^{141}Xe β^- decay 1988Fa06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

Parent: ^{141}Xe: E=0.0; J$^\pi$=5/2$^{(-)}$; T$_{1/2}$=1.73 s *1*; Q(β^-)=6280 *10*; %β^- decay=100

^{141}Xe-Q(β^-): From 2021Wa16.

Measured: γ, $\gamma\gamma$ (1988Fa06,1979Bo26,1977TaZZ,1976Ot03,1975Mo03), ce (1976Ot03), γ(t) (1975Mo03), β^-, $\beta\gamma$ (1973Ad04,1978Wo15).

Level schemes of 1976Ot03 and 1977TaZZ were re-examined and drastically amended by 1988Fa06 (levels above 1560 from 1976Ot03 were not confirmed and β feeding ^{141}Xe(g.s.) to ^{141}Cs(g.s.) reduced). Level scheme is that of 1988Fa06 and is still incomplete. The evaluator recommends remeasuring ^{141}Xe and ^{141}Cs β^- decay schemes.

^{141}Cs Levels

E(level)†	J$^\pi$‡	T$_{1/2}$	Comments
0.0	7/2$^+$	24.84 s *16*	T$_{1/2}$: from Adopted Levels, Gammas dataset.
69.05 *3*	(3/2)$^+$	23.3# ns *7*	
105.937 *5*	5/2$^+$	8.7# ns *2*	
116.82 *7*			
187.76 *2*	+	<1.9# ns	
206.65		<2.1# ns	
369.5 *1*	11/2$^+$		
389.0 *13*	9/2$^+$		
468.0	+		
492.8			
557.1	+		
644.2	+		
668.7			
801.0			
843.1			
975.2			
979.8 *19*			
1097.12	7/2$^{(-)}$,5/2$^{(-)}$		
1121.0 *24*			
1134.3			
1195.5			
1338.7			
1556.6	5/2$^{(-)}$,7/2$^{(-)}$		

† Values of 1988Fa06 are listed (the least-squares fit to Eγ values gives normalized χ^2=4.2 > critical χ^2=1.4 which indicates that numerous E$_\gamma$ values are inadequate).

‡ Adopted values.

From γ(t) (1975Mo03).

β^- radiations

Measured av Eβ=1960 *110* (1980Al15,1982Al01).

E(decay)	E(level)	Iβ^-†@	Log *ft*	Comments
(4723 *10*)	1556.6	12	5.4	av Eβ=2041.8 *52*
(4941 *10*)	1338.7	0.9	6.6	av Eβ=2144.2 *52*
(5085 *10*)	1195.5	1.3	6.5	av Eβ=2211.5 *52*

Continued on next page (footnotes at end of table)

^{141}Xe β^- decay 1988Fa06 (continued)

β^- radiations (continued)

E(decay)	E(level)	Iβ^- [†@]	Log *ft*	Comments
(5146 *10*)	1134.3	2.5	6.3	av Eβ=2240.3 *52*
(5159 *10*)	1121.0	2.5	6.3	av Eβ=2246.5 *53*
(5183 *10*)	1097.12	24	5.3	av Eβ=2257.8 *52*
(5300 *10*)	979.8	4.4	6.1	av Eβ=2312.9 *53*
(5305 *10*)	975.2	0.3	7.2	av Eβ=2315.1 *52*
(5437 *10*)	843.1	0.6	7.0	av Eβ=2377.2 *52*
(5479 *10*)	801.0	1.1	6.7	av Eβ=2397.0 *52*
(5611 *10*)	668.7	0.7	7.0	av Eβ=2459.2 *52*
(5636 *10*)	644.2	1.9	6.6	av Eβ=2470.7 *52*
(5723 *10*)	557.1	0.1	7.9	av Eβ=2511.7 *52*
(5787 *10*)	492.8	0.7	7.0	av Eβ=2541.9 *52*
(5812 *10*)	468.0	2.4	6.5	av Eβ=2553.6 *52*
(5891 *10*)	389.0	0.7	7.1	av Eβ=2590.7 *52*
(5911 *10*)	369.5	1.6	6.7	av Eβ=2599.9 *52*
(6073 *10*)	206.65	2.8	6.5	av Eβ=2676.5 *52*
(6092 *10*)	187.76	5.9	6.2	av Eβ=2685.3 *52*
(6163 *10*)	116.82	0.3	7.5	av Eβ=2718.7 *52*
(6211 *10*)	69.05	8.2	6.1	av Eβ=2741.1 *52*
(6280 *10*)	0.0	<20 [‡#]	>5.7	av Eβ=2773.6 *52*

† Based on imbalance of I(γ+ce) and assumption that Iβ(g.s.)≈20%. According to 1988Fa06, the unplaced gammas contribute about 30% of the observed feeding to the g.s., of which 5% are assumed to go to the g.s. and 25% to the exited levels up to 1556 keV (last observed level). Due to the unassigned feeding the given values of Iβ represent their upper limits and the log *ft* represent their lower limits. Most affected are the lower 117, 188, 207 and 370 levels whose Iγ imbalance produces negative β feeding. This was solved by 1988Fa06 by redistributing the high positive feeding of the 69 level following a series of assumptions regarding the intensities of the low-energy γ's present in this region, as well as expected β feedings. Due to this fact the original values of 1988Fa06 are listed for all levels.

‡ Based on 1988Fa06 reanalysis (superseding that of 1976Ot03) of total intensity balance of ^{141}Xe and ^{141}Cs β^- decay schemes implying g.s.-to-g.s. β^- feedings and measured γ-ray intensities including conversion electrons and unplaced γ-rays. (For a detailed discussion see intensity balance equations on page 915 of 1988Fa06 and arguments thereafter). According to 1988Fa06 about 5% of the unplaced γ feeding goes to the g.s. increasing its γ feeding from ≈80 up to rougly ≈85%, which would correspondingly decrease its β feeding from ≈20% to ≈15%. Finally because all deductions are inaccurate we adopt 20% as an upper limit.

\# Additional information 1.

@ Absolute intensity per 100 decays.

$\gamma(^{141}$Cs)

Iγ normalization: based on the imbalance of I(γ+ce) and assumption that Iβ(g.s.)≈20% (reanalysis of 1976Ot03 data by 1988Fa06).
Eγ and Iγ values are from 1988Fa06 and 1977TaZZ, except Eγ=118.705 *4*, 105.937 *5*, 100.721 *2*, 81.826 *2* which are from 1976Ot03. See 1976Ot03 for many other γ′s not observed by 1977TaZZ and 1988Fa06.
α(K)exp: determined by simultaneous measurement of Iγ and Ice(K) normalized to α(K)exp for standard γ transitions (1976Ot03).
Unplaced γ′s are from 1977TaZZ.

E_γ	I_γ#	E_i(level)	J^π_i	E_f	J^π_f	Mult.	δ‡	α†	Comments
37 *1*		105.937	5/2+	69.05	(3/2)+	[M1]			
47.78 *5*	0.7 *2*	116.82		69.05	(3/2)+				
69.05 *3*	20 *1*	69.05	(3/2)+	0.0	7/2+	(E2)		7.07	α(K)=3.53 *5*; α(L)=2.79 *4*; α(M)=0.608 *9* α(N)=0.1227 *18*; α(O)=0.01406 *20*; α(P)=9.26×10^{-5} *13* E_γ: Eγ=68.994 is reported by 1979Bo26; however, 1988Fa06, on the basis of cascade and crossover sums, conclude that this transition is misassigned. Mult.: from balance of I(69γ) and I(119γ) in γγ and fact that 119γ is M1+(E2) (1988Fa06).
81.826 *2*	14 *1*	187.76	+	105.937	5/2+	[M1]		1.599	α(K)=1.369 *20*; α(L)=0.183 *3*; α(M)=0.0375 *6* α(N)=0.00792 *11*; α(O)=0.001100 *16*; α(P)=5.39×10^{-5} *8*
89.10 *6*	0.8 *1*	557.1	+	468.0	+				
89.80 *4*	2.0 *2*	206.65		116.82					
100.721 *2*	11.3 *8*	206.65		105.937	5/2+				
105.942 *6*	41 *3*	105.937	5/2+	0.0	7/2+	M1+E2	5.9 *16*	1.50 *3*	α(K)=1.002 *17*; α(L)=0.394 *10*; α(M)=0.0850 *20* α(N)=0.0173 *4*; α(O)=0.00204 *5*; α(P)=2.83×10^{-5} *4* Mult.,δ: from Adopted Levels, Gammas dataset.
118.705 *4*	67 *5*	187.76	+	69.05	(3/2)+				Mult.: α(K)exp=0.20 *8* from which 1976Ot03 adopted M1,E2 while E1(+M2) is a better match (not adopted because it would contradict parity conservation).
122.5 *8*	0.2 *1*	492.8		369.5	11/2+				
137.63 *4*	3.4 *2*	206.65		69.05	(3/2)+				
167.6 *4*	0.19 *6*	557.1	+	389.0	9/2+				
187.69 *4*	11.8 *8*	187.76	+	0.0	7/2+	E2,(M1)		0.18 *3*	α(K)=0.147 *14*; α(L)=0.0271 *96*; α(M)=0.0057 *21* α(N)=0.00118 *42*; α(O)=1.52×10^{-4} *47*; α(P)=5.14×10^{-6} *12* Mult.: α(K)exp=0.16 *6*, may be M1+E2 or E2.
254.1@ *6*	<0.47@	1097.12	7/2(−),5/2(−)	843.1					
255.24@ *5*	3.4@ *3*	644.2	+	389.0	9/2+				
261.3 *5*	0.15 *7*	468.0	+	206.65					
280.26 *7*	0.3 *1*	468.0	+	187.76	+				
283.05 *4*	2.2 *2*	389.0	9/2+	105.937	5/2+				
286.0@ *1*	≤0.99@	492.8		206.65					

From ENSDF

$^{141}_{55}Cs_{86}$-3

γ(^{141}Cs) (continued)

E_γ	I_γ[#]	E_i(level)	J^π_i	E_f	J^π_f	Mult.	α[†]	Comments
286.0[@] 1	<0.99[@]	843.1		557.1	$^{+}$			
304.9 3	0.7 1	492.8		187.76	$^{+}$			
320.2[@] 5	<0.25[@]	389.0	9/2^{+}	69.05	(3/2)$^{+}$			
320.2[@] 5	<0.25[@]	1121.0		801.0				
333.0 3	0.5 1	801.0		468.0	$^{+}$			
335.4 7	0.2 1	979.8		644.2	$^{+}$			
361.96 5	4.8 4	468.0	$^{+}$	105.937	5/2^{+}	M1,E2	0.0258 17	α(K)=0.0218 18; α(L)=0.00316 13; α(M)=0.00065 4 α(N)=0.000136 6; α(O)=1.85×10^{-5} 4; α(P)=8.1×10^{-7} 11 Mult.: α(K)exp=0.024 15, may be M1+E2.
369.5 1	<0.4	369.5	11/2^{+}	0.0	7/2^{+}			Mult.: α(K)exp≤0.023, may be M1+E2 or E1.
369.5 1	8.0 4	557.1	$^{+}$	187.76	$^{+}$			Mult.: α(K)exp≤0.023, may be M1+E2 or E1.
387.00 6	2.5 2	492.8		105.937	5/2^{+}			
389.11 4	6.7 7	389.0	9/2^{+}	0.0	7/2^{+}	M1,E2	0.0211 17	α(K)=0.0179 18; α(L)=0.00255 5; α(M)=0.000524 13 α(N)=0.0001101 21; α(O)=1.50×10^{-5} 3; α(P)=6.6×10^{-7} 10 Mult.: α(K)exp=0.02 1.
398.9 2	1.4 1	468.0	$^{+}$	69.05	(3/2)$^{+}$			
^{x}407.22 41	0.295 86							
412.5 7	0.2 1	801.0		389.0	9/2^{+}			
422.4[@] 2	1.7[@] 5	979.8		557.1	$^{+}$			
422.4[@] 2	1.7[@] 5	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	1134.3				
423.89 5	8.6 7	492.8		69.05	(3/2)$^{+}$			
435.6 3	0.7 1	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	1121.0				
437.7 4	0.4 1	644.2	$^{+}$	206.65				
^{x}444.40 46	0.27 12							
451.5 4	1.2 3	557.1	$^{+}$	105.937	5/2^{+}			
453.2 2	2.3 4	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	644.2	$^{+}$			
456.8 3	2.0 2	644.2	$^{+}$	187.76	$^{+}$			
459.30 4	23 2	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	M1,E2	0.0135 16	α(K)=0.0115 15; α(L)=0.00158 7; α(M)=0.000325 12 α(N)=6.8×10^{-5} 3; α(O)=9.4×10^{-6} 6; α(P)=4.3×10^{-7} 7 Mult.: α(K)exp=0.013 6.
462.10 4	1.6 2	668.7		206.65				
467.81 4	12 1	468.0	$^{+}$	0.0	7/2^{+}	M1,E2	0.0128 15	α(K)=0.0109 14; α(L)=0.00150 8; α(M)=0.000309 13 α(N)=6.5×10^{-5} 3; α(O)=8.9×10^{-6} 7; α(P)=4.1×10^{-7} 7 Mult.: α(K)exp=0.015 6.
473.1 4	0.7 2	843.1		369.5	11/2^{+}			
476.6 5	0.5 2	1121.0		644.2	$^{+}$			
480 1	0.5 4	668.7		187.76	$^{+}$			
482.2 2	0.9 2	975.2		492.8				
492.85 6	2.8 3	492.8		0.0	7/2^{+}			
^{x}498.43 78	0.19 12							

γ(^{141}Cs) (continued)

E_γ	I_γ[#]	E_i(level)	J^π_i	E_f	J^π_f	Mult.	α[†]	Comments
507.6 *4*	0.5 *2*	975.2		468.0	+			
511.9 *4*	2.1 *4*	979.8		468.0	+			
^{x}518.09 *72*	0.21 *12*							
538.4 *1*	5.3 *4*	644.2	+	105.937	5/2$^+$	M1,E2	0.0089 *12*	α(K)=0.0076 *11*; α(L)=0.00102 *9*; α(M)=0.000210 *16* α(N)=4.4×10^{-5} *4*; α(O)=6.1×10^{-6} *6*; α(P)=2.9×10^{-7} *5* Mult.: α(K)exp(538γ+540γ)=0.011 *3*.
540.12 *4*	22 *2*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	557.1	+	(E1)	0.00259	α(K)=0.00225 *4*; α(L)=0.000279 *4*; α(M)=5.67×10^{-5} *8* α(N)=1.195×10^{-5} *17*; α(O)=1.657×10^{-6} *24*; α(P)=8.07×10^{-8} *12* Mult.: α(K)exp(540γ+538γ)=0.011 *3*.
^{x}544.87 *53*	0.36 *15*							
551.7 *1*	2.0 *2*	1195.5		644.2	+			
556.8 *1*	14 *1*	557.1	+	0.0	7/2$^+$	M1,E2	0.0082 *12*	α(K)=0.0070 *11*; α(L)=0.00094 *9*; α(M)=0.000192 *16* α(N)=4.0×10^{-5} *4*; α(O)=5.6×10^{-6} *6*; α(P)=2.6×10^{-7} *5* Mult.: α(K)exp=0.008 *3*.
^{x}560.81 *38*	0.52 *13*							
576.4 *2*	1.6 *2*	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	979.8				
^{x}580.58 *61*	0.27 *13*							
594.2 *1*	2.1 *2*	801.0		206.65				
599.7 *3*	0.7 *2*	668.7		69.05	(3/2)$^+$			
604.3 *2*	2.3 *2*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	492.8				
613.06 *4*	5.0 *10*	801.0		187.76	+			
^{x}624.85 *88*	0.18 *12*							
628.8 *3*	2.5 *3*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	468.0	+			
^{x}630.83 *37*	1.90 *31*							
641.19 *7*	6 *1*	1134.3		492.8				
644.2 *2*	2.5 *2*	644.2	+	0.0	7/2$^+$			
669.3 *4*	0.5 *2*	668.7		0.0	7/2$^+$			
^{x}677.61 *22*	1.13 *17*							
^{x}681.63 *82*	0.26 *15*							
^{x}704.87 *94*	0.39 *16*							
708.6 *7*	0.4 *2*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	389.0	9/2$^+$			
^{x}713.58 *31*	0.56 *17*							
^{x}729.07 *53*	0.54 *18*							
731.92 *8*	2.3 *3*	801.0		69.05	(3/2)$^+$			
^{x}740.11 *79*	0.27 *16*							
744.9 *3*	0.8 *2*	1134.3		389.0	9/2$^+$			
755.32 *6*	5.6 *5*	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	801.0				
772.9 *5*	9.4 *6*	979.8		206.65				
^{x}777.73 *18*	1.38 *16*							
^{x}783.14 *57*	0.31 *13*							
791.9 *1*	1.5 *2*	979.8		187.76	+			

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γ(^{141}Cs) (continued)

E_γ	I_γ[#]	E_i(level)	J^π_i	E_f	J^π_f
801.0 *3*	0.8 *2*	801.0		0.0	7/2$^+$
^{x}804.65 *36*	1.06 *23*				
807.0 *4*	0.8 *2*	1195.5		389.0	9/2$^+$
^{x}819.36 *93*	0.19 *11*				
^{x}823.51 *15*	1.25 *13*				
^{x}828.38 *49*	0.44 *14*				
^{x}830.70 *79*	0.27 *14*				
842.7 *2*	1.5 *2*	843.1		0.0	7/2$^+$
^{x}845.46 *39*	0.70 *13*				
^{x}848.13 *25*	1.03 *13*				
^{x}851.20 *29*	0.70 *12*				
^{x}854.45 *20*	1.23 *19*				
^{x}857.44 *50*	0.39 *18*				
^{x}867.26 *90*	0.27 *16*				
^{x}870.00 *27*	1.07 *18*				
873.8 *4*	0.4 *1*	979.8		105.937	5/2$^+$
^{x}881.49 *88*	0.17 *10*				
^{x}894.65 *15*	3.26 *35*				
^{x}897.05 *30*	1.34 *29*				
^{x}903.4 *19*	0.91 *40*				
909.23 *5*	100 *7*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	187.76	$^+$
913.4 *5*	2.4 *9*	1121.0		206.65	
^{x}919.41 *62*	0.26 *15*				
^{x}925.74 *39*	0.43 *12*				
933 *1*	0.4 *4*	1121.0		187.76	$^+$
^{x}934.5 *10*	0.42 *35*				
^{x}942.95 *42*	0.57 *14*				
946.1 *6*	0.5 *1*	1134.3		187.76	$^+$
^{x}949.59 *19*	1.29 *16*				
^{x}974.02 *32*	0.51 *12*				
979.7 *3*	6.6 *7*	979.8		0.0	7/2$^+$
^{x}985.93 *23*	1.28 *17*				
988.9 *5*	0.8 *2*	1195.5		206.65	
999.8 *6*	0.6 *2*	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	557.1	$^+$
1007.6 *1*	1.9 *3*	1195.5		187.76	$^+$
1015.0 *1*	1.3 *1*	1121.0		105.937	5/2$^+$
^{x}1025.96 *76*	0.42 *21*				
1028.25 *7*	5.1 *4*	1134.3		105.937	5/2$^+$
^{x}1037.08 *59*	0.33 *10*				
1051.96 *9*	4.6 *4*	1121.0		69.05	(3/2)$^+$
^{x}1056.76 *72*	0.28 *12*				
1064.62 *7*	3.3 *3*	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	492.8	
^{x}1075.18 *46*	0.310 *93*				
^{x}1082.20 *27*	0.56 *12*				
1089.6 *5*	0.6 *2*	1195.5		105.937	5/2$^+$
^{x}1092.08 *38*	0.78 *19*				
1097.41 *8*	3.6 *6*	1097.12	7/2$^{(-)}$,5/2$^{(-)}$	0.0	7/2$^+$
^{x}1099.06 *23*	2.37 *47*				
^{x}1104.31 *76*	0.200 *98*				
^{x}1111.88 *70*	0.32 *15*				
^{x}1116.22 *93*	0.24 *13*				
1121.1 *1*	2.8 *3*	1121.0		0.0	7/2$^+$
1132.0 *6*	0.5 *2*	1338.7		206.65	
1134.8 *4*	0.9 *2*	1134.3		0.0	7/2$^+$
^{x}1140.59 *26*	0.44 *13*				
1150.6 *3*	0.9 *2*	1338.7		187.76	$^+$
^{x}1159.05 *51*	0.35 *13*				
1168 *1*	0.2 *1*	1556.6	5/2$^{(-)}$,7/2$^{(-)}$	389.0	9/2$^+$
^{x}1178.90 *86*	0.44 *12*				
^{x}1190.8 *14*	0.17 *12*				
^{x}1207.92 *36*	0.58 *13*				
^{x}1213.03 *56*	0.64 *24*				
^{x}1215.97 *52*	1.90 *51*				
^{x}1218.05 *45*	1.58 *59*				
^{x}1231.10 *92*	0.66 *23*				
1232.9 *1*	2.3 *3*	1338.7		105.937	5/2$^+$
^{x}1238.40 *56*	0.44 *12*				
^{x}1241.7 *12*	0.21 *12*				
^{x}1246.48 *16*	1.29 *15*				
^{x}1252.37 *39*	0.43 *11*				
^{x}1260.94 *29*	0.55 *12*				
1270.4 *5*	0.3 *1*	1338.7		69.05	(3/2)$^+$
^{x}1283.10 *68*	0.76 *13*				
^{x}1292.55 *93*	0.176 *93*				
^{x}1304.79 *66*	0.25 *10*				
^{x}1310.92 *33*	0.68 *12*				
^{x}1314.68 *74*	0.38 *12*				
^{x}1318.28 *47*	0.49 *12*				
^{x}1328.80 *49*	0.35 *10*				
^{x}1344.82 *38*	0.64 *15*				
^{x}1351.35 *22*	1.05 *16*				
^{x}1362.89 *84*	0.44 *14*				

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$\gamma(^{141}Cs)$ (continued)

E_γ	I_γ#	E_i(level)	J_i^π	E_f	J_f^π	E_γ	I_γ#	E_i(level)
1368.8 *1*	5.3 *6*	1556.6	$5/2^{(-)},7/2^{(-)}$	187.76	+	^{x}1829.53 *42*	0.52 *11*	
^{x}1372.54 *50*	0.55 *17*					^{x}1855.71 *49*	0.39 *10*	
^{x}1383.83 *40*	0.76 *16*					^{x}1860.30 *25*	0.88 *12*	
^{x}1392.98 *53*	0.54 *16*					^{x}1870.95 *53*	0.34 *10*	
^{x}1396.4 *16*	0.17 *15*					^{x}1882.43 *35*	0.67 *12*	
^{x}1404.47 *20*	1.13 *16*					^{x}1886.51 *75*	0.26 *10*	
^{x}1420.52 *56*	0.268 *88*					^{x}1892.17 *83*	0.38 *10*	
^{x}1428.33 *49*	0.39 *11*					^{x}1902.01 *46*	0.39 *10*	
^{x}1431.90 *68*	0.25 *11*					^{x}1918.20 *33*	0.95 *16*	
^{x}1440.24 *84*	0.34 *16*					^{x}1922.46 *45*	0.67 *14*	
^{x}1442.9 *13*	0.21 *16*					^{x}1935.35 *63*	0.61 *14*	
^{x}1448.84 *47*	0.310 *92*					^{x}1951.3 *12*	0.19 *12*	
^{x}1469.20 *64*	0.33 *12*					^{x}1964.7 *12*	0.19 *11*	
^{x}1480.67 *81*	0.26 *12*					^{x}1993.4 *13*	0.17 *11*	
^{x}1489.62 *20*	1.26 *16*					^{x}1998.82 *63*	0.37 *12*	
^{x}1498.52 *63*	0.50 *13*					^{x}2009.3 *13*	0.16 *11*	
^{x}1502.83 *17*	1.72 *19*					^{x}2019.92 *20*	1.30 *16*	
^{x}1511.12 *88*	0.25 *12*					^{x}2039.3 *13*	0.33 *14*	
^{x}1537.9 *14*	0.17 *13*					^{x}2042.60 *53*	0.75 *15*	
^{x}1545.97 *91*	0.20 *17*					^{x}2047.0 *14*	0.21 *12*	
^{x}1550.95 *80*	0.39 *16*					^{x}2057.16 *76*	0.49 *12*	
1556.66 *8*	12 *1*	1556.6	$5/2^{(-)},7/2^{(-)}$	0.0	$7/2^+$	^{x}2101.2 *13*	0.16 *11*	
^{x}1575.34 *42*	0.350 *93*					^{x}2109.1 *12*	0.21 *12*	
^{x}1580.19 *27*	0.63 *10*					^{x}2119.95 *99*	0.23 *11*	
^{x}1585.90 *97*	0.165 *85*					^{x}2125.07 *89*	0.24 *11*	
^{x}1601.62 *29*	0.74 *12*					^{x}2131.9 *12*	0.18 *10*	
^{x}1621.36 *94*	0.22 *11*					^{x}2211.53 *35*	0.66 *12*	
^{x}1630.49 *57*	0.35 *12*					^{x}2235.55 *62*	0.36 *11*	
^{x}1637.08 *53*	0.40 *13*					^{x}2244.5 *12*	0.17 *10*	
^{x}1643.9 *12*	0.17 *12*					^{x}2282.79 *43*	0.59 *12*	
^{x}1653.9 *11*	0.20 *12*					^{x}2303.41 *20*	1.87 *20*	
^{x}1658.58 *39*	0.60 *12*					^{x}2312.11 *85*	0.27 *11*	
^{x}1687.88 *35*	0.87 *15*					^{x}2334.26 *70*	0.280 *91*	
^{x}1733.48 *86*	0.41 *18*					^{x}2371.76 *69*	0.253 *81*	
^{x}1736.4 *12*	0.29 *18*					^{x}2386.82 *76*	0.186 *88*	
^{x}1749.31 *40*	0.52 *12*					^{x}2394.79 *55*	0.427 *94*	
^{x}1755.73 *12*	2.40 *23*					^{x}2412.03 *48*	0.378 *87*	
^{x}1770.45 *16*	1.89 *21*					^{x}2431.73 *35*	0.555 *93*	
^{x}1784.02 *91*	0.27 *14*					^{x}2447.58 *43*	0.423 *89*	
^{x}1789.8 *12*	0.17 *14*					^{x}2474.16 *90*	0.221 *87*	
^{x}1800.05 *18*	1.48 *18*					^{x}2497.0 *13*	0.149 *86*	

γ(^{141}Cs) (continued)

E_γ	I_γ#	E_i(level)	E_γ	I_γ#	E_i(level)	E_γ	I_γ#	E_i(level)
x2519.0 *12*	0.165 *88*		x2703.35 *91*	0.183 *71*		x2873.5 *13*	0.155 *85*	
x2537.98 *60*	0.303 *85*		x2710.88 *61*	0.283 *73*		x2878.03 *83*	0.260 *79*	
x2547.93 *15*	1.75 *18*		x2726.94 *61*	0.333 *82*		x2908.3 *10*	0.160 *71*	
x2561.67 *84*	0.191 *91*		x2732.2 *16*	0.20 *12*		x2948.25 *55*	0.411 *74*	
x2567.38 *97*	0.170 *84*		x2735.92 *37*	0.86 *14*		x3107.8 *12*	0.110 *52*	
x2578.06 *52*	0.353 *88*		x2762.42 *62*	0.207 *60*		x3230.9 *12*	0.098 *47*	
x2600.18 *40*	0.56 *10*		x2790.75 *61*	0.263 *68*		x3364.13 *98*	0.106 *39*	
x2630.06 *41*	0.514 *95*		x2799.56 *96*	0.162 *66*		x3383.8 *10*	0.097 *40*	
x2635.93 *80*	0.247 *83*		x2817.9 *10*	0.177 *68*		x3415.4 *14*	0.080 *40*	
x2655.66 *98*	0.181 *82*		x2828.22 *68*	0.215 *62*				
x2682.93 *79*	0.159 *78*		x2840.59 *33*	0.459 *76*				

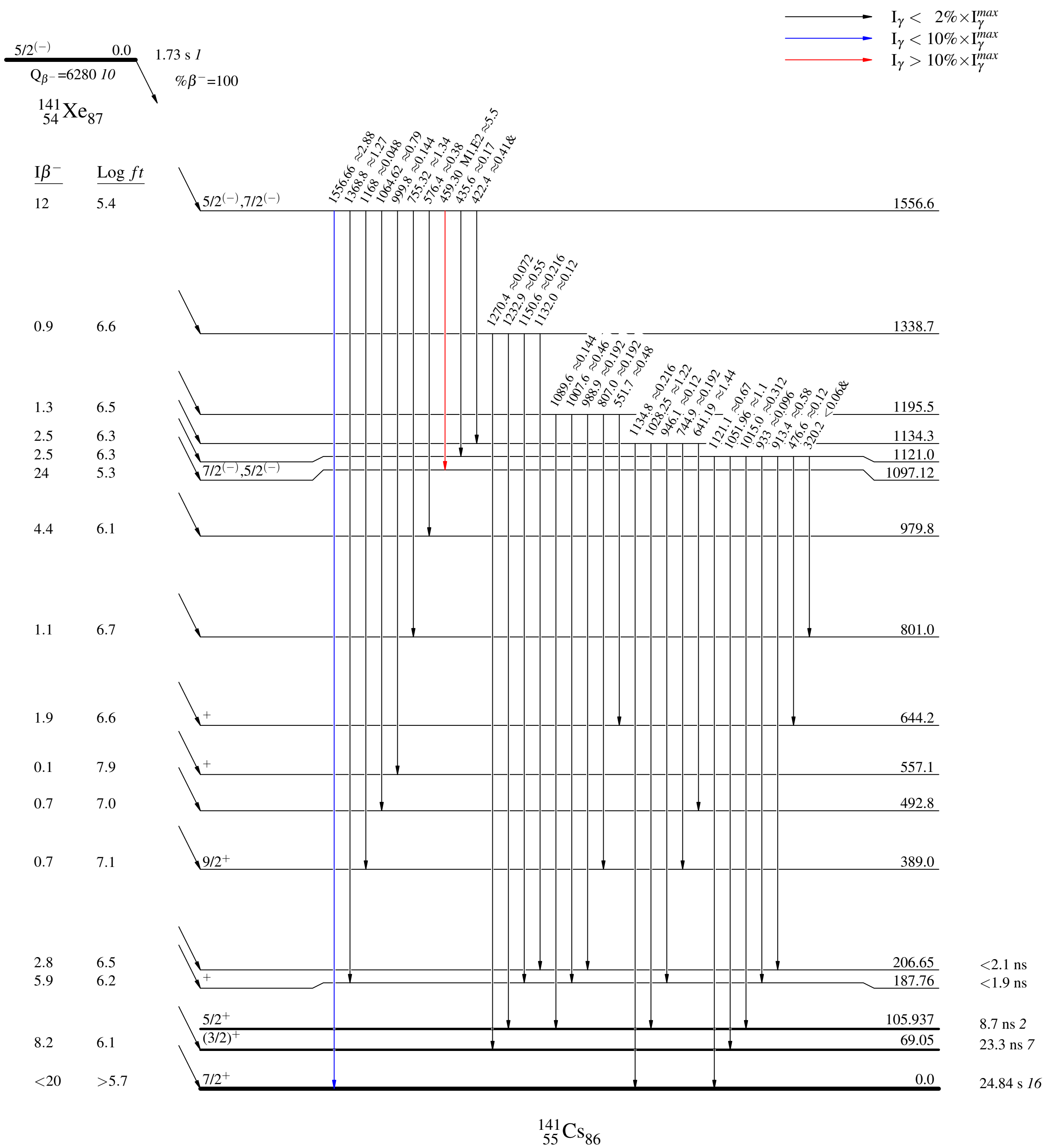
† Additional information 2.
‡ Additional information 3.
# For absolute intensity per 100 decays, multiply by ≈0.24.
@ Multiply placed with undivided intensity.
x γ ray not placed in level scheme.

$^{141}_{55}$Cs$_{86}$-8

^{141}Xe β^- decay 1988Fa06

Decay Scheme

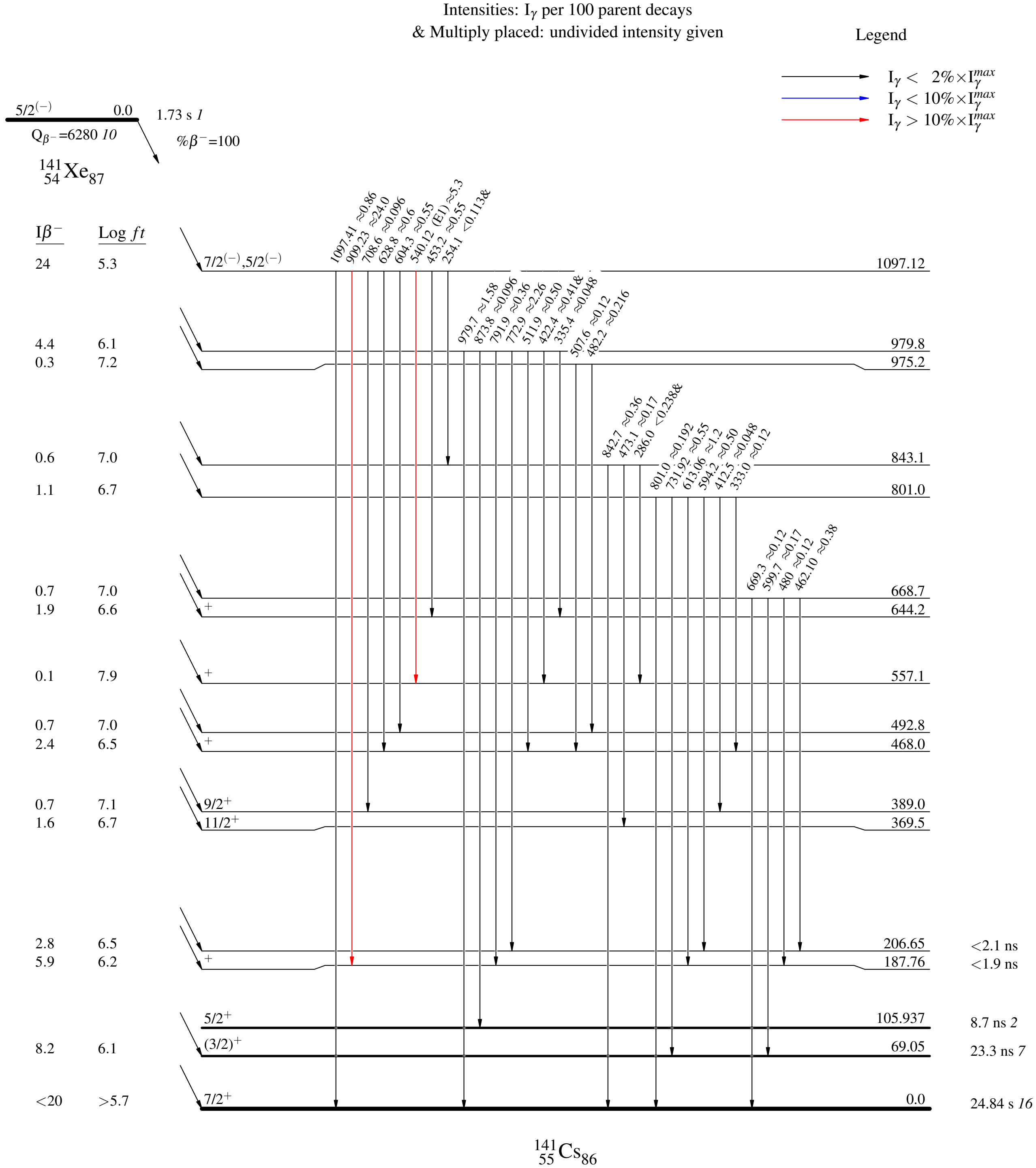
Intensities: I_γ per 100 parent decays
& Multiply placed: undivided intensity given



^{141}Xe β^- decay 1988Fa06

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays
& Multiply placed: undivided intensity given



$^{141}Xe\ \beta^-$ decay 1988Fa06

Decay Scheme (continued)

Intensities: I_γ per 100 parent decays
& Multiply placed: undivided intensity given