^{85}Y ε decay (4.86 h) 1976Li02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 116, 1 (2014)	31-Dec-2013

Parent: ^{85}Y: E=19.8 *4*; $J^{\pi}=(9/2)^+$; $T_{1/2}$=4.86 h *13*; Q(ε)=3261 *19*; %ε+%β^+ decay=100.0

^{85}Y-E,J^{π},$T_{1/2}$: From ^{85}Y Adopted Levels.

^{85}Y-Q(ε): From 2012Wa38.

1976Li02: measured γ singles and coincidences, source produced by spallation of Mo or Zr targets with 660-MeV protons and subsequent mass separation. Others: 1975Ba49, 1971Ar17, 1966Ho04, 1963Do07, 1962Pa02.

^{85}Sr Levels

E(level)†	J^{π}‡	$T_{1/2}$‡	Comments
0.0	$9/2^+$	64.849 d *7*	
231.80 *6*	$7/2^+$		
238.79 *10*	$1/2^-$	67.63 min *4*	%IT=86.6 *4*; %ε+%β^+=13.4 *4*
743.2 *2*	$3/2^-$		
767.3 *2*	$5/2^+$		
785.52 *13*	$(5/2^-)$		
936.83 *12*	$5/2^-$		
1220.75 *13*	$(11/2)^+$		
1261.99 *11*	$9/2^+$		
1355.11 *11*	$5/2^+$		
1405.17 *18*	$(5/2^-,7/2^-)$		
1453.0 *3*	$(5/2^-,7/2,9/2^-)$		
1555.36 *11*	$(5/2^+,7/2)$		
1588.64 *13*	$(7/2,9/2^+)$		
1627.12 *13*	$(9/2)^+$		
1657.6 *4*	$11/2^+$		
1700.98 *22*	$(5/2^-,7/2,9/2^-)$		
1793.68 *19*	$(5/2^-,7/2,9/2^+)$		
1919.74 *20*	$(7/2,9/2,11/2^+)$		
1982.1 *4*	$(7/2^+,9/2^+)$		
2046.61 *24*	$(9/2^+)$		
2086.19 *14*	$(7/2^+,9/2,11/2^+)$		
2123.78 *9*	$(7/2)^+$		
2165.83 *12*	$(7/2^+,9/2^+)$		
2172.02 *10*	$(7/2)^+$		
2351.73 *9*	$(7/2)^+$		
2471.0 *3*	$(7/2,9/2,11/2^+)$		
2642.21 *17*	$(7/2,9/2^-)$		
2717.6 *4*	$(7/2,9/2,11/2^+)$		
2768.2 *3*	$(7/2,9/2,11/2^+)$		
2782.03 *15*	$(7/2^+,9/2^+)$		
2810.03 *23*	$(7/2,9/2^+)$		
2814.4 *3*	$(7/2,9/2,11/2^+)$		
2975.25 *20*	$(7/2,9/2^-)$		
2980.27 *24*	(7/2,9/2)		
2990.7 *3*	$(7/2,9/2^-)$		
3018.1 *5*	$(7/2,9/2,11/2^+)$		
3031.2 *3*	$(7/2,9/2^-)$		
3063.2 *4*	(7/2,9/2,11/2)		
3075.3 *4*	$(7/2,9/2^-)$		
3088.6 *4*	$(7/2,9/2,11/2^+)$		
3129.1 *5*	$(7/2,9/2,11/2^+)$		

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^{85}Y ε decay (4.86 h) 1976Li02 (continued)

^{85}Sr Levels (continued)

† From least-squares fit to Eγ data.
‡ From Adopted Levels.

ε,β$^+$ radiations

E(decay)	E(level)	Iβ$^+$ †	Iε†	Log *ft*	I(ε+β$^+$)†	Comments
(152 *19*)	3129.1		0.017 *5*	6.3 *2*	0.017 *5*	εK=0.853 *4*; εL=0.120 *4*; εM+=0.0269 *8*
(192 *19*)	3088.6		0.067 *11*	5.9 *1*	0.067 *11*	εK=0.8582 *23*; εL=0.1161 *18*; εM+=0.0258 *5*
(206 *19*)	3075.3		0.038 *5*	6.2 *1*	0.038 *5*	εK=0.8594 *19*; εL=0.1150 *16*; εM+=0.0255 *4*
(218 *19*)	3063.2		0.025 *4*	6.4 *1*	0.025 *4*	εK=0.8605 *17*; εL=0.1142 *14*; εM+=0.0253 *4*
(250 *19*)	3031.2		0.063 *8*	6.2 *1*	0.063 *8*	εK=0.8627 *13*; εL=0.1125 *10*; εM+=0.02486 *25*
(263 *19*)	3018.1		0.036 *17*	6.5 *2*	0.036 *17*	εK=0.8634 *11*; εL=0.1119 *9*; εM+=0.02472 *22*
(290 *19*)	2990.7		0.048 *6*	6.4 *1*	0.048 *6*	εK=0.8647 *9*; εL=0.1109 *7*; εM+=0.02445 *18*
(301 *19*)	2980.27		0.133 *14*	6.0 *1*	0.133 *14*	εK=0.8651 *8*; εL=0.1105 *7*; εM+=0.02437 *17*
(306 *19*)	2975.25		0.163 *19*	5.9 *1*	0.163 *19*	εK=0.8653 *8*; εL=0.1104 *7*; εM+=0.02433 *16*
(466 *19*)	2814.4		0.146 *15*	6.37 *6*	0.146 *15*	εK=0.8692 *3*; εL=0.10725 *25*; εM+=0.02354 *7*
(471 *19*)	2810.03		0.213 *23*	6.21 *6*	0.213 *23*	εK=0.8693 *3*; εL=0.10720 *25*; εM+=0.02353 *6*
(499 *19*)	2782.03		0.69 *6*	5.75 *6*	0.69 *6*	εK=0.8697 *3*; εL=0.10688 *22*; εM+=0.02345 *6*
(513 *19*)	2768.2		0.084 *12*	6.7 *1*	0.084 *12*	εK=0.8699 *3*; εL=0.10673 *21*; εM+=0.02341 *5*
(563 *19*)	2717.6		0.037 *5*	7.1 *1*	0.037 *5*	εK=0.8704 *2*; εL=0.10627 *17*; εM+=0.02329 *5*
(639 *19*)	2642.21		0.81 *7*	5.90 *5*	0.81 *7*	εK=0.8711 *2*; εL=0.10571 *13*; εM+=0.02315 *4*
(810 *19*)	2471.0		0.049 *6*	7.33 *6*	0.049 *6*	εK=0.8722 *1*; εL=0.10485 *8*; εM+=0.02294 *2*
(929 *19*)	2351.73		5.0 *4*	5.44 *4*	5.0 *4*	εK=0.8727; εL=0.10444 *6*; εM+=0.02283 *2*
(1109 *19*)	2172.02		7.8 *6*	5.41 *4*	7.8 *6*	εK=0.8733; εL=0.10399 *5*; εM+=0.02272 *1*
(1115 *19*)	2165.83		1.33 *11*	6.18 *4*	1.33 *11*	εK=0.8733; εL=0.10397 *5*; εM+=0.02272 *1*
(1157 *19*)	2123.78	0.0023 *18*	11.7 *10*	5.27 *5*	11.7 *10*	av Eβ=64.5 *85*; εK=0.8732 *1*; εL=0.10387 *6*; εM+=0.02269 *2*
(1195 *19*)	2086.19		0.67 *6*	6.54 *5*	0.67 *6*	εK=0.8730 *3*; εL=0.10376 *7*; εM+=0.02266 *2*
(1234 *19*)	2046.61	0.00016 *7*	0.115 *19*	7.3 *1*	0.115 *19*	av Eβ=98.0 *82*; εK=0.8724 *5*; εL=0.1036 *1*; εM+=0.02263 *3*
(1299 *19*)	1982.1	0.00036 *14*	0.086 *20*	7.5 *1*	0.086 *20*	av Eβ=125.7 *82*; εK=0.8701 *11*; εL=0.10322 *16*; εM+=0.02254 *4*
(1361 *19*)	1919.74	0.0030 *8*	0.32 *4*	6.98 *6*	0.32 *4*	av Eβ=152.3 *81*; εK=0.8657 *19*; εL=0.1026 *3*; εM+=0.02240 *6*
(1487 *19*)	1793.68	0.0015 *8*	0.048 *23*	7.9 *2*	0.050 *24*	av Eβ=205.9 *81*; εK=0.847 *5*; εL=0.1002 *6*; εM+=0.02188 *12*
(1580 *19*)	1700.98	0.005 *3*	0.08 *5*	7.7 *3*	0.08 *5*	av Eβ=245.5 *82*; εK=0.823 *7*; εL=0.0973 *8*; εM+=0.02124 *17*
(1623 *19*)	1657.6	0.013 *3*	0.16 *3*	7.4 *1*	0.17 *3*	av Eβ=264.1 *82*; εK=0.809 *7*; εL=0.0955 *9*; εM+=0.02085 *19*
(1654 *19*)	1627.12	0.024 *5*	0.25 *5*	7.3 *1*	0.27 *5*	av Eβ=277.2 *82*; εK=0.797 *8*; εL=0.0941 *10*; εM+=0.02054 *21*
(1692 *19*)	1588.64	0.030 *6*	0.25 *4*	7.3 *1*	0.28 *5*	av Eβ=293.8 *82*; εK=0.781 *9*; εL=0.0922 *11*; εM+=0.02012 *23*
(1725‡ *19*)	1555.36	<0.030	<0.21	>7.4	<0.24	av Eβ=308.1 *82*; εK=0.766 *10*; εL=0.0904 *11*; εM+=0.01972 *24* I(ε+β$^+$): −0.11 *13* from intensity balance.
(1828 *19*)	1453.0	0.011 *3*	0.048 *15*	8.1 *2*	0.059 *18*	av Eβ=352.5 *83*; εK=0.713 *11*; εL=0.0840 *13*; εM+=0.0183 *3*
(1876 *19*)	1405.17	0.046 *9*	0.16 *3*	7.6 *1*	0.21 *4*	av Eβ=373.3 *83*; εK=0.685 *12*; εL=0.0807 *14*; εM+=0.0176 *3*
(2019 *19*)	1261.99	0.41 *5*	0.89 *10*	6.88 *6*	1.30 *14*	av Eβ=435.9 *84*; εK=0.596 *13*; εL=0.0701 *15*; εM+=0.0153 *4*
(2060 *19*)	1220.75	0.60 *6*	1.12 *11*	6.79 *5*	1.72 *16*	av Eβ=454.1 *84*; εK=0.570 *13*; εL=0.0670 *15*; εM+=0.0146 *4*
(2344 *19*)	936.83	0.038 *20*	0.11 *6*	9.2^{1u} *3*	0.15 *8*	av Eβ=606.3 *85*; εK=0.654 *9*; εL=0.0780 *11*;

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^{85}Y ε decay (4.86 h) 1976Li02 (continued)

ε,β+ radiations (continued)

E(decay)	E(level)	Iβ+ †	Iε†	Log *ft*	I(ε+β+)†	Comments
						εM+=0.01703 *24*
(2495 *19*)	785.52	0.04 *3*	0.08 *7*	9.5[1u] *4*	0.12 *10*	av Eβ=673.9 *85*; εK=0.582 *10*; εL=0.0693 *11*; εM+=0.01513 *25*
(3049 *19*)	231.80	4.8 *15*	1.0 *3*	7.2 *2*	5.8 *18*	av Eβ=900.8 *88*; εK=0.157 *4*; εL=0.0184 *5*; εM+=0.00401 *10*
(3281 *19*)	0.0	52 *3*	8.1 *6*	6.34 *4*	60 *4*	av Eβ=1007.9 *89*; εK=0.119 *3*; εL=0.0139 *4*; εM+=0.00303 *7*

† Absolute intensity per 100 decays.
‡ Existence of this branch is questionable.

^{85}Y ε decay (4.86 h) 1976Li02 (continued)

$\gamma(^{85}Sr)$

Iγ normalization: From absolute photon intensity=5.47% for 763-, 767-, 769-, and 770-keV γ rays from Iγ/Iγ± measurement.

E_γ	I_γ[f]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[g]	$I_{(\gamma+ce)}$[f]	Comments
(6.96[@] *11*)		238.79	1/2⁻	231.80	7/2⁺	(E3)		2.02×10⁷ *12*	76[&] *18*	α(L)=1.66×10⁷ *10*; α(M)=3.31×10⁶ *19*; α(N)=3.17×10⁵ *18*; α(O)=63 *4*
[x]129.6 *5*	1.3 *1*									
151.0 *10*	0.37[‡] *15*	936.83	5/2⁻	785.52	(5/2⁻)					
[x]179.8 *5*	1.64 *8*									
193.4 *4*	6.4 *3*	936.83	5/2⁻	743.2	3/2⁻					
231.7 *1*	422 *25*	231.80	7/2⁺	0.0	9/2⁺	M1+E2	0.45 *6*	0.0224 *12*		α(K)=0.0196 *11*; α(L)=0.00228 *14*; α(M)=0.000383 *23*; α(N)=4.7×10⁻⁵ *3*
238.9 *4*	0.25 *6*	238.79	1/2⁻	0.0	9/2⁺	M4		1.95		α(K)=1.61 *3*; α(L)=0.288 *5*; α(M)=0.0500 *9*; α(N)=0.00599 *10*; α(O)=0.000302 *5*
438.4 *5*	3.1 *2*	1793.68	(5/2⁻,7/2,9/2⁺)	1355.11	5/2⁺					
468.4 *4*	2.2 *2*	1405.17	(5/2⁻,7/2⁻)	936.83	5/2⁻					
504.40 *20*	27.9[a] *11*	743.2	3/2⁻	238.79	1/2⁻					
535.6 *2*	64.0 *25*	767.3	5/2⁺	231.80	7/2⁺					
546.7 *2*	22.0 *10*	785.52	(5/2⁻)	238.79	1/2⁻					
558.2 *3*	4.9 *3*	2351.73	(7/2)⁺	1793.68	(5/2⁻,7/2,9/2⁺)					
568.4 *2*	31.0 *13*	2123.78	(7/2)⁺	1555.36	(5/2⁺,7/2)					
576.7 *3*	4.2 *3*	2165.83	(7/2⁺,9/2⁺)	1588.64	(7/2,9/2⁺)					
587.5 *4*	2.2 *2*	1355.11	5/2⁺	767.3	5/2⁺					
611.9 *2*	20.0 *10*	1355.11	5/2⁺	743.2	3/2⁻					
616.5 *2*	16.0 *10*	2172.02	(7/2)⁺	1555.36	(5/2⁺,7/2)					
637.5 *4*	1.8 *3*	1405.17	(5/2⁻,7/2⁻)	767.3	5/2⁺					
658.4 *6*	1.1 *2*	1919.74	(7/2,9/2,11/2⁺)	1261.99	9/2⁺					
662.0 *6*	1.5 *3*	1405.17	(5/2⁻,7/2⁻)	743.2	3/2⁻					
667.5 *4*	2.7 *3*	1453.0	(5/2⁻,7/2,9/2⁻)	785.52	(5/2⁻)					
698.0 *2*	24.0 *10*	936.83	5/2⁻	238.79	1/2⁻					
718.4 *3*	1.5 *2*	2123.78	(7/2)⁺	1405.17	(5/2⁻,7/2⁻)					
724.5 *2*	8.2 *4*	2351.73	(7/2)⁺	1627.12	(9/2)⁺					
735.0 *10*	0.37 *20*	2782.03	(7/2⁺,9/2⁺)	2046.61	(9/2⁺)					
[x]747.2 *4*	0.66 *13*									
763.2 *5*	3.2 *4*	2351.73	(7/2)⁺	1588.64	(7/2,9/2⁺)					
767.3 *7*	67[‡] *7*	767.3	5/2⁺	0.0	9/2⁺					

$\gamma(^{85}Sr)$ (continued)

E_γ	I_γ[f]	E_i(level)	J_i^π	E_f	J_f^π
768.6 *8*	24‡ *3*	2123.78	$(7/2)^+$	1355.11	$5/2^+$
769.7 *10*	5.5‡ *11*	1555.36	$(5/2^+,7/2)$	785.52	$(5/2^-)$
787.9 *2*	29.0 *11*	1555.36	$(5/2^+,7/2)$	767.3	$5/2^+$
796.4 *3*	4.4 *3*	2351.73	$(7/2)^+$	1555.36	$(5/2^+,7/2)$
800.4 *9*	0.73 *24*	2782.03	$(7/2^+,9/2^+)$	1982.1	$(7/2^+,9/2^+)$
810.8 *2*	3.5 *3*	2165.83	$(7/2^+,9/2^+)$	1355.11	$5/2^+$
816.8 *2*	14.4 *8*	2172.02	$(7/2)^+$	1355.11	$5/2^+$
821.6 *2*	4.0 *3*	1588.64	$(7/2,9/2^+)$	767.3	$5/2^+$
x843.0 *8*	0.3 *1*				
861.6 *2*	18.0 *8*	2123.78	$(7/2)^+$	1261.99	$9/2^+$
865.5 *3*	2.2 *2*	2086.19	$(7/2^+,9/2,11/2^+)$	1220.75	$(11/2)^+$
898.7 *3*	1.6 *1*	2351.73	$(7/2)^+$	1453.0	$(5/2^-,7/2,9/2^-)$
910.0 *3*	3.7 *3*	2172.02	$(7/2)^+$	1261.99	$9/2^+$
914.5 *10*	2.4‡ *7*	1700.98	$(5/2^-,7/2,9/2^-)$	785.52	$(5/2^-)$
941.0 *3*	1.60 *16*	2642.21	$(7/2,9/2^-)$	1700.98	$(5/2^-,7/2,9/2^-)$
944.5 *3*	3.10 *23*	2165.83	$(7/2^+,9/2^+)$	1220.75	$(11/2)^+$
x959.0 *6*	0.37 *12*				
965.0 *10*	0.18 *9*	3088.6	$(7/2,9/2,11/2^+)$	2123.78	$(7/2)^+$
989.0 *3*	1.1 *1*	1220.75	$(11/2)^+$	231.80	$7/2^+$
996.5 *2*	10.0 *5*	2351.73	$(7/2)^+$	1355.11	$5/2^+$
1026.8 *3*	2.0 *2*	1793.68	$(5/2^-,7/2,9/2^+)$	767.3	$5/2^+$
1030.1 *2*	37.4 *15*	1261.99	$9/2^+$	231.80	$7/2^+$
1055.6 *6*	0.55 *15*	2975.25	$(7/2,9/2^-)$	1919.74	$(7/2,9/2,11/2^+)$
1067.1 *6*	0.73 *18*	2768.2	$(7/2,9/2,11/2^+)$	1700.98	$(5/2^-,7/2,9/2^-)$
1089.9 *4*	1.1 *2*	2351.73	$(7/2)^+$	1261.99	$9/2^+$
x1110.4[b] *4*	2.0 *2*				
x1115.8[c] *7*	0.55 *13*				
1123.2 *2*	33.0 *14*	1355.11	$5/2^+$	231.80	$7/2^+$
1131.0 *4*	0.64 *12*	2351.73	$(7/2)^+$	1220.75	$(11/2)^+$
x1170.0 *6*	0.73 *18*				
1172.9 *6*	0.92 *19*	1405.17	$(5/2^-,7/2^-)$	231.80	$7/2^+$
1186.9 *2*	5.1 *3*	2123.78	$(7/2)^+$	936.83	$5/2^-$
1215.0 *8*	0.82 *16*	1982.1	$(7/2^+,9/2^+)$	767.3	$5/2^+$
1220.5 *2*	36.6 *16*	1220.75	$(11/2)^+$	0.0	$9/2^+$
1235.5 *6*	0.73 *14*	2172.02	$(7/2)^+$	936.83	$5/2^-$
x1239.4 *8*	0.3 *1*				
1254.4 *3*	1.8 *2*	2810.03	$(7/2,9/2^+)$	1555.36	$(5/2^+,7/2)$
1261.9 *2*	12.0 *5*	1261.99	$9/2^+$	0.0	$9/2^+$
1320[i]		2086.19	$(7/2^+,9/2,11/2^+)$	767.3	$5/2^+$
1323.4 *2*	12.7 *6*	1555.36	$(5/2^+,7/2)$	231.80	$7/2^+$
1338.4 *2*	3.1 *2*	2123.78	$(7/2)^+$	785.52	$(5/2^-)$
1356.3[h†] *2*	2.4[hd] *4*	1588.64	$(7/2,9/2^+)$	231.80	$7/2^+$

$^{85}_{38}Sr_{47}$-5

γ(^{85}Sr) (continued)

E_γ	I_γ[f]	E_i(level)	J_i^π	E_f	J_f^π
1356.3[h†] 2	9.9[he] 5	2123.78	(7/2)$^+$	767.3	5/2$^+$
1377.0 5	0.55 13	2782.03	(7/2$^+$,9/2$^+$)	1405.17	(5/2$^-$,7/2$^-$)
1395.5 2	8.2 5	1627.12	(9/2)$^+$	231.80	7/2$^+$
1398.5 9	1.8 4	2165.83	(7/2$^+$,9/2$^+$)	767.3	5/2$^+$
1404.6 2	57.0 23	2172.02	(7/2)$^+$	767.3	5/2$^+$
1414.8 2	7.5 4	2351.73	(7/2)$^+$	936.83	5/2$^-$
1425.6 4	0.73 14	1657.6	11/2$^+$	231.80	7/2$^+$
1468[i]	0.2 2	1700.98	(5/2$^-$,7/2,9/2$^-$)	231.80	7/2$^+$
1519.7 3	0.65 13	2782.03	(7/2$^+$,9/2$^+$)	1261.99	9/2$^+$
1555.3 3	4.0 2	1555.36	(5/2$^+$,7/2)	0.0	9/2$^+$
1561.4 4	0.73 11	1793.68	(5/2$^-$,7/2,9/2$^+$)	231.80	7/2$^+$
1566.2 3	4.2 2	2351.73	(7/2)$^+$	785.52	(5/2$^-$)
1570 1	0.26 18	2975.25	(7/2,9/2$^-$)	1405.17	(5/2$^-$,7/2$^-$)
1574 1	0.18 15	2980.27	(7/2,9/2)	1405.17	(5/2$^-$,7/2$^-$)
1584.4 2	22.0 12	2351.73	(7/2)$^+$	767.3	5/2$^+$
1588.7 3	6.2 4	1588.64	(7/2,9/2$^+$)	0.0	9/2$^+$
1626.8 2	5.0 3	1627.12	(9/2)$^+$	0.0	9/2$^+$
1658.0 7	2.4 4	1657.6	11/2$^+$	0.0	9/2$^+$
1687.8 3	2.7 2	1919.74	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
1700.8 3	1.5 2	1700.98	(5/2$^-$,7/2,9/2$^-$)	0.0	9/2$^+$
1705.4 2	11.0 6	2642.21	(7/2,9/2$^-$)	936.83	5/2$^-$
[x]1747.0 6	0.73 14				
1750.3 4	1.5 2	1982.1	(7/2$^+$,9/2$^+$)	231.80	7/2$^+$
1814.7 4	1.3 2	2046.61	(9/2$^+$)	231.80	7/2$^+$
1827.0 5	0.73 13	3088.6	(7/2,9/2,11/2$^+$)	1261.99	9/2$^+$
1854.3 2	7.5 4	2086.19	(7/2$^+$,9/2,11/2$^+$)	231.80	7/2$^+$
1892.2 2	33.0 22	2123.78	(7/2)$^+$	231.80	7/2$^+$
1919.7 3	2.6 2	1919.74	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
1934.2 2	4.0 3	2165.83	(7/2$^+$,9/2$^+$)	231.80	7/2$^+$
1940.4 2	10.6 6	2172.02	(7/2)$^+$	231.80	7/2$^+$
2038.1 3	1.1 1	2975.25	(7/2,9/2$^-$)	936.83	5/2$^-$
2042.0 11	0.3 1	2810.03	(7/2,9/2$^+$)	767.3	5/2$^+$
2046.6 3	1.2 1	2046.61	(9/2$^+$)	0.0	9/2$^+$
[x]2070.0 8	0.3 1				
2086.2 2	2.7 2	2086.19	(7/2$^+$,9/2,11/2$^+$)	0.0	9/2$^+$
2095.3 7	0.31 8	3031.2	(7/2,9/2$^-$)	936.83	5/2$^-$
2120.2 3	14.6 11	2351.73	(7/2)$^+$	231.80	7/2$^+$
2123.8 2	92 5	2123.78	(7/2)$^+$	0.0	9/2$^+$
2166.0 2	8.1 5	2165.83	(7/2$^+$,9/2$^+$)	0.0	9/2$^+$
2172.1 2	42.0 22	2172.02	(7/2)$^+$	0.0	9/2$^+$
2189.5 4	0.47 7	2975.25	(7/2,9/2$^-$)	785.52	(5/2$^-$)
2205.0 4	0.55 6	2990.7	(7/2,9/2$^-$)	785.52	(5/2$^-$)
2239.2 3	0.91 8	2471.0	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$

^{85}Y ε decay (4.86 h) 1976Li02 (continued)

$\gamma(^{85}Sr)$ (continued)

E_γ	I_γ [f]	E_i(level)	J_i^π	E_f	J_f^π
[x]2256 *1*	0.14 *7*				
2289.6 *4*	0.47 *7*	3075.3	(7/2,9/2$^-$)	785.52	(5/2$^-$)
[x]2317.8 *5*	0.18 *3*				
2351.7 *2*	10.4 *7*	2351.73	(7/2)$^+$	0.0	9/2$^+$
2485.8 *4*	0.47 *5*	2717.6	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
2536.1 *5*	0.31 *4*	2768.2	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
2550.2 *2*	4.2 *3*	2782.03	(7/2$^+$,9/2$^+$)	231.80	7/2$^+$
2578.6 *4*	1.4 *2*	2810.03	(7/2,9/2$^+$)	231.80	7/2$^+$
2582.0 *5*	0.5 *1*	2814.4	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
2642.3 *3*	2.4 *2*	2642.21	(7/2,9/2$^-$)	0.0	9/2$^+$
2717.6 *6*	0.22 *4*	2717.6	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
2744.2 *8*	0.35 *6*	2975.25	(7/2,9/2$^-$)	231.80	7/2$^+$
2748.3 *3*	2.0 *1*	2980.27	(7/2,9/2)	231.80	7/2$^+$
2760.0 *15*	0.05 *2*	2990.7	(7/2,9/2$^-$)	231.80	7/2$^+$
2768.3 *4*	0.52 *5*	2768.2	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
[x]2777.8 *5*	0.63 *8*				
2782.2 *3*	6.2 *3*	2782.03	(7/2$^+$,9/2$^+$)	0.0	9/2$^+$
2785 *2*	0.4[‡] *3*	3018.1	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
2798.5 *5*	0.37 *4*	3031.2	(7/2,9/2$^-$)	231.80	7/2$^+$
2810.3 *6*	0.44 *8*	2810.03	(7/2,9/2$^+$)	0.0	9/2$^+$
2814.6 *3*	2.20 *16*	2814.4	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
2843.8 *7*	0.09 *2*	3075.3	(7/2,9/2$^-$)	231.80	7/2$^+$
2857.0 *6*	0.18 *3*	3088.6	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
2897.1 *5*	0.18 *3*	3129.1	(7/2,9/2,11/2$^+$)	231.80	7/2$^+$
[x]2936.2 *8*	0.09 *2*				
2975.7 *4*	0.29 *4*	2975.25	(7/2,9/2$^-$)	0.0	9/2$^+$
2980.6 *4*	0.29 *4*	2980.27	(7/2,9/2)	0.0	9/2$^+$
2990.8 *4*	0.29 *4*	2990.7	(7/2,9/2$^-$)	0.0	9/2$^+$
3018.1 *5*	0.26 *4*	3018.1	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
3031.4 *4*	0.49 *5*	3031.2	(7/2,9/2$^-$)	0.0	9/2$^+$
3063.1 *4*	0.46 *5*	3063.2	(7/2,9/2,11/2)	0.0	9/2$^+$
3075.4 *6*	0.14 *3*	3075.3	(7/2,9/2$^-$)	0.0	9/2$^+$
3087.8 *6*	0.16 *3*	3088.6	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$
3130.0 *12*	0.13 *8*	3129.1	(7/2,9/2,11/2$^+$)	0.0	9/2$^+$

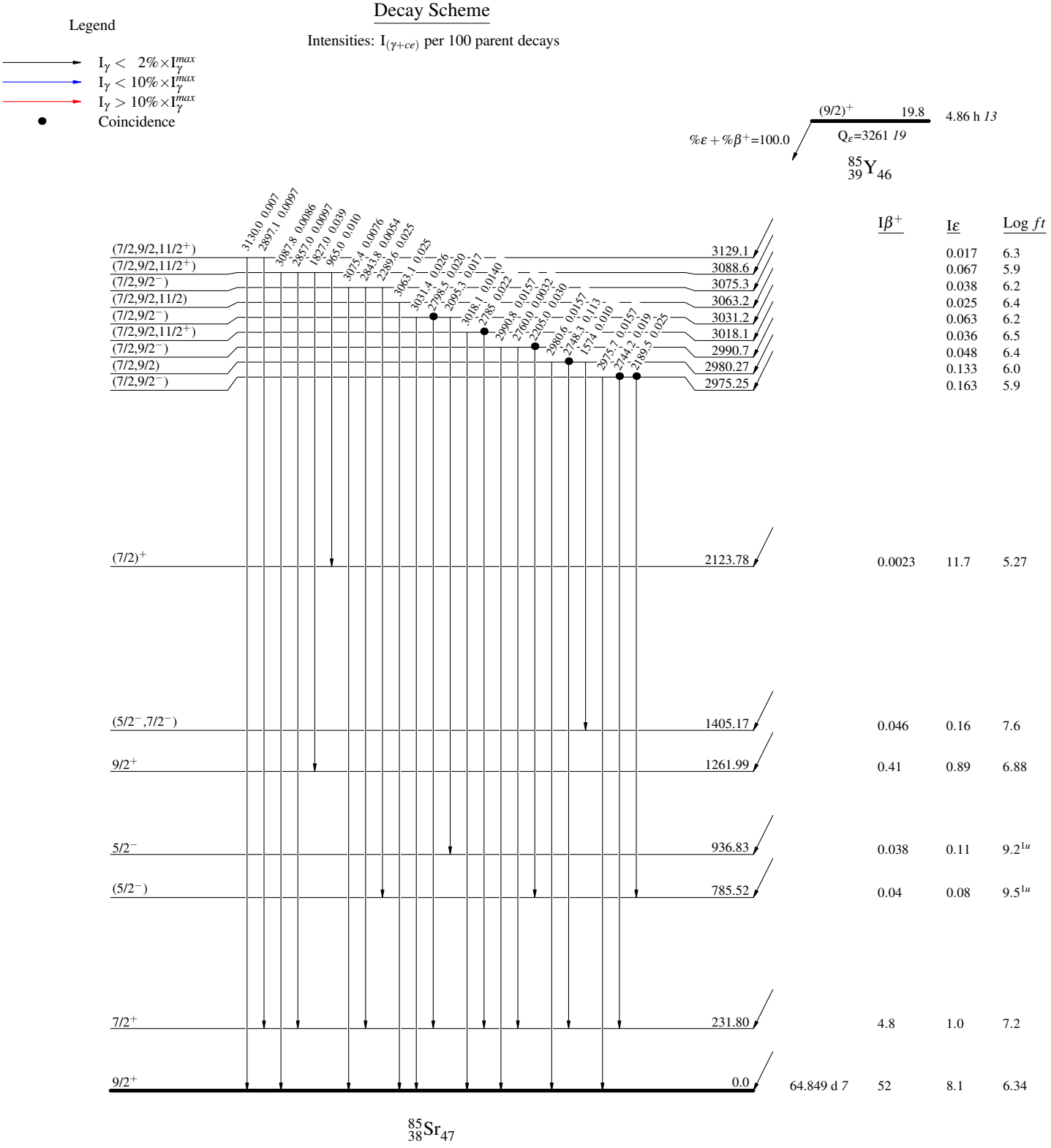
[†] Doubly placed. Intensity from branching observed in (p,n) at 3.8 MeV (1979Ba13).
[‡] From $\gamma\gamma$ coincidences.
[#] From Adopted Gammas.
[@] From level difference.
[&] From an intensity balance at the 238 level and Ti(7γ)/Iγ(238γ)=255 *49* from Adopted Gammas.
[a] From an intensity balance at the 743 level.
[b] 1976Li02 assumed a 1110 transition deexciting the 2810 level, but Eγ disagrees with level-energy difference.
[c] This transition was tentatively assigned deexciting the 1355 level by 1976Li02, but this is in contradiction with Adopted J$^\pi$.
[d] Deduced from Adopted branching and Iγ of the 1589 transition.
[e] From Iγ=12.3 *6* for the 1356γ and Iγ deduced for the placement from the 1589 level.
[f] For absolute intensity per 100 decays, multiply by 0.054 *4*.
[g] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
[h] Multiply placed with intensity suitably divided.
[i] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

$^{85}_{38}Sr_{47}$-7

^{85}Y ε decay (4.86 h) 1976Li02

Decay Scheme

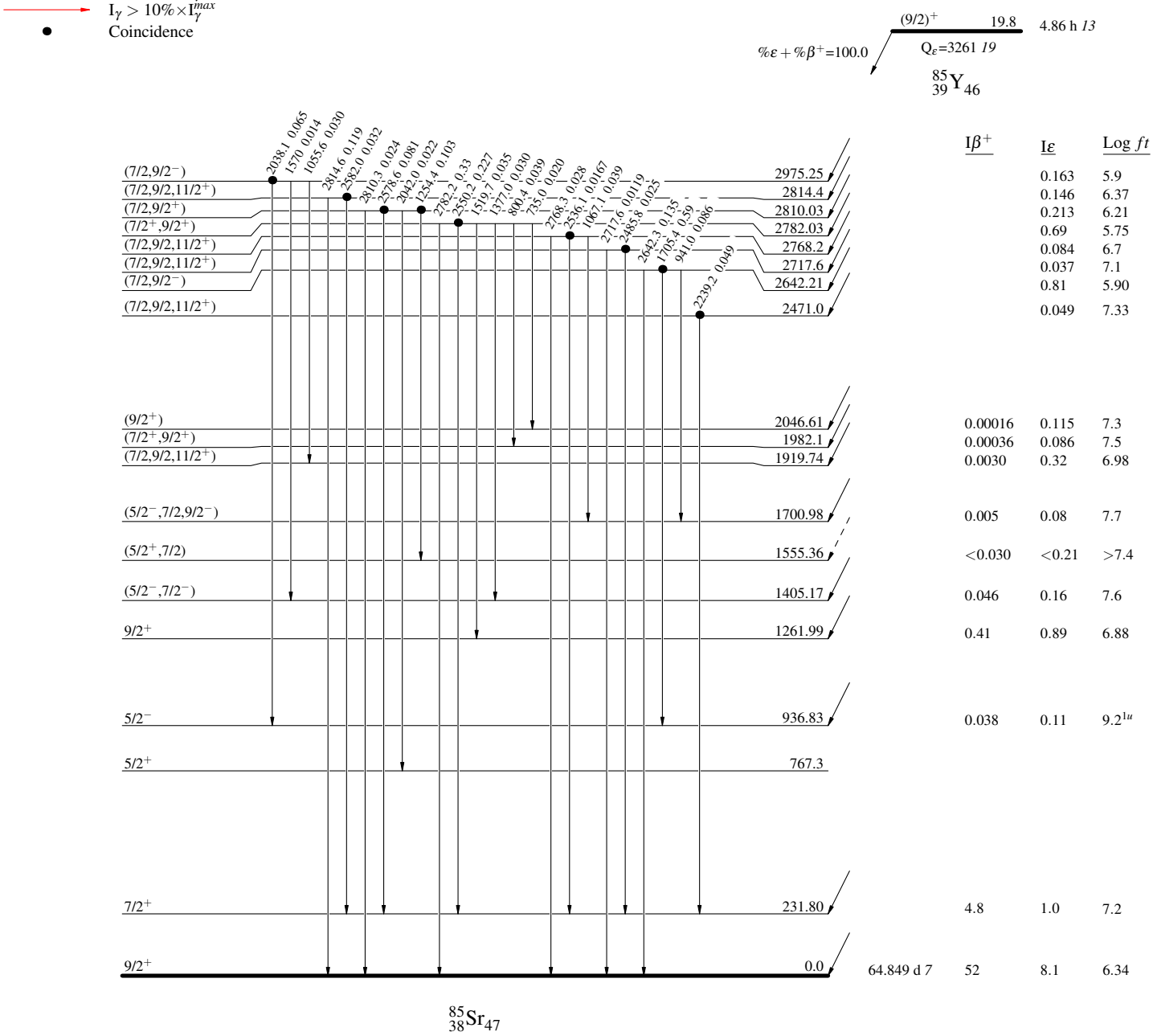
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays



^{85}Y ε decay (4.86 h) 1976Li02

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

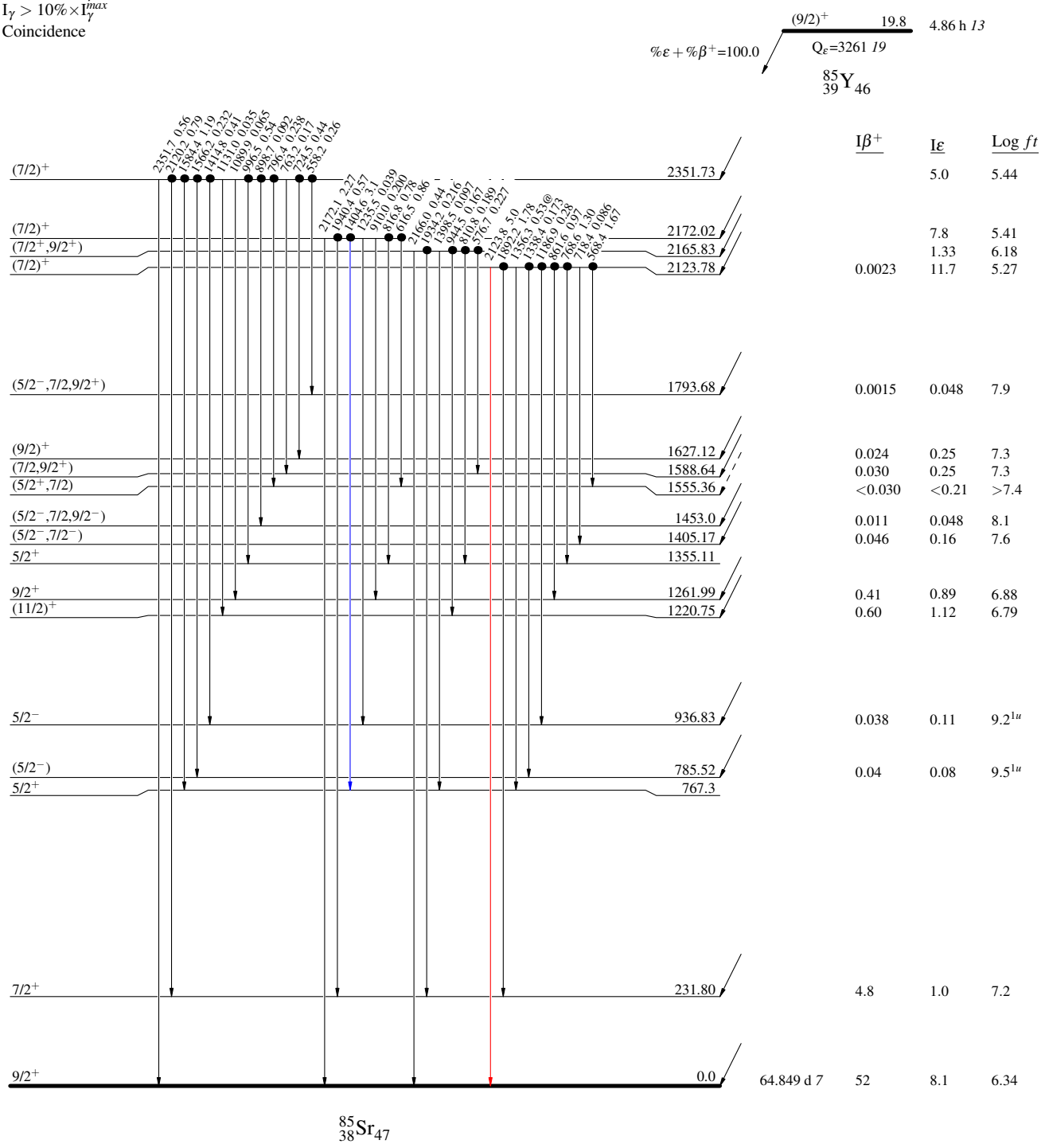


^{85}Y ε decay (4.86 h) 1976Li02

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
@ 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

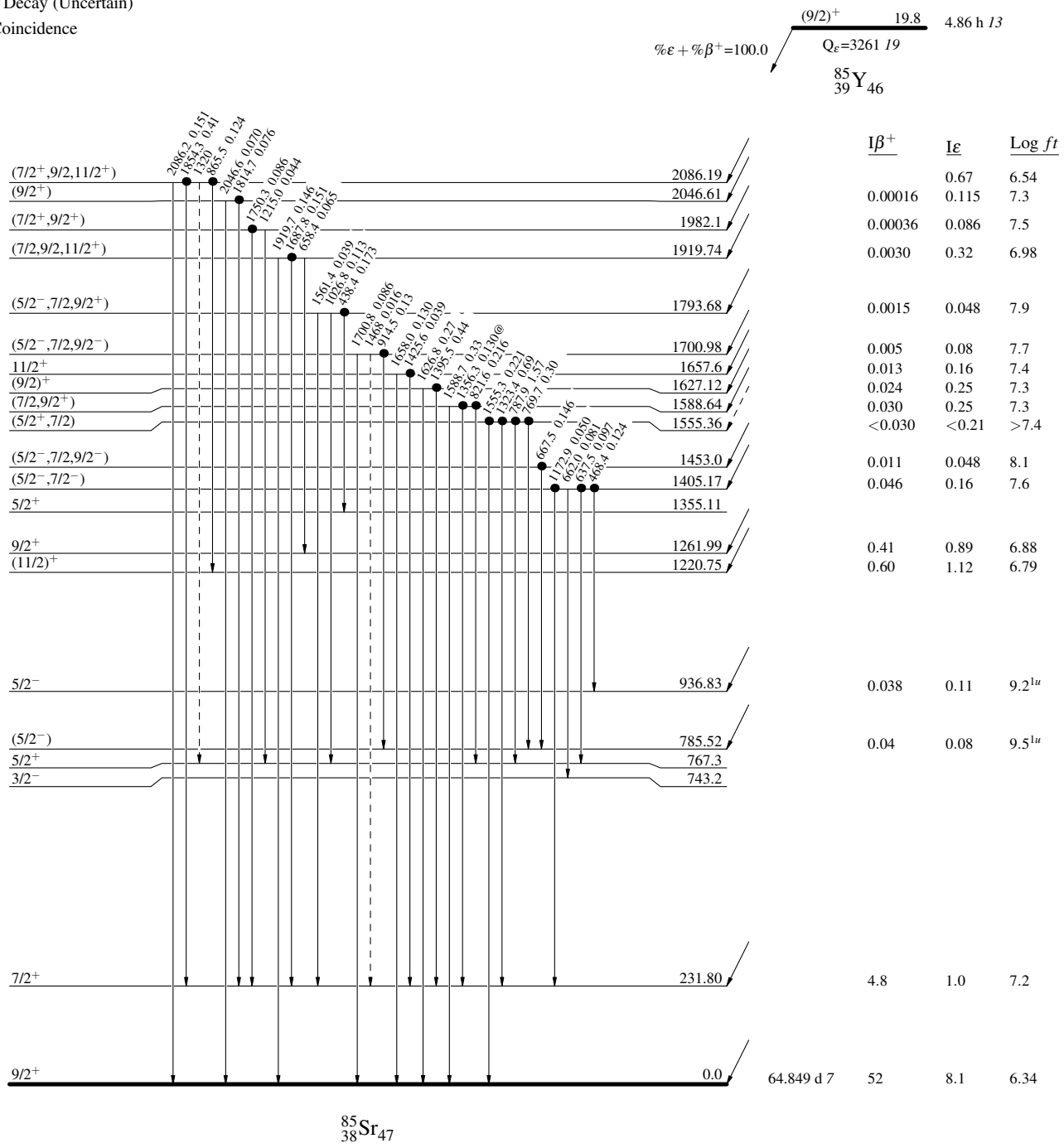


^{85}Y ε decay (4.86 h) 1976Li02

Decay Scheme (continued)

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

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



^{85}Y ε decay (4.86 h) 1976Li02

Decay Scheme (continued)

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