^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

σ_n=30 *8* (2006MuZX, which adopted value from 1971Be05) Others: 90 *7* (2013Fi01), 70 *20* (1952Po29).

1984Kr05: measured Eγ, Iγ with ILL curved crystal Bragg spectrometer for γ rays below 1.5 MeV and with a pair spectrometer and a Ge detector above 1.5 MeV. See also 1987Kr01 (from the same group as 1984Kr05) for some revisions to the level scheme proposed in 1984Kr05.

1971Be05 (also 1970BeZM): measured Eγ, Iγ using a Ge(Li) detector surrounded by a bifurcated NaI(Tl) annular detector and $\gamma\gamma$ using two Ge(Li) detectors. A total of 123 secondary and 38 primary transitions were reported incorporated in a level scheme of 27 levels up to 3.3 MeV.

2013Fi01: Measured Eγ, Iγ, total radiative neutron σ using a HPGe detector.

Additional information 1.

^{41}K Levels

The following levels proposed by 1971Be05 only have been omitted since these are not confirmed in the more detailed study of 1984Kr05: 1516.8, 2304.5, 2599.8, 2681.5, 3042.1, 3116.2, 3164.5 and 3281.1. The transitions reported by 1971Be05 connected with these levels have either not been seen by 1984Kr05 or assigned elsewhere.

E(level)[‡]	J$^\pi$[†]	Comments
0.0	$3/2^+$	
980.476 *8*	$1/2^+$	
1293.609 *8*	$7/2^-$	
1559.903 *12*	$3/2^+$	
1582.001 *11*	$3/2^-$	
1593.107 *12*	$1/2^+$	
1677.235 *10*	$7/2^+$	
1698.005 *15*	$5/2^+$	
2143.821 *24*	$5/2^+$	
2166.695 *24*	$3/2^-$	
2316.617 *24*	$5/2^-$	
2440.18[&] *4*	$(3/2,5/2^-)$	
2447.83 *7*	$(3/2^+,5/2,7/2^+)$	J$^\pi$: 1/2,5/2 (1984Kr05).
2494.91 *3*	$9/2^+$	
2507.93 *3*	$7/2^+$	
2527.66 *3*	$11/2^+$	
2593.97 *3*	$1/2^-,3/2^-$	
2710.48[&] *4*	$3/2^+,5/2^+$	
2712.57 *3*	$(7/2)^-$	
2756.73 *3*	$5/2^+$	
2761.73 *3*	$11/2^-$	
2774.25 *3*	$13/2^+$	
3048.22 *5*	$1/2^-,3/2^-$	
3141.84 *3*	$(7/2^-)$	
3142.43 *3*	$5/2^-$	J$^\pi$: $9/2^+$ (1984Kr05).
3213.61 *4*	$5/2^-$	J$^\pi$: 5/2 (1984Kr05).
3235.57 *4*	$(3/2^-,5/2,7/2^-)$	J$^\pi$: 5/2,7/2,$(9/2^-)$ (1984Kr05).
3240.65 *4*	$(5/2^+,7/2^-)$	J$^\pi$: $5/2^+$,7/2,$9/2^+$ (1984Kr05).
3431.84 *4*	$(9/2^-,7/2^-)$	
3449.79[&] *6*	$5/2^-,7/2^-$	
3489.30[#] *15*	$(5/2)^+$	J$^\pi$: $3/2^-$,5/2,7/2 (1984Kr05).
3521.38[#] *9*	$(5/2^+,7/2^+)$	

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

^{41}K Levels (continued)

E(level)‡	Jπ†	Comments
3534.45 *4*	(7/2+,9/2,11/2+)	
3560.61 *5*	(3/2−,5/2,7/2+)	
3572.38& *5*		
3612.77 *5*		
3651.46 *5*	(5/2,7/2−)	
3761.54 *5*		
3774.66 *5*	5/2−,7/2−	Jπ: 5/2 (1984Kr05).
3826.90 *4*	(5/2,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
3870.52# *6*	5/2−,7/2−	Jπ: 5/2,7/2,9/2+ (1984Kr05).
3990.40?@ *5*		Jπ: 7/2−,9/2 (1984Kr05).
3996.49 *4*	(5/2+)	
4026.94# *7*		Jπ: 5/2,7/2+ (1984Kr05).
4146.15 *6*	5/2−,7/2−	Jπ: 5/2,7/2,9/2+ (1984Kr05).
4164.57 *4*		Jπ: 5/2,7/2 (1984Kr05).
4220.62 *5*	(5/2)	
4228.99 *5*	(5/2)−	Jπ: 5/2,7/2+ (1984Kr05).
4244.22 *5*	(3/2)−	Jπ: 5/2+ (1984Kr05).
4260.36 *13*		Jπ: 5/2 (1984Kr05).
4274.96 *5*	(7/2−,9/2+)	
4303.01 *5*	(5/2+,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
4345.66 *5*	(5/2,7/2−)	Jπ: 5/2+,7/2− (1984Kr05).
4459.72 *5*	1/2−,3/2−	Jπ: 5/2+ (1984Kr05).
4525.37# *5*		Jπ: 5/2,7/2,9/2+ (1984Kr05).
4568.75# *5*	(9/2+,11/2−)	Jπ: 9/2+ (1984Kr05).
4609.48 *7*	(5/2+,7/2,9/2+)	
4730.70 *5*	(3/2)−	Jπ: 5/2,7/2,9/2 (1984Kr05).
4735.86 *6*	(5/2+,7/2+)	
4745.49 *10*	(5/2+)	
4749.47 *8*	(3/2−,5/2,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
4823.33 *5*	(7/2+,9/2+)	
4862.43 *6*	(3/2+,5/2)	
4927.83 *6*	(5/2)+	
4948.94# *6*	(3/2−,5/2,7/2−)	Jπ: 5/2,7/2− (1984Kr05).
5021.23?@ *8*		
5096.20 *8*		Jπ: 5/2,7/2 (1984Kr05).
5185.27 *6*	(5/2,7/2−)	Jπ: 5/2,7/2,9/2 (1984Kr05).
5298.86 *6*	(3/2−,5/2,7/2−)	Jπ: 5/2,7/2 (1984Kr05).
5496.61 *7*	(7/2+)	
5548.19 *7*	(3/2+,5/2+,7/2+)	
5557.39?@ *9*		Jπ: 5/2+ (1984Kr05).
5575.24?@ *8*	(3/2−,5/2,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
5604.58# *8*	(3/2−,5/2,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
5610.83# *6*	(5/2,7/2+)	Jπ: 5/2,7/2 (1984Kr05).
5655.66 *8*	(3/2−,5/2+)	Jπ: 5/2+ (1984Kr05).
5659.25# *8*	(3/2−,5/2,7/2+)	Jπ: 5/2,7/2+ (1984Kr05).
5800.80# *7*	(3/2+,5/2+)	Jπ: 5/2+ (1984Kr05).
5826.66 *7*	(5/2)+	Jπ: 5/2−,7/2,(9/2−) (1984Kr05).
5886.95 *8*	(3/2)−	Jπ: 5/2+ (1984Kr05).
5912.50 *8*	(9/2+)	
5952.41# *8*	(7/2−,9/2−)	Jπ: 7/2−,9/2 (1984Kr05).
5968.89# *8*	(9/2+,11/2−)	Jπ: 9/2+ (1984Kr05).
6040.67 *10*	(3/2−,5/2,7/2)	Jπ: 5/2,7/2 (1984Kr05).

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

^{41}K Levels (continued)

E(level)‡	J$^{\pi}$†	Comments
6070.76 *9*	(5/2,7/2,9/2$^+$)	
6078.56 *7*	(3/2)$^-$	J$^{\pi}$: 5/2,7/2$^-$ (1984Kr05).
6186.04 *11*	(5/2,7/2,9/2$^-$)	J$^{\pi}$: 5/2$^+$,7/2,9/2 (1984Kr05).
6211.50 *7*	(7/2$^+$,9/2$^-$)	J$^{\pi}$: 7/2$^+$,9/2 (1984Kr05).
6229.88?@ *10*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2$^+$,7/2,9/2$^+$ (1984Kr05).
6255.96 *8*	(5/2,7/2$^-$)	
6290.05 *14*	(3/2)$^-$	J$^{\pi}$: 5/2$^+$ (1984Kr05).
6394.31 *10*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2$^+$ (1984Kr05).
6434.51 *9*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2,(9/2$^-$) (1984Kr05).
6450.15?@ *10*	(3/2$^-$,5/2,7/2$^+$)	J$^{\pi}$: 5/2,7/2$^+$ (1984Kr05).
6497.00?@ *10*	(3/2)$^-$	J$^{\pi}$: 5/2,7/2,9/2 (1984Kr05).
6528.13 *9*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2,9/2$^+$ (1984Kr05).
6769.77 *10*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2$^-$ (1984Kr05).
6782.54# *10*		J$^{\pi}$: 5/2,7/2,9/2 (1984Kr05).
6791.36# *9*	(5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2 (1984Kr05).
6835.43 *9*	(5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2$^+$ (1984Kr05).
6995.53# *11*	(5/2,7/2,9/2$^+$)	
7020.97 *10*	(3/2)$^-$	J$^{\pi}$: 5/2,7/2,9/2$^+$ (1984Kr05).
7035.28 *14*	(5/2)$^-$	J$^{\pi}$: 5/2,7/2$^+$ (1984Kr05).
7361.15?@ *11*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2$^-$ (1984Kr05).
7593.06# *9*		J$^{\pi}$: 5/2,7/2,9/2 (1984Kr05).
7654.93 *9*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2,9/2$^+$ (1984Kr05).
7938.98 *10*		J$^{\pi}$: 5/2,7/2,9/2 (1984Kr05).
8190.21# *12*	(3/2$^-$,5/2,7/2$^-$)	J$^{\pi}$: 5/2,7/2,9/2$^+$ (1984Kr05).
8200.11 *9*	(5/2$^-$,7/2$^-$,3/2$^+$)	J$^{\pi}$: 5/2,7/2,9/2$^+$ (1984Kr05).
9740.70# *10*	(3/2)$^-$	J$^{\pi}$: 5/2,7/2,9/2 (1984Kr05).
(10095.25 *10*)	7/2$^-$,9/2$^-$	E(level): S(n)=10095.37 *6* (2012Wa38). Observed deexcitation intensity is 70% of g.s. feeding. J$^{\pi}$: s-wave capture in ^{40}K (g.s. J^{π}=4$^-$), but population of mainly the levels of J<11/2 shows that the dominant component is 7/2$^-$ (1984Kr05).

† From the Adopted Levels. J^{π}'s proposed by 1984Kr05 are given under comments when these differ from those in Adopted Levels. These are based on prior literature values as well as the assumption that only E1, M1, and E2 transitions are observed.
‡ From a least-squares fit to Eγ, by evaluators.
# Probable state (1984Kr05).
@ Tentative state (1984Kr05).
& Level proposed by 1987Kr01.

γ(^{41}K)

The following weak primary transitions were reported by 1971Be05 only: 6111.5, 6395.5, 6500.8, 6620.6, 6629.3, 6979.3, 7416.6, 7791.5 and 8579.2. 6500.8γ and 6395.5γ were not seen by 1984Kr05 while all the other γ rays are assigned by 1984Kr05 to the ^{35}Cl(n,γ) reaction.

The following weak secondary transitions were reported by 1971Be05 only: 198.8, 516.6, 788.4, 1122.2, 1164.1, and 1734.8. 516.6γ is assigned by 1984Kr05 to ^{35}Cl(n,γ) and 1122.2γ as possible double escape line of 2144γ. Placements by 1971Be05 of 788.4γ from 3236 level and 1164.1γ from 2144 level were not confirmed by 1984Kr05.

$\gamma\gamma$ coin information is adopted by 1984Kr05 from 1971Be05.

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
191.24[#] 6	0.008 2	2507.93	7/2+	2316.617	5/2−
193.73 11	0.003 2	4220.62	(5/2)	4026.94	
246.587 3	0.54 8	2774.25	13/2+	2527.66	11/2+
258.53 5	0.015 3	5557.39?		5298.86	(3/2−,5/2,7/2−)
266.841 19	0.009 3	2761.73	11/2−	2494.91	9/2+
288.388 6	0.035 12	1582.001	3/2−	1293.609	7/2−
293.786[f] 10	0.023[f] 5	3534.45	(7/2+,9/2,11/2+)	3240.65	(5/2+,7/2−)
293.786[f] 10	0.023[f] 5	4568.75	(9/2+,11/2−)	4274.96	(7/2−,9/2+)
296.340 23	0.008 2	4525.37		4228.99	(5/2)−
304.76 4	0.006 2	4525.37		4220.62	(5/2)
[x]314.73 11	0.007 3				
[x]327.766 2	0.028 6				
[x]336.627 6	0.079 13				
338.47 6	0.004 2	6835.43	(5/2,7/2−)	6497.00?	(3/2)−
339.41 4	0.008 2	4948.94	(3/2−,5/2,7/2−)	4609.48	(5/2+,7/2,9/2+)
344.79 8	0.143 22	3996.49	(5/2+)	3651.46	(5/2,7/2−)
354.541 7	0.113 17	(10095.25)	7/2−,9/2−	9740.70	(3/2)−
358.465 13	0.15 4	4228.99	(5/2)−	3870.52	5/2−,7/2−
361.99 3	0.011 2	5185.27	(5/2,7/2−)	4823.33	(7/2+,9/2+)
364.089 7	0.19 3	2507.93	7/2+	2143.821	5/2+
371.51[#] 6	0.048 8	4146.15	5/2−,7/2−	3774.66	5/2−,7/2−
380.13 7	0.005 2	3141.84	(7/2−)	2761.73	11/2−
380.696[bg] 8	0.067 10	3142.43	5/2−	2761.73	11/2−
383.617 6	0.142 21	1677.235	7/2+	1293.609	7/2−
385.107[#] 7	0.099 19	3141.84	(7/2−)	2756.73	5/2+
395.945 2	0.62 13	2712.57	(7/2)−	2316.617	5/2−
402.08 3	0.018 5	4228.99	(5/2)−	3826.90	(5/2,7/2+)
403.03[#] 3	0.018 4	4164.57		3761.54	
[x]417.190 5	0.037 8				
418.80 4	0.006 2	3560.61	(3/2−,5/2,7/2+)	3141.84	(7/2−)
419.31[f] 3	0.007[f] 2	5604.58	(3/2−,5/2,7/2+)	5185.27	(5/2,7/2−)
419.31[f] 3	0.007[f] 2	6078.56	(3/2)−	5659.25	(3/2−,5/2,7/2+)
429.790[#] 10	0.114 22	3990.40?		3560.61	(3/2−,5/2,7/2+)
445.814 5	0.23 5	2143.821	5/2+	1698.005	5/2+
454.557 7	0.022 5	5185.27	(5/2,7/2−)	4730.70	(3/2)−
[x]476.62 4	0.008 2				
[x]481.242[‡] 20	0.013 3				
[x]487.991 23	0.009 2				
492.821 23	0.009 2	7020.97	(3/2)−	6528.13	(3/2−,5/2,7/2−)
539.09 3	0.018 4	3774.66	5/2−,7/2−	3235.57	(3/2−,5/2,7/2−)
[x]541.83[‡] 3	0.035 7				
545.876 7	0.072 17	2712.57	(7/2)−	2166.695	3/2−
548.365 10	0.043 11	4823.33	(7/2+,9/2+)	4274.96	(7/2−,9/2+)
550.73 3	0.009 3	2143.821	5/2+	1593.107	1/2+
561.05[#] 4	0.011 3	3774.66	5/2−,7/2−	3213.61	5/2−
561.842 22	0.014 3	2143.821	5/2+	1582.001	3/2−
[x]564.01 3	0.013 3				
[x]565.73 3	0.016 14				
566.650[&] 17	0.087 18	2710.48	3/2+,5/2+	2143.821	5/2+
568.170 17	0.098 19	5298.86	(3/2−,5/2,7/2−)	4730.70	(3/2)−
573.597 9	0.052 12	2166.695	3/2−	1593.107	1/2+
579.418 7	0.89 17	1559.903	3/2+	980.476	1/2+
583.900 15	1.4 3	2143.821	5/2+	1559.903	3/2+

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
584.685 *11*	0.22 *5*	2166.695	3/2$^-$	1582.001	3/2$^-$
586.26 *4*	0.009 *4*	3826.90	(5/2,7/2$^+$)	3240.65	(5/2$^+$,7/2$^-$)
592.777[#] *25*	0.016 *5*	4244.22	(3/2)$^-$	3651.46	(5/2,7/2$^-$)
601.517 *12*	0.76 *18*	1582.001	3/2$^-$	980.476	1/2$^+$
606.824 *18*	0.027 *8*	2166.695	3/2$^-$	1559.903	3/2$^+$
607.846[f] *9*	0.089[f] *21*	4220.62	(5/2)	3612.77	
607.846[f] *9*	0.089[f] *21*	6434.51	(3/2$^-$,5/2,7/2$^-$)	5826.66	(5/2)$^+$
612.637 *8*	0.26 *8*	1593.107	1/2$^+$	980.476	1/2$^+$
612.925 *8*	0.31 *7*	2756.73	5/2$^+$	2143.821	5/2$^+$
614.766[bg] *7*	0.091 *23*	3142.43	5/2$^-$	2527.66	11/2$^+$
620.34 *3*	0.012 *3*	5548.19	(3/2$^+$,5/2$^+$,7/2$^+$)	4927.83	(5/2)$^+$
623.486[#] *14*	0.049 *13*	6450.15?	(3/2$^-$,5/2,7/2$^+$)	5826.66	(5/2)$^+$
633.891 *8*	0.72 *17*	3141.84	(7/2$^-$)	2507.93	7/2$^+$
[x]635.073 *18*	0.061 *17*				
639.345 *11*	0.031 *17*	2316.617	5/2$^-$	1677.235	7/2$^+$
645.17 *6*	0.015 *3*	6255.96	(5/2,7/2$^-$)	5610.83	(5/2,7/2$^+$)
646.924 *4*	0.40 *9*	3141.84	(7/2$^-$)	2494.91	9/2$^+$
655.60 *3*	0.011 *3*	5604.58	(3/2$^-$,5/2,7/2$^+$)	4948.94	(3/2$^-$,5/2,7/2$^-$)
[x]657.93 *5*	0.006 *3*				
659.92[f] *9*	0.025[f] *6*	4220.62	(5/2)	3560.61	(3/2$^-$,5/2,7/2$^+$)
659.92[f] *9*	0.025[f] *6*	5185.27	(5/2,7/2$^-$)	4525.37	
[x]660.935 *11*	0.045 *14*				
[x]661.23 *4*	0.057 *15*				
670.112 *8*	0.38 *10*	3431.84	(9/2$^-$,7/2$^-$)	2761.73	11/2$^-$
[x]672.039[‡] *13*	0.064 *17*				
[x]676.09 *3*	0.023 *5*				
685.056[f] *8*	0.083[f] *20*	3826.90	(5/2,7/2$^+$)	3141.84	(7/2$^-$)
685.056[f] *8*	0.083[f] *20*	4459.72	1/2$^-$,3/2$^-$	3774.66	5/2$^-$,7/2$^-$
694.199 *10*	0.20 *4*	4345.66	(5/2,7/2$^-$)	3651.46	(5/2,7/2$^-$)
712.800[f] *17*	0.034[f] *8*	5575.24?	(3/2$^-$,5/2,7/2$^+$)	4862.43	(3/2$^+$,5/2)
712.800[f] *17*	0.034[f] *8*	6791.36	(5/2,7/2$^-$)	6078.56	(3/2)$^-$
719.272 *12*	0.30 *6*	3431.84	(9/2$^-$,7/2$^-$)	2712.57	(7/2)$^-$
732.714[f] *6*	0.51[f] *12*	3240.65	(5/2$^+$,7/2$^-$)	2507.93	7/2$^+$
732.714[f] *6*	0.51[f] *12*	4164.57		3431.84	(9/2$^-$,7/2$^-$)
734.605 *8*	0.45 *11*	2316.617	5/2$^-$	1582.001	3/2$^-$
740.51 *4*	0.032 *9*	4274.96	(7/2$^-$,9/2$^+$)	3534.45	(7/2$^+$,9/2,11/2$^+$)
742.142[f&] *13*	0.100[f] *21*	2440.18	(3/2,5/2$^-$)	1698.005	5/2$^+$
742.142[f] *13*	0.100[f] *21*	5604.58	(3/2$^-$,5/2,7/2$^+$)	4862.43	(3/2$^+$,5/2)
745.733 *13*	0.18 *4*	3240.65	(5/2$^+$,7/2$^-$)	2494.91	9/2$^+$
768.531 *19*	0.079 *21*	4303.01	(5/2$^+$,7/2$^+$)	3534.45	(7/2$^+$,9/2,11/2$^+$)
773.471 *19*	0.11 *3*	5298.86	(3/2$^-$,5/2,7/2$^-$)	4525.37	
796.926 *20*	0.88 *22*	2494.91	9/2$^+$	1698.005	5/2$^+$
817.659 *9*	2.3 *5*	2494.91	9/2$^+$	1677.235	7/2$^+$
825.19 *3*	0.038 *8*	3141.84	(7/2$^-$)	2316.617	5/2$^-$
[x]827.33 *8*	0.018 *5*				
830.679 *9*	2.7 *6*	2507.93	7/2$^+$	1677.235	7/2$^+$
846.967[f&] *23*	0.067[f] *15*	2440.18	(3/2,5/2$^-$)	1593.107	1/2$^+$
846.967[f] *23*	0.067[f] *15*	4459.72	1/2$^-$,3/2$^-$	3612.77	
850.417 *7*	3.1 *7*	2527.66	11/2$^+$	1677.235	7/2$^+$
854.043 *20*	0.24 *7*	3996.49	(5/2$^+$)	3142.43	5/2$^-$
854.642 *20*	0.15 *6*	3996.49	(5/2$^+$)	3141.84	(7/2$^-$)

Continued on next page (footnotes at end of table)

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π	Comments
880.14 *3*	0.074 *15*	5610.83	(5/2,7/2$^+$)	4730.70	(3/2)$^-$	
887.13[f] *5*	0.070[f] *21*	5496.61	(7/2$^+$)	4609.48	(5/2$^+$,7/2,9/2$^+$)	
887.13[f] *5*	0.070[f] *21*	6186.04	(5/2,7/2,9/2$^-$)	5298.86	(3/2$^-$,5/2,7/2$^-$)	
891.260 *20*	0.081 *16*	5912.50	(9/2$^+$)	5021.23?		
895.955[bg] *10*	0.33 *7*	2593.97	1/2$^-$,3/2$^-$	1698.005	5/2$^+$	
904.38[fbg] *3*	0.063[f] *13*	3048.22	1/2$^-$,3/2$^-$	2143.821	5/2$^+$	
904.38[f] *3*	0.063[f] *13*	6791.36	(5/2,7/2$^-$)	5886.95	(3/2)$^-$	
918.949 *13*	0.86 *20*	3235.57	(3/2$^-$,5/2,7/2$^-$)	2316.617	5/2$^-$	
948.001 *13*	0.51 *11*	2507.93	7/2$^+$	1559.903	3/2$^+$	
974.67[#] *7*	0.079 *17*	4749.47	(3/2$^-$,5/2,7/2$^+$)	3774.66	5/2$^-$,7/2$^-$	
980.461 *16*	3.4 *7*	980.476	1/2$^+$	0.0	3/2$^+$	
988.47[#] *6*	0.065 *14*	4228.99	(5/2)$^-$	3240.65	(5/2$^+$,7/2$^-$)	
993.21 *8*	0.036 *9*	4228.99	(5/2)$^-$	3235.57	(3/2$^-$,5/2,7/2$^-$)	
998.45 *7*	0.043 *10*	3142.43	5/2$^-$	2143.821	5/2$^+$	
1004.87 *3*	0.091 *19*	3761.54		2756.73	5/2$^+$	
1006.81 *3*	0.44 *9*	3534.45	(7/2$^+$,9/2,11/2$^+$)	2527.66	11/2$^+$	
1011.89 *21*	0.11 *3*	2593.97	1/2$^-$,3/2$^-$	1582.001	3/2$^-$	
1014.498 *18*	0.33 *7*	2712.57	(7/2)$^-$	1698.005	5/2$^+$	
1022.996 *7*	11.2 *25*	2316.617	5/2$^-$	1293.609	7/2$^-$	
1026.48[f] *6*	0.084[f] *22*	3521.38	(5/2$^+$,7/2$^+$)	2494.91	9/2$^+$	
1026.48[f] *6*	0.084[f] *22*	3534.45	(7/2$^+$,9/2,11/2$^+$)	2507.93	7/2$^+$	
1039.532 *12*	0.61 *13*	3534.45	(7/2$^+$,9/2,11/2$^+$)	2494.91	9/2$^+$	
1041.51 *5*	0.108 *25*	3489.30	(5/2)$^+$	2447.83	(3/2$^+$,5/2,7/2$^+$)	
1051.27 *4*	0.064 *14*	5800.80	(3/2$^+$,5/2$^+$)	4749.47	(3/2$^-$,5/2,7/2$^+$)	
1058.708 *15*	0.41 *8*	2756.73	5/2$^+$	1698.005	5/2$^+$	
[x]1062.55 *6*	0.057 *13*					
1064.926[f] *20*	0.29[f] *6*	5800.80	(3/2$^+$,5/2$^+$)	4735.86	(5/2$^+$,7/2$^+$)	
1064.926[f] *20*	0.29[f] *6*	7593.06		6528.13	(3/2$^-$,5/2,7/2$^-$)	
1079.44[#] *4*	0.066 *17*	2756.73	5/2$^+$	1677.235	7/2$^+$	
1090.74 *5*	0.117 *25*	5826.66	(5/2)$^+$	4735.86	(5/2$^+$,7/2$^+$)	
1096.832 *17*	0.24 *5*	3240.65	(5/2$^+$,7/2$^-$)	2143.821	5/2$^+$	
1101.71 *3*	0.15 *3*	4244.22	(3/2)$^-$	3142.43	5/2$^-$	
1110.083 *14*	0.78 *16*	4345.66	(5/2,7/2$^-$)	3235.57	(3/2$^-$,5/2,7/2$^-$)	
1115.20[#] *3*	0.19 *4*	3431.84	(9/2$^-$,7/2$^-$)	2316.617	5/2$^-$	
1130.76 *20*	0.64 *11*	2712.57	(7/2)$^-$	1582.001	3/2$^-$	
1156.32[#] *12*	0.14 *4*	5886.95	(3/2)$^-$	4730.70	(3/2)$^-$	
1186.170 *17*	0.60 *16*	2166.695	3/2$^-$	980.476	1/2$^+$	
1196.785 *17*	0.50 *10*	2756.73	5/2$^+$	1559.903	3/2$^+$	
1201.303[b] *17*	1.5 *4*	2494.91	9/2$^+$	1293.609	7/2$^-$	
1203.21 *5*	0.17 *4*	4345.66	(5/2,7/2$^-$)	3142.43	5/2$^-$	
1214.327 *22*	0.69 *14*	2507.93	7/2$^+$	1293.609	7/2$^-$	
1228.59 *5*	0.21 *4*	3990.40?		2761.73	11/2$^-$	
[x]1231.46 *16*	0.15 *6*					
1247.40 *4*	0.24 *5*	6070.76	(5/2,7/2,9/2$^+$)	4823.33	(7/2$^+$,9/2$^+$)	
[x]1250.85 *9*	0.084 *20*					
1255.71 *7*	0.18 *7*	3572.38		2316.617	5/2$^-$	
1266.45[fbg] *22*	0.14[f] *3*	3761.54		2494.91	9/2$^+$	
1266.45[fbg] *22*	0.14[f] *3*	3774.66	5/2$^-$,7/2$^-$	2507.93	7/2$^+$	
1286.03 *10*	0.17 *5*	6782.54		5496.61	(7/2$^+$)	
1293.586 *7*	41 *9*	1293.609	7/2$^-$	0.0	3/2$^+$	σ_γ=37.1 b *19* (2013Fi01).
1321.33[#] *9*	0.087 *22*	5096.20		3774.66	5/2$^-$,7/2$^-$	

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π	Comments
1356.0[#] *3*	0.051 *14*	5659.25	(3/2$^-$,5/2,7/2$^+$)	4303.01	(5/2$^+$,7/2$^+$)	
1368.47 *12*	0.12 *3*	4609.48	(5/2$^+$,7/2,9/2$^+$)	3240.65	(5/2$^+$,7/2$^-$)	
[x]1373.02 *5*	0.31 *7*					
1418.975 *15*	3.2 *8*	2712.57	(7/2)$^-$	1293.609	7/2$^-$	
1463.35[b] *12*	0.69 *23*	2756.73	5/2$^+$	1293.609	7/2$^-$	
1465.10 *5*	1.2 *3*	3142.43	5/2$^-$	1677.235	7/2$^+$	
1468.090 *12*	3.3 *7*	2761.73	11/2$^-$	1293.609	7/2$^-$	
1470.99 *17*	0.18 *8*	6769.77	(3/2$^-$,5/2,7/2$^-$)	5298.86	(3/2$^-$,5/2,7/2$^-$)	
[x]1481.59 *16*	0.08 *3*					
1488.54 *4*	0.34 *7*	3996.49	(5/2$^+$)	2507.93	7/2$^+$	
1499.78[#] *13*	0.25 *5*	5496.61	(7/2$^+$)	3996.49	(5/2$^+$)	
1513.31[#] *8*	0.40 *4*	4274.96	(7/2$^-$,9/2$^+$)	2761.73	11/2$^-$	
1529.97 *25*	0.057 *7*	5557.39?		4026.94		
1534.2[#] *5*	0.030 *5*	7361.15?	(3/2$^-$,5/2,7/2$^-$)	5826.66	(5/2)$^+$	
1542.19[#] *21*	0.066 *8*	3240.65	(5/2$^+$,7/2$^-$)	1698.005	5/2$^+$	
1557.67 *18*	0.211 *25*	5548.19	(3/2$^+$,5/2$^+$,7/2$^+$)	3990.40?		
1559.89 *3*	4.1 *4*	1559.903	3/2$^+$	0.0	3/2$^+$	
[x]1563.96 *11*	0.167 *17*					
1581.98 *4*	3.7 *4*	1582.001	3/2$^-$	0.0	3/2$^+$	
1588.68[#] *11*	0.133 *14*	4730.70	(3/2)$^-$	3141.84	(7/2$^-$)	
1593.4[#] *5*	0.31 *3*	1593.107	1/2$^+$	0.0	3/2$^+$	
1606.05[f] *8*	0.194[f] *20*	5826.66	(5/2)$^+$	4220.62	(5/2)	
1606.05[f] *8*	0.194[f] *20*	6791.36	(5/2,7/2$^-$)	5185.27	(5/2,7/2$^-$)	
1624.76 *16*	0.116 *13*	5185.27	(5/2,7/2$^-$)	3560.61	(3/2$^-$,5/2,7/2$^+$)	
1631.5[#&g] *4*	0.26 *7*	3213.61	5/2$^-$	1582.001	3/2$^-$	
1649.96[f] *14*	0.157[f] *17*	4244.22	(3/2)$^-$	2593.97	1/2$^-$,3/2$^-$	
1649.96[f] *14*	0.157[f] *17*	6835.43	(5/2,7/2$^-$)	5185.27	(5/2,7/2$^-$)	
1666.51 *15*	0.101 *12*	4260.36		2593.97	1/2$^-$,3/2$^-$	
1677.23 *4*	19.7 *20*	1677.235	7/2$^+$	0.0	3/2$^+$	σ_γ=13 b *3* (2013Fi01).
1697.93 *4*	8.1 *8*	1698.005	5/2$^+$	0.0	3/2$^+$	
1716.2[#] *5*	0.032 *7*	4164.57		2447.83	(3/2$^+$,5/2,7/2$^+$)	
1721.02[#] *4*	0.51 *5*	4228.99	(5/2)$^-$	2507.93	7/2$^+$	
1727.24[f] *24*	0.123[f] *15*	3870.52	5/2$^-$,7/2$^-$	2143.821	5/2$^+$	
1727.24[f] *24*	0.123[f] *15*	7938.98		6211.50	(7/2$^+$,9/2$^-$)	
1739.14 *7*	0.27 *3*	6835.43	(5/2,7/2$^-$)	5096.20		
1747.88[#] *16*	0.098 *11*	5912.50	(9/2$^+$)	4164.57		
1753.64 *18*	0.088 *10*	5185.27	(5/2,7/2$^-$)	3431.84	(9/2$^-$,7/2$^-$)	
[x]1763.7[‡] *3*	0.051 *7*					
1770.55[f] *22*	0.072[f] *8*	6229.88?	(3/2$^-$,5/2,7/2$^-$)	4459.72	1/2$^-$,3/2$^-$	
1770.55[f] *22*	0.072[f] *8*	6791.36	(5/2,7/2$^-$)	5021.23?		
1790.3 *3*	0.069 *8*	3489.30	(5/2)$^+$	1698.005	5/2$^+$	
1794.6 *9*	0.199 *20*	4568.75	(9/2$^+$,11/2$^-$)	2774.25	13/2$^+$	
1804.7[#] *3*	0.033 *8*	5968.89	(9/2$^+$,11/2$^-$)	4164.57		
1808.7[f] *3*	0.06[f] *3*	4303.01	(5/2$^+$,7/2$^+$)	2494.91	9/2$^+$	
1808.7[f] *3*	0.06[f] *3*	5298.86	(3/2$^-$,5/2,7/2$^-$)	3489.30	(5/2)$^+$	
1840.93 *15*	0.111 *12*	6450.15?	(3/2$^-$,5/2,7/2$^+$)	4609.48	(5/2$^+$,7/2,9/2$^+$)	
1848.82 *4*	3.5 *4*	3142.43	5/2$^-$	1293.609	7/2$^-$	
1852.85 *6*	0.40 *4*	4609.48	(5/2$^+$,7/2,9/2$^+$)	2756.73	5/2$^+$	
1857.90 *10*	0.191 *20*	6078.56	(3/2)$^-$	4220.62	(5/2)	
1867.45[f] *25*	0.069[f] *8*	5298.86	(3/2$^-$,5/2,7/2$^-$)	3431.84	(9/2$^-$,7/2$^-$)	

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
1867.45[f] 25	0.069[f] 8	7938.98		6070.76	(5/2,7/2,9/2$^+$)
1895.09[d] 4	1.11[d] 11	3572.38		1677.235	7/2$^+$
1904.97 7	0.32 3	(10095.25)	7/2$^-$,9/2$^-$	8190.21	(3/2$^-$,5/2,7/2$^-$)
1909.74 14	0.28 3	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	6290.05	(3/2)$^-$
1919.95 4	2.07 21	3213.61	5/2$^-$	1293.609	7/2$^-$
1941.91 4	1.91 19	3235.57	(3/2$^-$,5/2,7/2$^-$)	1293.609	7/2$^-$
1946.95 4	0.97 10	3240.65	(5/2$^+$,7/2$^-$)	1293.609	7/2$^-$
1953.0[#] 3	0.102 12	5604.58	(3/2$^-$,5/2,7/2$^+$)	3651.46	(5/2,7/2$^-$)
[x]1965.91 13	0.146 15				
1974.22 4	1.08 11	3651.46	(5/2,7/2$^-$)	1677.235	7/2$^+$
1986.36[f] 23	0.081[f] 9	4303.01	(5/2$^+$,7/2$^+$)	2316.617	5/2$^-$
1986.36[f] 23	0.081[f] 9	7938.98		5952.41	(7/2$^-$,9/2$^-$)
[x]1998.9[‡] 4	0.17 3				
2011.7[#] 9	0.222 23	6255.96	(5/2,7/2$^-$)	4244.22	(3/2)$^-$
2026.4[#] 3	0.09 3	5800.80	(3/2$^+$,5/2$^+$)	3774.66	5/2$^-$,7/2$^-$
2030.51[#] 20	0.122 13	3612.77		1582.001	3/2$^-$
2041.02[#] 7	0.37 4	4568.75	(9/2$^+$,11/2$^-$)	2527.66	11/2$^+$
2046.31[#] 16	0.168 18	6290.05	(3/2)$^-$	4244.22	(3/2)$^-$
2059.8[#] 3	0.120 16	5886.95	(3/2)$^-$	3826.90	(5/2,7/2$^+$)
2062.7[#] 3	0.197 22	4228.99	(5/2)$^-$	2166.695	3/2$^-$
2066.1[#] 4	0.070 10	4823.33	(7/2$^+$,9/2$^+$)	2756.73	5/2$^+$
2077.55[#] 12	0.28 3	4244.22	(3/2)$^-$	2166.695	3/2$^-$
2083.64 7	0.33 3	6229.88?	(3/2$^-$,5/2,7/2$^-$)	4146.15	5/2$^-$,7/2$^-$
2089.12[#] 24	0.085 10	6434.51	(3/2$^-$,5/2,7/2$^-$)	4345.66	(5/2,7/2$^-$)
[x]2100.72[‡] 5	0.43 4				
2106.50 19	0.112 12	7654.93	(3/2$^-$,5/2,7/2$^-$)	5548.19	(3/2$^+$,5/2$^+$,7/2$^+$)
2114.10 25	0.83 8	4609.48	(5/2$^+$,7/2,9/2$^+$)	2494.91	9/2$^+$
2121.40[#] 25	0.105 12	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	6078.56	(3/2)$^-$
2128.6[#] 3	0.118 14	3826.90	(5/2,7/2$^+$)	1698.005	5/2$^+$
2138.12 4	1.01 10	3431.84	(9/2$^-$,7/2$^-$)	1293.609	7/2$^-$
2143.71 4	4.7 5	2143.821	5/2$^+$	0.0	3/2$^+$
2149.73[#] 5	0.43 4	3826.90	(5/2,7/2$^+$)	1677.235	7/2$^+$
2156.17[&] 6	1.26 13	3449.79	5/2$^-$,7/2$^-$	1293.609	7/2$^-$
2158.93[#] 8	0.54 6	6186.04	(5/2,7/2,9/2$^-$)	4026.94	
2166.72 5	0.49 5	2166.695	3/2$^-$	0.0	3/2$^+$
2171.01 6	0.47 5	4927.83	(5/2)$^+$	2756.73	5/2$^+$
2192.21 12	0.28 3	3774.66	5/2$^-$,7/2$^-$	1582.001	3/2$^-$
2195.58[#] 14	0.25 3	3489.30	(5/2)$^+$	1293.609	7/2$^-$
2201.53[f] 9	0.26[f] 3	3761.54		1559.903	3/2$^+$
2201.53[f] 9	0.26[f] 3	4345.66	(5/2,7/2$^-$)	2143.821	5/2$^+$
2211.93 19	0.177 19	7035.28	(5/2)$^-$	4823.33	(7/2$^+$,9/2$^+$)
2215.33[#] 21	0.156 17	4927.83	(5/2)$^+$	2712.57	(7/2)$^-$
2240.95[#] 7	0.68 7	4735.86	(5/2$^+$,7/2$^+$)	2494.91	9/2$^+$
2250.38[#bg] 15	0.213 22	4745.49	(5/2$^+$)	2494.91	9/2$^+$
2268.13[#] 19	0.125 14	4862.43	(3/2$^+$,5/2)	2593.97	1/2$^-$,3/2$^-$
2278.5[#] 6	0.047 8	6040.67	(3/2$^-$,5/2,7/2)	3761.54	
2295.9[#] 3	0.196 25	4823.33	(7/2$^+$,9/2$^+$)	2527.66	11/2$^+$
2298.55 12	0.46 5	3996.49	(5/2$^+$)	1698.005	5/2$^+$

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

$\gamma(^{41}K)$ (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
2304.83[#] *17*	0.138 *15*	5826.66	$(5/2)^+$	3521.38	$(5/2^+,7/2^+)$
2315.33 *20*	0.51 *8*	4823.33	$(7/2^+,9/2^+)$	2507.93	$7/2^+$
2316.55 *20*	0.38 *7*	2316.617	$5/2^-$	0.0	$3/2^+$
2319.27 *5*	1.37 *14*	3996.49	$(5/2^+)$	1677.235	$7/2^+$
2328.34[#] *15*	0.156 *17*	4823.33	$(7/2^+,9/2^+)$	2494.91	$9/2^+$
2355.9[#] *6*	0.093 *19*	7654.93	$(3/2^-,5/2,7/2^-)$	5298.86	$(3/2^-,5/2,7/2^-)$
2358.46[#] *23*	0.24 *3*	3651.46	$(5/2,7/2^-)$	1293.609	$7/2^-$
2375.7[#] *3*	0.083 *10*	4823.33	$(7/2^+,9/2^+)$	2447.83	$(3/2^+,5/2,7/2^+)$
2381.1[#] *4*	0.16 *3*	4525.37		2143.821	$5/2^+$
2383.4[#] *4*	0.18 *3*	5096.20		2712.57	$(7/2)^-$
2405.64 *21*	0.117 *14*	5548.19	$(3/2^+,5/2^+,7/2^+)$	3142.43	$5/2^-$
2414.92[#] *7*	0.48 *5*	5655.66	$(3/2^-,5/2^+)$	3240.65	$(5/2^+,7/2^-)$
2419.03[#] *8*	0.47 *5*	4735.86	$(5/2^+,7/2^+)$	2316.617	$5/2^-$
2428.92[#] *18*	0.231 *24*	4745.49	$(5/2^+)$	2316.617	$5/2^-$
2433.16[#] *21*	0.29 *3*	7361.15?	$(3/2^-,5/2,7/2^-)$	4927.83	$(5/2)^+$
2436.61 *9*	0.98 *10*	3996.49	$(5/2^+)$	1559.903	$3/2^+$
2440.28[&] *6*	0.86 *9*	2440.18	$(3/2,5/2^-)$	0.0	$3/2^+$
2447.77[#] *6*	0.45 *5*	2447.83	$(3/2^+,5/2,7/2^+)$	0.0	$3/2^+$
2458.5 *3*	0.090 *10*	6070.76	$(5/2,7/2,9/2^+)$	3612.77	
2466.90[bg] *7*	0.73 *7*	4026.94		1559.903	$3/2^+$
2480.92 *5*	0.63 *6*	3774.66	$5/2^-,7/2^-$	1293.609	$7/2^-$
2487.27 *4*	1.53 *15*	4164.57		1677.235	$7/2^+$
2502.12 *5*	0.73 *7*	(10095.25)	$7/2^-,9/2^-$	7593.06	
2507.88 *4*	3.2 *3*	2507.93	$7/2^+$	0.0	$3/2^+$
2513.88 *12*	0.25 *3*	5655.66	$(3/2^-,5/2^+)$	3141.84	$(7/2^-)$
2521.84[f] *24*	0.111[f] *13*	4220.62	$(5/2)$	1698.005	$5/2^+$
2521.84[f] *24*	0.111[f] *13*	6782.54		4260.36	
2531.48 *12*	0.44 *5*	6528.13	$(3/2^-,5/2,7/2^-)$	3996.49	$(5/2^+)$
2534.4[#] *4*	0.161 *21*	8190.21	$(3/2^-,5/2,7/2^-)$	5655.66	$(3/2^-,5/2^+)$
2543.49[#] *19*	0.210 *22*	4220.62	$(5/2)$	1677.235	$7/2^+$
2559.9[#] *3*	0.19 *3*	6835.43	$(5/2,7/2^-)$	4274.96	$(7/2^-,9/2^+)$
2562.55[#] *11*	0.72 *8*	4260.36		1698.005	$5/2^+$
2567.4[#] *4*	0.096 *12*	6394.31	$(3/2^-,5/2,7/2^-)$	3826.90	$(5/2,7/2^+)$
2576.48[f] *25*	0.107[f] *13*	3870.52	$5/2^-,7/2^-$	1293.609	$7/2^-$
2576.48[f] *25*	0.107[f] *13*	4274.96	$(7/2^-,9/2^+)$	1698.005	$5/2^+$
[x]2583.8[‡] *14*	0.028 *10*				
2588.3[#] *5*	0.19 *4*	5096.20		2507.93	$7/2^+$
2590.6[#] *7*	0.13 *3*	5826.66	$(5/2)^+$	3235.57	$(3/2^-,5/2,7/2^-)$
[x]2599.44 *8*	0.38 *4*				
2605.08 *7*	0.45 *5*	4303.01	$(5/2^+,7/2^+)$	1698.005	$5/2^+$
2611.15 *12*	0.33 *3*	4927.83	$(5/2)^+$	2316.617	$5/2^-$
2615.48[#] *25*	0.198 *21*	7361.15?	$(3/2^-,5/2,7/2^-)$	4745.49	$(5/2^+)$
2619.41 *19*	0.214 *23*	6394.31	$(3/2^-,5/2,7/2^-)$	3774.66	$5/2^-,7/2^-$
2647.83[f] *25*	0.114[f] *13*	4345.66	$(5/2,7/2^-)$	1698.005	$5/2^+$
2647.83[f] *25*	0.114[f] *13*	5096.20		2447.83	$(3/2^+,5/2,7/2^+)$
[x]2658.8[‡] *18*	0.04 *3*				
2668.55 *10*	1.19 *12*	4345.66	$(5/2,7/2^-)$	1677.235	$7/2^+$
2671.1[#] *4*	0.23 *3*	5912.50	$(9/2^+)$	3240.65	$(5/2^+,7/2^-)$

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
2677.27[#] 10	0.43 4	5185.27	(5/2,7/2$^-$)	2507.93	7/2$^+$
x2681.54[‡] 13	0.30 3				
2688.19 12	0.34 4	6450.15?	(3/2$^-$,5/2,7/2$^+$)	3761.54	
2692.14 22	0.198 22	6995.53	(5/2,7/2,9/2$^+$)	4303.01	(5/2$^+$,7/2$^+$)
2702.64 7	0.49 5	3996.49	(5/2$^+$)	1293.609	7/2$^-$
2710.41[&] 16	0.188 20	2710.48	3/2$^+$,5/2$^+$	0.0	3/2$^+$
x2719.22[‡] 17	0.181 19				
2727.07 18	0.173 18	7654.93	(3/2$^-$,5/2,7/2$^-$)	4927.83	(5/2)$^+$
2733.90 7	0.56 6	(10095.25)	7/2$^-$,9/2$^-$	7361.15?	(3/2$^-$,5/2,7/2$^-$)
2756.68 4	2.7 3	2756.73	5/2$^+$	0.0	3/2$^+$
2763.40 6	0.58 6	4345.66	(5/2,7/2$^-$)	1582.001	3/2$^-$
x2780.15 15	0.30 3				
2784.08[#] 17	0.26 3	5496.61	(7/2$^+$)	2712.57	(7/2)$^-$
2794.04[bg] 20	0.26 7	3774.66	5/2$^-$,7/2$^-$	980.476	1/2$^+$
2805.21[#] 13	0.29 3	6040.67	(3/2$^-$,5/2,7/2)	3235.57	(3/2$^-$,5/2,7/2$^-$)
2809.9[#] 4	0.099 12	5952.41	(7/2$^-$,9/2$^-$)	3142.43	5/2$^-$
x2817.10 13	0.237 25				
2827.06[#] 24	0.136 16	6040.67	(3/2$^-$,5/2,7/2)	3213.61	5/2$^-$
2833.7 3	0.136 16	6394.31	(3/2$^-$,5/2,7/2$^-$)	3560.61	(3/2$^-$,5/2,7/2$^+$)
2838.1[#] 3	0.120 14	6078.56	(3/2)$^-$	3240.65	(5/2$^+$,7/2$^-$)
2850.2[#] 4	0.29 6	5298.86	(3/2$^-$,5/2,7/2$^-$)	2447.83	(3/2$^+$,5/2,7/2$^+$)
2852.25 17	0.83 10	4146.15	5/2$^-$,7/2$^-$	1293.609	7/2$^-$
2862.57[#] 15	0.44 5	5575.24?	(3/2$^-$,5/2,7/2$^+$)	2712.57	(7/2)$^-$
x2865.8[‡] 3	0.30 3				
x2869.7 3	0.188 22				
2875.7 3	0.122 15	6528.13	(3/2$^-$,5/2,7/2$^-$)	3651.46	(5/2,7/2$^-$)
x2887.18 6	0.57 6				
2899.77 6	0.79 8	4459.72	1/2$^-$,3/2$^-$	1559.903	3/2$^+$
2919.06 13	0.25 3	7654.93	(3/2$^-$,5/2,7/2$^-$)	4735.86	(5/2$^+$,7/2$^+$)
2926.96 6	0.58 6	4220.62	(5/2)	1293.609	7/2$^-$
2935.07 5	0.96 10	4228.99	(5/2)$^-$	1293.609	7/2$^-$
2945.08[#] 12	0.33 3	6186.04	(5/2,7/2,9/2$^-$)	3240.65	(5/2$^+$,7/2$^-$)
2950.55 5	1.63 16	4244.22	(3/2)$^-$	1293.609	7/2$^-$
2963.0[#] 4	0.086 13	5557.39?		2593.97	1/2$^-$,3/2$^-$
2968.61[f] 18	0.217[f] 23	5496.61	(7/2$^+$)	2527.66	11/2$^+$
2968.61[f] 18	0.217[f] 23	6995.53	(5/2,7/2,9/2$^+$)	4026.94	
2981.26 5	2.55 25	4274.96	(7/2$^-$,9/2$^+$)	1293.609	7/2$^-$
2988.2[#] 10	0.034 8	5496.61	(7/2$^+$)	2507.93	7/2$^+$
x2995.81 19	0.186 20				
3001.4 3	0.133 16	5496.61	(7/2$^+$)	2494.91	9/2$^+$
3015.8[#] 4	0.132 25	3996.49	(5/2$^+$)	980.476	1/2$^+$
3024.88 21	0.31 3	7020.97	(3/2)$^-$	3996.49	(5/2$^+$)
3038.4 3	0.32 4	4735.86	(5/2$^+$,7/2$^+$)	1698.005	5/2$^+$
3042.81 20	0.62 5	6186.04	(5/2,7/2,9/2$^-$)	3142.43	5/2$^-$
3047.8[#] 3	0.47 5	3048.22	1/2$^-$,3/2$^-$	0.0	3/2$^+$
3051.7[#] 3	0.37 5	4345.66	(5/2,7/2$^-$)	1293.609	7/2$^-$
3059.75 10	0.87 6	(10095.25)	7/2$^-$,9/2$^-$	7035.28	(5/2)$^-$
3067.79[#bg] 20	0.37 3	4745.49	(5/2$^+$)	1677.235	7/2$^+$
3073.97 9	1.15 7	(10095.25)	7/2$^-$,9/2$^-$	7020.97	(3/2)$^-$
3086.7[#] 7	0.09 3	6229.88?	(3/2$^-$,5/2,7/2$^-$)	3142.43	5/2$^-$

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
[x]3090.0[‡] 8	0.07 3				
3099.57 10	0.41 3	(10095.25)	7/2$^-$,9/2$^-$	6995.53	(5/2,7/2,9/2$^+$)
3124.5[#] 7	0.049 15	4823.33	(7/2$^+$,9/2$^+$)	1698.005	5/2$^+$
3129.59[#] 15	0.258 22	5886.95	(3/2)$^-$	2756.73	5/2$^+$
3138.25 14	0.251 22	5912.50	(9/2$^+$)	2774.25	13/2$^+$
3146.19 13	0.44 3	4823.33	(7/2$^+$,9/2$^+$)	1677.235	7/2$^+$
3150.6[#] 3	0.223 25	5912.50	(9/2$^+$)	2761.73	11/2$^-$
3155.0[#] 3	0.154 22	5298.86	(3/2$^-$,5/2,7/2$^-$)	2143.821	5/2$^+$
3163.67 10	0.61 4	4745.49	(5/2$^+$)	1582.001	3/2$^-$
3179.67 10	0.65 4	5496.61	(7/2$^+$)	2316.617	5/2$^-$
3185.2[#] 3	0.177 22	4862.43	(3/2$^+$,5/2)	1677.235	7/2$^+$
3191.2 3	0.33 4	5952.41	(7/2$^-$,9/2$^-$)	2761.73	11/2$^-$
3194.8[#] 6	0.12 3	5968.89	(9/2$^+$,11/2$^-$)	2774.25	13/2$^+$
[x]3201.9 4	0.156 21				
3206.7[#] 3	0.201 23	5968.89	(9/2$^+$,11/2$^-$)	2761.73	11/2$^-$
3213.7[#bg] 4	0.122 18	3213.61	5/2$^-$	0.0	3/2$^+$
3229.6[#] 5	0.44 11	4927.83	(5/2)$^+$	1698.005	5/2$^+$
[x]3244.1[‡] 3	0.38 5				
3253.1[#] 9	0.31 16	4927.83	(5/2)$^+$	1677.235	7/2$^+$
3259.52 14	1.08 8	(10095.25)	7/2$^-$,9/2$^-$	6835.43	(5/2,7/2$^-$)
3282.8[#] 5	0.20 5	6040.67	(3/2$^-$,5/2,7/2)	2756.73	5/2$^+$
3292.64[#] 19	0.266 25	5800.80	(3/2$^+$,5/2$^+$)	2507.93	7/2$^+$
3304.17[#] 15	0.38 3	(10095.25)	7/2$^-$,9/2$^-$	6791.36	(5/2,7/2$^-$)
3312.70 14	0.51 4	(10095.25)	7/2$^-$,9/2$^-$	6782.54	
3317.59 22	0.31 3	7593.06		4274.96	(7/2$^-$,9/2$^+$)
3325.40 12	0.50 4	(10095.25)	7/2$^-$,9/2$^-$	6769.77	(3/2$^-$,5/2,7/2$^-$)
3334.6[#] 3	0.169 21	4927.83	(5/2)$^+$	1593.107	1/2$^+$
[x]3362.1 4	0.105 14				
3366.78[#] 13	0.336 23	4948.94	(3/2$^-$,5/2,7/2$^-$)	1582.001	3/2$^-$
3379.76 12	0.304 20	7654.93	(3/2$^-$,5/2,7/2$^-$)	4274.96	(7/2$^-$,9/2$^+$)
3385.88[#] 10	0.379 24	6434.51	(3/2$^-$,5/2,7/2$^-$)	3048.22	1/2$^-$,3/2$^-$
[x]3399.7 5	0.177 20				
3404.78 15	0.45 3	5912.50	(9/2$^+$)	2507.93	7/2$^+$
3410.75 21	0.285 25	7654.93	(3/2$^-$,5/2,7/2$^-$)	4244.22	(3/2)$^-$
3416.8 3	0.25 3	5912.50	(9/2$^+$)	2494.91	9/2$^+$
3421.2 5	0.128 23	7035.28	(5/2)$^-$	3612.77	
3437.10[#] 12	0.45 3	4730.70	(3/2)$^-$	1293.609	7/2$^-$
3455.86 9	0.79 5	4749.47	(3/2$^-$,5/2,7/2$^+$)	1293.609	7/2$^-$
3479.8[#] 3	0.19 3	4459.72	1/2$^-$,3/2$^-$	980.476	1/2$^+$
3488.59[fc] 21	0.82[f] 10	3489.30	(5/2)$^+$	0.0	3/2$^+$
3488.59[f] 21	0.82[f] 10	5655.66	(3/2$^-$,5/2$^+$)	2166.695	3/2$^-$
[x]3499.8[‡] 8	0.071 22				
[x]3508.2[‡] 10	0.13 6				
[x]3511.3[‡] 8	0.16 7				
3520.84[#] 15	0.47 4	3521.38	(5/2$^+$,7/2$^+$)	0.0	3/2$^+$
3529.4[#] 4	0.149 24	4823.33	(7/2$^+$,9/2$^+$)	1293.609	7/2$^-$
3540.8[#] 9	0.10 4	6782.54		3240.65	(5/2$^+$,7/2$^-$)
3561.0 5	0.45 12	3560.61	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
3565.4[#] 7	0.46 12	(10095.25)	7/2$^-$,9/2$^-$	6528.13	(3/2$^-$,5/2,7/2$^-$)

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ †	I_γ †e	E_i(level)	J_i^π	E_f	J_f^π
x3578.95a 24	0.108 11				
x3585.54 16	0.165 13				
3597.88 15	0.229 17	(10095.25)	7/2−,9/2−	6497.00?	(3/2)−
3612.91 11	0.268 17	3612.77		0.0	3/2+
x3620.27 10	0.294 18				
3627.74# 14	0.209 15	6769.77	(3/2−,5/2,7/2−)	3141.84	(7/2−)
3634.1# 3	0.073 10	4927.83	(5/2)+	1293.609	7/2−
3644.2 3	0.23 3	(10095.25)	7/2−,9/2−	6450.15?	(3/2−,5/2,7/2+)
3655.0 3	0.23 3	4948.94	(3/2−,5/2,7/2−)	1293.609	7/2−
3660.75 13	0.64 5	(10095.25)	7/2−,9/2−	6434.51	(3/2−,5/2,7/2−)
x3670.55 25	0.152 17				
3683.71 7	0.91 5	6211.50	(7/2+,9/2−)	2527.66	11/2+
3693.2# 3	0.116 15	6835.43	(5/2,7/2−)	3141.84	(7/2−)
3700.85 10	0.53 3	(10095.25)	7/2−,9/2−	6394.31	(3/2−,5/2,7/2−)
3715.9f 4	0.095f 15	5298.86	(3/2−,5/2,7/2−)	1582.001	3/2−
3715.9f 4	0.095f 15	6211.50	(7/2+,9/2−)	2494.91	9/2+
3723.9 3	0.118 15	6040.67	(3/2−,5/2,7/2)	2316.617	5/2−
3740.45# 23	0.25 3	8200.11	(5/2−,7/2−,3/2+)	4459.72	1/2−,3/2−
3747.9f 6	0.095f 20	6255.96	(5/2,7/2−)	2507.93	7/2+
3747.9f 6	0.095f 20	7361.15?	(3/2−,5/2,7/2−)	3612.77	
3761.21 7	1.69 9	3761.54		0.0	3/2+
3774.74 12	0.60 4	3774.66	5/2−,7/2−	0.0	3/2+
3785.6# 3	0.179 23	7020.97	(3/2)−	3235.57	(3/2−,5/2,7/2−)
3792.6 3	0.201 24	7938.98		4146.15	5/2−,7/2−
3805.04 11	0.69 4	(10095.25)	7/2−,9/2−	6290.05	(3/2)−
3815.21 10	0.67 4	6528.13	(3/2−,5/2,7/2−)	2712.57	(7/2)−
3826.55# 15	0.40 3	3826.90	(5/2,7/2+)	0.0	3/2+
3839.07 11	0.58 4	(10095.25)	7/2−,9/2−	6255.96	(5/2,7/2−)
3865.20 12	0.327 21	(10095.25)	7/2−,9/2−	6229.88?	(3/2−,5/2,7/2−)
3870.84 11	0.364 22	5548.19	(3/2+,5/2+,7/2+)	1677.235	7/2+
3883.57 6	1.04 6	(10095.25)	7/2−,9/2−	6211.50	(7/2+,9/2−)
x3889.75 18	0.229 17				
3895.0 4	0.078 11	6211.50	(7/2+,9/2−)	2316.617	5/2−
3908.84 7	1.56 9	(10095.25)	7/2−,9/2−	6186.04	(5/2,7/2,9/2−)
x3925.35 9	0.80 5				
3932.7# 5	0.098 18	5610.83	(5/2,7/2+)	1677.235	7/2+
3939.9# 3	0.25 3	8200.11	(5/2−,7/2−,3/2+)	4260.36	
3944.8 5	0.141 23	8190.21	(3/2−,5/2,7/2−)	4244.22	(3/2)−
x3973.74 16	0.40 3				
3996.25 6	2.50 13	3996.49	(5/2+)	0.0	3/2+
x4004.50 18	0.296 24				
4016.40 14	0.42 3	(10095.25)	7/2−,9/2−	6078.56	(3/2)−
4024.41 13	0.43 3	(10095.25)	7/2−,9/2−	6070.76	(5/2,7/2,9/2+)
4041.0# 6	0.068 16	5021.23?		980.476	1/2+
4054.41 9	0.75 4	(10095.25)	7/2−,9/2−	6040.67	(3/2−,5/2,7/2)
4063.0# 3	0.143 18	5655.66	(3/2−,5/2+)	1593.107	1/2+
x4088.53 6	0.449 24				
4099.69 24	0.084 8	5659.25	(3/2−,5/2,7/2+)	1559.903	3/2+
x4105.17 9	0.335 19				
4117.87 8	0.318 18	6434.51	(3/2−,5/2,7/2−)	2316.617	5/2−
4126.14 7	0.392 21	(10095.25)	7/2−,9/2−	5968.89	(9/2+,11/2−)
4142.63 6	0.61 3	(10095.25)	7/2−,9/2−	5952.41	(7/2−,9/2−)

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
[x]4150.83 *13*	0.131 *9*				
[x]4167.05 *13*	0.149 *10*				
4175.64 *23*	0.089 *8*	6769.77	(3/2$^-$,5/2,7/2$^-$)	2593.97	1/2$^-$,3/2$^-$
4182.54 *6*	0.86 *5*	(10095.25)	7/2$^-$,9/2$^-$	5912.50	(9/2$^+$)
[x]4187.79 *10*	0.317 *19*				
[x]4200.51 *9*	0.227 *13*				
4208.05 *6*	0.74 *4*	(10095.25)	7/2$^-$,9/2$^-$	5886.95	(3/2)$^-$
[x]4215.83 *9*	0.343 *20*				
4220.63 *12*	0.251 *15*	4220.62	(5/2)	0.0	3/2$^+$
4227.4 *3*	0.089 *13*	6394.31	(3/2$^-$,5/2,7/2$^-$)	2166.695	3/2$^-$
4228.8 *3*	0.109 *14*	4228.99	(5/2)$^-$	0.0	3/2$^+$
4238.51 *20*	0.165 *14*	6995.53	(5/2,7/2,9/2$^+$)	2756.73	5/2$^+$
[x]4251.80 *18*	0.205 *16*				
4259.73 *11*	0.376 *23*	4260.36		0.0	3/2$^+$
4268.34 *7*	0.73 *4*	(10095.25)	7/2$^-$,9/2$^-$	5826.66	(5/2)$^+$
[x]4283.91 *8*	0.54 *3*				
4294.09 *8*	0.55 *3*	(10095.25)	7/2$^-$,9/2$^-$	5800.80	(3/2$^+$,5/2$^+$)
4302.7 *3*	0.101 *12*	4303.01	(5/2$^+$,7/2$^+$)	0.0	3/2$^+$
4322.00[#] *18*	0.121 *10*	7035.28	(5/2)$^-$	2712.57	(7/2)$^-$
[x]4332.02 *23*	0.097 *9*				
[x]4339.53 *9*	0.329 *19*				
[x]4350.62 *24*	0.089 *9*				
4372.6[f] *5*	0.108[f] *13*	6070.76	(5/2,7/2,9/2$^+$)	1698.005	5/2$^+$
4372.6[f] *5*	0.108[f] *13*	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	3826.90	(5/2,7/2$^+$)
4380.2[#] *10*	0.062 *12*	6078.56	(3/2)$^-$	1698.005	5/2$^+$
4429.0 *5*	0.065 *10*	8190.21	(3/2$^-$,5/2,7/2$^-$)	3761.54	
4435.0 *6*	0.54 *4*	(10095.25)	7/2$^-$,9/2$^-$	5659.25	(3/2$^-$,5/2,7/2$^+$)
4439.37 *7*	1.20 *7*	(10095.25)	7/2$^-$,9/2$^-$	5655.66	(3/2$^-$,5/2$^+$)
[x]4446.47 *17*	0.179 *13*				
4459.0[#] *6*	0.59 *3*	4459.72	1/2$^-$,3/2$^-$	0.0	3/2$^+$
4465.7 *4*	0.063 *9*	6782.54		2316.617	5/2$^-$
4474.0 *7*	0.032 *7*	6791.36	(5/2,7/2$^-$)	2316.617	5/2$^-$
4484.24 *11*	0.333 *20*	(10095.25)	7/2$^-$,9/2$^-$	5610.83	(5/2,7/2$^+$)
4489.92 *11*	0.388 *23*	(10095.25)	7/2$^-$,9/2$^-$	5604.58	(3/2$^-$,5/2,7/2$^+$)
4496.0 *4*	0.067 *9*	6078.56	(3/2)$^-$	1582.001	3/2$^-$
4509.6 *3*	0.142 *18*	6186.04	(5/2,7/2,9/2$^-$)	1677.235	7/2$^+$
4519.62 *13*	0.47 *3*	(10095.25)	7/2$^-$,9/2$^-$	5575.24?	(3/2$^-$,5/2,7/2$^+$)
4532.7 *3*	0.37 *5*	5826.66	(5/2)$^+$	1293.609	7/2$^-$
4536.7 *4*	0.26 *4*	(10095.25)	7/2$^-$,9/2$^-$	5557.39?	
4546.79 *8*	1.15 *7*	(10095.25)	7/2$^-$,9/2$^-$	5548.19	(3/2$^+$,5/2$^+$,7/2$^+$)
4576.65 *11*	0.200 *12*	5557.39?		980.476	1/2$^+$
[x]4582.9 *3*	0.101 *10*				
[x]4587.2[‡] *8*	0.034 *9*				
4598.26 *6*	0.87 *5*	(10095.25)	7/2$^-$,9/2$^-$	5496.61	(7/2$^+$)
4639.50 *19*	0.087 *7*	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	3560.61	(3/2$^-$,5/2,7/2$^+$)
4647.89[#] *17*	0.105 *8*	7361.15?	(3/2$^-$,5/2,7/2$^-$)	2712.57	(7/2)$^-$
[x]4657.35 *7*	0.53 *3*				
4668.25[f] *24*	0.099[f] *9*	6835.43	(5/2,7/2$^-$)	2166.695	3/2$^-$
4668.25[f] *24*	0.099[f] *9*	8190.21	(3/2$^-$,5/2,7/2$^-$)	3521.38	(5/2$^+$,7/2$^+$)
4673.52 *11*	0.270 *16*	6255.96	(5/2,7/2$^-$)	1582.001	3/2$^-$
4696.38[f] *17*	0.280[f] *20*	6290.05	(3/2)$^-$	1593.107	1/2$^+$
4696.38[f] *17*	0.280[f] *20*	6394.31	(3/2$^-$,5/2,7/2$^-$)	1698.005	5/2$^+$
4701.3 *5*	0.145 *16*	8190.21	(3/2$^-$,5/2,7/2$^-$)	3489.30	(5/2)$^+$

Continued on next page (footnotes at end of table)

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
4705.8 *8*	0.056 *15*	6290.05	(3/2)$^-$	1582.001	3/2$^-$
[x]4723.26 *9*	0.369 *21*				
4735.9[#] *3*	0.076 *9*	4735.86	(5/2$^+$,7/2$^+$)	0.0	3/2$^+$
4744.6 *6*	0.44 *3*	4745.49	(5/2$^+$)	0.0	3/2$^+$
4749.05 *11*	0.51 *3*	4749.47	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
4776.65 *22*	0.110 *10*	6070.76	(5/2,7/2,9/2$^+$)	1293.609	7/2$^-$
4796.10[#] *7*	0.81 *4*	(10095.25)	7/2$^-$,9/2$^-$	5298.86	(3/2$^-$,5/2,7/2$^-$)
4820.08 *18*	0.167 *12*	5800.80	(3/2$^+$,5/2$^+$)	980.476	1/2$^+$
[x]4832.47[‡] *9*	0.54 *3*				
[x]4855.30 *17*	0.085 *6*				
4862.43 *10*	0.186 *11*	4862.43	(3/2$^+$,5/2)	0.0	3/2$^+$
[x]4875.66 *16*	0.122 *8*				
4880.8[#] *6*	0.027 *5*	7593.06		2712.57	(7/2)$^-$
4891.12 *14*	0.098 *7*	7035.28	(5/2)$^-$	2143.821	5/2$^+$
4905.3 *9*	0.15 *5*	5886.95	(3/2)$^-$	980.476	1/2$^+$
4910.04 *25*	0.63 *6*	(10095.25)	7/2$^-$,9/2$^-$	5185.27	(5/2,7/2$^-$)
[x]4926.2 *3*	0.33 *4*				
[x]4978.6 *4*	0.150 *21*				
4998.64[#] *8*	0.60 *3*	(10095.25)	7/2$^-$,9/2$^-$	5096.20	
[x]5012.68 *11*	0.315 *19*				
5021.19 *17*	0.165 *12*	5021.23?		0.0	3/2$^+$
5073.4 *5*	0.096 *16*	(10095.25)	7/2$^-$,9/2$^-$	5021.23?	
[x]5083.40 *20*	0.275 *23*				
5114.5 *4*	0.153 *18*	6791.36	(5/2,7/2$^-$)	1677.235	7/2$^+$
5146.00 *21*	0.37 *3*	(10095.25)	7/2$^-$,9/2$^-$	4948.94	(3/2$^-$,5/2,7/2$^-$)
5151.7 *3*	0.29 *3*	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	3048.22	1/2$^-$,3/2$^-$
5157.8[#] *7*	0.085 *18*	6835.43	(5/2,7/2$^-$)	1677.235	7/2$^+$
5167.18 *10*	0.81 *5*	(10095.25)	7/2$^-$,9/2$^-$	4927.83	(5/2)$^+$
5203.2 *3*	0.134 *16*	6497.00?	(3/2)$^-$	1293.609	7/2$^-$
5225.9 *4*	0.117 *17*	7938.98		2712.57	(7/2)$^-$
5232.14 *25*	0.223 *20*	(10095.25)	7/2$^-$,9/2$^-$	4862.43	(3/2$^+$,5/2)
[x]5249.91 *19*	0.262 *21*				
[x]5260.2[‡] *10*	0.039 *13*				
5271.54 *7*	1.88 *10*	(10095.25)	7/2$^-$,9/2$^-$	4823.33	(7/2$^+$,9/2$^+$)
[x]5278.9 *3*	0.111 *12*				
[x]5288.2 *4*	0.065 *10*				
[x]5299.95 *21*	0.127 *12*				
5309.3 *5*	0.053 *9*	6290.05	(3/2)$^-$	980.476	1/2$^+$
5319.5 *9*	0.028 *9*	6995.53	(5/2,7/2,9/2$^+$)	1677.235	7/2$^+$
5345.65 *12*	1.13 *8*	(10095.25)	7/2$^-$,9/2$^-$	4749.47	(3/2$^-$,5/2,7/2$^+$)
5349.57 *10*	1.56 *9*	(10095.25)	7/2$^-$,9/2$^-$	4745.49	(5/2$^+$)
5357.7 *3*	0.43 *4*	7035.28	(5/2)$^-$	1677.235	7/2$^+$
5359.0 *3*	0.53 *5*	(10095.25)	7/2$^-$,9/2$^-$	4735.86	(5/2$^+$,7/2$^+$)
5364.03 *12*	0.60 *4*	(10095.25)	7/2$^-$,9/2$^-$	4730.70	(3/2)$^-$
[x]5420.46 *18*	0.244 *18*				
[x]5440.87 *14*	0.359 *24*				
5476.0[f] *3*	0.116[f] *14*	6769.77	(3/2$^-$,5/2,7/2$^-$)	1293.609	7/2$^-$
5476.0[f] *3*	0.116[f] *14*	7035.28	(5/2)$^-$	1559.903	3/2$^+$
5485.42 *7*	1.61 *9*	(10095.25)	7/2$^-$,9/2$^-$	4609.48	(5/2$^+$,7/2,9/2$^+$)
[x]5495.88[f@] *8*	1.32[f] *7*				
5495.88[f@g] *8*	1.32[f] *7*	5496.61	(7/2$^+$)	0.0	3/2$^+$
5510.82 *15*	0.297 *20*	7654.93	(3/2$^-$,5/2,7/2$^-$)	2143.821	5/2$^+$
5526.14 *13*	0.369 *23*	(10095.25)	7/2$^-$,9/2$^-$	4568.75	(9/2$^+$,11/2$^-$)

Continued on next page (footnotes at end of table)

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

γ(^{41}K) (continued)

E_γ [†]	I_γ [†e]	E_i(level)	J_i^π	E_f	J_f^π
5541.64 *17*	0.329 *23*	6835.43	(5/2,7/2$^-$)	1293.609	7/2$^-$
5547.91 *12*	0.56 *3*	5548.19	(3/2$^+$,5/2$^+$,7/2$^+$)	0.0	3/2$^+$
5568.8 *4*	0.149 *19*	(10095.25)	7/2$^-$,9/2$^-$	4525.37	
5573.9 *3*	0.183 *20*	5575.24?	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
5604.26 *18*	0.262 *19*	5604.58	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
5610.3 *5*	0.080 *12*	5610.83	(5/2,7/2$^+$)	0.0	3/2$^+$
5635.26 *8*	1.45 *8*	(10095.25)	7/2$^-$,9/2$^-$	4459.72	1/2$^-$,3/2$^-$
[x]5646.3 *4*	0.071 *10*				
5658.9 *15*	0.257 *17*	5659.25	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
[x]5676.90 *18*	0.203 *15*				
5727.03 *22*	0.75 *7*	7020.97	(3/2)$^-$	1293.609	7/2$^-$
5749.31 *9*	4.06 *23*	(10095.25)	7/2$^-$,9/2$^-$	4345.66	(5/2,7/2$^-$)
5776.8 *10*	0.10 *3*	7361.15?	(3/2$^-$,5/2,7/2$^-$)	1582.001	3/2$^-$
5791.75 *25*	0.55 *5*	(10095.25)	7/2$^-$,9/2$^-$	4303.01	(5/2$^+$,7/2$^+$)
[x]5806.0 *8*	0.11 *3*				
5819.99 *11*	2.16 *13*	(10095.25)	7/2$^-$,9/2$^-$	4274.96	(7/2$^-$,9/2$^+$)
5834.25 *15*	1.04 *7*	(10095.25)	7/2$^-$,9/2$^-$	4260.36	
5850.46 *13*	1.36 *9*	(10095.25)	7/2$^-$,9/2$^-$	4244.22	(3/2)$^-$
5865.66 *13*	1.52 *10*	(10095.25)	7/2$^-$,9/2$^-$	4228.99	(5/2)$^-$
5873.60 *23*	0.65 *6*	(10095.25)	7/2$^-$,9/2$^-$	4220.62	(5/2)
5930.19 *9*	1.23 *7*	(10095.25)	7/2$^-$,9/2$^-$	4164.57	
5948.69 *11*	0.65 *4*	(10095.25)	7/2$^-$,9/2$^-$	4146.15	5/2$^-$,7/2$^-$
6068.06 *25*	0.174 *16*	(10095.25)	7/2$^-$,9/2$^-$	4026.94	
6098.23 *7*	5.4 *3*	(10095.25)	7/2$^-$,9/2$^-$	3996.49	(5/2$^+$)
6104.2 *3*	0.38 *4*	(10095.25)	7/2$^-$,9/2$^-$	3990.40?	
6224.9 *3*	0.152 *16*	(10095.25)	7/2$^-$,9/2$^-$	3870.52	5/2$^-$,7/2$^-$
6267.86 *11*	0.85 *5*	(10095.25)	7/2$^-$,9/2$^-$	3826.90	(5/2,7/2$^+$)
6289.24 *21*	0.272 *22*	6290.05	(3/2)$^-$	0.0	3/2$^+$
6308.8 *8*	0.049 *12*	9740.70	(3/2)$^-$	3431.84	(9/2$^-$,7/2$^-$)
6319.7 *6*	0.88 *5*	(10095.25)	7/2$^-$,9/2$^-$	3774.66	5/2$^-$,7/2$^-$
6333.24 *9*	1.80 *10*	(10095.25)	7/2$^-$,9/2$^-$	3761.54	
[x]6357.9 *5*	0.097 *14*				
6443.17 *11*	0.382 *22*	(10095.25)	7/2$^-$,9/2$^-$	3651.46	(5/2,7/2$^-$)
6450.6 *4*	0.069 *8*	6450.15?	(3/2$^-$,5/2,7/2$^+$)	0.0	3/2$^+$
6481.45 *21*	0.120 *10*	(10095.25)	7/2$^-$,9/2$^-$	3612.77	
6522.4 *6*	0.030 *5*	8200.11	(5/2$^-$,7/2$^-$,3/2$^+$)	1677.235	7/2$^+$
6534.26 *22*	0.093 *7*	(10095.25)	7/2$^-$,9/2$^-$	3560.61	(3/2$^-$,5/2,7/2$^+$)
6560.22 *8*	0.64 *3*	(10095.25)	7/2$^-$,9/2$^-$	3534.45	(7/2$^+$,9/2,11/2$^+$)
6573.41 *13*	0.203 *12*	(10095.25)	7/2$^-$,9/2$^-$	3521.38	(5/2$^+$,7/2$^+$)
[x]6588.1 *8*	0.022 *5*				
6606.1[#] *3*	0.085 *7*	(10095.25)	7/2$^-$,9/2$^-$	3489.30	(5/2)$^+$
6644.90 *15*	0.306 *20*	7938.98		1293.609	7/2$^-$
6662.85 *10*	0.82 *5*	(10095.25)	7/2$^-$,9/2$^-$	3431.84	(9/2$^-$,7/2$^-$)
6853.9 *3*	0.37 *4*	(10095.25)	7/2$^-$,9/2$^-$	3240.65	(5/2$^+$,7/2$^-$)
6859.4 *5*	0.22 *3*	(10095.25)	7/2$^-$,9/2$^-$	3235.57	(3/2$^-$,5/2,7/2$^-$)
6881.05 *10*	1.63 *9*	(10095.25)	7/2$^-$,9/2$^-$	3213.61	5/2$^-$
6952.26 *10*	1.97 *11*	(10095.25)	7/2$^-$,9/2$^-$	3142.43	5/2$^-$
7028.03 *25*	0.044 *4*	9740.70	(3/2)$^-$	2712.57	(7/2)$^-$
7046.71 *19*	0.062 *5*	(10095.25)	7/2$^-$,9/2$^-$	3048.22	1/2$^-$,3/2$^-$
7337.71 *12*	2.04 *12*	(10095.25)	7/2$^-$,9/2$^-$	2756.73	5/2$^+$
7381.97 *11*	2.33 *13*	(10095.25)	7/2$^-$,9/2$^-$	2712.57	(7/2)$^-$
7586.57 *10*	0.53 *3*	(10095.25)	7/2$^-$,9/2$^-$	2507.93	7/2$^+$
7599.37 *14*	0.244 *15*	(10095.25)	7/2$^-$,9/2$^-$	2494.91	9/2$^+$
7777.89 *14*	9.1 *6*	(10095.25)	7/2$^-$,9/2$^-$	2316.617	5/2$^-$
7950.70 *13*	2.78 *17*	(10095.25)	7/2$^-$,9/2$^-$	2143.821	5/2$^+$

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05 (continued)

$\gamma(^{41}K)$ (continued)

E_γ †	I_γ †e	E_i(level)	J_i^π	E_f	J_f^π
8396.41 *12*	0.183 *10*	(10095.25)	$7/2^-$,$9/2^-$	1698.005	$5/2^+$
8417.05 *19*	0.112 *9*	(10095.25)	$7/2^-$,$9/2^-$	1677.235	$7/2^+$
8445.5 *7*	0.009 *2*	9740.70	$(3/2)^-$	1293.609	$7/2^-$
x8469.5 *7*	0.010 *2*				
8512.31 *14*	0.202 *21*	(10095.25)	$7/2^-$,$9/2^-$	1582.001	$3/2^-$
8800.55 *13*	1.02 *7*	(10095.25)	$7/2^-$,$9/2^-$	1293.609	$7/2^-$

† From 1984Kr05. Iγ includes systematic uncertainty of 15% below 1.5 MeV, 10% between 1.5 and 3.0 MeV and 5% above 3 MeV.
‡ This γ has either multiple placements or very improbable placement on the basis of J^π and intensity arguments (1984Kr05).
# Multiple placement is possible but the given placement is favored by J^π and intensity arguments (1984Kr05).
@ Assumed (1984Kr05) as doublet, one component from 5496 level, the other remains unidentified. However, the level scheme of 1984Kr05 does not show a g.s. transition from 5496 level. The evaluators have placed this γ from 5496 based on comment by 1984Kr05.
& Placement is questionable since the branching ratios in (n,γ) (1984Kr05) and (n,n$'\gamma$) (1987Kr01) disagree.
a May deexcite a 3579 level as proposed by 1986Bi03 in (p,γ).
b Placement questioned by 1986Bi03 and/or 1986Sm13 in (p,γ); since this γ was not seen in their singles γ or $\gamma\gamma$ coin spectra, as expected from significant branching reported by 1984Kr05.
c Placement proposed by 1986Sm13 in (p,γ).
d Part (≈25%) of this γ ray may deexcite 3489 level as in (p,γ).
e Intensity per 100 neutron captures.
f Multiply placed with undivided intensity.
g Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme

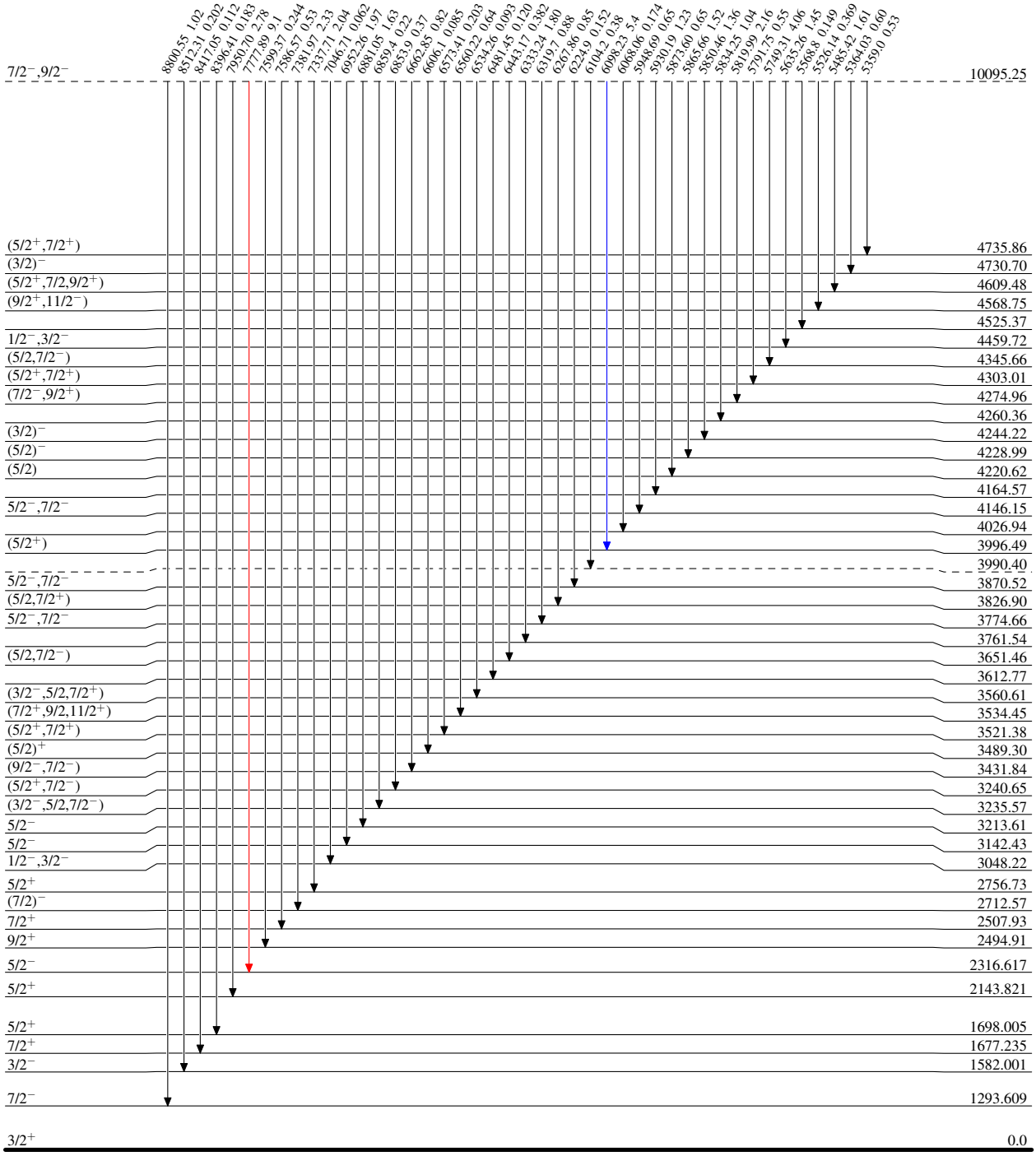
Intensities: Relative I_γ

Legend

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

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

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



$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

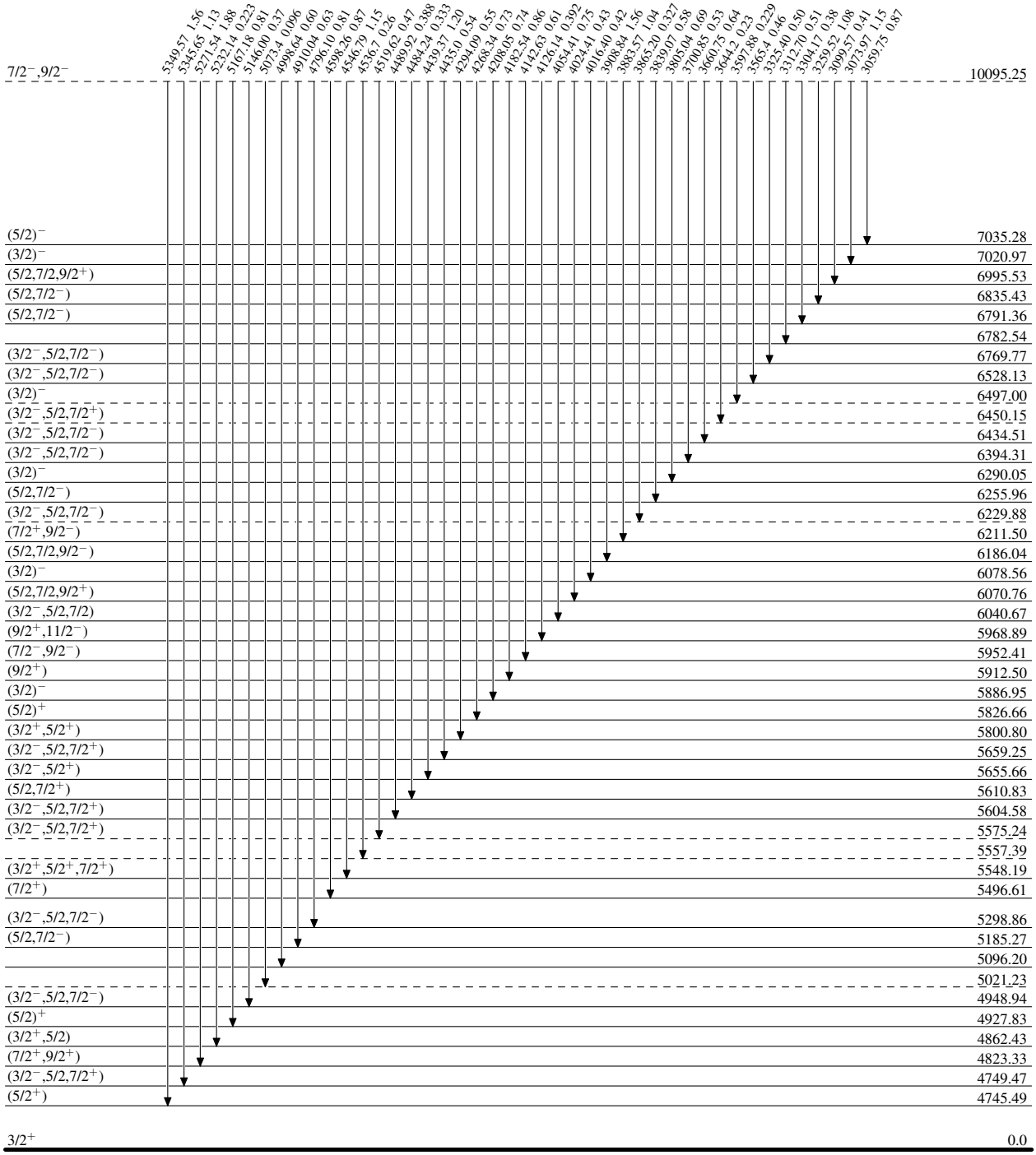
Intensities: Relative I_γ

Legend

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

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

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



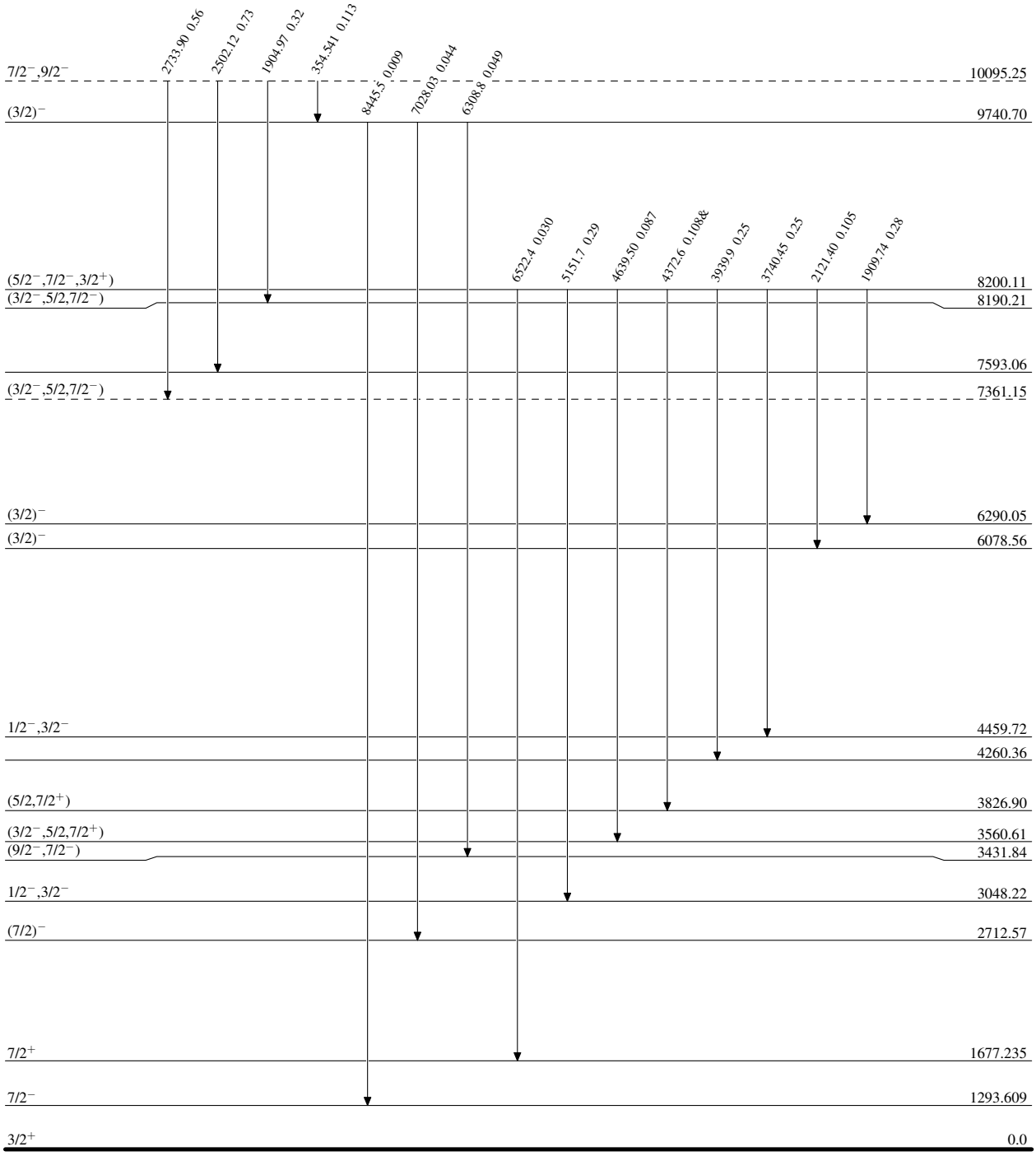
$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



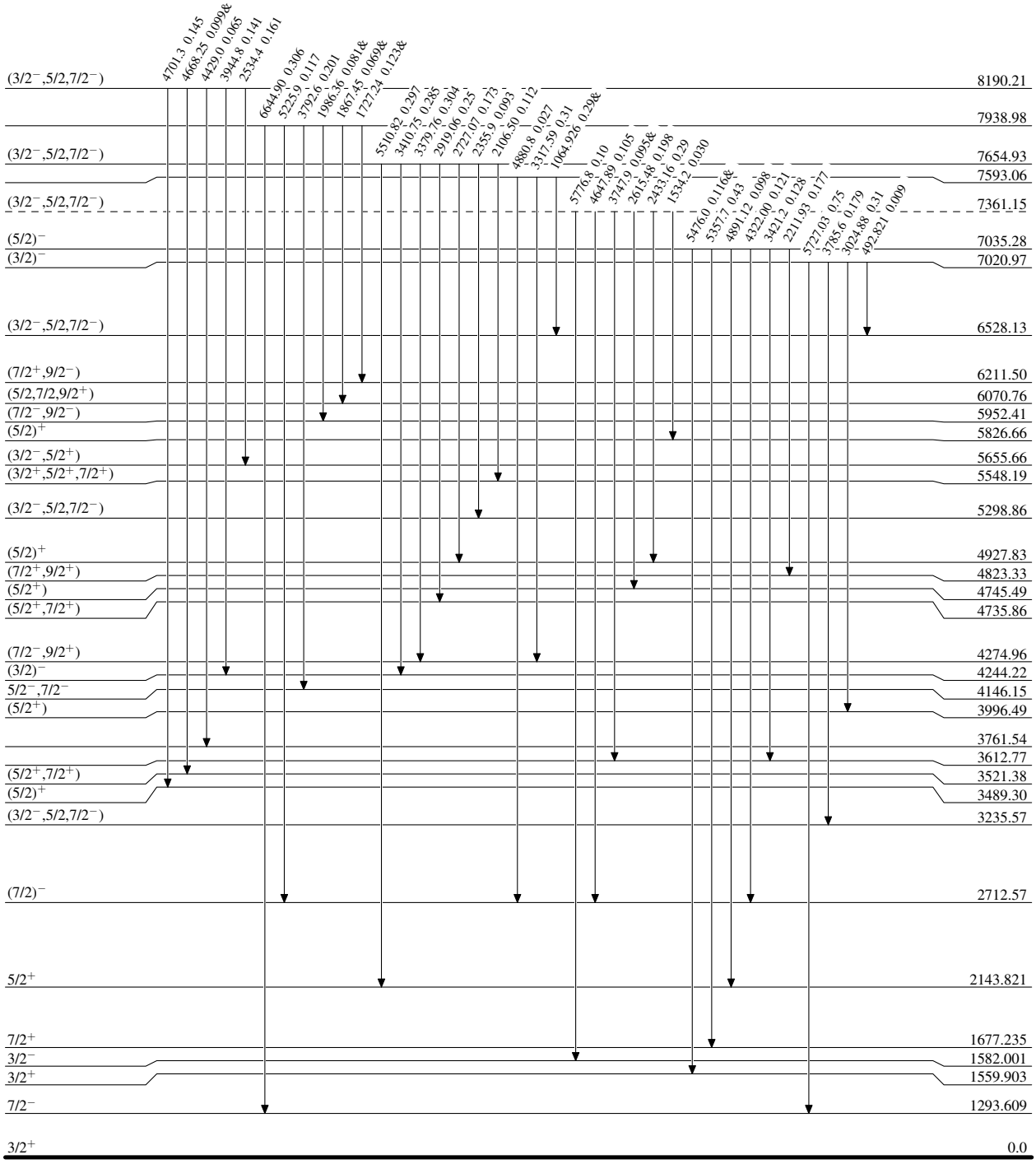
$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



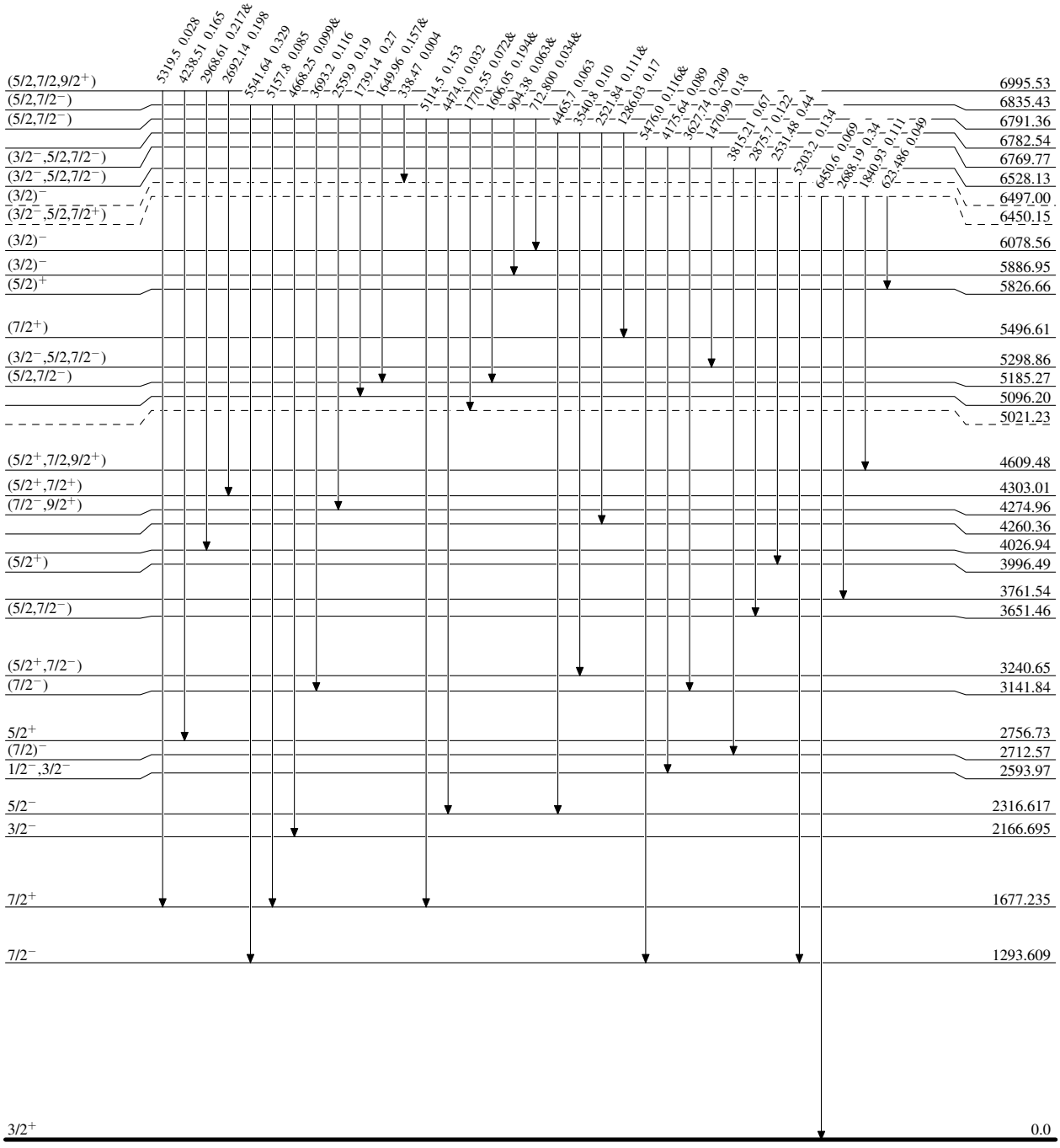
$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



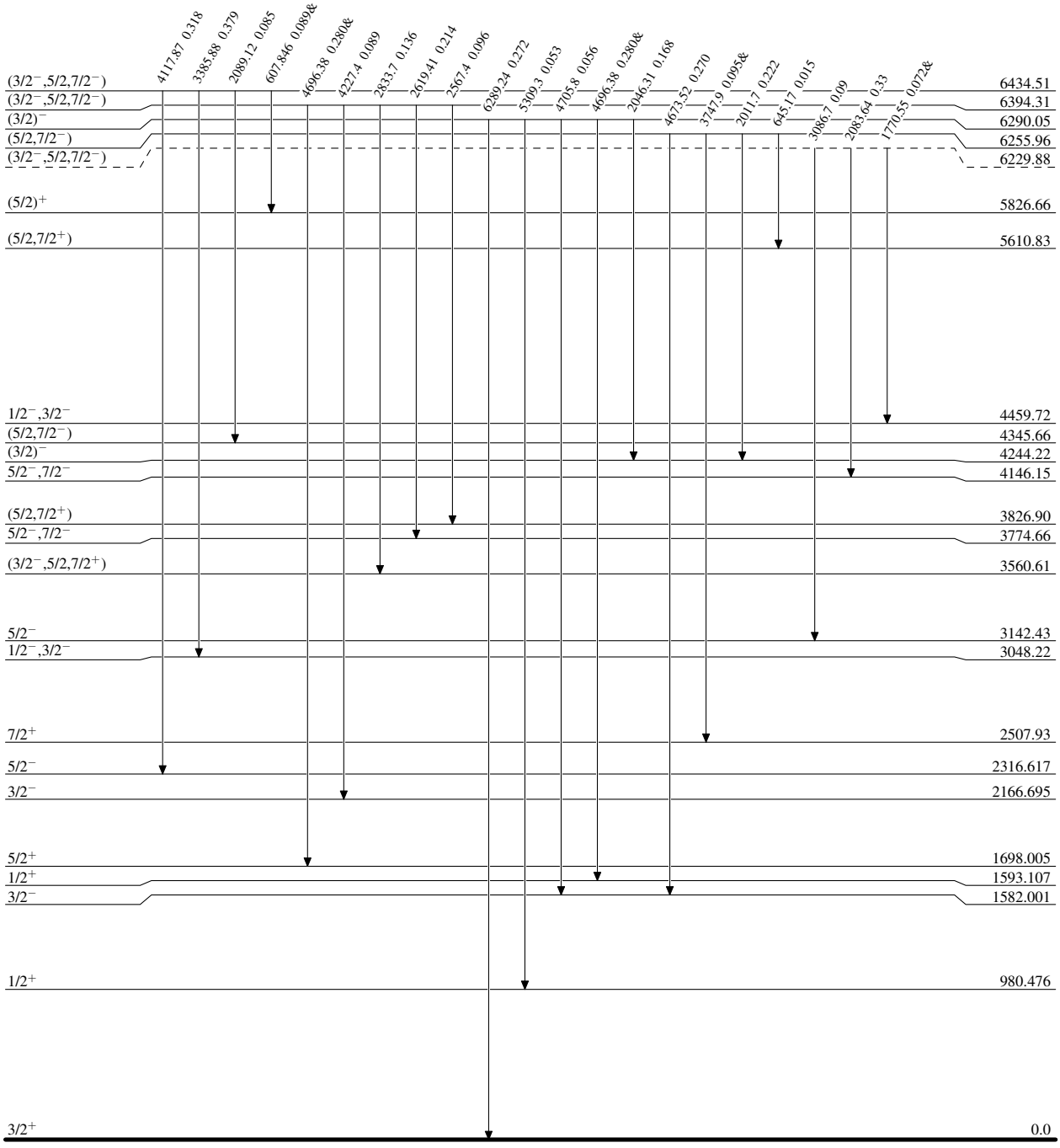
$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



$^{41}_{19}K_{22}$

^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

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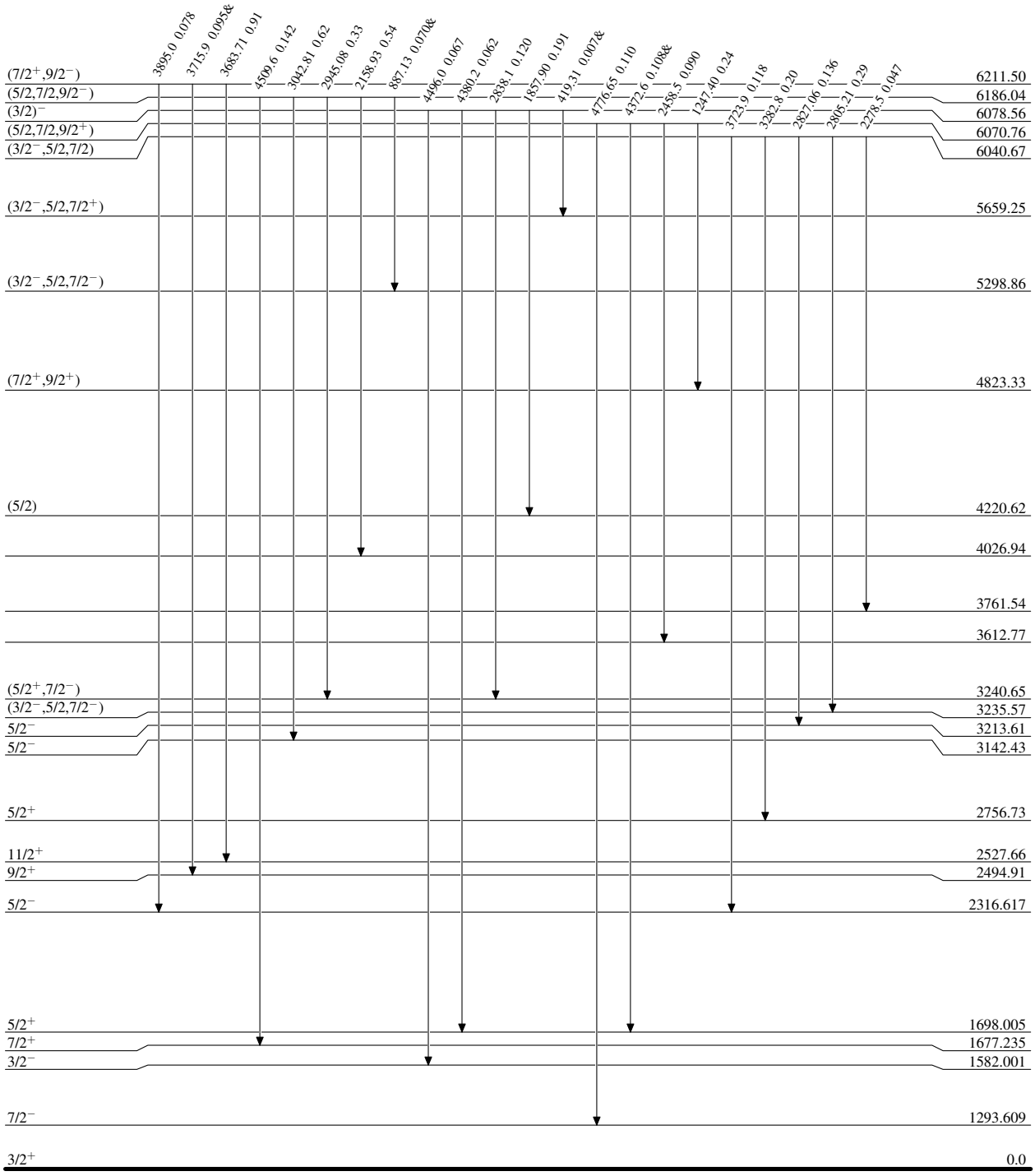

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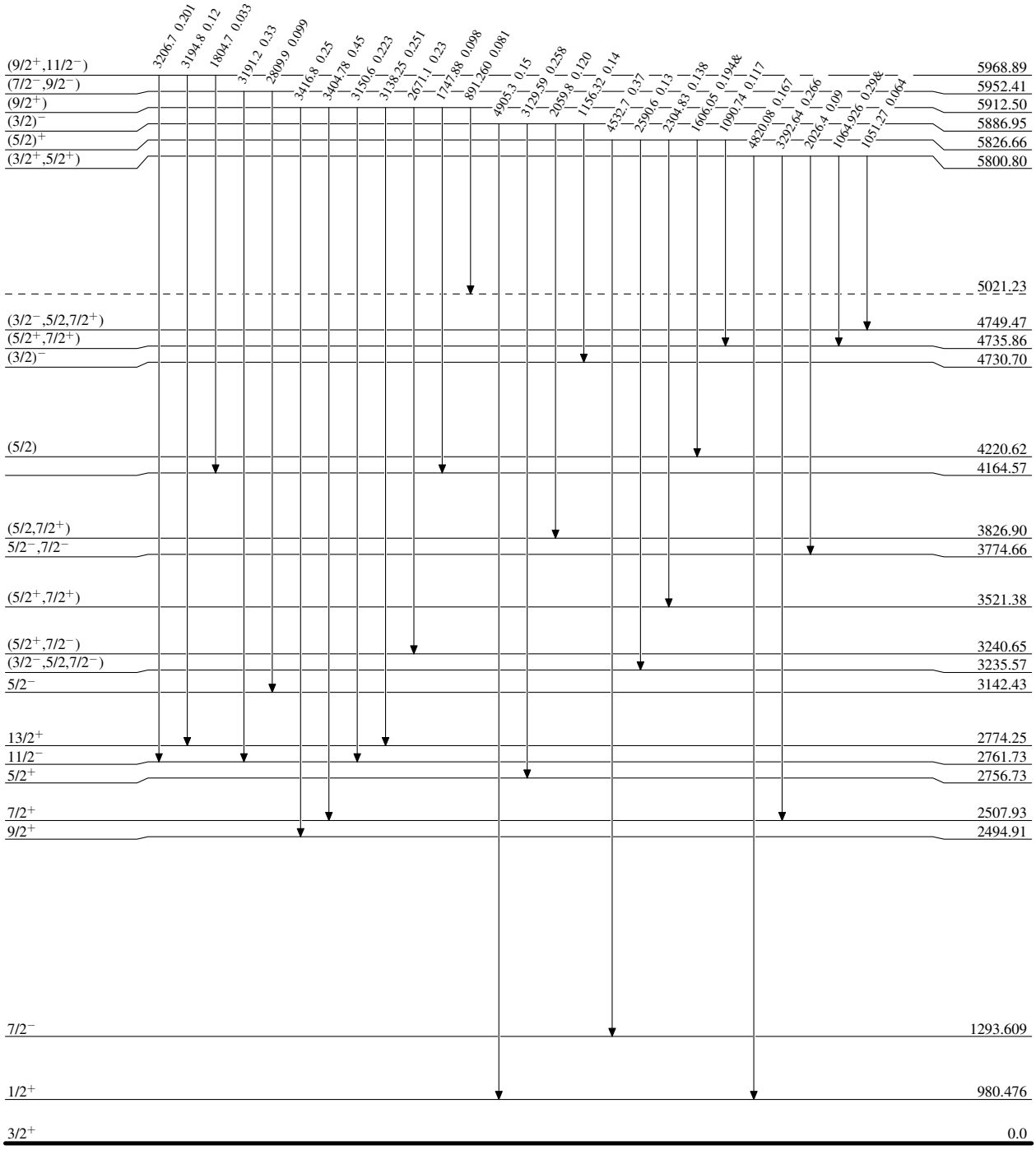

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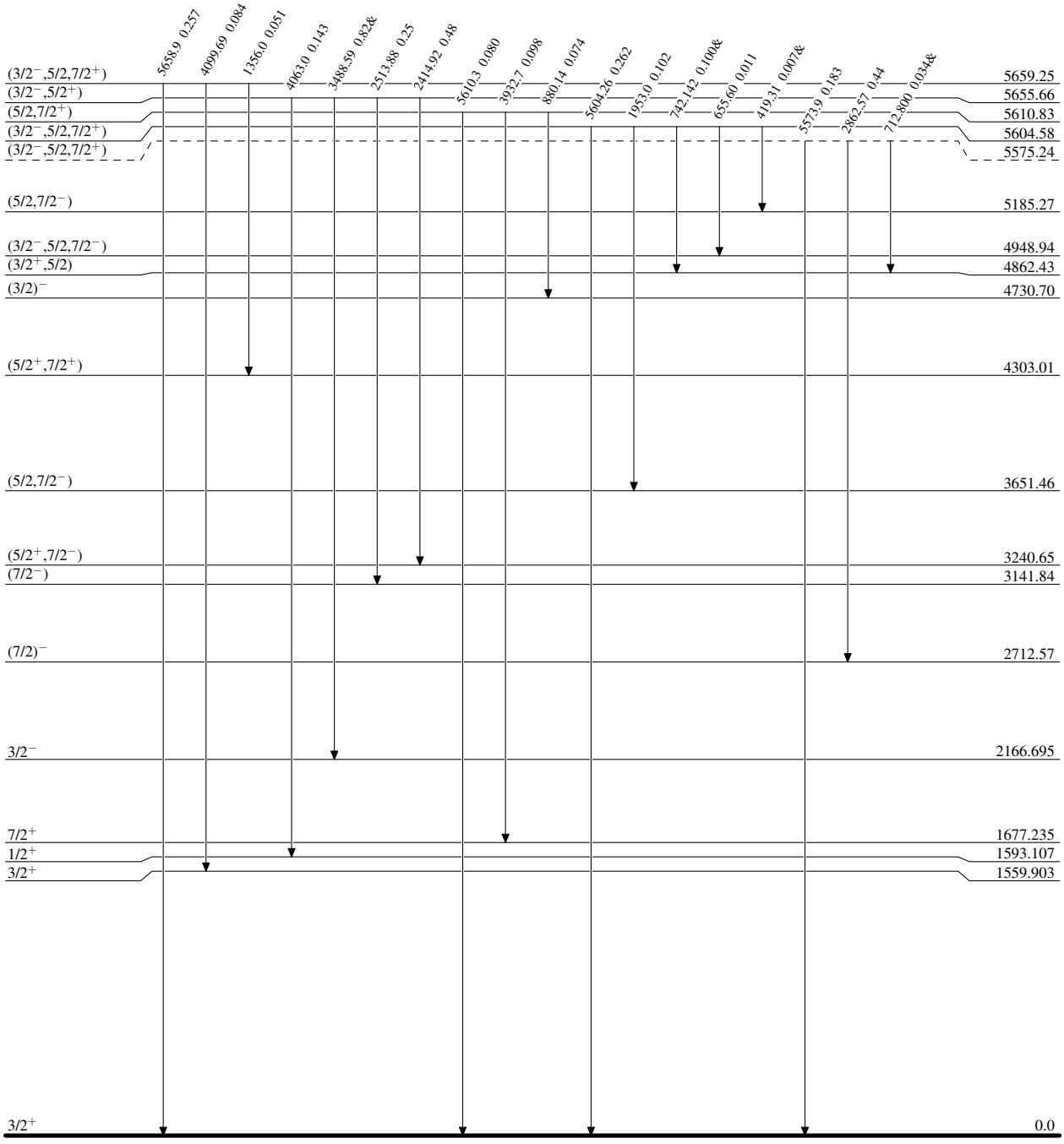

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Level Scheme (continued)

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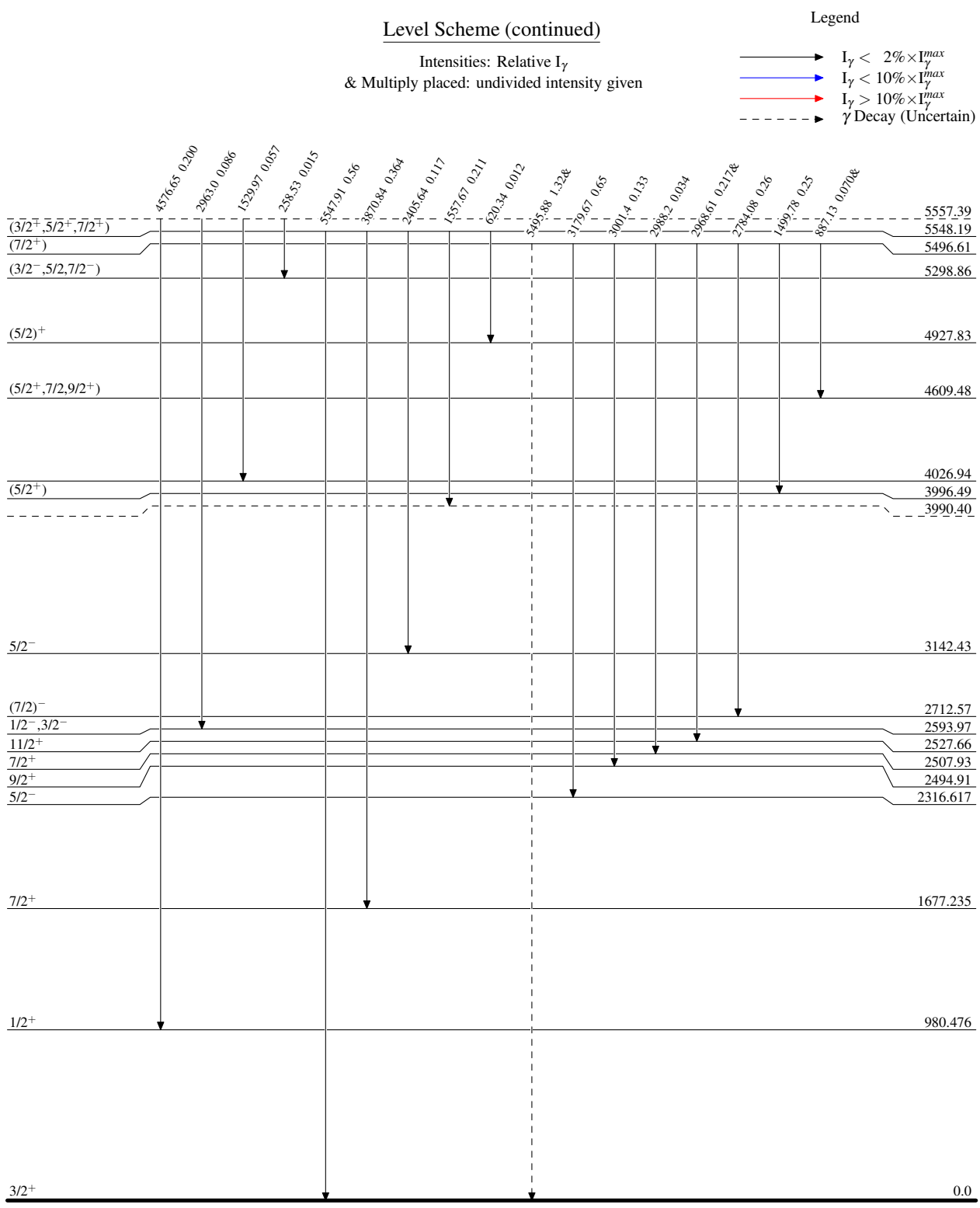

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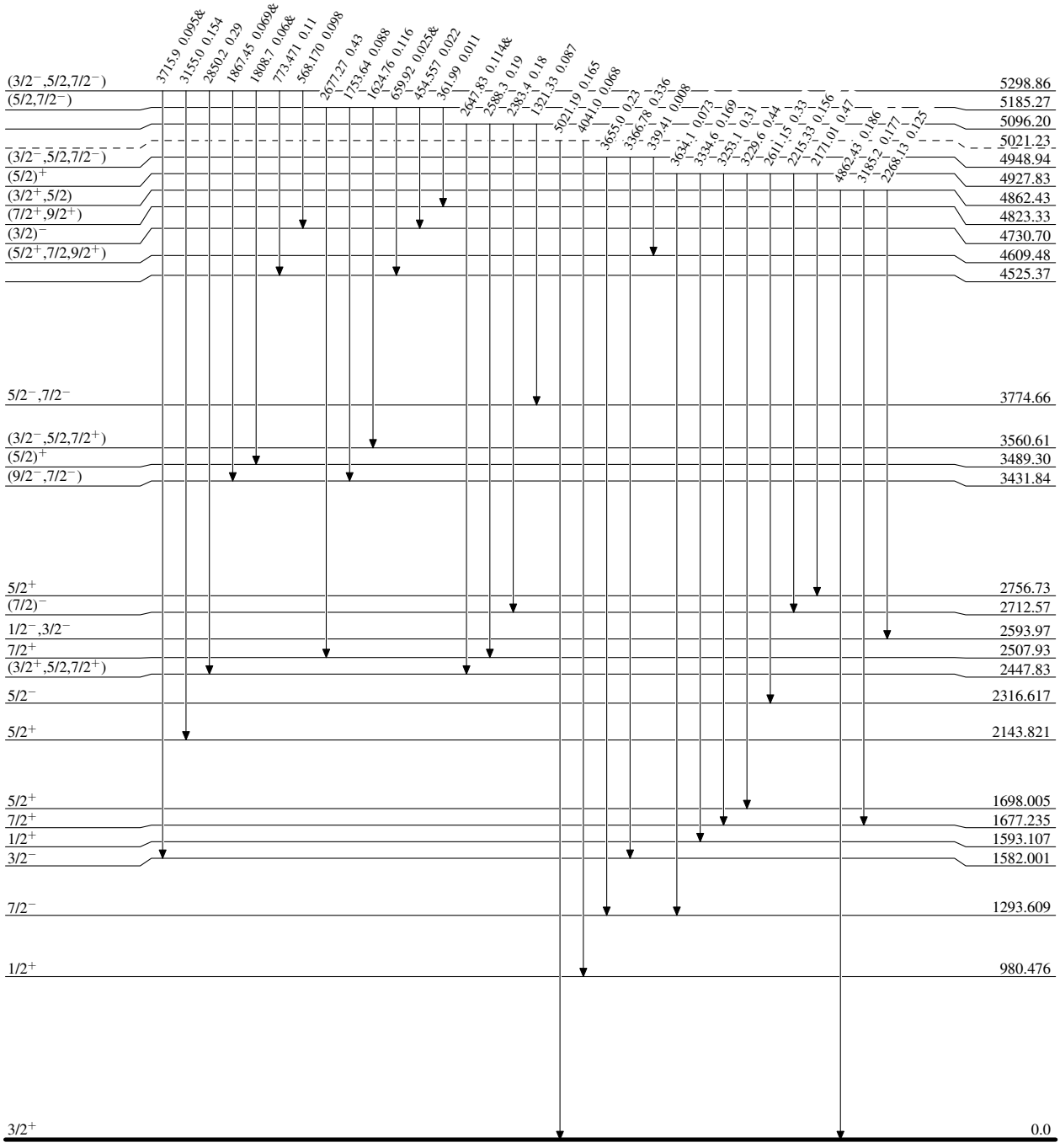

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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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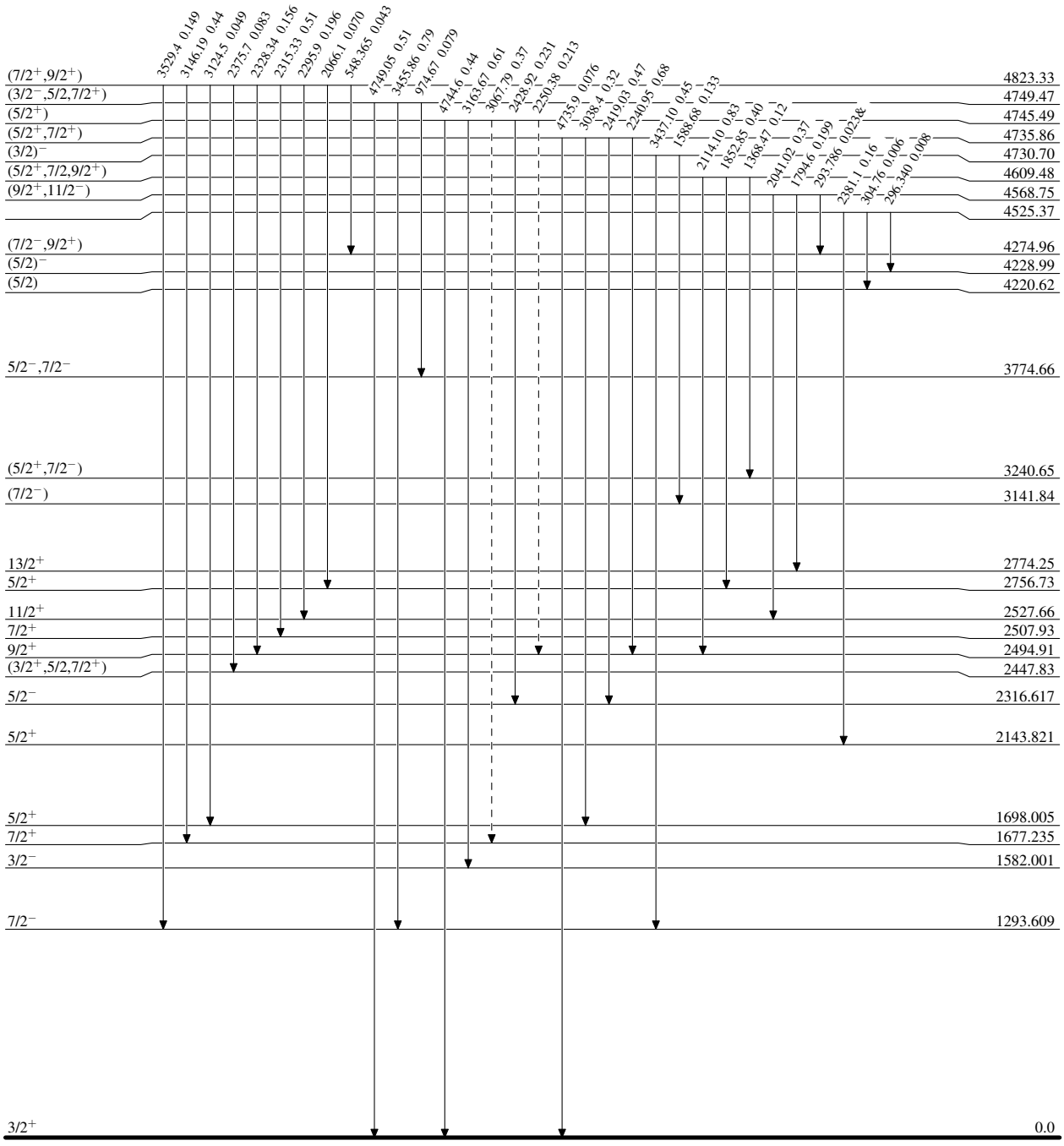
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



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^{40}K(n,γ) E=thermal 1984Kr05,1971Be05

Level Scheme (continued)

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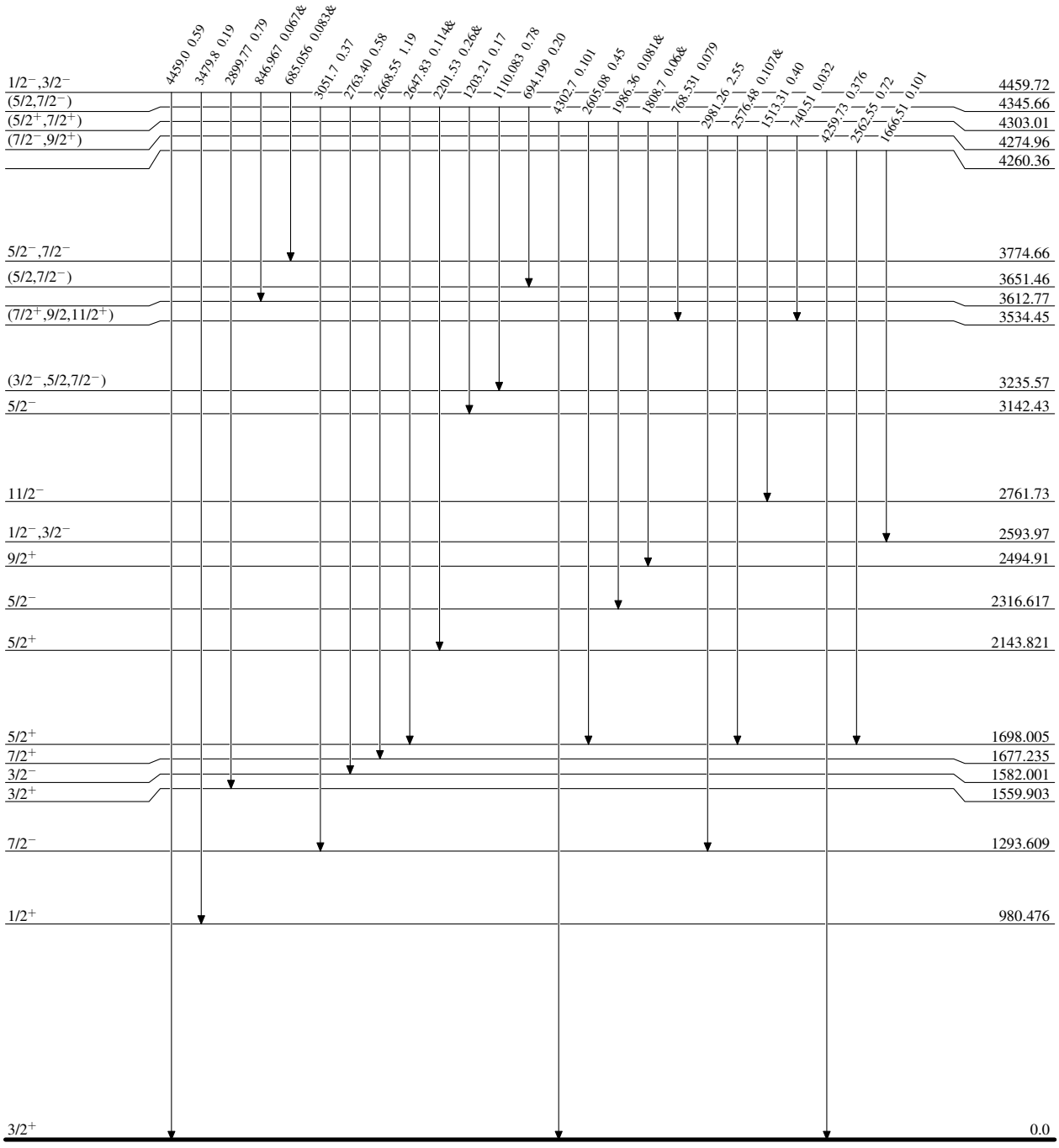

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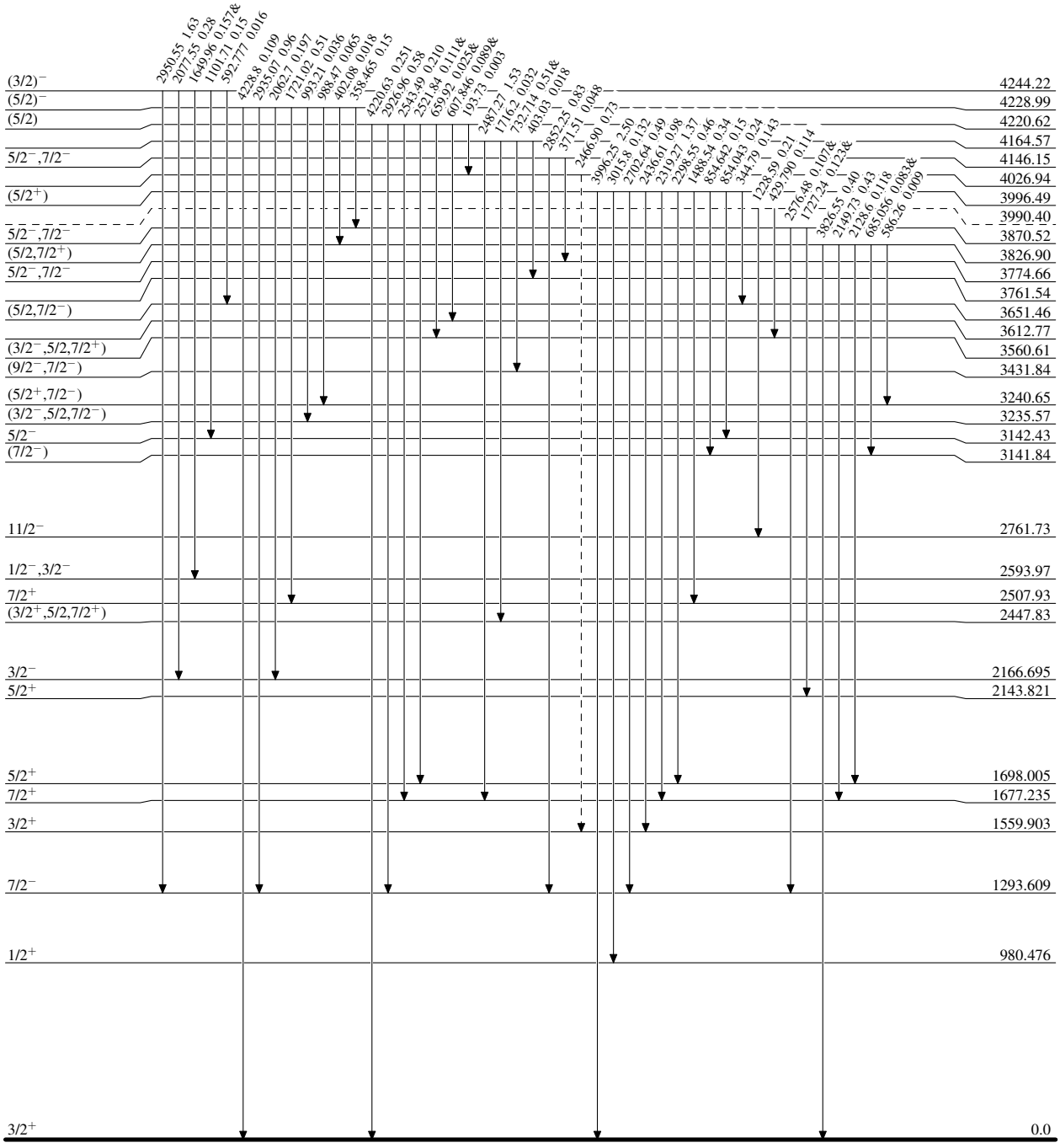

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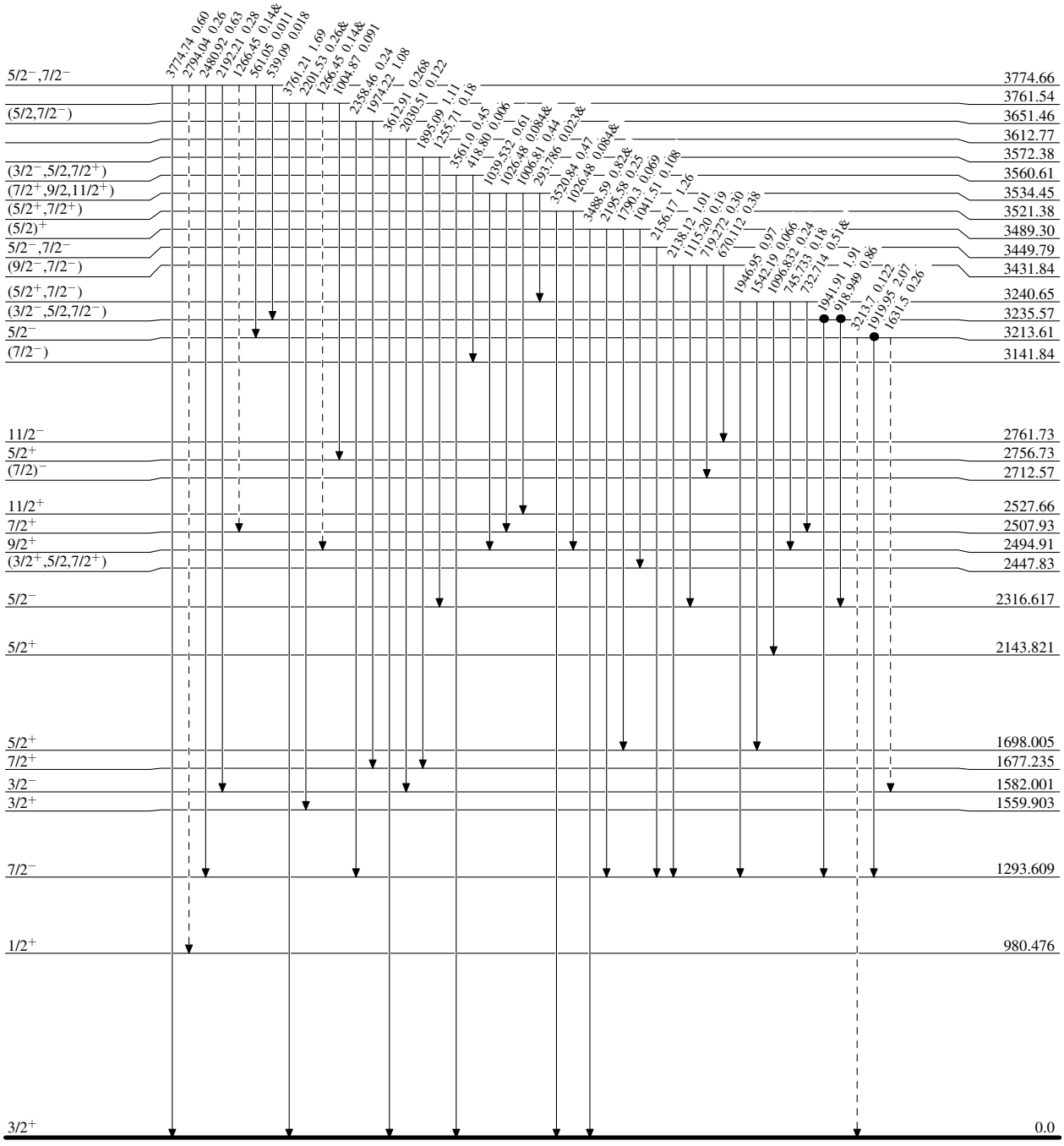
γ Decay (Uncertain)
Coincidence



$^{41}_{19}K_{22}$

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Level Scheme (continued)

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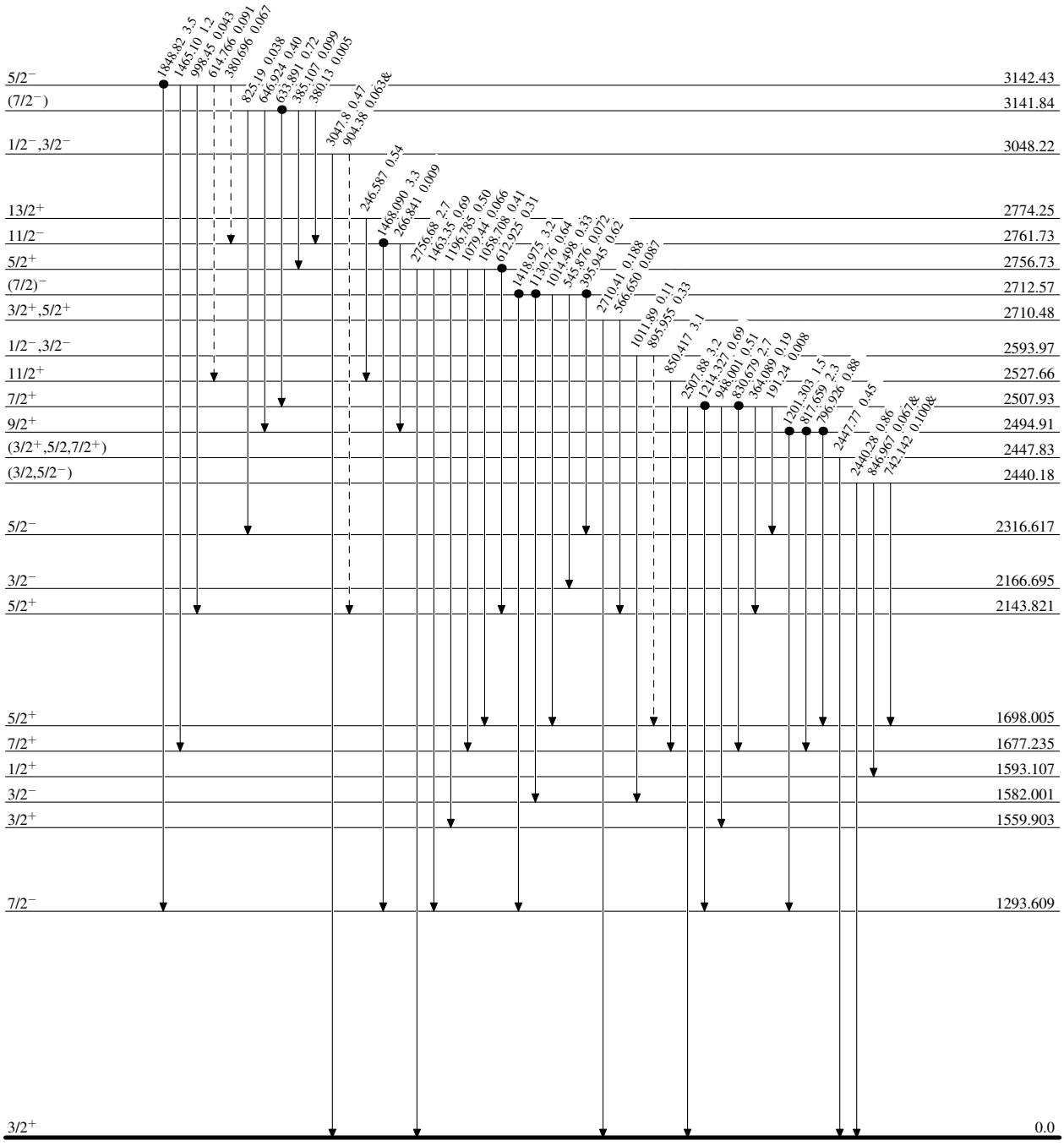
γ Decay (Uncertain)
Coincidence



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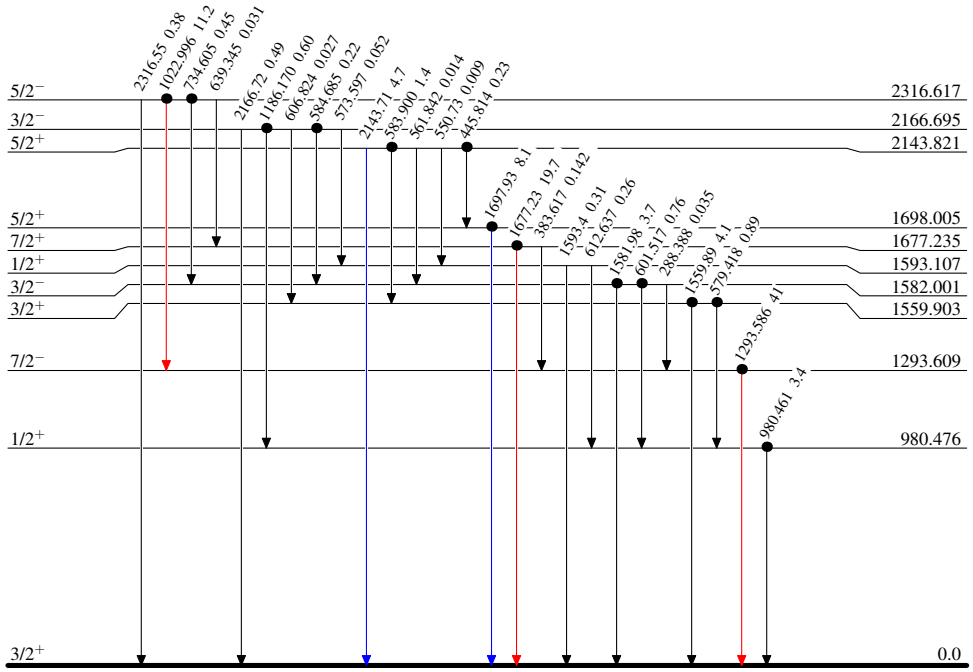
Coincidence



$^{41}_{19}K_{22}$