

⁷⁷Rb ε decay (3.78 min) 1975BaWR,1975Li13,1975We23

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	30-Sep-2020

Parent: ⁷⁷Rb: E=0.0; J^π=3/2⁻; T_{1/2}=3.78 min 4; Q(ε)=5339.0 24; %ε+%β⁺ decay=100.0

⁷⁷Rb-J^π,T_{1/2}: From ⁷⁷Rb Adopted Levels.

⁷⁷Rb-Q(ε): From 2017Wa10.

Main references: 1975BaWR, 1975Li13, 1975We23, 1975Bo52. 1975We23 and 1975Bo52 report only intense γ transitions.

The level scheme is mainly from γγ data of 1975BaWR and 1975Li13.

Others: 1986Ho22, 1980DeZB, 1979SpZZ, 1976ScZK, 1976BaYW, 1974No08, 1972DiZK, 1972De40, 1972Ar02, 1971Do01.

Total decay energy of 5385 keV 505 deduced (by RADLIST code) from proposed decay scheme is in agreement with the expected value of 5339 keV 3, indicating that decay scheme is well established.

⁷⁷Kr Levels

E(level) [†]	J ^π [‡]	T _{1/2}	Comments
0.0	5/2 ⁺	71.25 min 42	%ε+%β ⁺ =100 T _{1/2} ,%ε+%β ⁺ : from Adopted Levels.
66.50 5	3/2 ⁻		
149.94 9	7/2 ⁺		
245.30 6	5/2 ⁻		
459.88 9	1/2 ⁻		
499.58 12	7/2 ⁻		
577.3 6	(3/2 ⁻ ,5/2,7/2 ⁻)		
674.98 21	(3/2 ⁺ ,5/2)		
714.35 8	(1/2 ⁻ ,3/2,5/2 ⁻)		
733.3 6	(1/2,3/2,5/2)		
747.18 23	(3/2 ⁺ ,5/2)		
790.52 12	(1/2 ⁻ ,3/2,5/2)		
872.01 7	(3/2,5/2)		
955.5 [#] 7	(3/2 ⁺ ,5/2)		
957.83 10			
1013.0 6	(1/2 ⁺ ,3/2,5/2 ⁻)		
1020.76 [@] 22			
1024.8 [#] 6	(3/2,5/2)		
1037.42 6	(3/2,5/2)		
1055.57 [#] 10			
1108.67 12	(5/2)		
1154.2 [#] 7			
1243.09 14	(1/2 ⁺ ,3/2,5/2 ⁻)		
1312.44 15	1/2,3/2,5/2 ⁽⁻⁾		
1444.1 [#] 7	1/2,3/2,5/2		
1509.5 [#] 7	(3/2 ⁺ ,5/2)		
1672.48 [#] 12	(3/2,5/2)		
1782.23 [@] 11	1/2,3/2,5/2		
1838.37 [@] 8	(1/2 ⁺ ,3/2,5/2)		
1865.6 [#] 9	(3/2 ⁺ ,5/2)		
1907.6 [#] 12	(3/2 ⁻ ,5/2 ⁻)		
1913.48 [@] 13	(1/2 ⁻ ,3/2,5/2)		
2025.73 [@] 7	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻		
2822.65 [@] 19	(3/2 ⁻ ,5/2 ⁻)		

Continued on next page (footnotes at end of table)

⁷⁷Rb ε decay (3.78 min) **1975BaWR,1975Li13,1975We23** (continued)

⁷⁷Kr Levels (continued)

E(level) [†]	Jπ [‡]
3007.72 [@] 19	(3/2,5/2) ⁻
3054.30 [@] 15	(1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻)

† From least-squares fit to E_γ data.
 ‡ From Adopted Levels.
 # From 1975Li13 only.
 @ From 1975BaWR only.

ε,β⁺ radiations

β⁺ measurements: 1975BaWR, 1975Li13.

β⁺γ measurement: 1975We23, 1982Mo10.

Q value from total γ-absorption: 1993Al03.

Measured β⁺ endpoint energy: 3860 150 (1975Li13), 3975 120 (1975BaWR) (both β⁺ singles measurements. These values together with the adopted Q value do not show the strongest β⁺ feeding to 66 level as given in the decay scheme. The discrepancy could be due to errors in these E(β⁺) values or in the β⁺ feeding to 66 level).

E(decay)	E(level)	Iβ ⁺ #	Iε [#]	Log f _t [‡]	I(ε+β ⁺) ^{†#}	Comments
(2284.7 24)	3054.30	0.17 3	0.14 3	5.8 1	0.31 6	av Eβ=552.4 11; εK=0.3829 14; εL=0.04449 16; εM+=0.00914 4
(2331.3 24)	3007.72	0.43 8	0.29 6	5.5 1	0.72 14	av Eβ=573.2 11; εK=0.3579 13; εL=0.04158 15; εM+=0.00854 3
(2516.4 24)	2822.65	0.38 8	0.17 3	5.8 1	0.55 11	av Eβ=656.5 11; εK=0.2728 10; εL=0.03167 12; εM+=0.006504 23
(3313.3 24)	2025.73	3.8 7	0.45 9	5.6 1	4.2 8	av Eβ=1022.2 12; εK=0.0934 3; εL=0.01082 4; εM+=0.002221 7
(3425.5 24)	1913.48	0.58 12	0.060 12	6.5 1	0.64 13	av Eβ=1074.5 12; εK=0.08189 23; εL=0.00948 3; εM+=0.001946 6
(3431 3)	1907.6	0.31 5	0.032 6	6.8 1	0.34 6	av Eβ=1077.2 13; εK=0.0813 3; εL=0.00942 3; εM+=0.001933 6
(3473 3)	1865.6	0.15 3	0.015 3	7.2 1	0.17 3	av Eβ=1096.8 12; εK=0.07753 23; εL=0.00898 3; εM+=0.001843 6
(3500.6 24)	1838.37	1.8 4	0.17 3	6.1 1	2.0 4	av Eβ=1109.5 12; εK=0.07519 21; εL=0.008704 24; εM+=0.001787 5
(3556.8 24)	1782.23	0.97 17	0.085 15	6.4 1	1.06 19	av Eβ=1135.8 12; εK=0.07063 19; εL=0.008176 22; εM+=0.001678 5
(3666.5 24)	1672.48	1.22 23	0.094 18	6.4 1	1.31 25	av Eβ=1187.2 12; εK=0.06271 16; εL=0.007257 19; εM+=0.001490 4
(3829.5 25)	1509.5	0.97 23	0.062 15	6.6 1	1.03 25	av Eβ=1263.8 12; εK=0.05295 14; εL=0.006126 16; εM+=0.001258 4
(3894.9 25)	1444.1	0.8 3	0.05 2	6.8 2	0.8 3	av Eβ=1294.7 12; εK=0.04960 13; εL=0.005737 15; εM+=0.001178 3
(4026.6 24)	1312.44	0.82 19	0.043 10	6.8 1	0.86 20	av Eβ=1356.9 12; εK=0.04364 10; εL=0.005047 12; εM+=0.0010360 2
(4095.9 24)	1243.09	1.1 3	0.056 14	6.7 1	1.2 3	av Eβ=1389.7 12; εK=0.04088 10; εL=0.004727 11; εM+=0.0009703 2
(4184.8 [@] 25)	1154.2	1.1 3	0.047 13	6.8 1	1.1 3	av Eβ=1431.8 12; εK=0.03767 9; εL=0.004355 10; εM+=0.0008939 2
(4230.3 24)	1108.67	2.7 6	0.12 2	6.4 1	2.8 6	av Eβ=1453.4 12; εK=0.03615 8; εL=0.004179 9;

Continued on next page (footnotes at end of table)

^{77}Rb ε decay (3.78 min) **1975BaWR,1975Li13,1975We23** (continued) ε, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\varepsilon$ #	Log ft^{\ddagger}	$I(\varepsilon+\beta^+)^{\ddagger\#}$	Comments
(4301.6 24)	1037.42	1.2 3	0.046 12	6.8 1	1.2 3	$\varepsilon M^+=0.0008578$ 1 av $E\beta=1487.2$ 12; $\varepsilon K=0.03393$ 8; $\varepsilon L=0.003923$ 9; $\varepsilon M^+=0.0008052$ 1
(4314.2 25)	1024.8	1.4 4	0.057 15	6.8 1	1.5 4	av $E\beta=1493.2$ 12; $\varepsilon K=0.03356$ 8; $\varepsilon L=0.003880$ 9; $\varepsilon M^+=0.0007963$ 1
(4326.0 25)	1013.0	1.6 4	0.064 15	6.7 1	1.7 4	av $E\beta=1498.8$ 12; $\varepsilon K=0.03321$ 8; $\varepsilon L=0.003840$ 9; $\varepsilon M^+=0.0007881$ 1
(4383.5 25)	955.5	0.55 19	0.021 7	7.2 2	0.57 20	av $E\beta=1526.2$ 12; $\varepsilon K=0.03160$ 7; $\varepsilon L=0.003653$ 8; $\varepsilon M^+=0.0007497$ 1
(4467.0 24)	872.01	2.1 7	0.074 23	6.7 2	2.2 7	av $E\beta=1565.9$ 12; $\varepsilon K=0.02944$ 6; $\varepsilon L=0.003402$ 7; $\varepsilon M^+=0.0006983$ 1
(4548.5 24)	790.52	1.3 3	0.041 9	7.0 1	1.3 3	av $E\beta=1604.8$ 12; $\varepsilon K=0.02751$ 6; $\varepsilon L=0.003180$ 7; $\varepsilon M^+=0.0006526$ 1
(4591.8 24)	747.18	0.54 10	0.017 3	7.3 1	0.56 10	av $E\beta=1625.5$ 12; $\varepsilon K=0.02655$ 6; $\varepsilon L=0.003069$ 6; $\varepsilon M^+=0.0006298$ 1
(4605.7 25)	733.3	0.9 3	0.03 1	7.1 2	0.9 3	av $E\beta=1632.1$ 12; $\varepsilon K=0.02626$ 6; $\varepsilon L=0.003034$ 6; $\varepsilon M^+=0.0006228$ 1
(4624.6 24)	714.35	2.8 6	0.085 18	6.6 1	2.9 6	av $E\beta=1641.1$ 12; $\varepsilon K=0.02586$ 5; $\varepsilon L=0.002988$ 6; $\varepsilon M^+=0.0006133$ 1
(4664.0 24)	674.98	2.3 6	0.069 17	6.7 1	2.4 6	av $E\beta=1659.9$ 12; $\varepsilon K=0.02506$ 5; $\varepsilon L=0.002895$ 6; $\varepsilon M^+=0.0005943$ 1
(4761.7 [@] 25)	577.3	<0.09	<0.002	>8.2	<0.09	av $E\beta=1706.6$ 12; $\varepsilon K=0.02320$ 5; $\varepsilon L=0.002681$ 6; $\varepsilon M^+=0.0005502$ 1
(4839.4 [@] 24)	499.58	1.6 4	0.040 10	7.0 1	1.6 4	av $E\beta=1743.9$ 12; $\varepsilon K=0.02186$ 4; $\varepsilon L=0.002525$ 5; $\varepsilon M^+=0.0005183$ 1 log ft is too low for a $7/2^-$ to $3/2^-$ transition. There may be additional γ rays feeding this level.
(4879.1 24)	459.88	7.1 14	0.18 3	6.4 1	7.3 14	av $E\beta=1762.9$ 12; $\varepsilon K=0.02121$ 4; $\varepsilon L=0.002450$ 5; $\varepsilon M^+=0.0005029$ 1
(5093.7 24)	245.30	12.6 24	0.27 5	6.2 1	12.9 25	av $E\beta=1865.8$ 12; $\varepsilon K=0.01812$ 4; $\varepsilon L=0.002093$ 4; $\varepsilon M^+=0.0004294$ 8 E(decay): measured endpoint energy=3670 490 in coincidence with 393γ (1975We23).
(5189.1 24)	149.94	1.5 5	0.069 22	8.8 ^{lu} 2	1.6 5	av $E\beta=1919.8$ 12; $\varepsilon K=0.03808$ 7; $\varepsilon L=0.004420$ 8; $\varepsilon M^+=0.0009077$ 1
(5272.5 24)	66.50	27 5	0.51 9	6.0 1	28 5	av $E\beta=1951.8$ 12; $\varepsilon K=0.01598$ 3; $\varepsilon L=0.001846$ 3; $\varepsilon M^+=0.0003788$ 7
(5339.0 [@] 24)	0.0	<29	<0.52	>5.9	<30	av $E\beta=1983.9$ 12; $\varepsilon K=0.015275$ 25; $\varepsilon L=0.001764$ 3; $\varepsilon M^+=0.0003620$ 6

[†] From γ -ray intensity balance, assuming <30% β feeding to g.s. based on $\log ft > 5.9$ for first-forbidden transition. As the decay does not seem well established, all the $\varepsilon+\beta^+$ feedings should be considered as upper limits.

[‡] All $\log ft$ values should be considered as lower limits as the decay scheme does not seem well established.

Absolute intensity per 100 decays.

@ Existence of this branch is questionable.

$\gamma(^{77}\text{Kr})$

I_γ normalization: from ΣI(γ+ce)(gammas to g.s.)=85 15, assuming ε+β⁺ feeding to g.s. as <30%, corresponding to log ft>5.9.

E _γ [†]	I _γ ^{†c}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [‡]	δ [‡]	α ^d	Comments
^x 39.2 ^{&g} 4	0.5 2								
66.52 5	100	66.50	3/2 ⁻	0.0	5/2 ⁺	(E1)		0.300	α(K)=0.266 4; α(L)=0.0292 5; α(M)=0.00468 7; α(N)=0.000453 7
78.1 [#] 7	0.20 7	577.3	(3/2 ⁻ ,5/2,7/2 ⁻)	499.58	7/2 ⁻	[D,E2]		1.3 11	
^x 106 [#] 1	0.15 6								
129 [#] 1	≈0.1	1154.2		1024.8	(3/2,5/2)				
149.93 9	7.6 5	149.94	7/2 ⁺	0.0	5/2 ⁺	M1+E2	-0.16 10	0.047 7	α(K)=0.042 6; α(L)=0.0047 8; α(M)=0.00076 12; α(N)=7.6×10 ⁻⁵ 11
178.78 8	38.9 14	245.30	5/2 ⁻	66.50	3/2 ⁻	(M1(+E2))	-0.09 9	0.0278 20	α(K)=0.0246 17; α(L)=0.00272 22; α(M)=0.00044 4; α(N)=4.4×10 ⁻⁵ 4
216.0 ^{#g} 15	≈0.1	459.88	1/2 ⁻	245.30	5/2 ⁻				
237.1 [#] 5	0.7 2	1108.67	(5/2)	872.01	(3/2,5/2)				
245.24 10	1.3 5	245.30	5/2 ⁻	0.0	5/2 ⁺	[E1]			
254.3 3	3.12 4	499.58	7/2 ⁻	245.30	5/2 ⁻	(M1(+E2))	<0.05	0.01102	α(K)=0.00976 15; α(L)=0.001065 16; α(M)=0.000173 3; α(N)=1.74×10 ⁻⁵ 3
254.5 3	1.04 16	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)	459.88	1/2 ⁻				
291.0 [#] 15	0.3 1	1444.1	1/2,3/2,5/2	1154.2					
306.43 25	0.5 3	1020.76		714.35	(1/2 ⁻ ,3/2,5/2 ⁻)				
354.1 [#] 8	0.6 2	1312.44	1/2,3/2,5/2 ⁽⁻⁾	957.83					
393.37 9	17.1 7	459.88	1/2 ⁻	66.50	3/2 ⁻				
433.06 14	1.47 11	499.58	7/2 ⁻	66.50	3/2 ⁻	E2			
468.99 19	2.08 13	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)	245.30	5/2 ⁻				
511 2	≈1.4	577.3	(3/2 ⁻ ,5/2,7/2 ⁻)	66.50	3/2 ⁻				I _γ : determined from the decay scheme.
525.0 [#] 15	≈0.2	674.98	(3/2 ⁺ ,5/2)	149.94	7/2 ⁺				
545.23 15	2.0 1	790.52	(1/2 ⁻ ,3/2,5/2)	245.30	5/2 ⁻				
554 [#] 1	0.6 2	1013.0	(1/2 ⁺ ,3/2,5/2 ⁻)	459.88	1/2 ⁻				
568.9 [#] 10	0.3 1	1243.09	(1/2 ⁺ ,3/2,5/2 ⁻)	674.98	(3/2 ⁺ ,5/2)				
577.2 [#] 5	2.1 3	1154.2		577.3	(3/2 ⁻ ,5/2,7/2 ⁻)				
597.25 [#] 21	0.78 4	747.18	(3/2 ⁺ ,5/2)	149.94	7/2 ⁺				
608.6 3	4.3 5	674.98	(3/2 ⁺ ,5/2)	66.50	3/2 ⁻				
609.04 29	1.02 21	1108.67	(5/2)	499.58	7/2 ⁻				
617 [#] 1	≈0.3	1672.48	(3/2,5/2)	1055.5?					
626.69 12	5.6 5	872.01	(3/2,5/2)	245.30	5/2 ⁻				
634.0 [#] 8	0.4 1	1672.48	(3/2,5/2)	1037.42	(3/2,5/2)				
647.88 10	4.5 3	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)	66.50	3/2 ⁻				

γ(⁷⁷Kr) (continued)

E_γ †	I_γ †c	E_i (level)	J_i^π	E_f	J_f^π
666.8# 7	2.4 3	733.3	(1/2,3/2,5/2)	66.50	3/2 ⁻
674.9 3	0.48 18	674.98	(3/2 ⁺ ,5/2)	0.0	5/2 ⁺
712.36 ^a 12	0.48 ^a 12	957.83		245.30	5/2 ⁻
713.4@ 4	0.48 8	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	1312.44	1/2,3/2,5/2 ⁽⁻⁾
724.5# 7	0.9 2	790.52	(1/2 ⁻ ,3/2,5/2)	66.50	3/2 ⁻
729.1# 9	0.4 2	1444.1	1/2,3/2,5/2	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)
745.0@ 3	0.32 4	1782.23	1/2,3/2,5/2	1037.42	(3/2,5/2)
746.5 15	≈0.2	747.18	(3/2 ⁺ ,5/2)	0.0	5/2 ⁺
756.0# 15	≈0.2	1865.6	(3/2 ⁺ ,5/2)	1108.67	(5/2)
776.1# 9	0.8 2	1509.5	(3/2 ⁺ ,5/2)	733.3	(1/2,3/2,5/2)
779.8# 8	1.9 3	1024.8	(3/2,5/2)	245.30	5/2 ⁻
782.6 5	0.74 26	1243.09	(1/2 ⁺ ,3/2,5/2 ⁻)	459.88	1/2 ⁻
792.2 3	0.55 13	1037.42	(3/2,5/2)	245.30	5/2 ⁻
800.94 11	0.88 4	1838.37	(1/2 ⁺ ,3/2,5/2)	1037.42	(3/2,5/2)
805.6 ^f 1	2.5 ^f 6	872.01	(3/2,5/2)	66.50	3/2 ⁻
805.6 ^f # 7	1.0 ^f 3	955.5	(3/2 ⁺ ,5/2)	149.94	7/2 ⁺
^x 826.0# 15	≈0.1				
834.1# 10	0.4 2	1509.5	(3/2 ⁺ ,5/2)	674.98	(3/2 ⁺ ,5/2)
852.58 13	1.39 7	1312.44	1/2,3/2,5/2 ⁽⁻⁾	459.88	1/2 ⁻
^x 860.0# 7	1.1 2				
871.3# 8	0.5 2	872.01	(3/2,5/2)	0.0	5/2 ⁺
910.2@ 1	1.02 4	1782.23	1/2,3/2,5/2	872.01	(3/2,5/2)
946.8# 10	0.7 2	1013.0	(1/2 ⁺ ,3/2,5/2 ⁻)	66.50	3/2 ⁻
958.7 1	2.71 18	1108.67	(5/2)	149.94	7/2 ⁺
966.34 10	1.13 6	1838.37	(1/2 ⁺ ,3/2,5/2)	872.01	(3/2,5/2)
970.87 10	4.12 22	1037.42	(3/2,5/2)	66.50	3/2 ⁻
988.27 ^{ebg} 10	3.07 ^e 18	1055.5?		66.50	3/2 ⁻
988.27 ^e 10	3.07 ^e 18	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	1037.42	(3/2,5/2)
991.67@ 20	0.52 4	1782.23	1/2,3/2,5/2	790.52	(1/2 ⁻ ,3/2,5/2)
1012.3 8	1.6 3	1013.0	(1/2 ⁺ ,3/2,5/2 ⁻)	0.0	5/2 ⁺
1023.9# 10	0.8 2	1024.8	(3/2,5/2)	0.0	5/2 ⁺
1037.43 10	2.08 10	1037.42	(3/2,5/2)	0.0	5/2 ⁺
1067.79 10	1.16 6	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	957.83	
1109# 1	0.6 2	1108.67	(5/2)	0.0	5/2 ⁺
1123.83@ 30	0.34 1	1838.37	(1/2 ⁺ ,3/2,5/2)	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)
1153.79 10	1.88 11	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	872.01	(3/2,5/2)
1176.67 15	0.77 9	1243.09	(1/2 ⁺ ,3/2,5/2 ⁻)	66.50	3/2 ⁻
1199.2 4	0.43 10	1913.48	(1/2 ⁻ ,3/2,5/2)	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)

5

γ(⁷⁷Kr) (continued)

E_γ^\dagger	$I_\gamma^{\ddagger c}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1235.35@ 25	0.14 3	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	790.52	(1/2 ⁻ ,3/2,5/2)
1242.9 3	0.28 4	1243.09	(1/2 ⁺ ,3/2,5/2 ⁻)	0.0	5/2 ⁺
1311.37 10	0.57 3	2025.73	1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)
1360# 2	≈0.3	1509.5	(3/2 ⁺ ,5/2)	149.94	7/2 ⁺
1378.1# 15	0.7 3	1444.1	1/2,3/2,5/2	66.50	3/2 ⁻
1408# 2	≈0.1	1907.6	(3/2 ⁻ ,5/2 ⁻)	499.58	7/2 ⁻
1427.2 4	0.34 12	1672.48	(3/2,5/2)	245.30	5/2 ⁻
1448# 2	≈0.2	1907.6	(3/2 ⁻ ,5/2 ⁻)	459.88	1/2 ⁻
1511# 2	≈0.3	1509.5	(3/2 ⁺ ,5/2)	0.0	5/2 ⁺
^x 1541.5# 15	0.5 2				
1606.00 12	0.72 4	1672.48	(3/2,5/2)	66.50	3/2 ⁻
^x 1631.5# 15	0.4 2				
1662# 2	≈0.3	1907.6	(3/2 ⁻ ,5/2 ⁻)	245.30	5/2 ⁻
1668.15@ 12	0.70 3	1913.48	(1/2 ⁻ ,3/2,5/2)	245.30	5/2 ⁻
1672.4 3	0.53 3	1672.48	(3/2,5/2)	0.0	5/2 ⁺
1716# 1	≈0.1	1865.6	(3/2 ⁺ ,5/2)	149.94	7/2 ⁺
1801.9 3	0.23 3	2822.65	(3/2 ⁻ ,5/2 ⁻)	1020.76	
1838.41 13	1.23 6	1838.37	(1/2 ⁺ ,3/2,5/2)	0.0	5/2 ⁺
2340.03@ 25	0.21 3	3054.30	(1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻)	714.35	(1/2 ⁻ ,3/2,5/2 ⁻)
2508.00@ 25	0.22 3	3007.72	(3/2,5/2) ⁻	499.58	7/2 ⁻
2577.28@ 25	0.49 5	2822.65	(3/2 ⁻ ,5/2 ⁻)	245.30	5/2 ⁻
2594.33@ 14	0.33 3	3054.30	(1/2 ⁻ ,3/2 ⁻ ,5/2 ⁻)	459.88	1/2 ⁻
2762.45@ 25	1.04 8	3007.72	(3/2,5/2) ⁻	245.30	5/2 ⁻
2822.6@ 4	0.24 3	2822.65	(3/2 ⁻ ,5/2 ⁻)	0.0	5/2 ⁺

† Weighted average of **1975BaWR**, **1975Li13**, **1975We23** and **1975Bo52**. In some cases uncertainties quoted by **1975BaWR** are unrealistically low. The evaluator has increased these to 0.1 keV for E_γ and 5% for I_γ .

‡ From Adopted Gammas, unless otherwise stated or assumed for the purpose of γ -ray intensity balance.

γ reported by **1975Li13** only.

@ γ reported by **1975BaWR** only.

& Placed between 500 and 460 levels (**1975Li13**); however, evaluator considers this placement unlikely from adopted J^π values of 7/2⁻ and 1/2⁻ for 500 and 460 levels, respectively.

^a From $\gamma\gamma$ data of **1975BaWR**. A doublet is proposed near this energy.

^b Placement from **1975Li13**. $\gamma\gamma$ data of **1975BaWR** support main placement with 2026 level.

^c For absolute intensity per 100 decays, multiply by 0.57 10.

$\gamma(^{77}\text{Kr})$ (continued)

- ^d Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.
- ^e Multiply placed with undivided intensity.
- ^f Multiply placed with intensity suitably divided.
- ^g Placement of transition in the level scheme is uncertain.
- ^x γ ray not placed in level scheme.

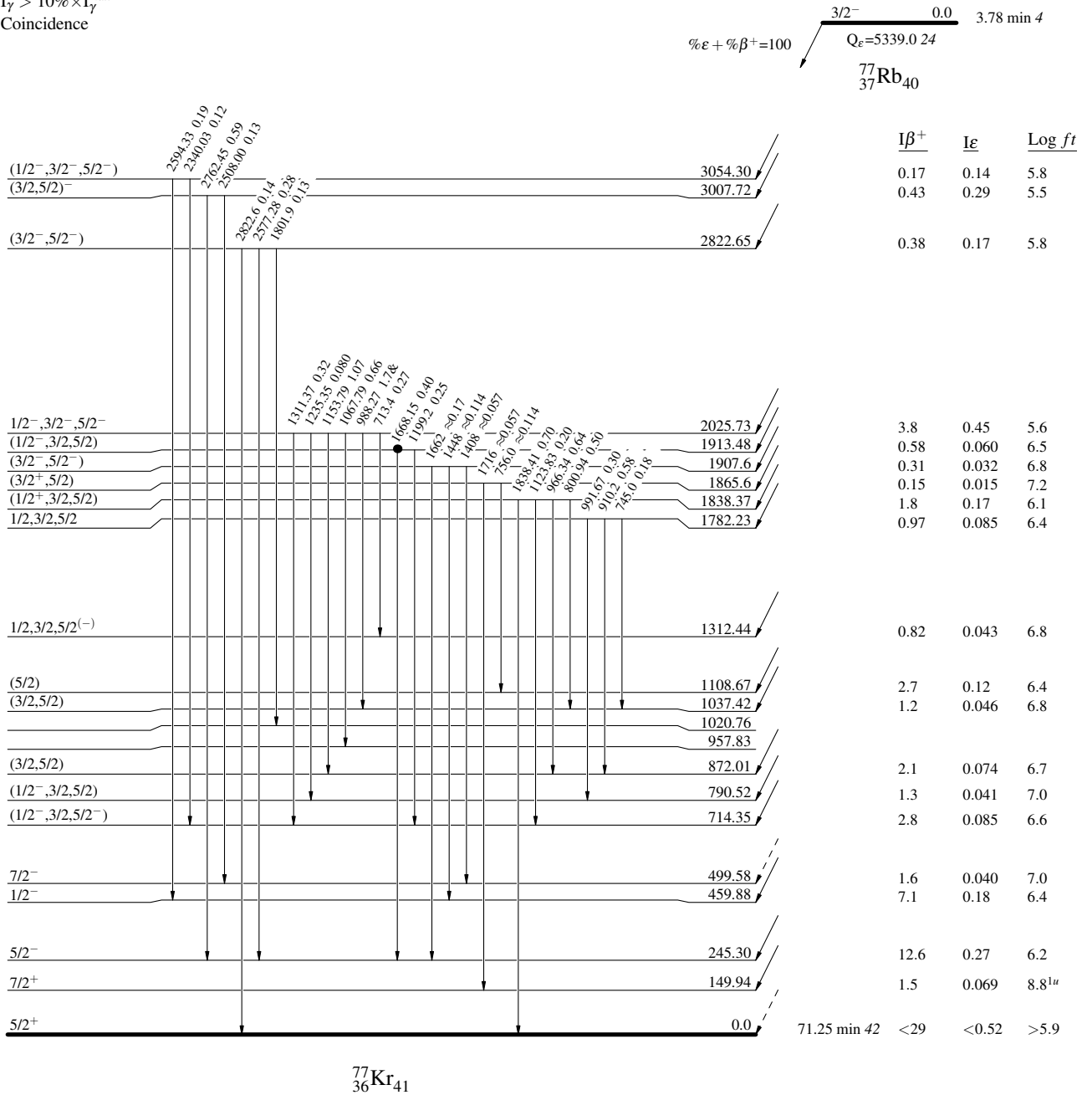
⁷⁷Rb ε decay (3.78 min) 1975BaWR,1975Li13,1975We23

Decay Scheme

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence

Intensities: I_(γ+ce) per 100 parent decays
& Multiply placed: undivided intensity given



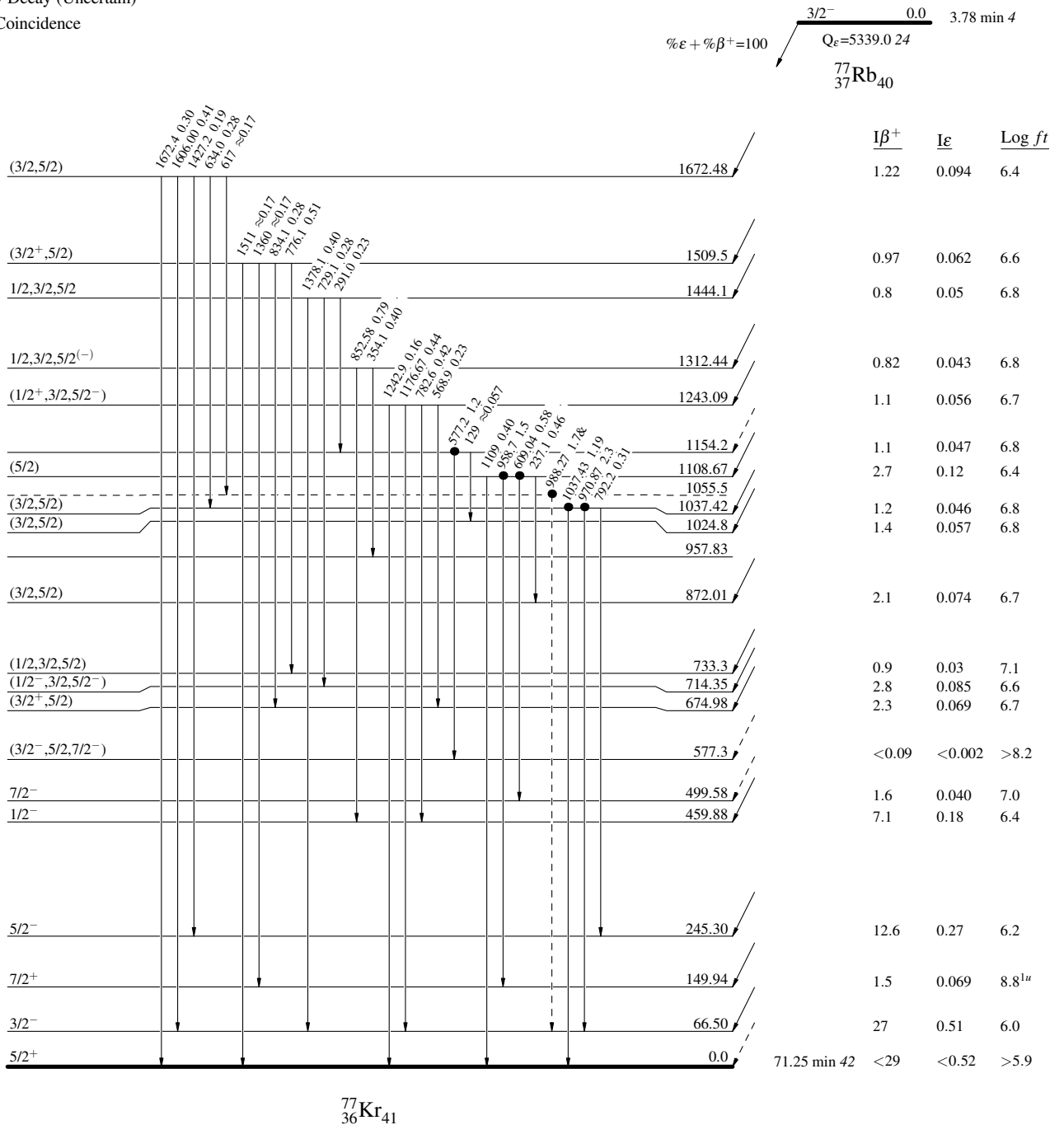
^{77}Rb ϵ decay (3.78 min) $^{1975}\text{BaWR},^{1975}\text{Li13},^{1975}\text{We23}$

Decay Scheme (continued)

Legend

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

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



⁷⁷Rb ε decay (3.78 min) 1975BaWR,1975Li13,1975We23

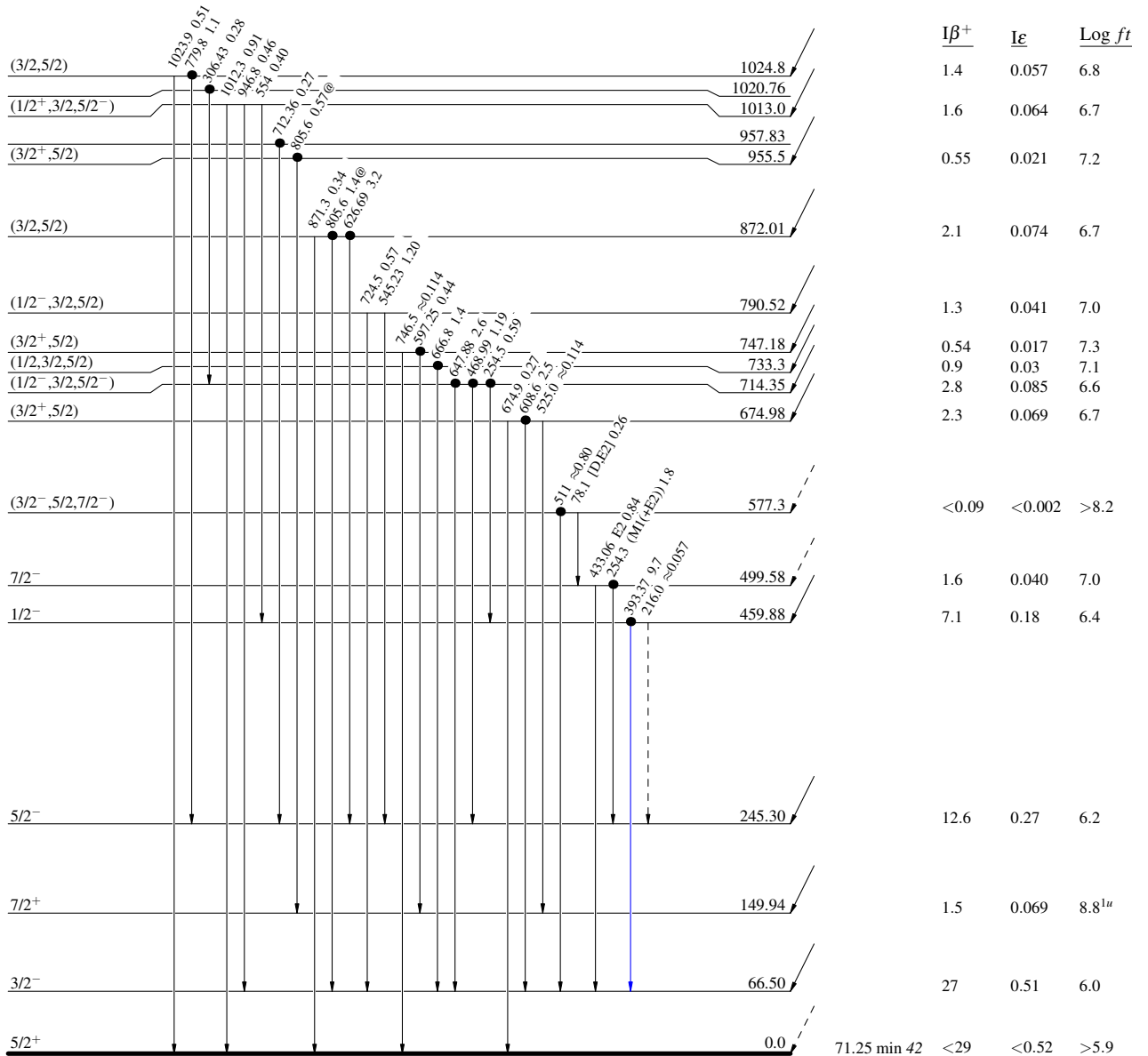
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- - - - - γ Decay (Uncertain)
- Coincidence

⁷⁷Rb₄₀ 3/2⁻ 0.0 3.78 min 4
Q_ε=5339.0 24
%ε + %β⁺ = 100



⁷⁷Kr₄₁

^{77}Rb ϵ decay (3.78 min) 1975BaWR,1975Li13,1975We23

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
 & Multiply placed: undivided intensity given
 @ Multiply placed: intensity suitably divided

Legend

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

