	$(2,3)^-$	
1603.60 *5*	0.18 *4*	1861.893	2^-	258.260	4^-	
1604.36 *5*	0.18 *4*	3421.27	$(0^-$ to 3)	1816.879	$(2,3,4^-)$	
1606.95 *6*	0.083 *13*	5710.61	$(2^-,3,4^+)$	4103.72	$(0^-$ to $4^+)$	
1616.84 *11*	0.060 *10*	1723.44	$(2,3,4^+)$	106.828	3^-	
1622.53 *7*	0.084 *13*	2765.960	$(2^+,3)$	1143.593	4^+	
1640.18 *4*	0.101 *15*	2482.147	$(1,2,3)^-$	841.937	3^-	
1644.55 *6*	0.066 *10*	3831.74?	$(1^+,2,3)$	2187.23	3^+	
1655.16 *3*	0.21 *3*	1913.460	$(2^-,3)$	258.260	4^-	
1658.94 *9*	0.049 *8*	4576.26	$(2,3)^-$	2917.10	$(1^-$ to $4^+)$	
1661.8 *4*	0.083 *13*	2917.10	$(1^-$ to $4^+)$	1254.821	2^-	
1665.14[&] *14*	0.029[&] *5*	2862.78	$(2^-,3)$	1197.904	4^-	
1665.14[&] *14*	0.029[&] *5*	4053.87	$(2,3)^-$	2388.835	3^+	
1671.20 *11*	0.045 *8*	2926.09	$(2,3)^-$	1254.821	2^-	
1673.71[&] *11*	0.052[&] *9*	4039.96	(1,2,3)	2366.172	$(2,3)^-$	
1673.71[&] *11*	0.052[&] *9*	5710.61	$(2^-,3,4^+)$	4036.86	3^-	
1684.17 *5*	0.11 *3*	3888.33	$(2,3)^-$	2204.046	$(2^-,3,4^+)$	

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π	Comments
1684.19 *5*	0.11 *3*	2366.172	$(2,3)^-$	681.942	(2,3)	
1687.08 *10*	0.042 *7*	(7533.80)	$1^+,2^+$	5846.58	$(1^-,2,3^+)$	
1707.01 *7*	0.131 *20*	2388.835	3^+	681.942	(2,3)	
1709.983 *25*	0.98 *15*	1816.879	$(2,3,4^-)$	106.828	3^-	
x1735.05 *3*	0.27 *4*					
1740.20 *3*	0.40 *6*	2422.155	$(1^-,2,3)$	681.942	(2,3)	
1744.03 *4*	0.146 *22*	(7533.80)	$1^+,2^+$	5789.69	(0 to 4^+)	
1749.63 *5*	0.147 *23*	5789.69	(0 to 4^+)	4039.96	(1,2,3)	
1754.98 *3*	0.48 *7*	1861.893	2^-	106.828	3^-	
1759.28 *6*	0.066 *10*	3621.20	(2,3)	1861.893	2^-	
1763.39 *7*	0.068 *11*	4152.35	$(2^-,3,4^+)$	2388.835	3^+	
1766.26 *3*	0.49 *7*	3021.108	$(2,3)^-$	1254.821	2^-	
1774.09 *5*	0.155 *24*	(7533.80)	$1^+,2^+$	5759.69	$(1^-,2,3^+)$	
1783.51 *12*	0.39 *6*	2422.155	$(1^-,2,3)$	638.726	3^-	
1785.95 *6*	0.21 *3*	2627.847	$(2^-,3)$	841.937	3^-	
1787.5 *3*	0.17 *3*	3195.80	$(2^-,3)$	1407.912	$(1^-,2,3)$	
x1797.26 *15*	0.069 *12*					
1800.15 *4*	0.23 *4*	2482.147	$(1,2,3)^-$	681.942	(2,3)	
1802.57 *11*	0.088 *14*	3210.61	$(1^+,2,3)$	1407.912	$(1^-,2,3)$	
1810.51 *10*	0.069 *11*	3008.33	3	1197.904	4^-	
1812.50& *18*	0.037& *7*	3674.14	$(1^-,2,3)$	1861.893	2^-	
1812.50& *18*	0.037& *7*	5097.04	(0^- to 3)	3284.41	$(2,3)^-$	
1818.32 *23*	0.138 *21*	3195.80	$(2^-,3)$	1377.121	$(2,3)^-$	
1823.18 *3*	0.34 *5*	(7533.80)	$1^+,2^+$	5710.61	$(2^-,3,4^+)$	
1830.42 *23*	0.161 *24*	1937.492	$(1,2,3)^-$	106.828	3^-	
1833.88 *5*	0.115 *18*	3233.93	$(3,4^+)$	1400.03	(2,3)	
1836.55 *4*	0.138 *21*	(7533.80)	$1^+,2^+$	5697.22	(1^- to 4^+)	
1842.95 *3*	1.12 *17*	1842.971	$(1^-,2,3)$	0.0	2^-	
1861.855 *24*	3.4 *5*	1861.893	2^-	0.0	2^-	Additional information 28.
1864.68 *5*	0.123 *19*	3008.33	3	1143.593	4^+	
x1872.97 *18*	0.021 *5*					
1877.13 *6*	0.22 *3*	4128.34	3^-	2251.062	$(1^-,2,3)$	
1881.10 *3*	0.37 *6*	3794.62	(0^- to 3)	1913.460	$(2^-,3)$	
1891.92 *5*	0.089 *14*	5179.13	(0^- to 4^+)	3287.16	$(2^-,3,4^+)$	
1900.49& *9*	0.049& *8*	3888.33	$(2,3)^-$	1987.979	(0^- to 4^-)	
1900.49& *9*	0.049& *8*	5318.95	$(2^-,3)$	3418.44	$(2,3)^-$	
1903.41 *9*	0.051 *8*	(7533.80)	$1^+,2^+$	5630.29	(4^+)	
1909.90 *5*	0.083 *13*	3287.16	$(2^-,3,4^+)$	1377.121	$(2,3)^-$	
1913.8 *3*	0.011 *3*	1913.460	$(2^-,3)$	0.0	2^-	
1921.61 *15*	0.026 *5*	4942.97	(1^- to 4^-)	3021.108	$(2,3)^-$	
1934.16 *3*	0.28 *4*	2718.098	$(2^-,3)$	783.885	2^-	
1937.48 *3*	1.50 *23*	1937.492	$(1,2,3)^-$	0.0	2^-	Additional information 29.
1941.22 *7*	0.064 *10*	4128.34	3^-	2187.23	3^+	
1945.69 *3*	0.42 *6*	2204.046	$(2^-,3,4^+)$	258.260	4^-	
x1948.89 *7*	0.087 *14*					
1962.29 *3*	0.50 *8*	2644.289	3^-	681.942	(2,3)	
1965.10 *3*	0.48 *7*	2072.009	$(2,3)^-$	106.828	3^-	
1968.08 *9*	0.060 *10*	2606.996	$(1^-,2,3)$	638.726	3^-	
1976.64 *5*	0.106 *16*	3890.09	(0^- to 3)	1913.460	$(2^-,3)$	
1985.20 *12*	0.042 *7*	4612.82	$(2^+,3)$	2627.847	$(2^-,3)$	
1988.00 *8*	0.112 *17*	1987.979	(0^- to 4^-)	0.0	2^-	
1990.20 *9*	0.088 *14*	3367.32	(1^+)	1377.121	$(2,3)^-$	
1998.11 *11*	0.067 *12*	3195.80	$(2^-,3)$	1197.904	4^-	
2006.0 *3*	0.033 *10*	2644.289	3^-	638.726	3^-	
2012.09 *9*	0.142 *16*	4778.05	(1^- to 4^+)	2765.960	$(2^+,3)$	

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π
2014.36 *19*	0.136 *15*	4416.60	$(2,3)^-$	2401.798	$(2,3)^-$
2020.83 *6*	0.42 *4*	2862.78	$(2^-,3)$	841.937	3^-
2023.76 *11*	0.075 *9*	4389.78	$(2^-,3,4^+)$	2366.172	$(2,3)^-$
2027.35 *19*	0.035 *6*	4416.60	$(2,3)^-$	2388.835	3^+
2030.27 *8*	0.163 *17*	4748.54	3^-	2718.098	$(2^-,3)$
x2034.26 *7*	0.25 *3*				
2035.91 *10*	0.129 *17*	3233.93	$(3,4^+)$	1197.904	4^-
2050.02 *10*	0.093 *11*	3502.90	$(2^+,3,4^+)$	1453.05	$(2^-,3,4^-)$
2056.85 *12*	0.063 *9*	(7533.80)	$1^+,2^+$	5476.92	$(1^+,2,3)$
2060.99 *18*	0.034 *7*	4938.98	$(1^-,2,3)$	2878.009	3^-
2065.16 *11*	0.086 *12*	3529.03	$(0^-$ to $3)$	1463.649	$(1^-,2,3)$
2071.95 *4*	2.16 *22*	2072.009	$(2,3)^-$	0.0	2^-
2076.86 *5*	0.201 *24*	5002.99	$(1^-,2,3)$	2926.09	$(2,3)^-$
2076.90 *5*	0.100 *16*	4443.14	$(0^-$ to $4^+)$	2366.172	$(2,3)^-$
2083.94 *4*	1.35 *14*	2765.960	$(2^+,3)$	681.942	$(2,3)$
2086.53 *5*	0.41 *4*	3284.41	$(2,3)^-$	1197.904	4^-
2089.8 *4*	0.104 *12*	3233.93	$(3,4^+)$	1143.593	4^+
2094.05& *11*	0.069& *9*	2878.009	3^-	783.885	2^-
2094.05& *11*	0.069& *9*	4576.26	$(2,3)^-$	2482.147	$(1,2,3)^-$
2096.60 *12*	0.065 *8*	2938.60	$(1^-,2,3)$	841.937	3^-
2101.26 *21*	0.027 *6*	3367.32	(1^+)	1266.300	$(1,2,3)^-$
2107.92 *15*	0.037 *7*	2366.172	$(2,3)^-$	258.260	4^-
2113.09 *23*	0.033 *8*	3367.32	(1^+)	1254.821	2^-
2115.55 *18*	0.100 *22*	4103.72	$(0^-$ to $4^+)$	1987.979	$(0^-$ to $4^-)$
2116.8 *4*	0.122 *24*	3862.04	$(1^-$ to $4^+)$	1745.613	$(2^+,3^+)$
2119.72 *14*	0.055 *8*	3658.59	$(2^-,3)$	1538.74	3^+
x2122.20 *10*	0.089 *11*				
2125.60 *13*	0.049 *8*	3502.90	$(2^+,3,4^+)$	1377.121	$(2,3)^-$
x2128.43 *10*	0.081 *10*				
2131.9 *3*	0.021 *7*	2238.589	$(1,2,3)^-$	106.828	3^-
2138.42 *10*	0.112 *13*	3862.04	$(1^-$ to $4^+)$	1723.44	$(2,3,4^+)$
2143.43 *5*	0.66 *7*	2401.798	$(2,3)^-$	258.260	4^-
x2148.80 *9*	0.165 *18*				
x2156.34 *8*	0.194 *20*				
2163.29 *11*	0.100 *12*	3418.44	$(2,3)^-$	1254.821	2^-
2166.38 *6*	0.42 *4*	3008.33	3	841.937	3^-
2172.71 *25*	0.028 *6*	3014.46	$(1,2,3)^-$	841.937	3^-
2179.04& *8*	0.179& *20*	2878.009	3^-	699.087	5^-
2179.04& *8*	0.179& *20*	4806.83	$(1$ to $3)^-$	2627.847	$(2^-,3)$
2184.45 *14*	0.067 *9*	3295.35	$(2,3)$	1110.744	3^+
2188.20 *18*	0.104 *19*	4590.56	$(2^-,3,4^+)$	2401.798	$(2,3)^-$
2189.90 *19*	0.106 *18*	4103.72	$(0^-$ to $4^+)$	1913.460	$(2^-,3)$
2192.79 *23*	0.044 *8*	3304.36	1^+	1110.744	3^+
2195.95 *10*	0.105 *12*	2878.009	3^-	681.942	$(2,3)$
2199.61 *13*	0.060 *9*	4806.83	$(1$ to $3)^-$	2606.996	$(1^-,2,3)$
2215.11 *20*	0.18 *3*	(7533.80)	$1^+,2^+$	5318.95	$(2^-,3)$
2220.57 *5*	0.58 *6*	3418.44	$(2,3)^-$	1197.904	4^-
2238.56 *4*	2.17 *22*	2238.589	$(1,2,3)^-$	0.0	2^-
x2240.56 *5*	0.38 *4*				
2243.25 *9*	0.098 *11*	3696.39	$(3^-,4^+)$	1453.05	$(2^-,3,4^-)$
2259.28 *4*	2.14 *21*	2366.172	$(2,3)^-$	106.828	3^-
2262.79 *16*	0.040 *6*	3529.03	$(0^-$ to $3)$	1266.300	$(1,2,3)^-$
2266.55 *7*	0.151 *16*	4128.34	3^-	1861.893	2^-
2281.90 *10*	0.075 *9*	2388.835	3^+	106.828	3^-
2287.12 *5*	0.46 *5*	(7533.80)	$1^+,2^+$	5246.63	$(1^-$ to $4^+)$

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ [†]	I_γ [‡@]	E_i(level)	J_i^π	E_f	J_f^π	Comments
2294.98 *3*	3.1 *3*	2401.798	$(2,3)^-$	106.828	3^-	Additional information 31.
[x]2298.87 *8*	0.125 *13*					
2307.39 *10*	0.072 *8*	3418.44	$(2,3)^-$	1110.744	3^+	
2315.19 *4*	1.45 *14*	2422.155	$(1^-,2,3)$	106.828	3^-	
2319.70 *8*	0.144 *15*	3696.39	$(3^-,4^+)$	1377.121	$(2,3)^-$	
2325.11 *12*	0.053 *7*	4576.26	$(2,3)^-$	2251.062	$(1^-,2,3)$	
2332.50[&] *11*	0.074[&] *9*	3014.46	$(1,2,3)^-$	681.942	(2,3)	
2332.50[&] *11*	0.074[&] *9*	5953.50	(1,2,3)	3621.20	(2,3)	
2334.63 *17*	0.047 *7*	5630.29	(4^+)	3295.35	(2,3)	
2338.49 *8*	0.123 *13*	5759.69	$(1^-,2,3^+)$	3421.27	(0^- to 3)	
2341.09[&] *19*	0.033[&] *5*	3040.19	3^-	699.087	5^-	
2341.09[&] *19*	0.033[&] *5*	5759.69	$(1^-,2,3^+)$	3418.44	$(2,3)^-$	
2354.55 *8*	0.132 *14*	(7533.80)	$1^+,2^+$	5179.13	(0^- to 4^+)	
2359.17 *6*	0.33 *3*	3502.90	$(2^+,3,4^+)$	1143.593	4^+	
2366.13 *4*	3.9 *4*	2366.172	$(2,3)^-$	0.0	2^-	
2369.9 *3*	0.171 *18*	2627.847	$(2^-,3)$	258.260	4^-	
2372.68 *11*	0.075 *9*	3862.04	(1^- to 4^+)	1489.30	(1^- to 5^-)	
2375.35 *8*	0.138 *15*	2482.147	$(1,2,3)^-$	106.828	3^-	
2381.8 *3*	0.179 *18*	4128.34	3^-	1745.613	$(2^+,3^+)$	
2384.99 *8*	0.135 *14*	3658.59	$(2^-,3)$	1273.517	2^-	
2388.81 *5*	0.44 *5*	2388.835	3^+	0.0	2^-	
2392.14 *6*	0.33 *3*	3658.59	$(2^-,3)$	1266.300	$(1,2,3)^-$	
2395.53 *6*	0.212 *22*	2653.79	$(2^-,3)$	258.260	4^-	
2397.83 *9*	0.096 *11*	3798.14	$(2^-,3,4^+)$	1400.03	(2,3)	
2401.72 *5*	0.34 *3*	2401.798	$(2,3)^-$	0.0	2^-	
2403.84 *7*	0.177 *19*	3658.59	$(2^-,3)$	1254.821	2^-	
2408.82 *11*	0.064 *9*	4612.82	$(2^+,3)$	2204.046	$(2^-,3,4^+)$	
2411.9 *3*	0.067 *19*	3195.80	$(2^-,3)$	783.885	2^-	
2413.34 *17*	0.104 *21*	3876.94	(1^- to 4^+)	1463.649	$(1^-,2,3)$	
2422.20 *11*	0.072 *9*	2422.155	$(1^-,2,3)$	0.0	2^-	
2436.65 *5*	0.33 *3*	(7533.80)	$1^+,2^+$	5097.04	(0^- to 3)	
2441.02 *13*	0.041 *6*	5318.95	$(2^-,3)$	2878.009	3^-	
2450.82[&] *14*	0.091[&] *17*	4612.82	$(2^+,3)$	2161.645	$(2^+,3,4^+)$	
2450.82[&] *14*	0.091[&] *17*	5953.50	(1,2,3)	3502.90	$(2^+,3,4^+)$	
2452.36 *8*	0.23 *3*	(7533.80)	$1^+,2^+$	5081.26	$(1^-,2,3)$	
2455.04[&] *12*	0.056[&] *7*	4443.14	(0^- to 4^+)	1987.979	(0^- to 4^-)	
2455.04[&] *12*	0.056[&] *7*	5759.69	$(1^-,2,3^+)$	3304.36	1^+	
2460.9 *3*	0.224 *23*	3658.59	$(2^-,3)$	1197.904	4^-	
2466.69 *6*	0.28 *3*	2573.63	(2,3)	106.828	3^-	
2469.81 *6*	0.30 *3*	(7533.80)	$1^+,2^+$	5064.01	(1^- to 4^+)	
2476.79 *6*	0.211 *21*	3876.94	(1^- to 4^+)	1400.03	(2,3)	
2480.28 *14*	0.062 *9*	3888.33	$(2,3)^-$	1407.912	$(1^-,2,3)$	
2482.21 *20*	0.044 *7*	2482.147	$(1,2,3)^-$	0.0	2^-	
2485.3 *3*	0.028 *6*	3862.04	(1^- to 4^+)	1377.121	$(2,3)^-$	
2487.42 *7*	0.153 *16*	4853.60	(0 to 3)$^-$	2366.172	$(2,3)^-$	
2490.65 *7*	0.171 *18*	4428.28	$(1^+,2,3)$	1937.492	$(1,2,3)^-$	
2493.18 *14*	0.043 *6*	4481.07	$(2,3)^-$	1987.979	(0^- to 4^-)	
2500.45 *5*	0.51 *5*	3284.41	$(2,3)^-$	783.885	2^-	
2504.34[&] *13*	0.038[&] *5*	3770.67?	(0^- to 3)	1266.300	$(1,2,3)^-$	
2504.34[&] *13*	0.038[&] *5*	4576.26	$(2,3)^-$	2072.009	$(2,3)^-$	
[x]2508.15 *8*	0.097 *10*					
2520.73 *9*	0.110 *12*	2627.847	$(2^-,3)$	106.828	3^-	
2523.30 *8*	0.132 *14*	5097.04	(0^- to 3)	2573.63	(2,3)	

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π
x2526.25 7	0.180 19				
2530.77 6	0.33 4	(7533.80)	$1^+,2^+$	5002.99	$(1^-,2,3)$
x2533.17 9	0.090 10				
2537.36 7	0.146 16	2644.289	3^-	106.828	3^-
2542.11 13	0.045 6	5846.58	$(1^-,2,3^+)$	3304.36	1^+
2550.12 11	0.052 7	4013.89	(0^- to 3)	1463.649	$(1^-,2,3)$
2554.93 12	0.064 9	4416.60	$(2,3)^-$	1861.893	2^-
2556.94 7	0.137 15	3195.80	$(2^-,3)$	638.726	3^-
2561.53 12	0.038 5	4748.54	3^-	2187.23	3^+
2566.86 9	0.089 10	4259.10	$(1^-,2,3)$	1692.00	(1^- to 4^-)
2573.54 16	0.15 4	2573.63	(2,3)	0.0	2^-
2574.57 20	0.12 4	(7533.80)	$1^+,2^+$	4959.64	(0^- to 4^+)
2580.79 9	0.074 9	5002.99	$(1^-,2,3)$	2422.155	$(1^-,2,3)$
2585.61 20	0.019 5	3696.39	$(3^-,4^+)$	1110.744	3^+
2590.81 6	0.197 20	(7533.80)	$1^+,2^+$	4942.97	(1^- to 4^-)
2594.9 4	0.129 15	(7533.80)	$1^+,2^+$	4938.98	$(1^-,2,3)$
2599.42 8	0.102 11	4416.60	$(2,3)^-$	1816.879	$(2,3,4^-)$
2602.76 10	0.059 7	4806.83	(1 to 3)$^-$	2204.046	$(2^-,3,4^+)$
2606.4 3	0.169 17	4013.89	(0^- to 3)	1407.912	$(1^-,2,3)$
x2617.48 9	0.083 9				
2622.61 16	0.042 7	3304.36	1^+	681.942	(2,3)
2624.65 19	0.042 6	3323.73	3^-	699.087	5^-
2627.74 10	0.091 11	2627.847	$(2^-,3)$	0.0	2^-
2629.79 10	0.125 14	(7533.80)	$1^+,2^+$	4903.68	$(3^-,4^+)$
2632.03 8	0.101 11	4039.96	(1,2,3)	1407.912	$(1^-,2,3)$
2648.38 6	0.181 19	3287.16	$(2^-,3,4^+)$	638.726	3^-
2653.56 10	0.055 7	2653.79	$(2^-,3)$	0.0	2^-
2656.43 7	0.128 13	(7533.80)	$1^+,2^+$	4877.25	(0 to 4^+)
2660.49 17	0.026 4	3502.90	$(2^+,3,4^+)$	841.937	3^-
2664.15 12	0.070 9	4481.07	$(2,3)^-$	1816.879	$(2,3,4^-)$
2666.13 11	0.074 10	4179.43	$(2^-,3,4^+)$	1513.069	(1^- to 5^-)
x2672.02 14	0.038 6				
x2678.09 10	0.102 12				
2680.15 4	0.62 6	(7533.80)	$1^+,2^+$	4853.60	(0 to 3)$^-$
2685.17 8	0.087 10	3367.32	(1^+)	681.942	(2,3)
2687.54 11	0.065 8	3798.14	$(2^-,3,4^+)$	1110.744	3^+
2691.07 7	0.137 14	4154.70	$(1^-,2,3)$	1463.649	$(1^-,2,3)$
2695.13 8	0.093 10	5097.04	(0^- to 3)	2401.798	$(2,3)^-$
2700.18 10	0.059 7	4938.98	$(1^-,2,3)$	2238.589	$(1,2,3)^-$
2706.03 12	0.035 5	4778.05	(1^- to 4^+)	2072.009	$(2,3)^-$
2710.0 4	0.009 3	5476.92	$(1^+,2,3)$	2765.960	$(2^+,3)$
x2717.29 7	0.137 14				
2720.05 25	0.30 3	4128.34	3^-	1407.912	$(1^-,2,3)$
2726.90 4	1.11 11	(7533.80)	$1^+,2^+$	4806.83	(1 to 3)$^-$
2730.74 11	0.044 5	5097.04	(0^- to 3)	2366.172	$(2,3)^-$
2740.08 6	0.27 3	4013.89	(0^- to 3)	1273.517	2^-
2745.19 10	0.065 8	3529.03	(0^- to 3)	783.885	2^-
2747.66 7	0.121 13	4013.89	(0^- to 3)	1266.300	$(1,2,3)^-$
2751.5 4	0.184 19	4128.34	3^-	1377.121	$(2,3)^-$
2755.7 5	0.154 16	(7533.80)	$1^+,2^+$	4778.05	(1^- to 4^+)
2762.47 10	0.061 7	3021.108	$(2,3)^-$	258.260	4^-
2765.80 4	1.61 16	2765.960	$(2^+,3)$	0.0	2^-
2770.75 13	0.036 5	2878.009	3^-	106.828	3^-
2774.0 3	0.066 7	4590.56	$(2^-,3,4^+)$	1816.879	$(2,3,4^-)$
2779.63 6	0.187 20	3418.44	$(2,3)^-$	638.726	3^-
2781.84 5	0.35 4	4036.86	3^-	1254.821	2^-

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π
2784.8 *3*	0.114 *12*	(7533.80)	$1^+,2^+$	4748.54	3^-
2787.39 *7*	0.165 *17*	4053.87	$(2,3)^-$	1266.300	$(1,2,3)^-$
x2789.74 *6*	0.27 *3*				
2810.15 *6*	0.183 *19*	2917.10	$(1^-$ to $4^+)$	106.828	3^-
x2814.13 *20*	0.023 *4*				
2817.7 *3*	0.098 *10*	(7533.80)	$1^+,2^+$	4715.40	$(2^-,3)$
2820.84 *20*	0.031 *4*	3502.90	$(2^+,3,4^+)$	681.942	(2,3)
2823.40 *19*	0.029 *4*	3934.62	$(2^-,3)$	1110.744	3^+
x2827.25 *9*	0.070 *8*				
2832.13 *6*	0.221 *22*	3674.14	$(1^-,2,3)$	841.937	3^-
x2846.09 *5*	0.33 *3*				
2854.71 *10*	0.054 *6*	4128.34	3^-	1273.517	2^-
x2860.49 *10*	0.161 *22*				
2862.02 *8*	0.23 *3*	4128.34	3^-	1266.300	$(1,2,3)^-$
2873.6 *4*	0.233 *24*	(7533.80)	$1^+,2^+$	4660.71	$(2^-,3)$
2878.10 *16*	0.024 *4*	2878.009	3^-	0.0	2^-
2881.44 *24*	0.017 *4*	5759.69	$(1^-,2,3^+)$	2878.009	3^-
2887.15 *22*	0.016 *3*	4959.64	$(0^-$ to $4^+)$	2072.009	$(2,3)^-$
2896.2 *3*	0.025 *6*	5759.69	$(1^-,2,3^+)$	2862.78	$(2^-,3)$
2898.28 *11*	0.064 *8*	4715.40	$(2^-,3)$	1816.879	$(2,3,4^-)$
2907.35 *14*	0.41 *4*	3014.46	$(1,2,3)^-$	106.828	3^-
x2913.56 *9*	0.061 *7*				
2919.9 *6*	0.25 *7*	(7533.80)	$1^+,2^+$	4612.82	$(2^+,3)$
2926.01 *5*	0.34 *3*	2926.09	$(2,3)^-$	0.0	2^-
2938.38 *6*	0.190 *19*	2938.60	$(1^-,2,3)$	0.0	2^-
2943.15 *5*	0.43 *4*	(7533.80)	$1^+,2^+$	4590.56	$(2^-,3,4^+)$
2945.07 *14*	0.067 *10*	4806.83	$(1$ to $3)^-$	1861.893	2^-
2952.86 *6*	0.170 *17*	4416.60	$(2,3)^-$	1463.649	$(1^-,2,3)$
2957.39 *5*	0.36 *4*	(7533.80)	$1^+,2^+$	4576.26	$(2,3)^-$
2961.11 *9*	0.069 *8*	4778.05	$(1^-$ to $4^+)$	1816.879	$(2,3,4^-)$
2964.63 *6*	0.167 *17*	4428.28	$(1^+,2,3)$	1463.649	$(1^-,2,3)$
2977.04 *5*	0.54 *5*	(7533.80)	$1^+,2^+$	4556.68	$(1^-,2,3)$
2981.69& *19*	0.027& *4*	4179.43	$(2^-,3,4^+)$	1197.904	4^-
2981.69& *19*	0.027& *4*	4389.78	$(2^-,3,4^+)$	1407.912	$(1^-,2,3)$
2984.32 *12*	0.061 *7*	4128.34	3^-	1143.593	4^+
2987.07 *17*	0.030 *4*	3770.67?	$(0^-$ to $3)$	783.885	2^-
2991.87 *10*	0.071 *9*	3674.14	$(1^-,2,3)$	681.942	(2,3)
2997.69 *24*	0.020 *4*	3696.39	$(3^-,4^+)$	699.087	5^-
3008.28 *9*	0.135 *8*	3008.33	3	0.0	2^-
3010.54 *8*	0.176 *10*	3794.62	$(0^-$ to $3)$	783.885	2^-
3014.6 *3*	0.222 *12*	3696.39	$(3^-,4^+)$	681.942	(2,3)
3021.07 *8*	0.308 *16*	3021.108	$(2,3)^-$	0.0	2^-
3025.54 *9*	0.119 *7*	4938.98	$(1^-,2,3)$	1913.460	$(2^-,3)$
3028.89 *7*	0.407 *21*	3287.16	$(2^-,3,4^+)$	258.260	4^-
3034.90 *7*	0.484 *24*	3876.94	$(1^-$ to $4^+)$	841.937	3^-
3039.92 *8*	0.305 *23*	3040.19	3^-	0.0	2^-
3052.69 *7*	0.80 *4*	(7533.80)	$1^+,2^+$	4481.07	$(2,3)^-$
3065.38 *19*	0.024 *3*	3323.73	3^-	258.260	4^-
3077.33 *10*	0.074 *5*	4590.56	$(2^-,3,4^+)$	1513.069	$(1^-$ to $5^-)$
3080.1& *3*	0.019& *3*	5318.95	$(2^-,3)$	2238.589	$(1,2,3)^-$
3080.1& *3*	0.019& *3*	5846.58	$(1^-,2,3^+)$	2765.960	$(2^+,3)$
3088.47 *11*	0.095 *8*	3770.67?	$(0^-$ to $3)$	681.942	(2,3)
3090.55 *9*	0.213 *12*	(7533.80)	$1^+,2^+$	4443.14	$(0^-$ to $4^+)$
3092.86 *9*	0.136 *9*	4556.68	$(1^-,2,3)$	1463.649	$(1^-,2,3)$
3105.49 *7*	0.86 *4*	(7533.80)	$1^+,2^+$	4428.28	$(1^+,2,3)$

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π
x3110.29 8	0.291 16				
3112.50& 9	0.145& 9	3794.62	(0⁻ to 3)	681.942	(2,3)
3112.50& 9	0.145& 9	4576.26	(2,3)⁻	1463.649	(1⁻,2,3)
3117.04 7	1.26 6	(7533.80)	1⁺,2⁺	4416.60	(2,3)⁻
x3120.98 16	0.037 3				
x3123.85 10	0.095 6				
3126.83& 10	0.099& 6	3233.93	(3,4⁺)	106.828	3⁻
3126.83& 10	0.099& 6	4590.56	(2⁻,3,4⁺)	1463.649	(1⁻,2,3)
3144.36 11	0.282 14	(7533.80)	1⁺,2⁺	4389.78	(2⁻,3,4⁺)
3150.87 11	0.057 4	3934.62	(2⁻,3)	783.885	2⁻
3160.04 8	0.346 19	3418.44	(2,3)⁻	258.260	4⁻
3161.66 8	0.22 3	4416.60	(2,3)⁻	1254.821	2⁻
3161.82 8	0.22 3	4428.28	(1⁺,2,3)	1266.300	(1,2,3)⁻
3177.25 16	0.195 11	3284.41	(2,3)⁻	106.828	3⁻
3180.00 19	0.19 4	3862.04	(1⁻ to 4⁺)	681.942	(2,3)
x3181.20 16	0.18 4				
3185.09 9	0.096 5	4877.25	(0 to 4⁺)	1692.00	(1⁻ to 4⁻)
3188.9 3	0.013 2	3295.35	(2,3)	106.828	3⁻
3195.59 8	0.255 13	3195.80	(2⁻,3)	0.0	2⁻
3206.66 22	0.019 2	3888.33	(2,3)⁻	681.942	(2,3)
3210.46 8	0.219 11	3210.61	(1⁺,2,3)	0.0	2⁻
3216.47 19	0.044 6	3323.73	3⁻	106.828	3⁻
3220.89 9	0.138 7	5064.01	(1⁻ to 4⁺)	1842.971	(1⁻,2,3)
3224.0 3	0.016 3	3862.04	(1⁻ to 4⁺)	638.726	3⁻
x3226.97 10	0.079 5				
x3234.13 12	0.040 3				
x3238.49 11	0.075 6				
x3240.73 8	0.180 10				
3252.93 13	0.044 4	4660.71	(2⁻,3)	1407.912	(1⁻,2,3)
3258.0 3	0.020 4	5246.63	(1⁻ to 4⁺)	1987.979	(0⁻ to 4⁻)
3265.39 16	0.030 3	5179.13	(0⁻ to 4⁺)	1913.460	(2⁻,3)
3269.86 16	0.022 2	4053.87	(2,3)⁻	783.885	2⁻
3274.47 9	0.120 7	(7533.80)	1⁺,2⁺	4259.10	(1⁻,2,3)
3278.85 23	0.032 5	4389.78	(2⁻,3,4⁺)	1110.744	3⁺
3280.8 7	0.019 5	5002.99	(1⁻,2,3)	1723.44	(2,3,4⁺)
3283.44 18	0.090 8	4556.68	(1⁻,2,3)	1273.517	2⁻
3285.6 4	0.043 6	4128.34	3⁻	841.937	3⁻
x3287.91 16	0.076 7				
3290.62 23	0.024 3	4556.68	(1⁻,2,3)	1266.300	(1,2,3)⁻
3295.16 11	0.051 4	3295.35	(2,3)	0.0	2⁻
3310.40 8	0.348 18	4152.35	(2⁻,3,4⁺)	841.937	3⁻
3312.74 10	0.082 6	4154.70	(1⁻,2,3)	841.937	3⁻
3317.11 19	0.019 2	4428.28	(1⁺,2,3)	1110.744	3⁺
3321.65 9	0.189 12	4105.74?	(0⁻ to 3)	783.885	2⁻
3323.69 9	0.210 12	3323.73	3⁻	0.0	2⁻
3338.36 23	0.047 4	4036.86	3⁻	699.087	5⁻
3342.50 20	0.019 2	4806.83	(1 to 3)⁻	1463.649	(1⁻,2,3)
3346.01& 23	0.023& 3	4612.82	(2⁺,3)	1266.300	(1,2,3)⁻
3346.01& 23	0.023& 3	5953.50	(1,2,3)	2606.996	(1⁻,2,3)
3350.64 14	0.115 14	5978.32	4⁺	2627.847	(2⁻,3)
3354.22 9	0.166 9	(7533.80)	1⁺,2⁺	4179.43	(2⁻,3,4⁺)
x3366.79 11	0.075 6				
3367.20 8	0.098 13	3367.32	(1⁺)	0.0	2⁻
3370.05 8	0.21 3	4481.07	(2,3)⁻	1110.744	3⁺

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^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ [†]	I_γ [‡@]	E_i(level)	J_i^π	E_f	J_f^π
3379.07 *8*	0.215 *12*	(7533.80)	$1^+,2^+$	4154.70	$(1^-,2,3)$
3381.31 *8*	0.65 *3*	(7533.80)	$1^+,2^+$	4152.35	$(2^-,3,4^+)$
3394.24 *12*	0.041 *3*	4660.71	$(2^-,3)$	1266.300	$(1,2,3)^-$
3399.5 *3*	0.102 *6*	3658.59	$(2^-,3)$	258.260	4^-
3405.34 *7*	2.07 *10*	(7533.80)	$1^+,2^+$	4128.34	3^-
[x]3410.66 *13*	0.036 *3*				
[x]3414.36 *9*	0.126 *7*				
3417.07 *16*	0.040 *4*	4259.10	$(1^-,2,3)$	841.937	3^-
3421.09 *8*	0.53 *3*	3421.27	$(0^-$ to 3)	0.0	2^-
3427.93 *8*	0.232 *14*	(7533.80)	$1^+,2^+$	4105.74?	$(0^-$ to 3)
3429.87 *8*	0.250 *15*	(7533.80)	$1^+,2^+$	4103.72	$(0^-$ to $4^+)$
[x]3439.12 *10*	0.071 *4*				
3446.56 *10*	0.066 *4*	4959.64	$(0^-$ to $4^+)$	1513.069	$(1^-$ to $5^-)$
3450.39 *13*	0.142 *18*	4903.68	$(3^-,4^+)$	1453.05	$(2^-,3,4^-)$
[x]3455.18 *8*	0.203 *11*				
3459.36 *11*	0.060 *4*	5710.61	$(2^-,3,4^+)$	2251.062	$(1^-,2,3)$
3465.26 *10*	0.081 *5*	4576.26	$(2,3)^-$	1110.744	3^+
3468.99[&] *9*	0.182[&] *10*	4612.82	$(2^+,3)$	1143.593	4^+
3468.99[&] *9*	0.182[&] *10*	4877.25	(0 to 4^+)	1407.912	$(1^-,2,3)$
[x]3474.27 *8*	0.219 *11*				
3479.73[&] *8*	0.311[&] *16*	4590.56	$(2^-,3,4^+)$	1110.744	3^+
3479.73[&] *8*	0.311[&] *16*	(7533.80)	$1^+,2^+$	4053.87	$(2,3)^-$
[x]3483.49 *15*	0.027 *3*				
3489.45 *8*	0.496 *25*	4128.34	3^-	638.726	3^-
3493.77 *9*	0.160 *9*	(7533.80)	$1^+,2^+$	4039.96	(1,2,3)
3496.67 *8*	0.472 *24*	(7533.80)	$1^+,2^+$	4036.86	3^-
3501.7 *3*	0.012 *2*	5246.63	$(1^-$ to $4^+)$	1745.613	$(2^+,3^+)$
3514.40 *12*	0.044 *3*	3621.20	(2,3)	106.828	3^-
3519.73 *8*	1.45 *7*	(7533.80)	$1^+,2^+$	4013.89	$(0^-$ to 3)
[x]3524.37 *10*	0.109 *7*				
3528.78 *17*	0.092 *18*	3529.03	$(0^-$ to 3)	0.0	2^-
3539.88 *13*	0.034 *3*	3798.14	$(2^-,3,4^+)$	258.260	4^-
[x]3548.45 *20*	0.033 *3*				
3551.83 *10*	0.070 *4*	4806.83	$(1$ to $3)^-$	1254.821	2^-
[x]3565.36 *9*	0.152 *8*				
3574.58 *20*	0.028 *4*	4416.60	$(2,3)^-$	841.937	3^-
3576.98 *11*	0.061 *5*	4259.10	$(1^-,2,3)$	681.942	(2,3)
3582.50 *15*	0.026 *2*	4959.64	$(0^-$ to $4^+)$	1377.121	$(2,3)^-$
3589.45 *9*	0.218 *11*	3696.39	$(3^-,4^+)$	106.828	3^-
[x]3594.07 *15*	0.026 *2*				
3599.03 *8*	0.339 *17*	(7533.80)	$1^+,2^+$	3934.62	$(2^-,3)$
[x]3610.11 *10*	0.101 *6*				
3624.83 *14*	0.025 *2*	5697.22	$(1^-$ to $4^+)$	2072.009	$(2,3)^-$
3638.65 *16*	0.024 *2*	4481.07	$(2,3)^-$	841.937	3^-
3643.46 *8*	0.336 *19*	(7533.80)	$1^+,2^+$	3890.09	$(0^-$ to 3)
3645.26 *10*	0.151 *12*	(7533.80)	$1^+,2^+$	3888.33	$(2,3)^-$
3656.63 *8*	0.73 *4*	(7533.80)	$1^+,2^+$	3876.94	$(1^-$ to $4^+)$
3659.96 *16*	0.033 *3*	5476.92	$(1^+,2,3)$	1816.879	$(2,3,4^-)$
3671.70 *8*	0.87 *4*	(7533.80)	$1^+,2^+$	3862.04	$(1^-$ to $4^+)$
[x]3688.20 *8*	0.332 *17*				
[x]3698.33 *15*	0.042 *3*				
3701.91 *9*	0.117 *6*	(7533.80)	$1^+,2^+$	3831.74?	$(1^+,2,3)$
3707.96 *12*	0.039 *3*	4389.78	$(2^-,3,4^+)$	681.942	(2,3)
3714.28 *17*	0.019 *2*	4556.68	$(1^-,2,3)$	841.937	3^-
[x]3727.98 *11*	0.057 *3*				

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ [†]	I_γ [‡@]	E_i(level)	J_i^π	E_f	J_f^π
[x]3732.40 *14*	0.044 *3*				
3735.52 *9*	0.201 *11*	(7533.80)	$1^+,2^+$	3798.14	$(2^-,3,4^+)$
3738.94 *8*	0.77 *4*	(7533.80)	$1^+,2^+$	3794.62	$(0^-$ to 3)
[x]3752.52 *13*	0.051 *4*				
3755.06 *9*	0.139 *8*	3862.04	$(1^-$ to $4^+)$	106.828	3^-
[x]3759.14 *12*	0.040 *3*				
3763.03 *10*	0.102 *5*	(7533.80)	$1^+,2^+$	3770.67?	$(0^-$ to 3)
3769.86 *11*	0.069 *4*	3876.94	$(1^-$ to $4^+)$	106.828	3^-
3777.70 *9*	0.067 *7*	4416.60	$(2,3)^-$	638.726	3^-
3790.36 *9*	0.164 *9*	5064.01	$(1^-$ to $4^+)$	1273.517	2^-
3794.82 *12*	0.040 *3*	3794.62	$(0^-$ to 3)	0.0	2^-
3801.25 *17*	0.018 *2*	5789.69	(0 to 4^+)	1987.979	$(0^-$ to $4^-)$
3814.8 *3*	0.026 *6*	5081.26	$(1^-,2,3)$	1266.300	$(1,2,3)^-$
3816.80 *14*	0.060 *6*	5978.32	4^+	2161.645	$(2^+,3,4^+)$
3827.56 *12*	0.045 *3*	3934.62	$(2^-,3)$	106.828	3^-
3831.32 *11*	0.063 *4*	3831.74?	$(1^+,2,3)$	0.0	2^-
3837.27 *8*	0.96 *5*	(7533.80)	$1^+,2^+$	3696.39	$(3^-,4^+)$
3842.41 *12*	0.043 *3*	4481.07	$(2,3)^-$	638.726	3^-
3859.48 *9*	0.52 *3*	(7533.80)	$1^+,2^+$	3674.14	$(1^-,2,3)$
[x]3862.89 *9*	0.173 *9*				
3869.12 *10*	0.082 *5*	5246.63	$(1^-$ to $4^+)$	1377.121	$(2,3)^-$
3874.7 *4*	0.24 *3*	4556.68	$(1^-,2,3)$	681.942	(2,3)
3875.05 *9*	0.80 *5*	(7533.80)	$1^+,2^+$	3658.59	$(2^-,3)$
3881.34 *20*	0.016 *2*	5953.50	(1,2,3)	2072.009	$(2,3)^-$
3889.93 *10*	0.104 *6*	3890.09	$(0^-$ to 3)	0.0	2^-
3893.97 *9*	0.157 *8*	4152.35	$(2^-,3,4^+)$	258.260	4^-
[x]3901.54 *9*	0.166 *9*				
3912.28 *9*	0.350 *18*	(7533.80)	$1^+,2^+$	3621.20	(2,3)
[x]3914.57 *18*	0.040 *5*				
3935.39 *19*	0.017 *2*	4778.05	$(1^-$ to $4^+)$	841.937	3^-
[x]3943.94 *10*	0.142 *7*				
[x]3952.66 *10*	0.169 *9*				
[x]3971.64 *15*	0.022 *2*				
4005.79 *23*	0.104 *6*	(7533.80)	$1^+,2^+$	3529.03	$(0^-$ to 3)
4013.77 *9*	0.73 *4*	4013.89	$(0^-$ to 3)	0.0	2^-
[x]4020.19 *13*	0.034 *2*				
4022.8 *4*	0.301 *15*	4806.83	$(1$ to $3)^-$	783.885	2^-
4030.70 *9*	0.258 *13*	(7533.80)	$1^+,2^+$	3502.90	$(2^+,3,4^+)$
4033.4 *4*	0.036 *4*	4715.40	$(2^-,3)$	681.942	(2,3)
4037.2 *3*	0.024 *3*	4036.86	3^-	0.0	2^-
4039.64 *15*	0.043 *4*	4039.96	(1,2,3)	0.0	2^-
4048.9 *3*	0.063 *4*	4748.54	3^-	699.087	5^-
4053.64 *12*	0.047 *3*	4053.87	$(2,3)^-$	0.0	2^-
[x]4057.92 *12*	0.055 *4*				
[x]4064.34 *11*	0.065 *4*				
4095.81 *18*	0.019 *2*	4778.05	$(1^-$ to $4^+)$	681.942	(2,3)
4101.15 *17*	0.021 *2*	4942.97	$(1^-$ to $4^-)$	841.937	3^-
4105.75 *12*	0.062 *4*	4105.74?	$(0^-$ to 3)	0.0	2^-
4112.20 *9*	0.59 *3*	(7533.80)	$1^+,2^+$	3421.27	$(0^-$ to 3)
4115.15 *9*	1.72 *9*	(7533.80)	$1^+,2^+$	3418.44	$(2,3)^-$
4120.72 *11*	0.091 *5*	5318.95	$(2^-,3)$	1197.904	4^-
4124.2 *3*	0.014 *2*	4806.83	$(1$ to $3)^-$	681.942	(2,3)
4127.93 *14*	0.045 *3*	4128.34	3^-	0.0	2^-
4131.35 *23*	0.021 *2*	4389.78	$(2^-,3,4^+)$	258.260	4^-
4140.4 *3*	0.011 *2*	5630.29	(4^+)	1489.30	$(1^-$ to $5^-)$
4154.22 *12*	0.050 *3*	4154.70	$(1^-,2,3)$	0.0	2^-

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ [†]	I_γ [‡@]	E_i(level)	J_i^π	E_f	J_f^π
4158.8 *3*	0.009 *2*	4416.60	(2,3)$^-$	258.260	4$^-$
4166.20 *10*	0.321 *16*	(7533.80)	1$^+$,2$^+$	3367.32	(1$^+$)
[x]4173.09 *12*	0.060 *4*				
[x]4182.98 *15*	0.025 *2*				
4203.80 *23*	0.016 *2*	4903.68	(3$^-$,4$^+$)	699.087	5$^-$
4209.94 *10*	0.226 *12*	(7533.80)	1$^+$,2$^+$	3323.73	3$^-$
[x]4212.71 *13*	0.055 *4*				
4218.71 *25*	0.012 *2*	5002.99	(1$^-$,2,3)	783.885	2$^-$
4229.38 *11*	0.210 *11*	(7533.80)	1$^+$,2$^+$	3304.36	1$^+$
4233.87 *22*	0.018 *2*	5697.22	(1$^-$ to 4$^+$)	1463.649	(1$^-$,2,3)
4238.31 *11*	0.219 *11*	(7533.80)	1$^+$,2$^+$	3295.35	(2,3)
4246.39 *12*	0.120 *7*	(7533.80)	1$^+$,2$^+$	3287.16	(2$^-$,3,4$^+$)
4249.24 *10*	0.91 *5*	(7533.80)	1$^+$,2$^+$	3284.41	(2,3)$^-$
4254.09 *20*	0.018 *2*	5630.29	(4$^+$)	1376.10	6$^+$
4258.95 *13*	0.042 *3*	4259.10	(1$^-$,2,3)	0.0	2$^-$
4270.35 *16*	0.021 *2*	5759.69	(1$^-$,2,3$^+$)	1489.30	(1$^-$ to 5$^-$)
[x]4294.41 *24*	0.014 *2*				
4299.71 *9*	0.490 *25*	(7533.80)	1$^+$,2$^+$	3233.93	(3,4$^+$)
4309.58 *12*	0.049 *3*	4416.60	(2,3)$^-$	106.828	3$^-$
4319.91 *10*	0.190 *10*	5697.22	(1$^-$ to 4$^+$)	1377.121	(2,3)$^-$
4322.90 *9*	0.460 *23*	(7533.80)	1$^+$,2$^+$	3210.61	(1$^+$,2,3)
4331.5 *4*	0.022 *2*	4590.56	(2$^-$,3,4$^+$)	258.260	4$^-$
4337.71 *9*	0.83 *4*	(7533.80)	1$^+$,2$^+$	3195.80	(2$^-$,3)
4366.0 *4*	0.007 *2*	5476.92	(1$^+$,2,3)	1110.744	3$^+$
[x]4371.43 *10*	0.228 *12*				
4374.04 *10*	0.149 *8*	4481.07	(2,3)$^-$	106.828	3$^-$
4399.00 *18*	0.027 *2*	5081.26	(1$^-$,2,3)	681.942	(2,3)
4402.48 *21*	0.052 *6*	4660.71	(2$^-$,3)	258.260	4$^-$
4404.62 *11*	0.134 *9*	5246.63	(1$^-$ to 4$^+$)	841.937	3$^-$
[x]4410.83 *15*	0.025 *2*				
4416.31 *10*	0.217 *11*	4416.60	(2,3)$^-$	0.0	2$^-$
4425.20 *10*	0.141 *8*	5064.01	(1$^-$ to 4$^+$)	638.726	3$^-$
[x]4432.87 *15*	0.031 *2*				
4442.06 *11*	0.076 *4*	5081.26	(1$^-$,2,3)	638.726	3$^-$
4457.3 *3*	0.012 *2*	4715.40	(2$^-$,3)	258.260	4$^-$
4465.4 *3*	0.009 *2*	5978.32	4$^+$	1513.069	(1$^-$ to 5$^-$)
[x]4472.85 *14*	0.026 *2*				
4481.16 *18*	0.040 *4*	4481.07	(2,3)$^-$	0.0	2$^-$
4483.7 *3*	0.035 *4*	4590.56	(2$^-$,3,4$^+$)	106.828	3$^-$
4493.41 *10*	0.435 *22*	(7533.80)	1$^+$,2$^+$	3040.19	3$^-$
[x]4504.02 *12*	0.073 *5*				
4512.50 *9*	1.26 *6*	(7533.80)	1$^+$,2$^+$	3021.108	(2,3)$^-$
4519.11 *10*	0.64 *3*	(7533.80)	1$^+$,2$^+$	3014.46	(1,2,3)$^-$
4525.18 *10*	0.89 *5*	(7533.80)	1$^+$,2$^+$	3008.33	3
4534.97 *13*	0.045 *3*	5318.95	(2$^-$,3)	783.885	2$^-$
[x]4568.52 *11*	0.107 *6*				
[x]4581.67 *22*	0.015 *2*				
4594.98 *10*	0.52 *3*	(7533.80)	1$^+$,2$^+$	2938.60	(1$^-$,2,3)
4601.31 *21*	0.017 *2*	5978.32	4$^+$	1376.10	6$^+$
4607.48 *10*	0.440 *22*	(7533.80)	1$^+$,2$^+$	2926.09	(2,3)$^-$
4612.3 *6*	0.007 *2*	4612.82	(2$^+$,3)	0.0	2$^-$
4616.58 *10*	0.274 *14*	(7533.80)	1$^+$,2$^+$	2917.10	(1$^-$ to 4$^+$)
4636.57 *20*	0.016 *2*	5318.95	(2$^-$,3)	681.942	(2,3)
4645.03 *11*	0.077 *4*	4903.68	(3$^-$,4$^+$)	258.260	4$^-$
4655.62 *10*	0.58 *3*	(7533.80)	1$^+$,2$^+$	2878.009	3$^-$
4670.93 *10*	0.465 *23*	(7533.80)	1$^+$,2$^+$	2862.78	(2$^-$,3)

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

γ(^{42}K) (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π	Comments
x4675.94 *15*	0.027 *2*					
x4686.38 *11*	0.081 *4*					
4693.1 *4*	0.009 *2*	5476.92	(1+,2,3)	783.885	2−	
4698.54 *11*	0.148 *8*	5953.50	(1,2,3)	1254.821	2−	
x4709.19 *22*	0.014 *2*					
4714.7 *5*	0.007 *2*	4715.40	(2−,3)	0.0	2−	
x4731.14 *17*	0.020 *2*					
4734.5 *4*	0.008 *2*	5846.58	(1−,2,3+)	1110.744	3+	
x4745.37 *23*	0.023 *3*					
4747.9 *4*	0.014 *3*	4748.54	3−	0.0	2−	
4767.57 *10*	4.11 *21*	(7533.80)	1+,2+	2765.960	(2+,3)	Additional information 33.
4815.35 *10*	1.46 *7*	(7533.80)	1+,2+	2718.098	(2−,3)	
x4826.89 *16*	0.030 *2*					
x4830.94 *17*	0.027 *2*					
4853.29 *11*	0.205 *10*	4853.60	(0 to 3)−	0.0	2−	
x4861.33 *11*	0.165 *9*					
4880.6 *4*	0.062 *4*	(7533.80)	1+,2+	2653.79	(2−,3)	
4889.17 *10*	0.94 *5*	(7533.80)	1+,2+	2644.289	3−	
4895.7 *3*	0.012 *2*	5002.99	(1−,2,3)	106.828	3−	
4905.67 *10*	0.59 *3*	(7533.80)	1+,2+	2627.847	(2−,3)	
4926.46 *10*	0.59 *3*	(7533.80)	1+,2+	2606.996	(1−,2,3)	
4938.54 *13*	0.049 *3*	4938.98	(1−,2,3)	0.0	2−	
4959.88 *10*	0.368 *19*	(7533.80)	1+,2+	2573.63	(2,3)	
x4985.71 *14*	0.042 *3*					
x5031.31 *12*	0.121 *8*					
5051.32 *10*	2.01 *10*	(7533.80)	1+,2+	2482.147	(1,2,3)−	
5057.6 *3*	0.013 *2*	5697.22	(1− to 4+)	638.726	3−	
5080.94 *13*	0.059 *3*	5081.26	(1−,2,3)	0.0	2−	
5096.55 *15*	0.029 *2*	5097.04	(0− to 3)	0.0	2−	
5111.39 *10*	2.01 *10*	(7533.80)	1+,2+	2422.155	(1−,2,3)	
5131.64 *10*	3.69 *18*	(7533.80)	1+,2+	2401.798	(2,3)−	Additional information 34.
5144.68 *11*	1.03 *5*	(7533.80)	1+,2+	2388.835	3+	
5167.28 *10*	6.6 *3*	(7533.80)	1+,2+	2366.172	(2,3)−	Additional information 35.
x5227.9 *7*	0.005 *2*					
x5239.85 *22*	0.017 *2*					
5282.38 *11*	0.54 *3*	(7533.80)	1+,2+	2251.062	(1−,2,3)	
5294.82 *11*	2.65 *13*	(7533.80)	1+,2+	2238.589	(1,2,3)−	Additional information 36.
x5316.71 *24*	0.013 *2*					
5328.2 *3*	0.125 *6*	(7533.80)	1+,2+	2204.046	(2−,3,4+)	
5339.22 *14*	0.049 *3*	5978.32	4+	638.726	3−	
5346.34 *13*	0.058 *3*	(7533.80)	1+,2+	2187.23	3+	
5371.91 *11*	0.383 *19*	(7533.80)	1+,2+	2161.645	(2+,3,4+)	
x5405.17 *23*	0.013 *1*					
5452.25 *16*	0.028 *2*	5710.61	(2−,3,4+)	258.260	4−	
5461.44 *11*	2.52 *13*	(7533.80)	1+,2+	2072.009	(2,3)−	Additional information 37.
5484.12 *11*	1.82 *9*	(7533.80)	1+,2+	2049.320	3+	
5595.93 *11*	1.37 *7*	(7533.80)	1+,2+	1937.492	(1,2,3)−	
5619.90# *15*	0.61# *3*	(7533.80)	1+,2+	1913.460	(2−,3)	
5671.50 *12*	3.71 *19*	(7533.80)	1+,2+	1861.893	2−	Additional information 38.
5690.44 *12*	2.26 *11*	(7533.80)	1+,2+	1842.971	(1−,2,3)	
5716.54 *12*	0.187 *10*	(7533.80)	1+,2+	1816.879	(2,3,4−)	
5787.79 *13*	0.155 *8*	(7533.80)	1+,2+	1745.613	(2+,3+)	
5810.00 *12*	0.63 *3*	(7533.80)	1+,2+	1723.44	(2,3,4+)	
x5828.69 *24*	0.011 *1*					
x5840.01 *21*	0.013 *1*					
x5852.66 *16*	0.030 *2*					

Continued on next page (footnotes at end of table)

^{41}K(n,γ) E=thermal 1985Kr06 (continued)

$\gamma(^{42}K)$ (continued)

E_γ †	I_γ ‡@	E_i(level)	J_i^π	E_f	J_f^π	Comments
x5858.0 *5*	0.005 *1*					
x5959.42 *18*	0.022 *1*					
x6047.7 *4*	0.005 *1*					
6069.65 *13*	0.310 *16*	(7533.80)	$1^+,2^+$	1463.649	$(1^-,2,3)$	
6125.37 *13*	0.370 *19*	(7533.80)	$1^+,2^+$	1407.912	$(1^-,2,3)$	
6133.19 *16*	0.400 *20*	(7533.80)	$1^+,2^+$	1400.03	(2,3)	
6156.15 *13*	0.90 *5*	(7533.80)	$1^+,2^+$	1377.121	$(2,3)^-$	Additional information 39.
6259.76 *13*	0.369 *19*	(7533.80)	$1^+,2^+$	1273.517	2^-	
6267.03 *13*	0.79 *4*	(7533.80)	$1^+,2^+$	1266.300	$(1,2,3)^-$	
6278.49 *13*	1.54 *8*	(7533.80)	$1^+,2^+$	1254.821	2^-	Additional information 40.
6389.70 *14*	0.206 *10*	(7533.80)	$1^+,2^+$	1143.593	4^+	
6422.57 *13*	0.64 *3*	(7533.80)	$1^+,2^+$	1110.744	3^+	
6691.34 *14*	0.79 *4*	(7533.80)	$1^+,2^+$	841.937	3^-	
6851.29 *14*	5.6 *3*	(7533.80)	$1^+,2^+$	681.942	(2,3)	Additional information 41.
6894.52 *14*	1.25 *6*	(7533.80)	$1^+,2^+$	638.726	3^-	Additional information 42.
7426.34 *15*	3.21 *16*	(7533.80)	$1^+,2^+$	106.828	3^-	Additional information 43.
7533.16 *15*	1.86 *9*	(7533.80)	$1^+,2^+$	0.0	2^-	Additional information 44.

† Systematic uncertainties of 5 ppm below 1.5 MeV energy, 10 ppm between 1.5 MeV and 3.0 MeV, and 20 ppm above 3 MeV photon energy are included.

‡ Intensities are per 100 neutron captures. Systematic uncertainties of 20% below 0.5 MeV, 15% between 0.5 MeV and 2 MeV, 10% between 2.0 MeV and 3.0 MeV, and 5% above 3 MeV are included. To obtain absolute cross section on the scale given in 2013Fi01, multiply listed Iγ value by an approximate factor of 0.0150. The obtained values of cross sections have been compared with corresponding ones in 2013Fi01 and they are in a good agreement within uncertainties, except for a few γ rays: 454.01, 830.89 and 1121.70, for which the values from 2013Fi01 is significantly higher.

From E(transition)=5620.30, branching=0.65% 3 as listed in table 3 of 1985Kr06.

@ Intensity per 100 neutron captures.

& Multiply placed with undivided intensity.

x γ ray not placed in level scheme.

^{41}K(n,γ) E=thermal 1985Kr06

Level Scheme

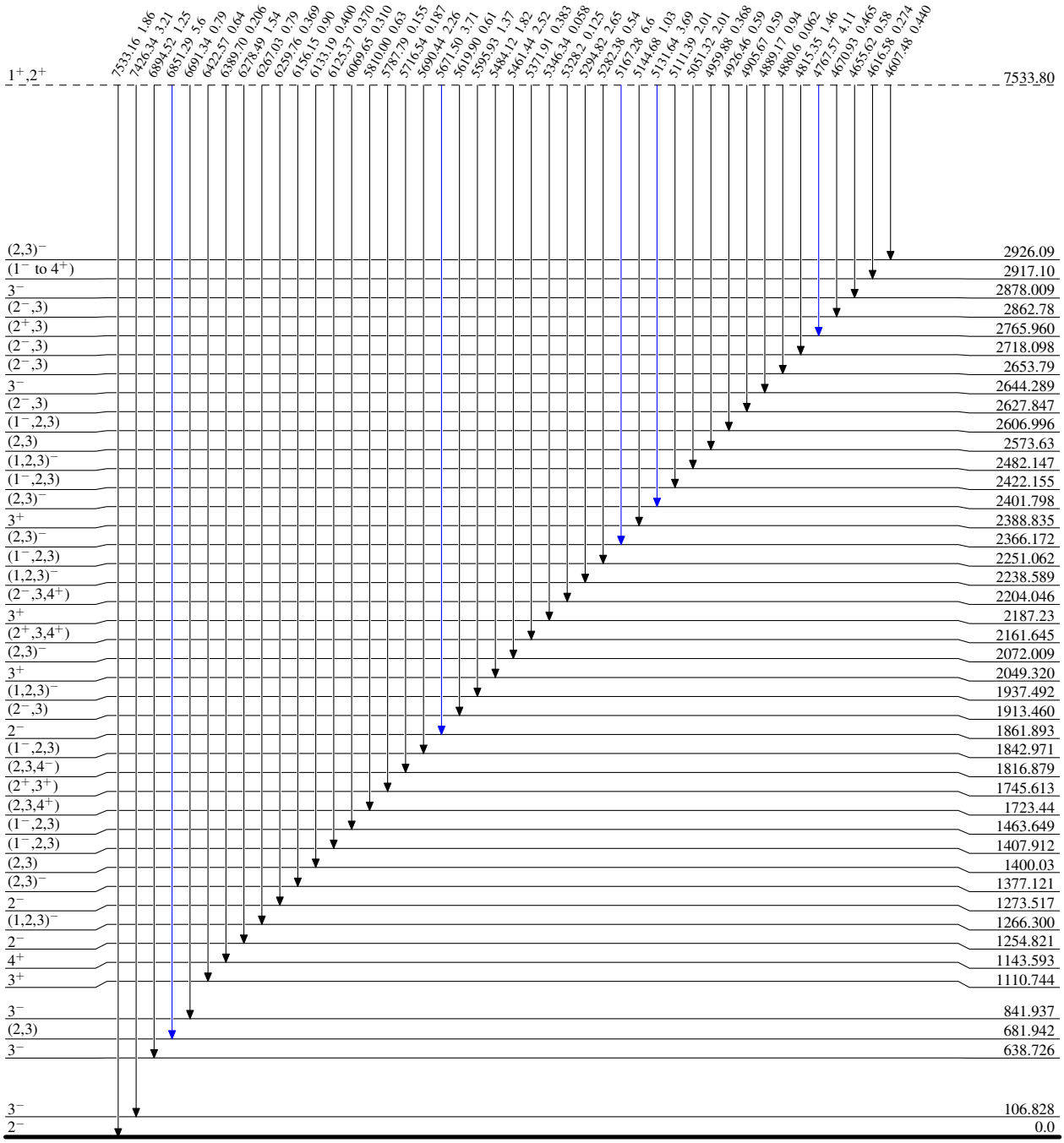
Intensities: $I_{(\gamma+ce)}$ per 100 neutron captures

Legend

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

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

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



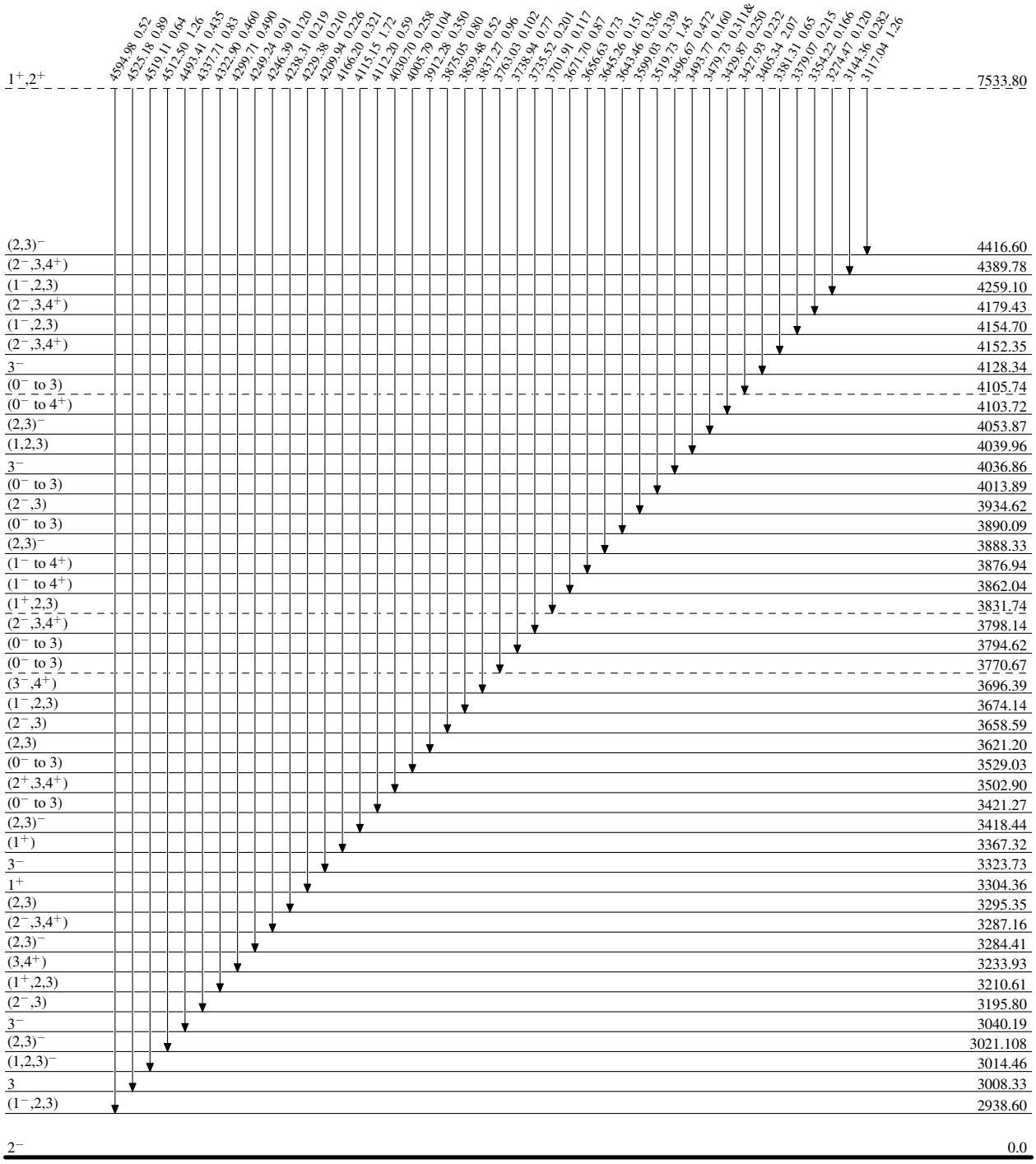
$^{42}_{19}K_{23}$

^{41}K(n,γ) E=thermal 1985Kr06

Level Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 neutron captures
& Multiply placed: undivided intensity given

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



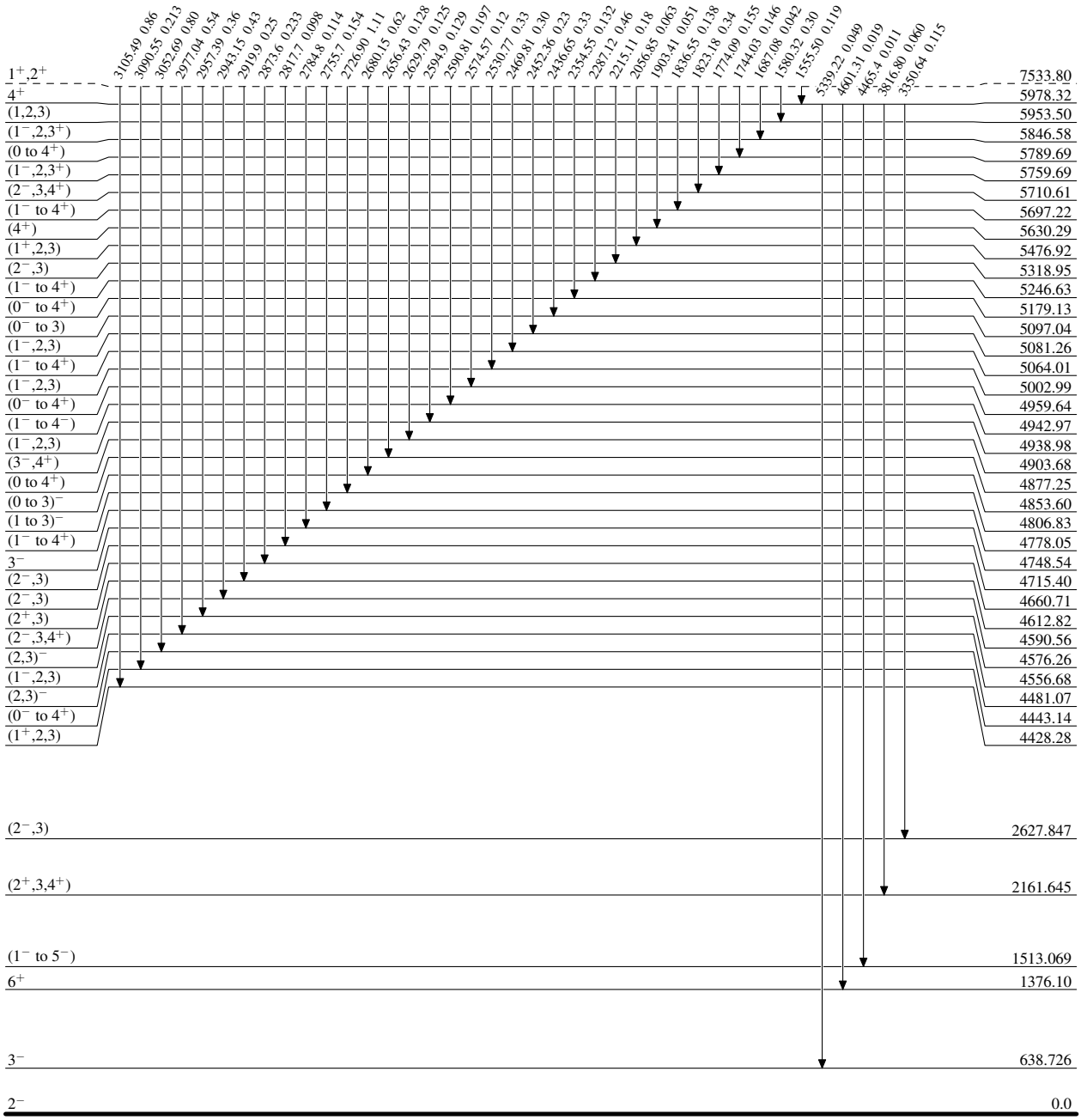
$^{42}_{19}K_{23}$

^{41}K(n,γ) E=thermal 1985Kr06

Level Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 neutron captures
& Multiply placed: undivided intensity given

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



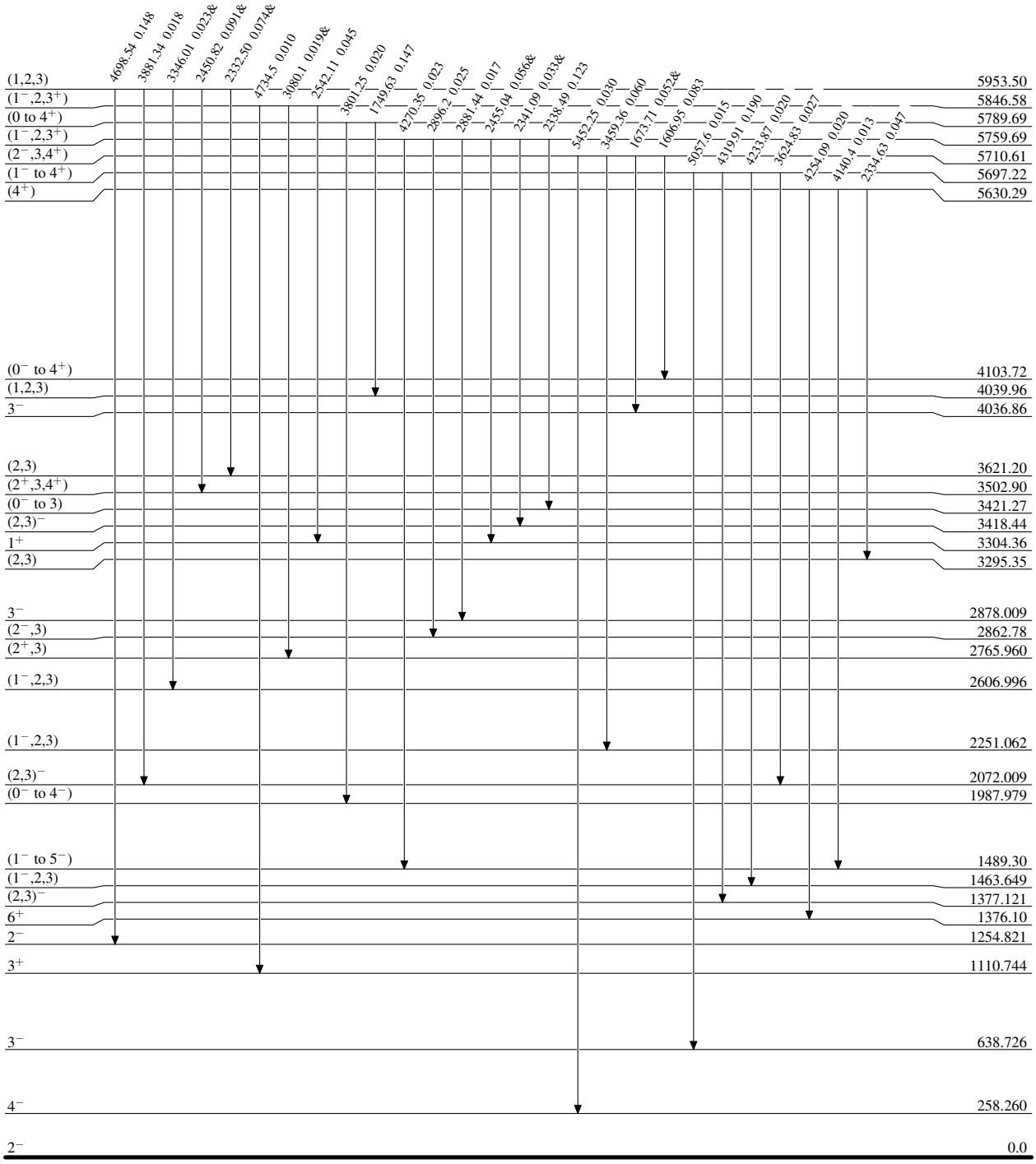
$^{42}_{19}K_{23}$

^{41}K(n,γ) E=thermal 1985Kr06

Level Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 neutron captures
& Multiply placed: undivided intensity given

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



$^{42}_{19}K_{23}$

^{41}K(n,γ) E=thermal 1985Kr06

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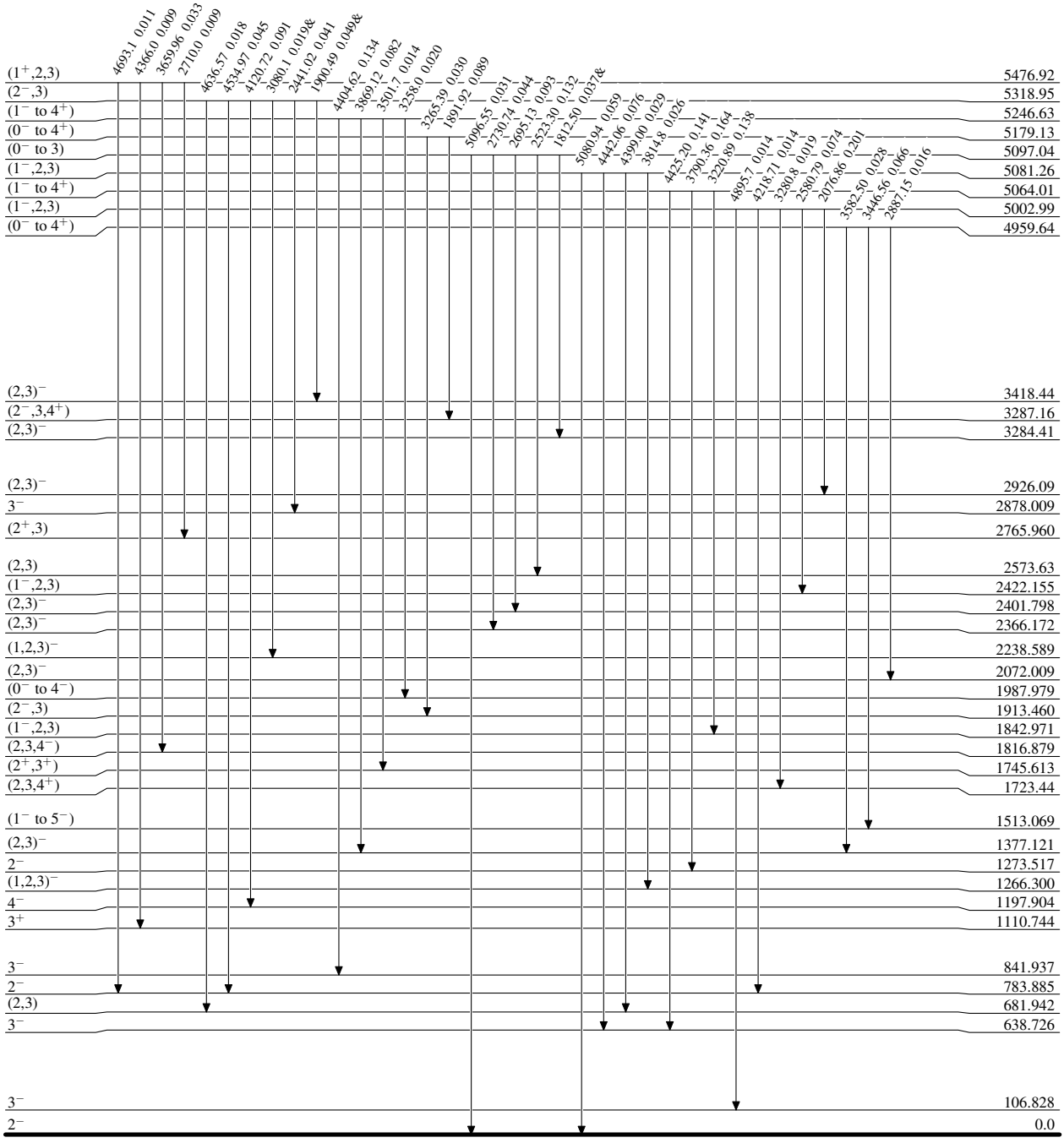

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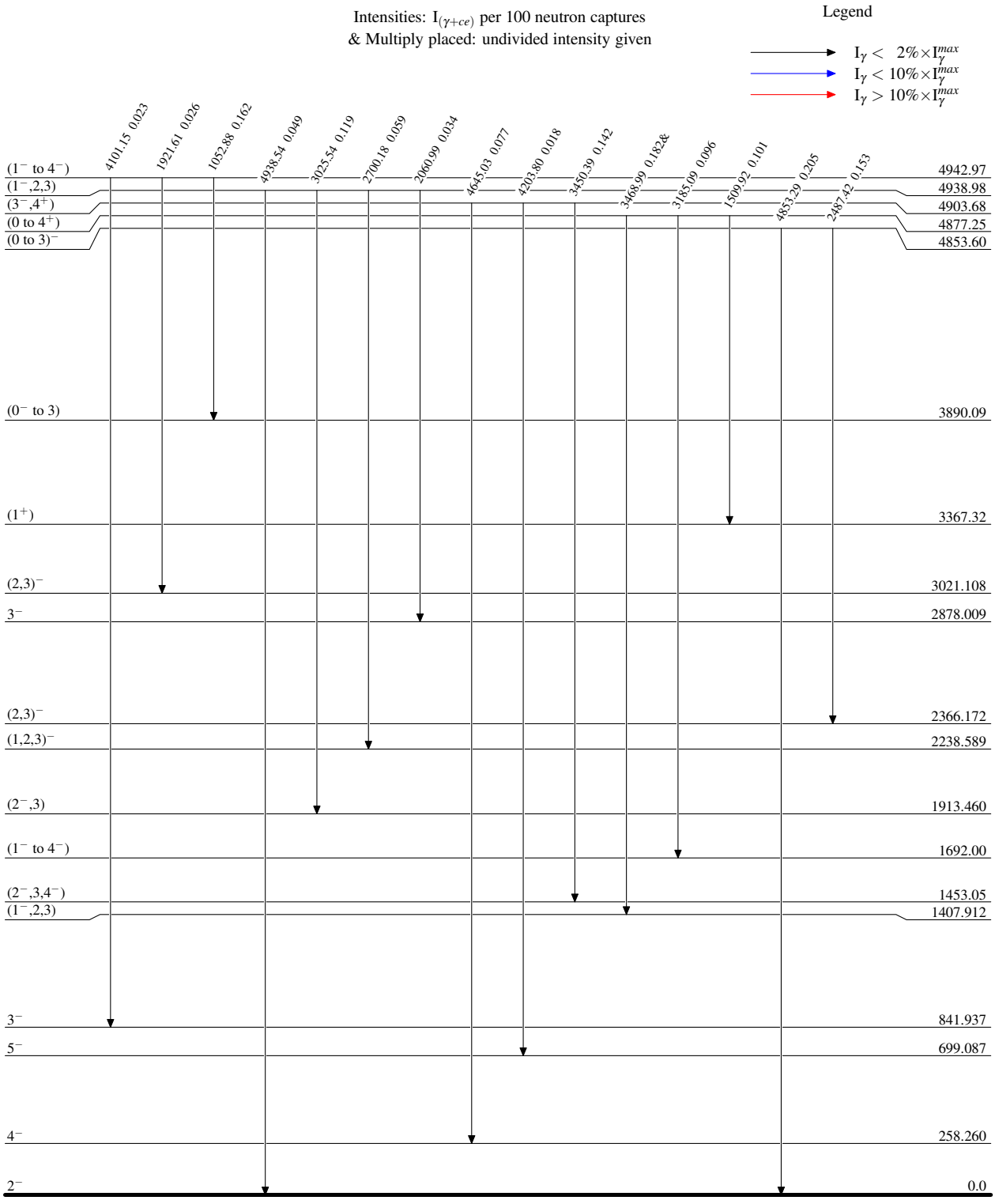

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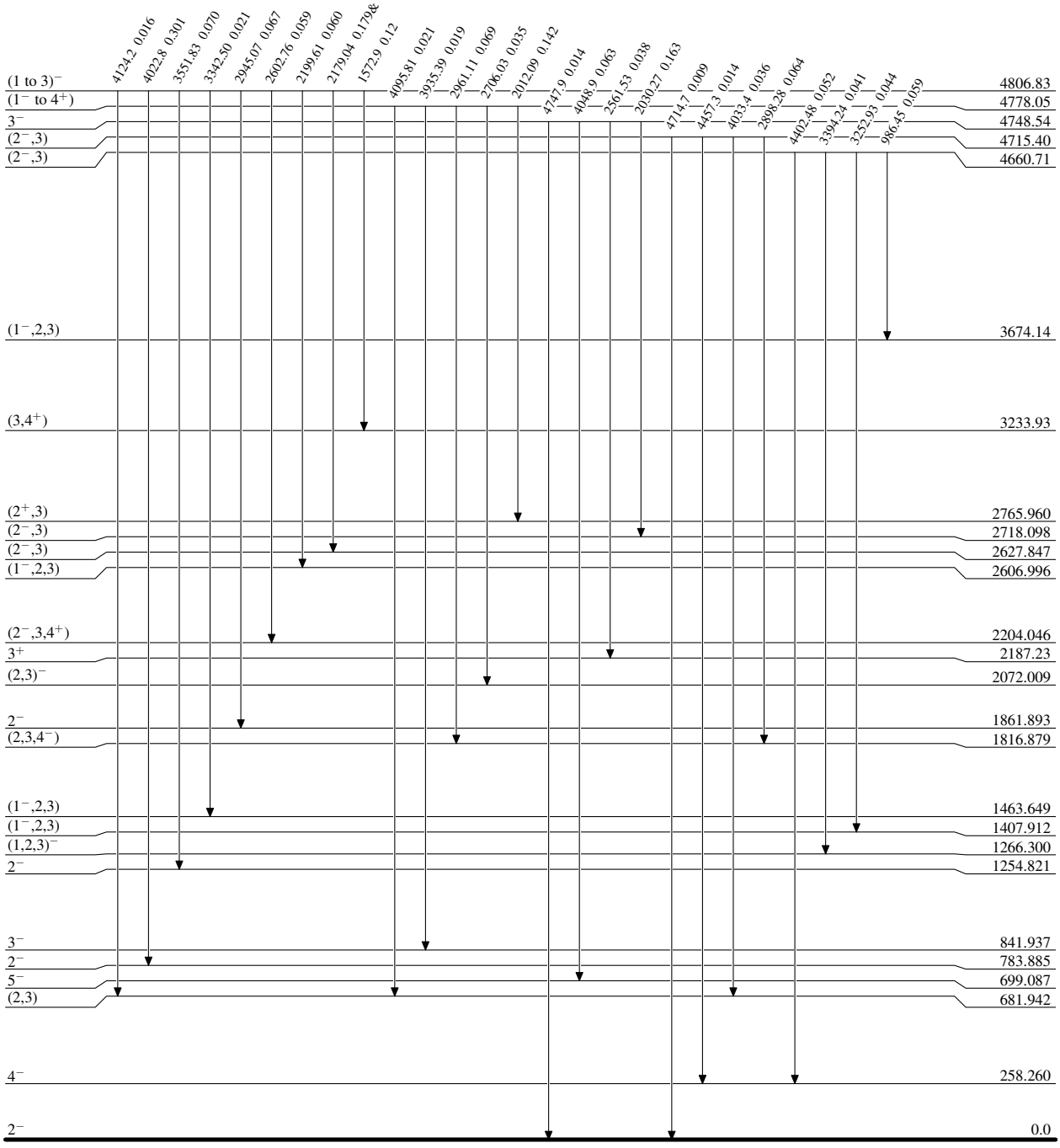

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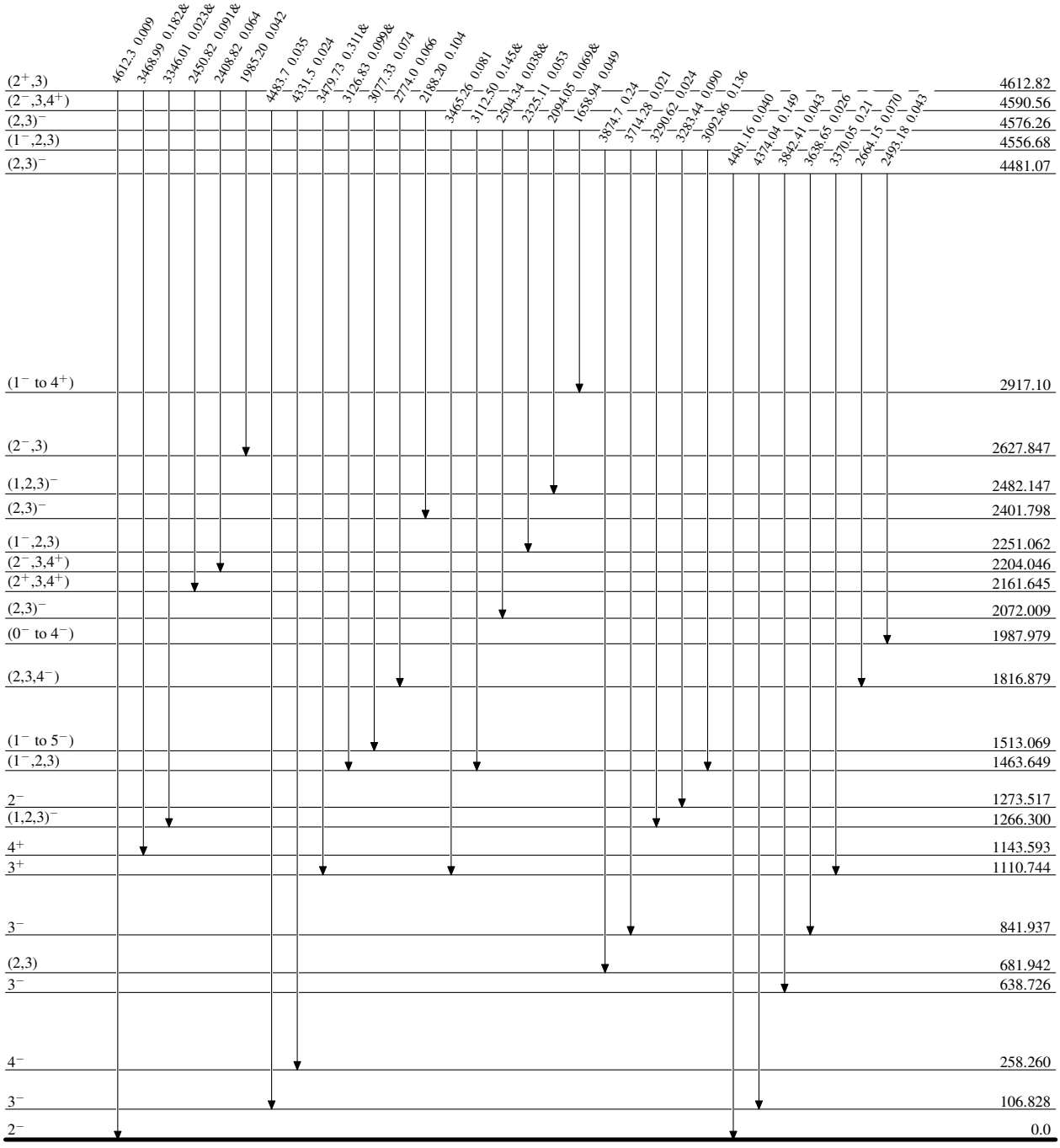

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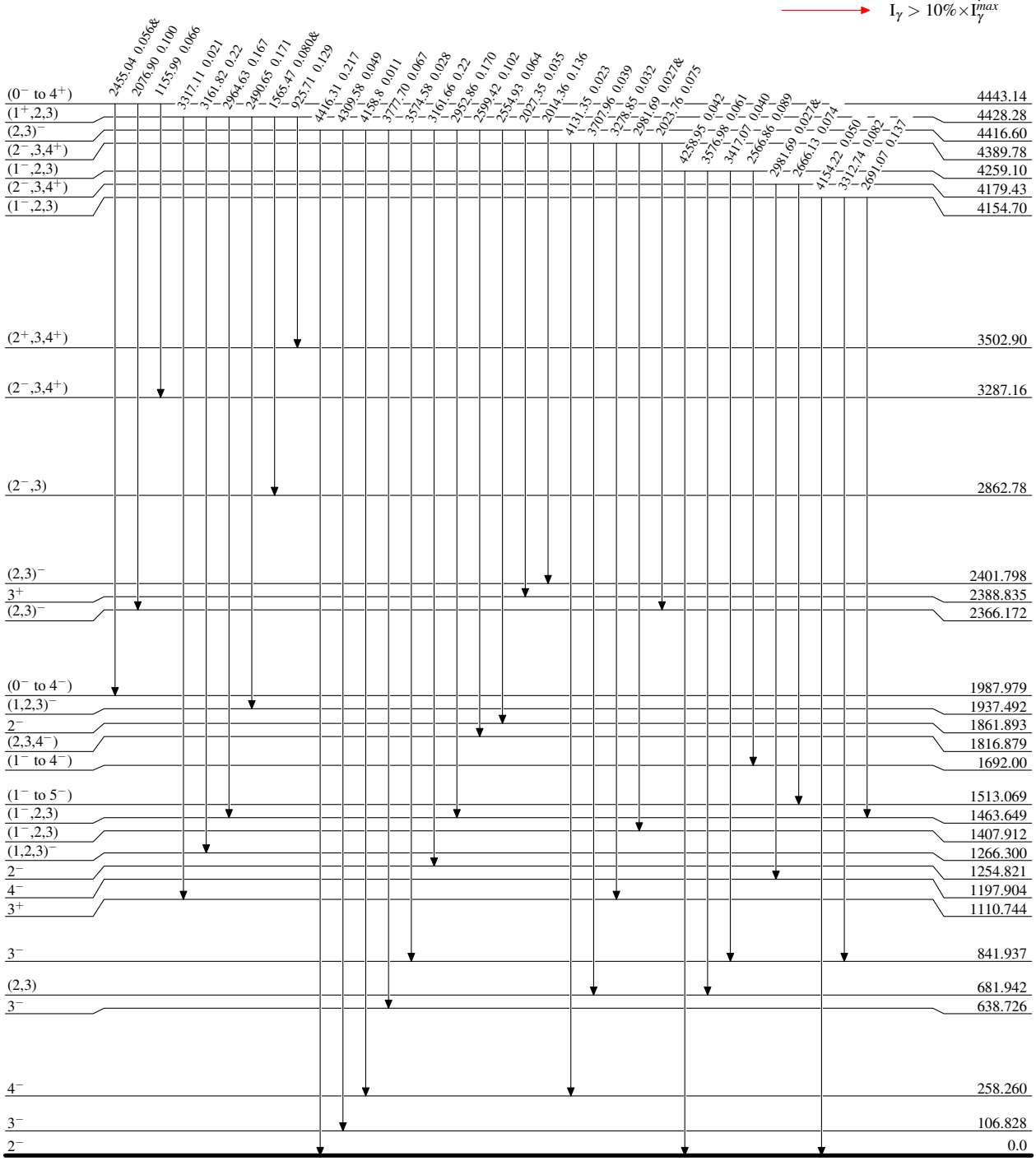

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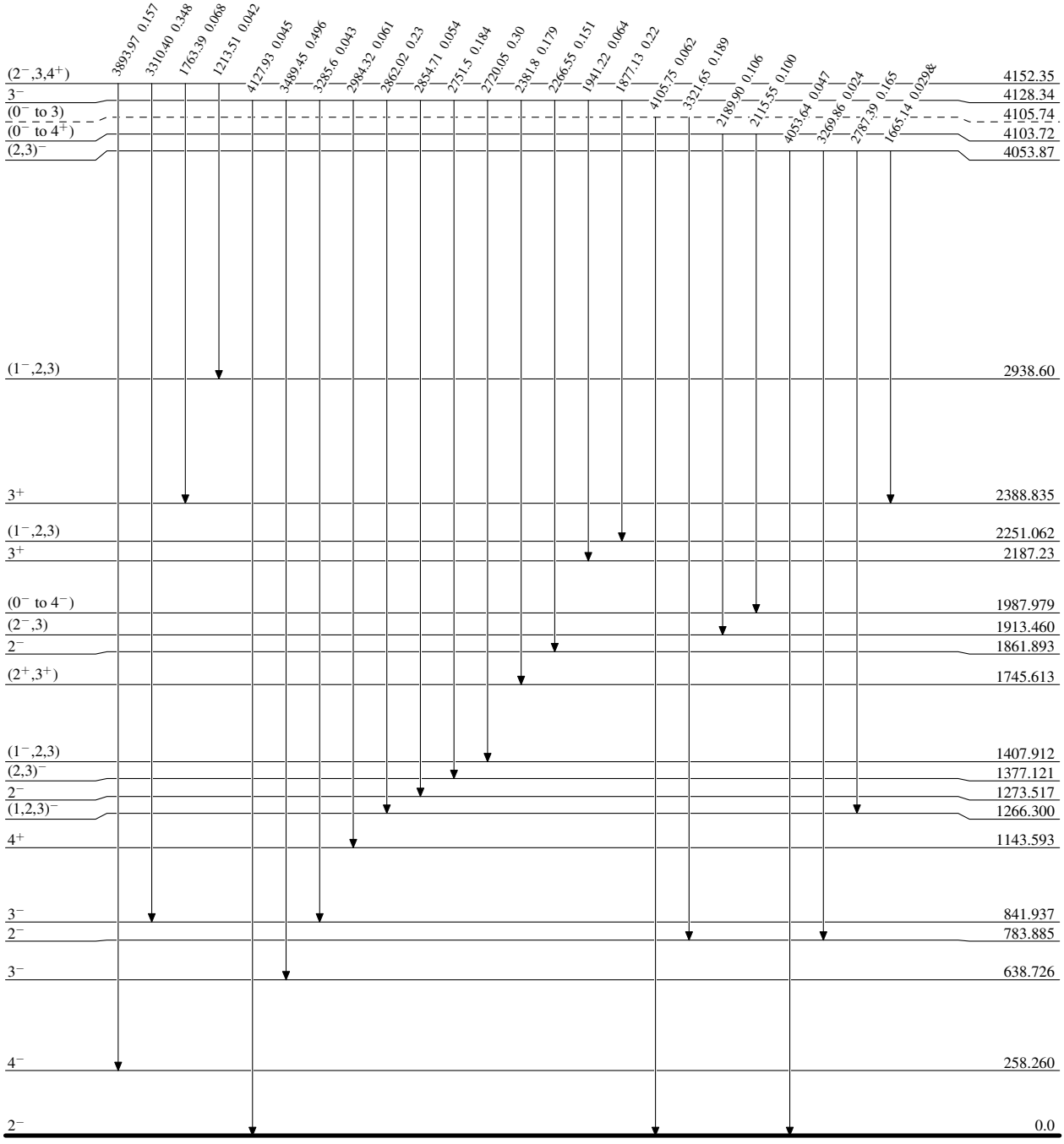

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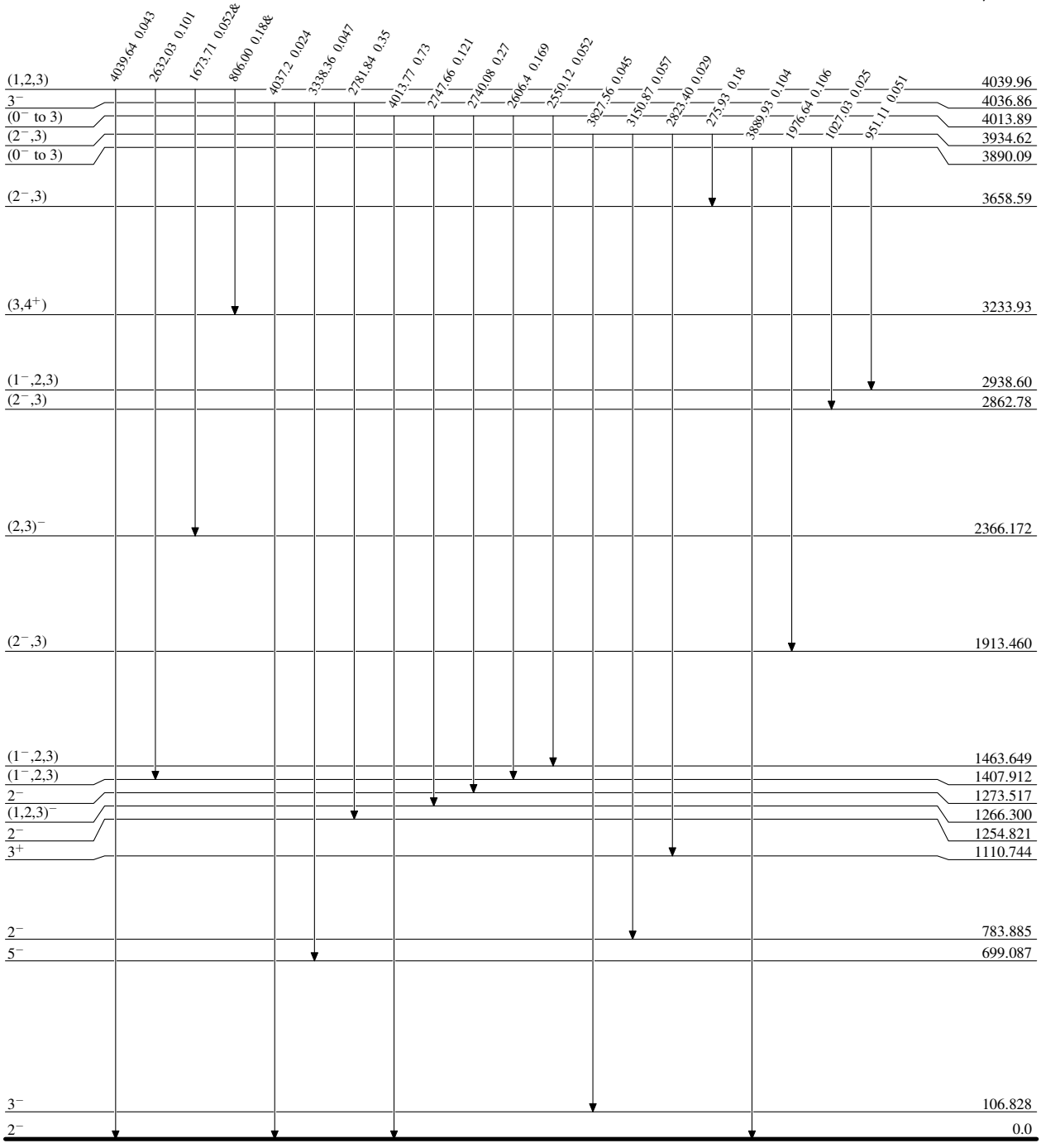

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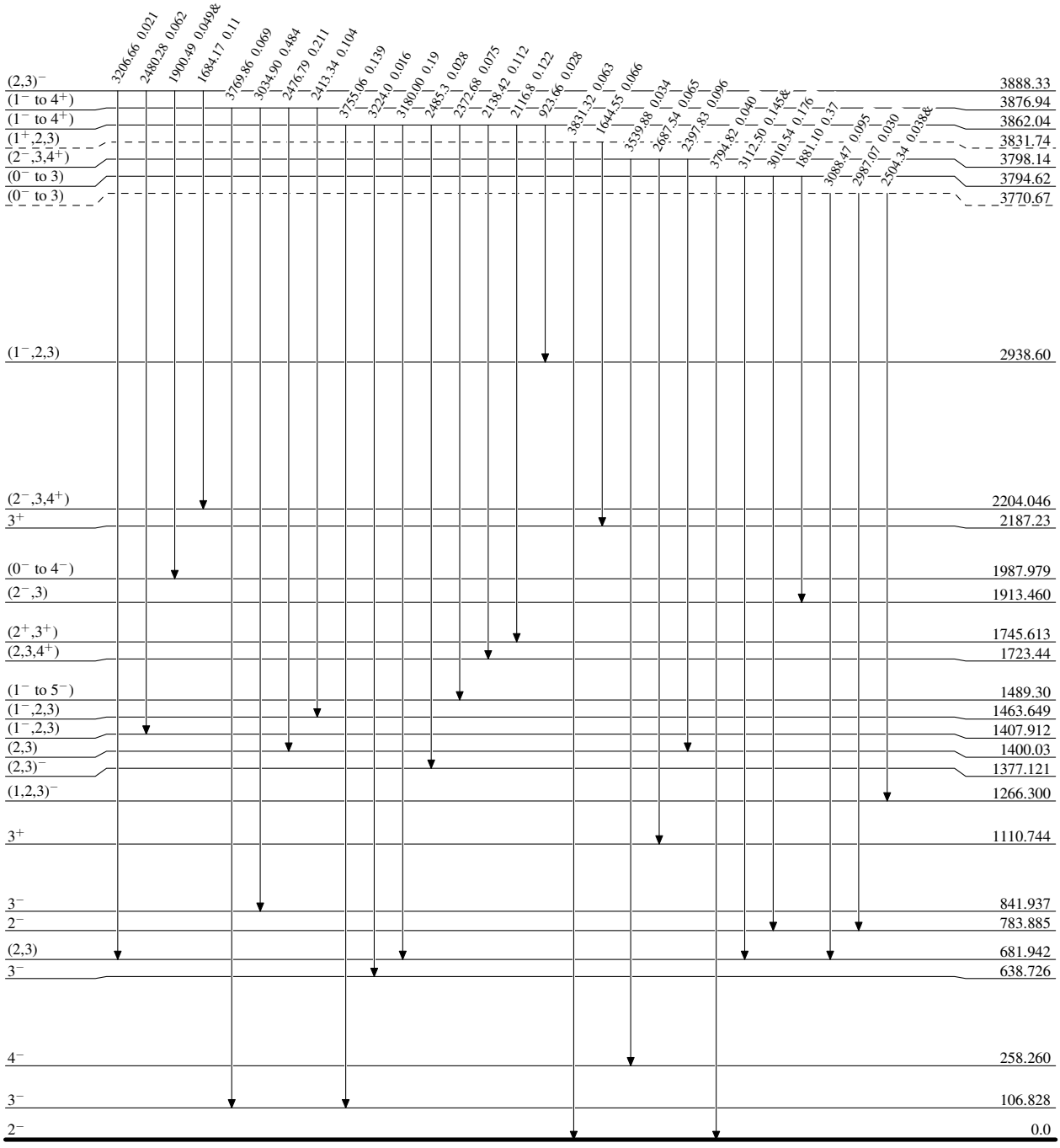

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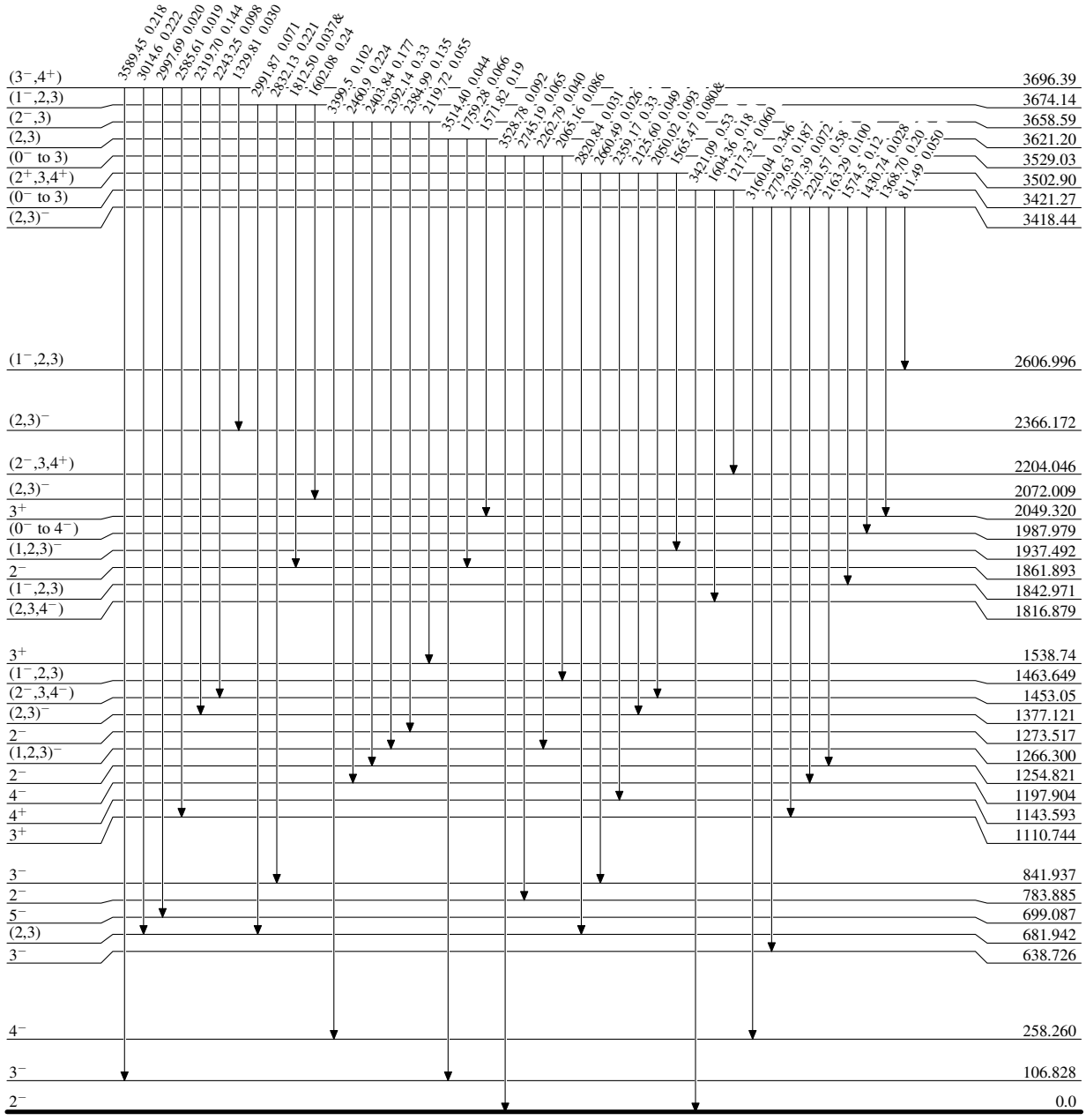

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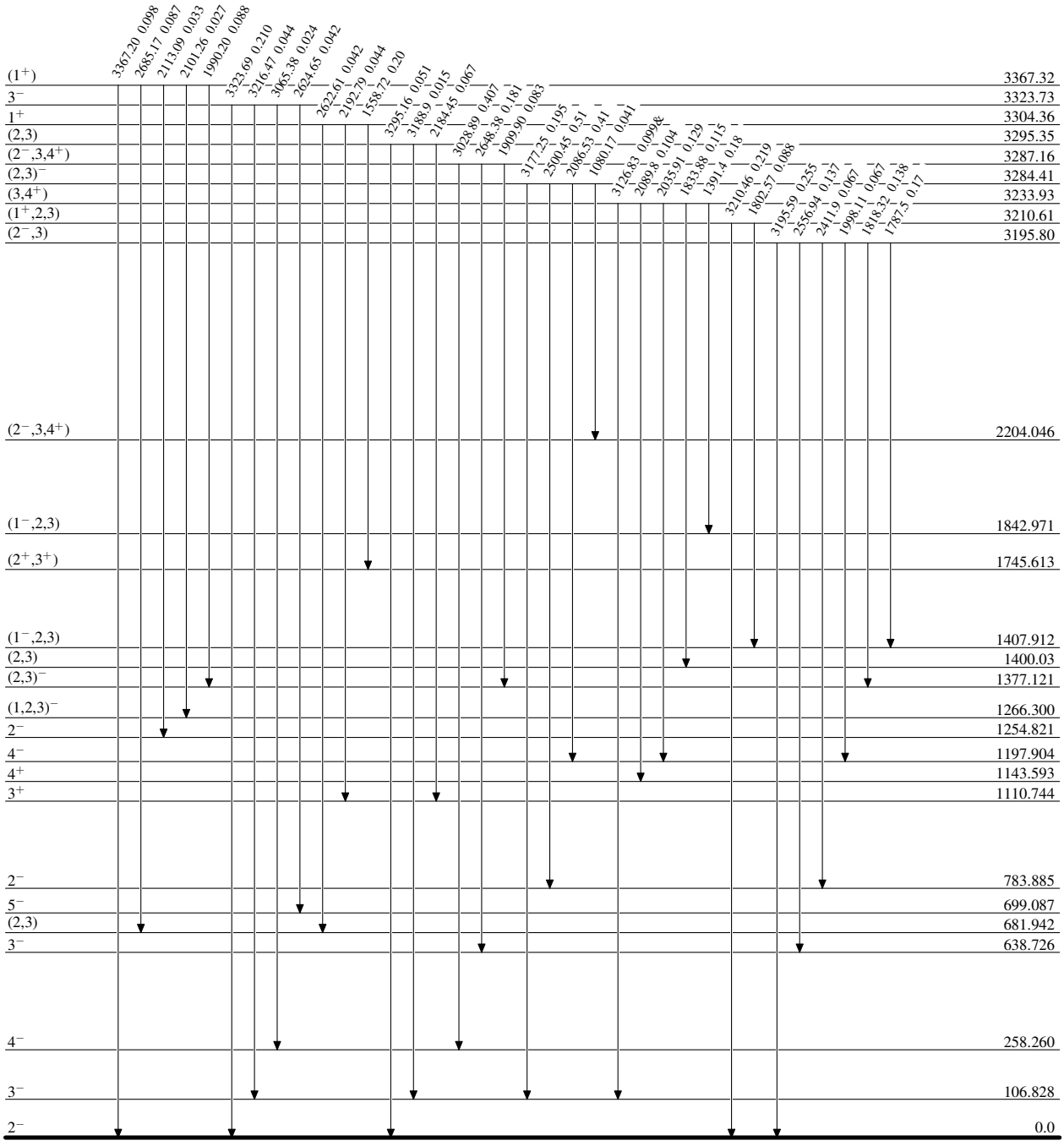

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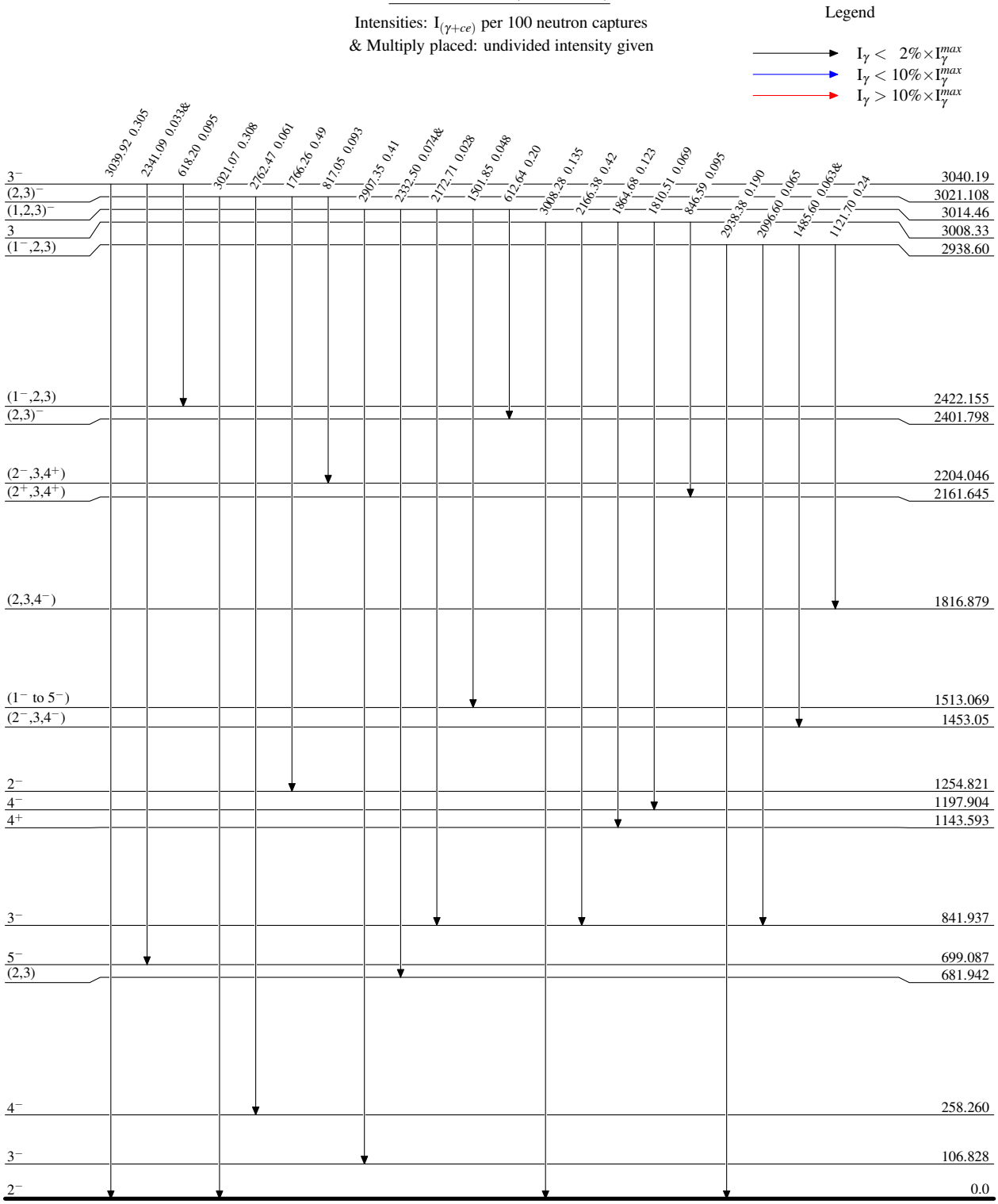

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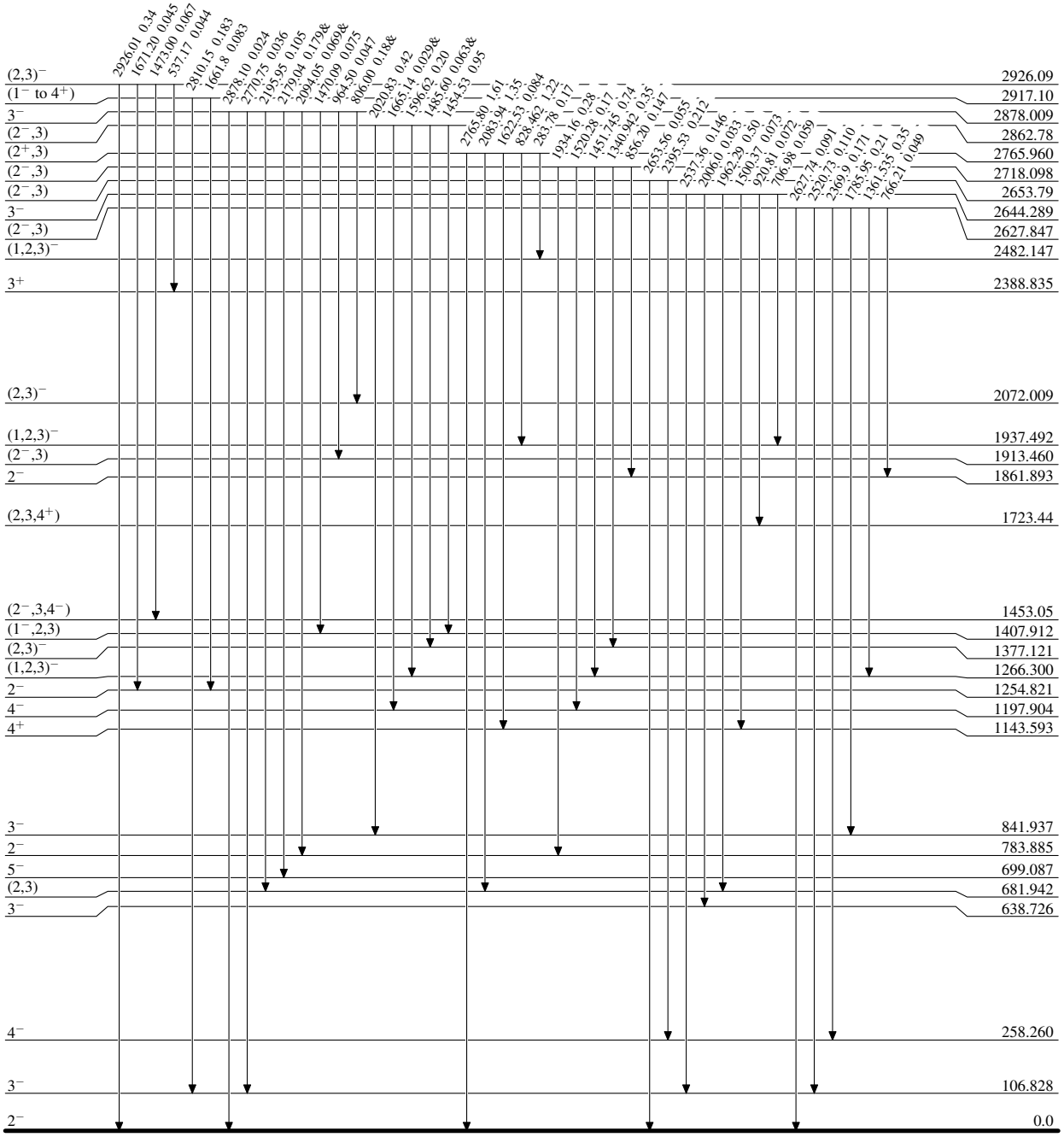

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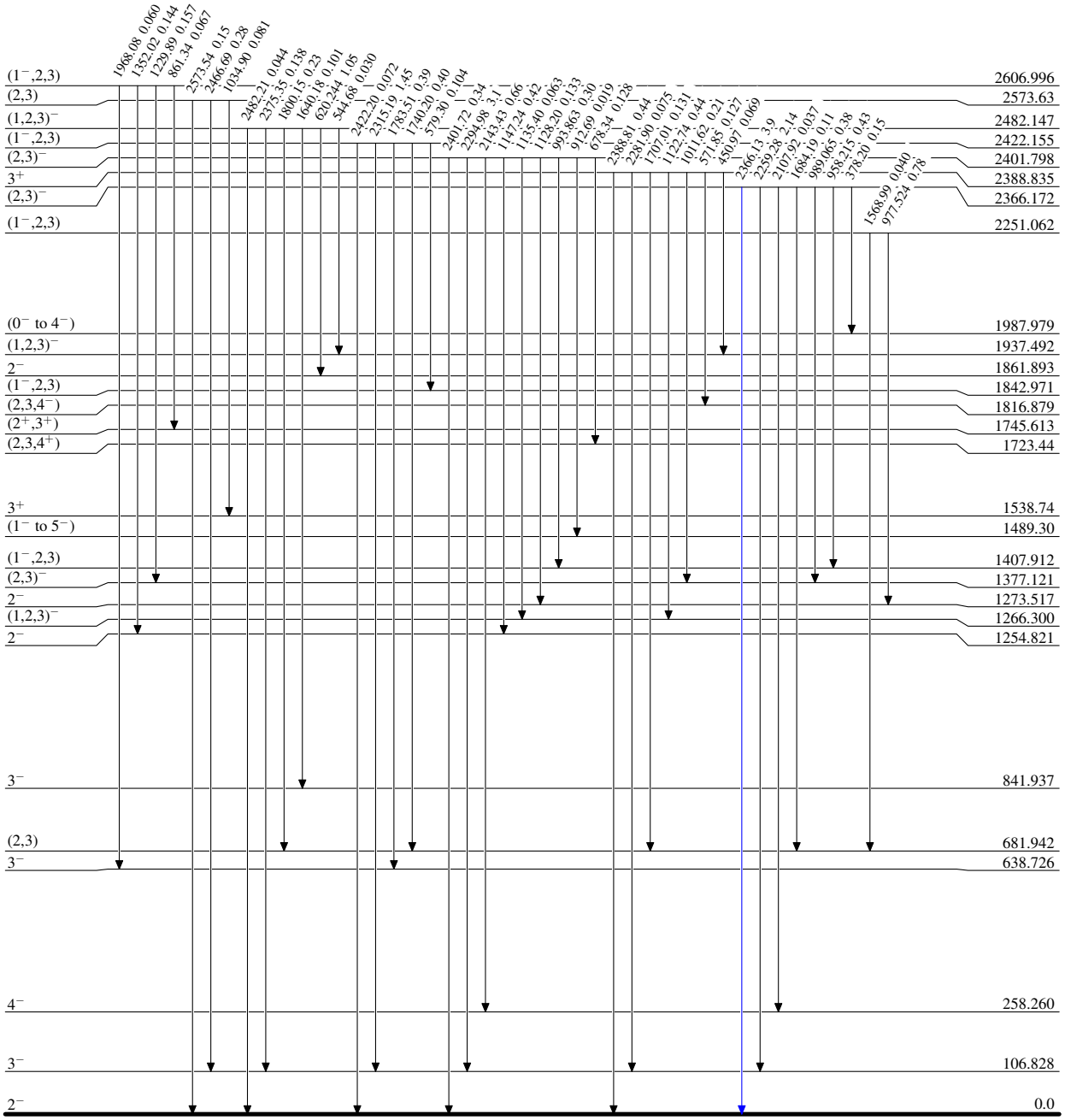

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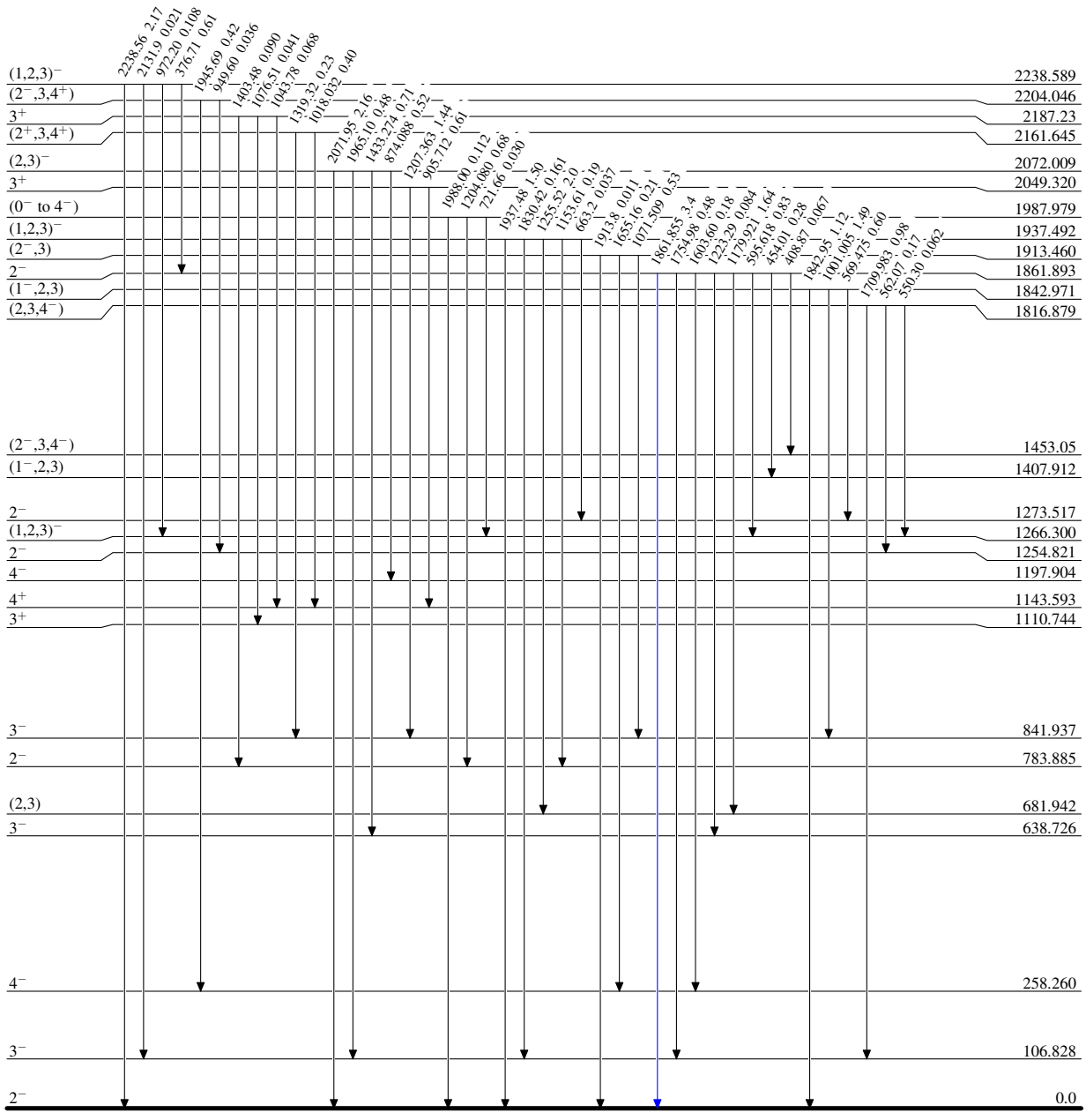

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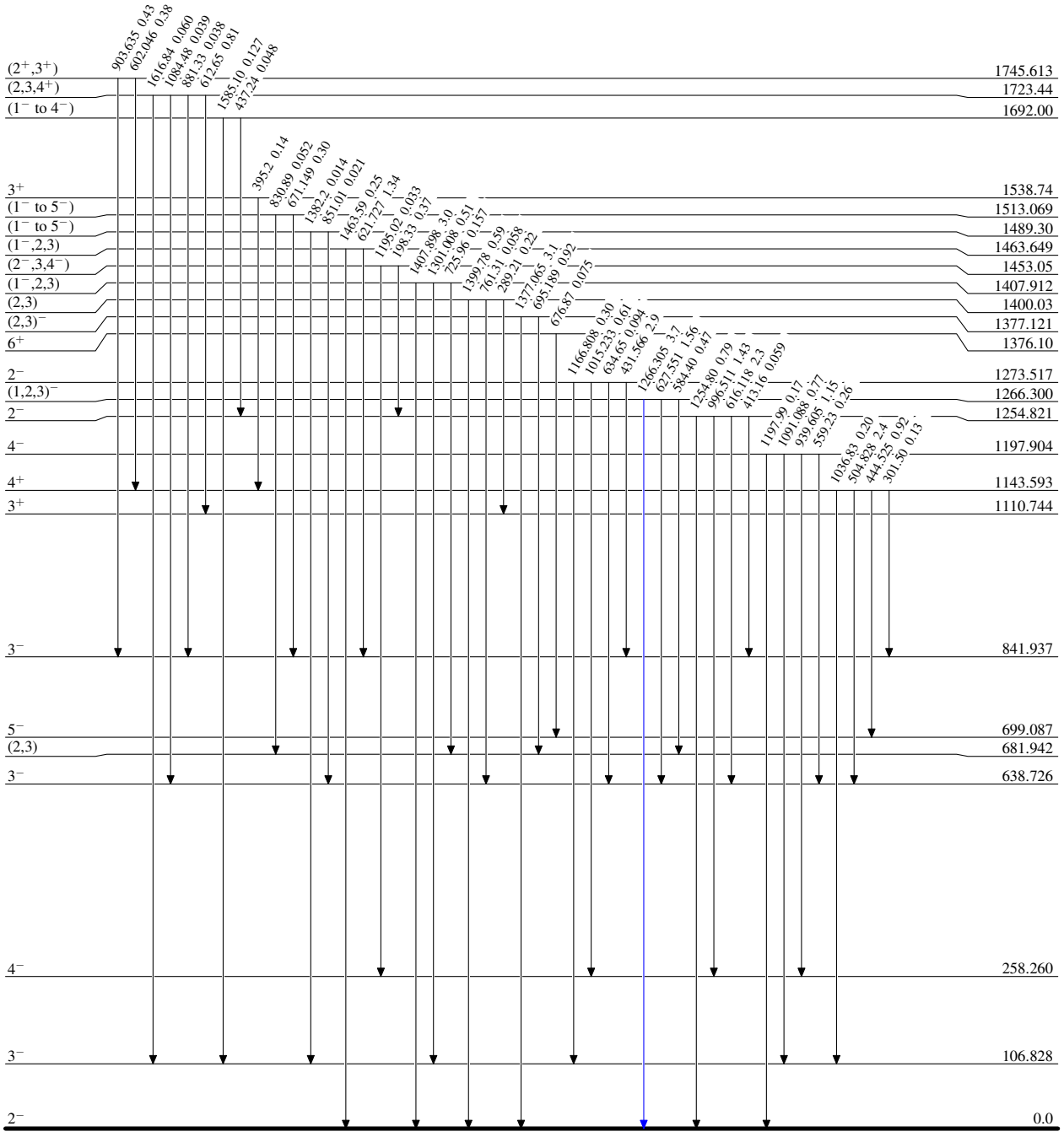

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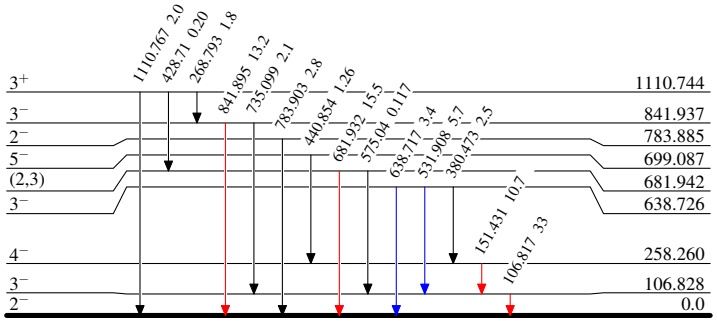

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