^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 125, 201 (2015)	31-Dec-2014

Parent: ^{83}As: E=0.0; J^π=(5/2$^-$); $T_{1/2}$=13.4 s *4*; Q(β^-)=5671 *4*; %β^- decay=100.0

1975Kr08: ^{83}As activity from thermal neutron induced fission of ^{235}U and ^{233}U followed by chemical separation. Measured Eγ, Iγ, $\gamma\gamma$ using two Ge(Li) detectors.

1982Me01,1984LiZW: ^{83}As activity from fission products followed by chemical separation. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma$(t) using Ge(Li) detectors. 1984LiZW is a thesis describing in more detail the results presented in 1982Me01.

Others: 1989WaZV, 1974KrZG, 1968De19.

The decay scheme is incomplete and/or there are problems with the decay scheme normalization (see comment on Iγ normalization. For this reason, β-feedings and log *ft* values are not derived for this dataset.

Iγ normalization: Additional information 2.

Additional information 1.

α: Additional information 3.

^{83}Se Levels

E(level)†	J^π‡	$T_{1/2}$‡	Comments
0.0	9/2$^+$	22.3 min *2*	
228.72 *7*	1/2$^-$	70.1 s *4*	
539.86 *8*	1/2$^+$		
582.16 *6*	5/2$^+$	3.6 ns *6*	$T_{1/2}$: from $\gamma\gamma$(t) in 1984LiZW. Other: ≈3 ns estimated from $\gamma\gamma$(t) in 1982Me01.
963.26 *5*	3/2$^+$		
1062.89 *7*	(1/2$^+$,3/2,5/2$^-$)		
1100.45 *7*	3/2$^+$		
1265.03 *10*	(5/2$^+$,7/2$^+$)		
1296.27 *9*	(11/2$^+$)		
1331.56 *5*	5/2$^+$		
1472.96 *10*	(3/2)$^+$		
1526.49 *8*	(7/2$^+$,9/2$^+$)		
1664.84 *18*	5/2$^+$		
1710.43 *7*	(1/2$^+$,3/2)		
1822.48 *6*	(5/2$^+$,7/2,9/2$^+$)		
1907.66 *21*			
1943.31 *8*	(5/2$^+$,7/2$^+$)		
2076.84 *5*	(5/2$^+$,7/2$^+$)		
2137.67 *11*	(1/2$^+$,3/2)		
2189.80 *20*	(5/2$^+$)		
2482.25 *8*	5/2$^+$		
2545.58 *21*	3/2$^+$		
2678.72 *11*			
2724.65 *7*	(5/2$^+$,7/2$^+$)		
2858.02 *6*	5/2$^+$		
2880.54 *5*			
2971.2 *3*	(3/2$^-$)		
2981.02 *6*	(5/2$^+$,7/2$^+$)		
3167.19 *7*	(1/2$^+$,3/2)		
3243.03 *7*	(5/2$^+$,7/2$^+$)		
3281.93 *8*	(1/2$^+$,3/2,5/2$^+$)		
3333.22 *8*			
3386.4 *3*			
3423.9 *6*			
3463.6 *10*	5/2$^+$		
3558.4 *10*			
3689.9 *5*			

Continued on next page (footnotes at end of table)

^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW (continued)

^{83}Se Levels (continued)

E(level)[†]	Jπ[‡]	Comments
3827.7 *8*	(1/2$^+$)	
3865.1? *20*		E(level): observed only by 1975Kr08, not included in the Adopted Levels.
3911.6 *20*		
4001.3 *11*		

[†] From a least-squares fit to Eγ, by evaluator.
[‡] From the Adopted Levels.

^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW (continued)

$\gamma(^{83}Se)$

Iγ normalization: an absolute intensity of 34.0% *34* for the 734-keV γ ray from ^{83}As β^- decay has been reported by 1989WaZV. Using this value and the decay scheme, ΣI(γ+ce) to ^{83}Se(g.s.)=30.9% *16* is deduced by the evaluator. This value compares with 36% *8* (1968De19) and 23% *9* (1974KrZG). However, this normalization results in only 74% β-feeding intensity, indicating incompleteness in the decay scheme or problems with the absolute γ-ray intensity and ΣI(γ+ce) measurements.

E_γ [†]	I_γ [†#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α	Comments
42[&] *2*	≤0.001	582.16	5/2$^+$	539.86	1/2$^+$	[E2]	20 *4*	α(K)=16 *3*; α(L)=3.9 *10*; α(M)=0.60 *15*; α(N)=0.040 *10*
135.8 *30*	0.02 *2*	1100.45	3/2$^+$	963.26	3/2$^+$			
157.2 *13*	0.09 *9*	1822.48	(5/2$^+$,7/2,9/2$^+$)	1664.84	5/2$^+$			
165.3 *12*	0.01 *1*	1265.03	(5/2$^+$,7/2$^+$)	1100.45	3/2$^+$			
192 *2*	0.07 *6*	1664.84	5/2$^+$	1472.96	(3/2)$^+$			
195[&] *1*	<0.18	1526.49	(7/2$^+$,9/2$^+$)	1331.56	5/2$^+$			
207[&] *2*	<0.06	1472.96	(3/2)$^+$	1265.03	(5/2$^+$,7/2$^+$)	[E2]	0.0561 *22*	α(K)=0.0494 *19*; α(L)=0.00575 *23*; α(M)=0.00089 *4*; α(N)=7.2×10^{-5} *3*
230.0 *2*	1.0 *1*	1526.49	(7/2$^+$,9/2$^+$)	1296.27	(11/2$^+$)			
231[&] *2*	≤0.06	1331.56	5/2$^+$	1100.45	3/2$^+$			
237.0[&]	0.01	1710.43	(1/2$^+$,3/2)	1472.96	(3/2)$^+$			E_γ,I_γ: in Figure IV.4 of 1984LiZW, but not included in Table IV.3.
268 *2*	0.02 *2*	1331.56	5/2$^+$	1062.89	(1/2$^+$,3/2,5/2$^-$)	[E1]	0.00437 *12*	α(K)=0.00390 *10*; α(L)=0.000408 *11*; α(M)=6.32×10^{-5} *17*; α(N)=5.34×10^{-6} *14*
296[&] *2*	<0.10	1822.48	(5/2$^+$,7/2,9/2$^+$)	1526.49	(7/2$^+$,9/2$^+$)			
311.5 *1*	3.07 *9*	539.86	1/2$^+$	228.72	1/2$^-$	[E1]	0.00287	α(K)=0.00256 *4*; α(L)=0.000267 *4*; α(M)=4.15×10^{-5} *6*; α(N)=3.51×10^{-6} *5* E_γ,I_γ: likely corresponds to an unplaced Eγ=310.0 *3*, Iγ=2.7 *3* transition observed in 1975Kr08.
333.2[&] *6*	<0.05	1664.84	5/2$^+$	1331.56	5/2$^+$			
350[&] *2*	<0.06	1822.48	(5/2$^+$,7/2,9/2$^+$)	1472.96	(3/2)$^+$			
367.5 *20*	0.06 *5*	1331.56	5/2$^+$	963.26	3/2$^+$			
372.6 *1*	0.44 *5*	1472.96	(3/2)$^+$	1100.45	3/2$^+$			
380.7 *8*	0.04 *3*	963.26	3/2$^+$	582.16	5/2$^+$			
397.8 *1*	0.25 *3*	2880.54		2482.25	5/2$^+$			
400[&] *2*	<0.04	1664.84	5/2$^+$	1265.03	(5/2$^+$,7/2$^+$)			
411.8[&] *11*	<0.2	2076.84	(5/2$^+$,7/2$^+$)	1664.84	5/2$^+$			
423.0[&] *20*	<0.06	963.26	3/2$^+$	539.86	1/2$^+$			
445.6 *2*	0.66 *3*	1710.43	(1/2$^+$,3/2)	1265.03	(5/2$^+$,7/2$^+$)			
480.0[&] *20*	<0.04	1062.89	(1/2$^+$,3/2,5/2$^-$)	582.16	5/2$^+$			
491.2 *1*	0.81 *4*	1822.48	(5/2$^+$,7/2,9/2$^+$)	1331.56	5/2$^+$			
518.2 *1*	3.43 *21*	1100.45	3/2$^+$	582.16	5/2$^+$			
526[&] *2*	<0.08	1822.48	(5/2$^+$,7/2,9/2$^+$)	1296.27	(11/2$^+$)			

From ENSDF

$^{83}_{34}Se_{49}$-3

^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW (continued)

$\gamma(^{83}Se)$ (continued)

E_γ †	I_γ †#	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α	Comments
549.8 *2*	0.34 *4*	2076.84	(5/2$^+$,7/2$^+$)	1526.49	(7/2$^+$,9/2$^+$)			
557& *2*	<0.02	1822.48	(5/2$^+$,7/2,9/2$^+$)	1265.03	(5/2$^+$,7/2$^+$)			
560.6 *1*	1.0 *1*	1100.45	3/2$^+$	539.86	1/2$^+$			
565& *2*	<0.02	1664.84	5/2$^+$	1100.45	3/2$^+$			
582.4 *1*	10.9 *2*	582.16	5/2$^+$	0.0	9/2$^+$	[E2]	1.74×10^{-3}	α(K)=0.001550 *22*; α(L)=0.0001658 *24*; α(M)=2.58×10^{-5} *4*; α(N)=2.17×10^{-6} *3* E_γ,I_γ: likely corresponds to an unplaced Eγ=582.0 *1*, Iγ=9.9 *4* transition observed in 1975Kr08.
603& *2*	<0.04	1664.84	5/2$^+$	1062.89	(1/2$^+$,3/2,5/2$^-$)	[E1]	5.30×10^{-4} *9*	α(K)=0.000473 *8*; α(L)=4.91×10^{-5} *8*; α(M)=7.64×10^{-6} *13*; α(N)=6.51×10^{-7} *11*
609.7 *1*	0.05 *3*	1710.43	(1/2$^+$,3/2)	1100.45	3/2$^+$			
648& *2*	<0.04	1710.43	(1/2$^+$,3/2)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
682.9 *1*	1.23 *9*	1265.03	(5/2$^+$,7/2$^+$)	582.16	5/2$^+$			
685.0 *20*	0.25 *8*	3167.19	(1/2$^+$,3/2)	2482.25	5/2$^+$			
690.8 *2*	0.27 *3*	2880.54		2189.80	(5/2$^+$)			
702.1& *16*	<0.14	1664.84	5/2$^+$	963.26	3/2$^+$			
722& *2*	<0.06	1822.48	(5/2$^+$,7/2,9/2$^+$)	1100.45	3/2$^+$			
734.9 *1*	100 *1*	963.26	3/2$^+$	228.72	1/2$^-$	[E1]	3.40×10^{-4}	α(K)=0.000304 *5*; α(L)=3.15×10^{-5} *5*; α(M)=4.89×10^{-6} *7*; α(N)=4.17×10^{-7} *6*
745.4 *1*	0.29 *6*	2076.84	(5/2$^+$,7/2$^+$)	1331.56	5/2$^+$			
748.8 *2*	1.23 *24*	1331.56	5/2$^+$	582.16	5/2$^+$			
759& *2*	<0.06	1822.48	(5/2$^+$,7/2,9/2$^+$)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
760.6 *15*	0.14 *6*	3243.03	(5/2$^+$,7/2$^+$)	2482.25	5/2$^+$			
781.1 *1*	3.23 *23*	2858.02	5/2$^+$	2076.84	(5/2$^+$,7/2$^+$)	[E1]	2.99×10^{-4}	α(K)=0.000267 *4*; α(L)=2.76×10^{-5} *4*; α(M)=4.29×10^{-6} *6*; α(N)=3.66×10^{-7} *6* E_γ: other: 780.5 *2* (1975Kr08). I_γ: other: 2.8 *3* (1975Kr08).
791.0 *10*	0.04 *3*	1331.56	5/2$^+$	539.86	1/2$^+$	[E2]	7.50×10^{-4}	α(K)=0.000668 *10*; α(L)=7.05×10^{-5} *11*; α(M)=1.097×10^{-5} *16*; α(N)=9.31×10^{-7} *14*
803.8 *1*	9.3 *2*	2880.54		2076.84	(5/2$^+$,7/2$^+$)			I_γ: other: 9.2 *4* (1975Kr08).
806.0 *10*	0.31 *15*	2137.67	(1/2$^+$,3/2)	1331.56	5/2$^+$			
807.5 *3*	0.25 *8*	1907.66		1100.45	3/2$^+$			
812.0 *20*	0.03 *3*	2076.84	(5/2$^+$,7/2$^+$)	1265.03	(5/2$^+$,7/2$^+$)			
817.2 *10*	0.27 *14*	2482.25	5/2$^+$	1664.84	5/2$^+$			
834.1 *1*	20.0 *2*	1062.89	(1/2$^+$,3/2,5/2$^-$)	228.72	1/2$^-$			E_γ: 1975Kr08 observed a γ ray with Eγ=833.8 *1*, Iγ=19.5 *17* which could not be placed in the decay scheme. 1975Kr08 observe coincidences with the 735γ, inconsistent with its placement from 1062-keV level. 1984LiZW do not observe coincidences between the 834γ and the 735γ.
845.0 *15*	0.10 *5*	1907.66		1062.89	(1/2$^+$,3/2,5/2$^-$)			

From ENSDF

$^{83}_{34}Se_{49}$-4

$\gamma(^{83}Se)$ (continued)

E_γ †	I_γ †#	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α	Comments
871.0 *15*	0.15 *12*	1100.45	3/2$^+$	228.72	1/2$^-$	[E1]	2.39×10^{-4}	α(K)=0.000213 *3*; α(L)=2.20×10^{-5} *4*; α(M)=3.42×10^{-6} *5*; α(N)=2.92×10^{-7} *5*
891[&] *2*	<0.03	1472.96	(3/2)$^+$	582.16	5/2$^+$			
904.0 *1*	0.29 *2*	2981.02	(5/2$^+$,7/2$^+$)	2076.84	(5/2$^+$,7/2$^+$)			
914.5 *1*	0.53 *4*	2858.02	5/2$^+$	1943.31	(5/2$^+$,7/2$^+$)			
933.1 *2*	0.37 *4*	1472.96	(3/2)$^+$	539.86	1/2$^+$			
944.0[@&] *3*	0.06[@]	1526.49	(7/2$^+$,9/2$^+$)	582.16	5/2$^+$			E_γ,I_γ: in Figure IV.4 of 1984LiZW, but not included in Table IV.3.
944.0[@&] *3*	<0.18[@]	1907.66		963.26	3/2$^+$			E_γ: half-life of transition not in agreement with that of ^{83}As, not included in the Adopted Levels.
979.8 *1*	0.73 *4*	1943.31	(5/2$^+$,7/2$^+$)	963.26	3/2$^+$			
1010.0 *20*	0.10 *10*	2482.25	5/2$^+$	1472.96	(3/2)$^+$			
1014.0 *1*	6.1 *2*	2076.84	(5/2$^+$,7/2$^+$)	1062.89	(1/2$^+$,3/2,5/2$^-$)			E_γ,I_γ: likely corresponds to an unplaced Eγ=1013.7 *2*, Iγ=6.1 *5* transition observed in 1975Kr08.
1036.8[@&] *20*	<0.16[@]	2137.67	(1/2$^+$,3/2)	1100.45	3/2$^+$			
1036.8[@] *20*	<1.6[@]	2981.02	(5/2$^+$,7/2$^+$)	1943.31	(5/2$^+$,7/2$^+$)			
1058.2 *1*	7.7 *2*	2880.54		1822.48	(5/2$^+$,7/2,9/2$^+$)			E_γ,I_γ: possibly corresponds to an unplaced Eγ=1057.6 *2*, Iγ=4.7 *10* transition observed in 1975Kr08.
1074.0 *7*	1.5 *2*	2137.67	(1/2$^+$,3/2)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
1082.9 *5*	0.71 *14*	1664.84	5/2$^+$	582.16	5/2$^+$			
1113.4 *1*	36.1 *11*	2076.84	(5/2$^+$,7/2$^+$)	963.26	3/2$^+$			I_γ: other: 34.1 *27* (1975Kr08).
1125.0 *3*	0.28 *6*	1664.84	5/2$^+$	539.86	1/2$^+$	[E2]	3.22×10^{-4}	α(K)=0.000286 *4*; α(L)=2.98×10^{-5} *5*; α(M)=4.64×10^{-6} *7*; α(N)=3.96×10^{-7} *6*
1127.8 *1*	0.97 *8*	1710.43	(1/2$^+$,3/2)	582.16	5/2$^+$			
1143.6 *3*	0.23 *6*	3281.93	(1/2$^+$,3/2,5/2$^+$)	2137.67	(1/2$^+$,3/2)			
1151.1 *4*	0.60 *5*	2482.25	5/2$^+$	1331.56	5/2$^+$			
1158.7 *1*	1.31 *20*	2981.02	(5/2$^+$,7/2$^+$)	1822.48	(5/2$^+$,7/2,9/2$^+$)			E_γ,I_γ: possibly corresponds to an unplaced Eγ=1158.4 *2*, Iγ=4.6 *5* transition observed in 1975Kr08.
1169.3 *1*	1.43 *9*	2880.54		1710.43	(1/2$^+$,3/2)			
1170.0[&]	0.02	1710.43	(1/2$^+$,3/2)	539.86	1/2$^+$			E_γ,I_γ: in Figure IV.4 of 1984LiZW, but not included in Table IV.3.
1196.0 *6*	0.14 *3*	3333.22		2137.67	(1/2$^+$,3/2)			
1218.0 *10*	0.07 *6*	2482.25	5/2$^+$	1265.03	(5/2$^+$,7/2$^+$)			
1240.0 *5*	0.08 *4*	1822.48	(5/2$^+$,7/2,9/2$^+$)	582.16	5/2$^+$			
1243.0 *10*	0.10 *8*	1472.96	(3/2)$^+$	228.72	1/2$^-$	[E1]	1.96×10^{-4}	α(K)=0.0001085 *16*; α(L)=1.117×10^{-5} *16*; α(M)=1.737×10^{-6} *25*; α(N)=1.486×10^{-7} *21*
1257.0 *2*	0.23 *4*	3333.22		2076.84	(5/2$^+$,7/2$^+$)			
1258.0 *21*	0.19 *5*	3167.19	(1/2$^+$,3/2)	1907.66				
1265.1 *5*	0.09 *3*	1265.03	(5/2$^+$,7/2$^+$)	0.0	9/2$^+$			
1296.2 *1*	1.24 *6*	1296.27	(11/2$^+$)	0.0	9/2$^+$			
1326.8 *10*	0.15 *8*	1907.66		582.16	5/2$^+$			

From ENSDF

$^{83}_{34}Se_{49}$-5

$\gamma(^{83}Se)$ (continued)

E_γ †	I_γ †#	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α	Comments
1331.1 *3*	1.41 *10*	2858.02	$5/2^+$	1526.49	$(7/2^+,9/2^+)$	[E2]	2.58×10^{-4}	α(K)=0.000199 *3*; α(L)=2.06×10^{-5} *3*; α(M)=3.21×10^{-6} *5*; α(N)=2.74×10^{-7} *4*
1331.2 *1*	13.7 *4*	1331.56	$5/2^+$	0.0	$9/2^+$	[E2]	2.58×10^{-4}	α(K)=0.000199 *3*; α(L)=2.06×10^{-5} *3*; α(M)=3.21×10^{-6} *5*; α(N)=2.74×10^{-7} *4* I_γ: other: 15.8 *11* (1975Kr08).
1367.0& *11*	<0.02	1907.66		539.86	$1/2^+$			
1381.2 *10*	0.20 *10*	2482.25	$5/2^+$	1100.45	$3/2^+$			
1408.0 *2*	<0.4	2880.54		1472.96	$(3/2)^+$			
1419.5 *2*	0.23 *4*	2482.25	$5/2^+$	1062.89	$(1/2^+,3/2,5/2^-)$	[E1]	2.88×10^{-4}	α(K)=8.63×10^{-5} *12*; α(L)=8.87×10^{-6} *13*; α(M)=1.379×10^{-6} *20*; α(N)=1.181×10^{-7} *17*
1420.0 *10*	0.23 *4*	3243.03	$(5/2^+,7/2^+)$	1822.48	$(5/2^+,7/2,9/2^+)$			
1454.7 *3*	5.3 *3*	2981.02	$(5/2^+,7/2^+)$	1526.49	$(7/2^+,9/2^+)$			
1480.7 *3*	0.27 *5*	1710.43	$(1/2^+,3/2)$	228.72	$1/2^-$			
1518.4 *1*	2.57 *10*	2482.25	$5/2^+$	963.26	$3/2^+$			
1526.4 *1*	8.1 *3*	1526.49	$(7/2^+,9/2^+)$	0.0	$9/2^+$			
1537.2& *16*	0.22 *8*	2076.84	$(5/2^+,7/2^+)$	539.86	$1/2^+$			E_γ: possibly a transition from the β decay of ^{82}As, not included in Adopted Levels.
1548.8 *1*	3.1 *1*	2880.54		1331.56	$5/2^+$			I_γ: other: 3.0 *2* (1975Kr08).
1582.3 *2*	0.30 *5*	2545.58	$3/2^+$	963.26	$3/2^+$			
1596.6 *8*	0.09 *5*	2137.67	$(1/2^+,3/2)$	539.86	$1/2^+$			
1607.0 *15*	0.10 *7*	2189.80	$(5/2^+)$	582.16	$5/2^+$			
1615.5 *1*	2.27 *7*	2678.72		1062.89	$(1/2^+,3/2,5/2^-)$			
1623.6 *4*	0.40 *4*	2724.65	$(5/2^+,7/2^+)$	1100.45	$3/2^+$			
1641.0 *4*	0.02 *2*	2971.2	$(3/2^-)$	1331.56	$5/2^+$			
1649.2 *1*	2.20 *7*	2981.02	$(5/2^+,7/2^+)$	1331.56	$5/2^+$			
1664.6 *3*	0.18 *4*	1664.84	$5/2^+$	0.0	$9/2^+$	[E2]	2.96×10^{-4}	α(K)=0.0001265 *18*; α(L)=1.308×10^{-5} *19*; α(M)=2.03×10^{-6} *3*; α(N)=1.741×10^{-7} *25*
1715.6 *5*	0.08 *3*	2981.02	$(5/2^+,7/2^+)$	1265.03	$(5/2^+,7/2^+)$			
1761.4 *1*	0.73 *4*	2724.65	$(5/2^+,7/2^+)$	963.26	$3/2^+$			
1780.2 *1*	1.62 *6*	2880.54		1100.45	$3/2^+$			
1795.3 *1*	2.0 *1*	2858.02	$5/2^+$	1062.89	$(1/2^+,3/2,5/2^-)$	[E1]	5.46×10^{-4}	α(K)=5.91×10^{-5} *9*; α(L)=6.06×10^{-6} *9*; α(M)=9.41×10^{-7} *14*; α(N)=8.07×10^{-8} *12*
1818.0 *2*	0.61 *10*	2880.54		1062.89	$(1/2^+,3/2,5/2^-)$			
1822.5 *1*	8.2 *2*	1822.48	$(5/2^+,7/2,9/2^+)$	0.0	$9/2^+$			E_γ,I_γ: likely corresponds to an unplaced Eγ=1822.4 *1*, Iγ=7.9 *7* transition observed in 1975Kr08.
1860.0 *3*	0.17 *10*	3333.22		1472.96	$(3/2)^+$			
1894.8 *2*	12.3 *3*	2858.02	$5/2^+$	963.26	$3/2^+$			I_γ: other: 17.6 *15* (1975Kr08).
1900.3 *5*	0.19 *8*	2482.25	$5/2^+$	582.16	$5/2^+$			
1908.9 *1*	1.99 *12*	2137.67	$(1/2^+,3/2)$	228.72	$1/2^-$			
1912.0 *10*	0.05 *4*	3243.03	$(5/2^+,7/2^+)$	1331.56	$5/2^+$			
1917.3 *1*	12.9 *4*	2880.54		963.26	$3/2^+$			I_γ: other: 14.8 *17* (1975Kr08).
1919.3 *5*	0.70 *14*	2981.02	$(5/2^+,7/2^+)$	1062.89	$(1/2^+,3/2,5/2^-)$			

From ENSDF

$^{83}_{34}Se_{49}$-6

$\gamma(^{83}Se)$ (continued)

E_γ [†]	I_γ [†#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α	Comments
1944.0 *5*	0.14 *7*	1943.31	(5/2$^+$,7/2$^+$)	0.0	9/2$^+$			
2001.0 *1*	0.12 *10*	3333.22		1331.56	5/2$^+$			
2017.9 *1*	1.27 *10*	2981.02	(5/2$^+$,7/2$^+$)	963.26	3/2$^+$			
2077.0 *1*	25.0 *5*	2076.84	(5/2$^+$,7/2$^+$)	0.0	9/2$^+$			I_γ: other: 27.7 *28* (1975Kr08).
2092.0 *10*	0.14 *3*	3423.9		1331.56	5/2$^+$			
2098.3 *12*	0.09 *8*	2678.72		582.16	5/2$^+$			
2104.2 *2*	0.37 *4*	3167.19	(1/2$^+$,3/2)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
2141.7 *3*	0.29 *6*	2678.72		539.86	1/2$^+$			
2142.5 *7*	0.07 *4*	2724.65	(5/2$^+$,7/2$^+$)	582.16	5/2$^+$			
2180.3 *19*	0.03 *3*	3243.03	(5/2$^+$,7/2$^+$)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
2190.6 *7*	0.11 *7*	2189.80	(5/2$^+$)	0.0	9/2$^+$			
2204.2 *1*	21.3 *4*	3167.19	(1/2$^+$,3/2)	963.26	3/2$^+$			E_γ: other: 2202.9 *2* (1975Kr08). I_γ: other: 22.2 *19* (1975Kr08).
2218.7 *2*	1.44 *16*	3281.93	(1/2$^+$,3/2,5/2$^+$)	1062.89	(1/2$^+$,3/2,5/2$^-$)			
2270.8 *5*	0.15 *4*	3333.22		1062.89	(1/2$^+$,3/2,5/2$^-$)			
2279.9 *1*	0.56 *5*	3243.03	(5/2$^+$,7/2$^+$)	963.26	3/2$^+$			
2299.2 *1*	0.89 *5*	2880.54		582.16	5/2$^+$			
2318.8 *1*	2.52 *5*	3281.93	(1/2$^+$,3/2,5/2$^+$)	963.26	3/2$^+$			E_γ,I_γ: possibly corresponds to an unplaced Eγ=2316.5 *10*, Iγ=1.8 *9* transition observed in 1975Kr08.
2360.0 *10*	0.07 *4*	3423.9		1062.89	(1/2$^+$,3/2,5/2$^-$)			
2370.4 *1*	1.14 *6*	3333.22		963.26	3/2$^+$			
2388.3 *9*	0.23 *5*	2971.2	(3/2$^-$)	582.16	5/2$^+$			
2423.1 *3*	0.58 *7*	3386.4		963.26	3/2$^+$			
2429.5 *5*	0.29 *5*	2971.2	(3/2$^-$)	539.86	1/2$^+$			
2449.9 *2*	0.97 *8*	2678.72		228.72	1/2$^-$			
2461.9 *10*	0.25 *4*	3423.9		963.26	3/2$^+$			
2580.0 *20*	0.2 *2*	3911.6		1331.56	5/2$^+$			
2585.2 *1*	0.17 *3*	3167.19	(1/2$^+$,3/2)	582.16	5/2$^+$			
2626.7 *5*	0.11 *3*	3689.9		1062.89	(1/2$^+$,3/2,5/2$^-$)			
2629.0 *15*	0.03 *2*	3167.19	(1/2$^+$,3/2)	539.86	1/2$^+$			
[x]2660.1[‡] *10*	2.6[‡] *4*							
2699.6 *1*	0.52 *3*	3281.93	(1/2$^+$,3/2,5/2$^+$)	582.16	5/2$^+$			
2724.6 *1*	0.18 *6*	2724.65	(5/2$^+$,7/2$^+$)	0.0	9/2$^+$			
2729.0 *15*	0.67 *7*	3689.9		963.26	3/2$^+$			
2742.5 *2*	0.44 *5*	3281.93	(1/2$^+$,3/2,5/2$^+$)	539.86	1/2$^+$			
2858.1 *1*	17.0 *3*	2858.02	5/2$^+$	0.0	9/2$^+$	[E2]	7.70×10^{-4}	α(K)=4.81×10^{-5} *7*; α(L)=4.93×10^{-6} *7*; α(M)=7.67×10^{-7} *11*; α(N)=6.58×10^{-8} *10* I_γ: other: 16.3 *15* (1975Kr08).
2865.0 *12*	0.07 *7*	3827.7	(1/2$^+$)	963.26	3/2$^+$			
2881.4 *10*	0.11 *6*	3463.6	5/2$^+$	582.16	5/2$^+$			
2937.9 *1*	0.66 *10*	3167.19	(1/2$^+$,3/2)	228.72	1/2$^-$			
2976.2	0.11 *6*	3558.4		582.16	5/2$^+$			
2981.2 *5*	1.54 *6*	2981.02	(5/2$^+$,7/2$^+$)	0.0	9/2$^+$			

From ENSDF

$^{83}_{34}Se_{49}$-7

^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW (continued)

$\gamma(^{83}Se)$ (continued)

E_γ [†]	I_γ [†#]	E_i(level)	J_i^π	E_f	J_f^π	Comments
3038.0 *11*	0.2 *2*	4001.3		963.26	$3/2^+$	
3242.8 *1*	3.5 *1*	3243.03	$(5/2^+,7/2^+)$	0.0	$9/2^+$	I_γ: other: 4.1 *4* (1975Kr08).
3245.0 *10*	0.05 *5*	3827.7	$(1/2^+)$	582.16	$5/2^+$	
3865.0[‡&] *20*	1.1[‡] *5*	3865.1?		0.0	$9/2^+$	

† From 1984LiZW, except where noted.
‡ From 1975Kr08.
# Absolute intensity per 100 decays.
@ Multiply placed with intensity suitably divided.
& Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

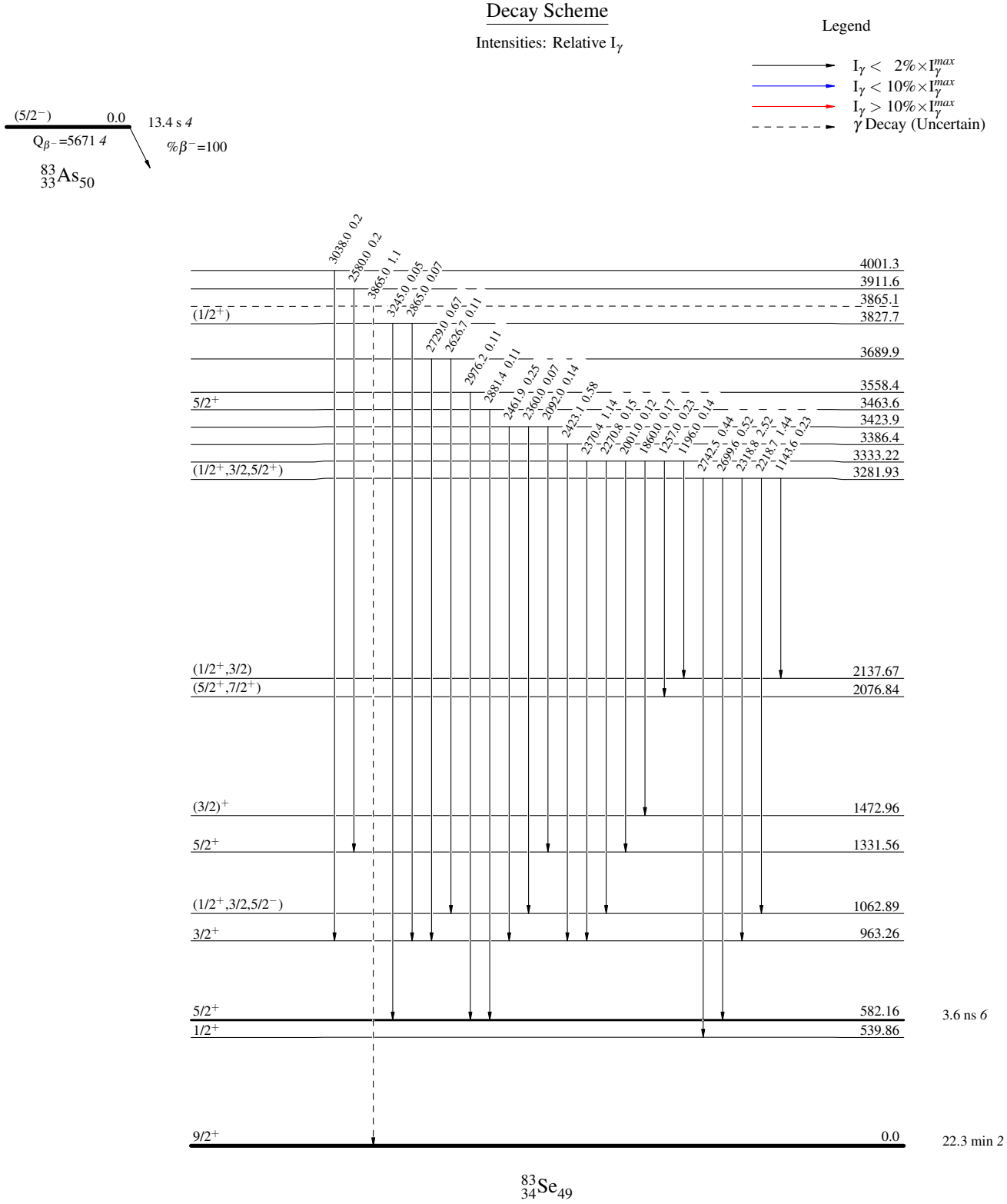
From ENSDF

$^{83}_{34}Se_{49}$-8

^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme

Intensities: Relative I_γ

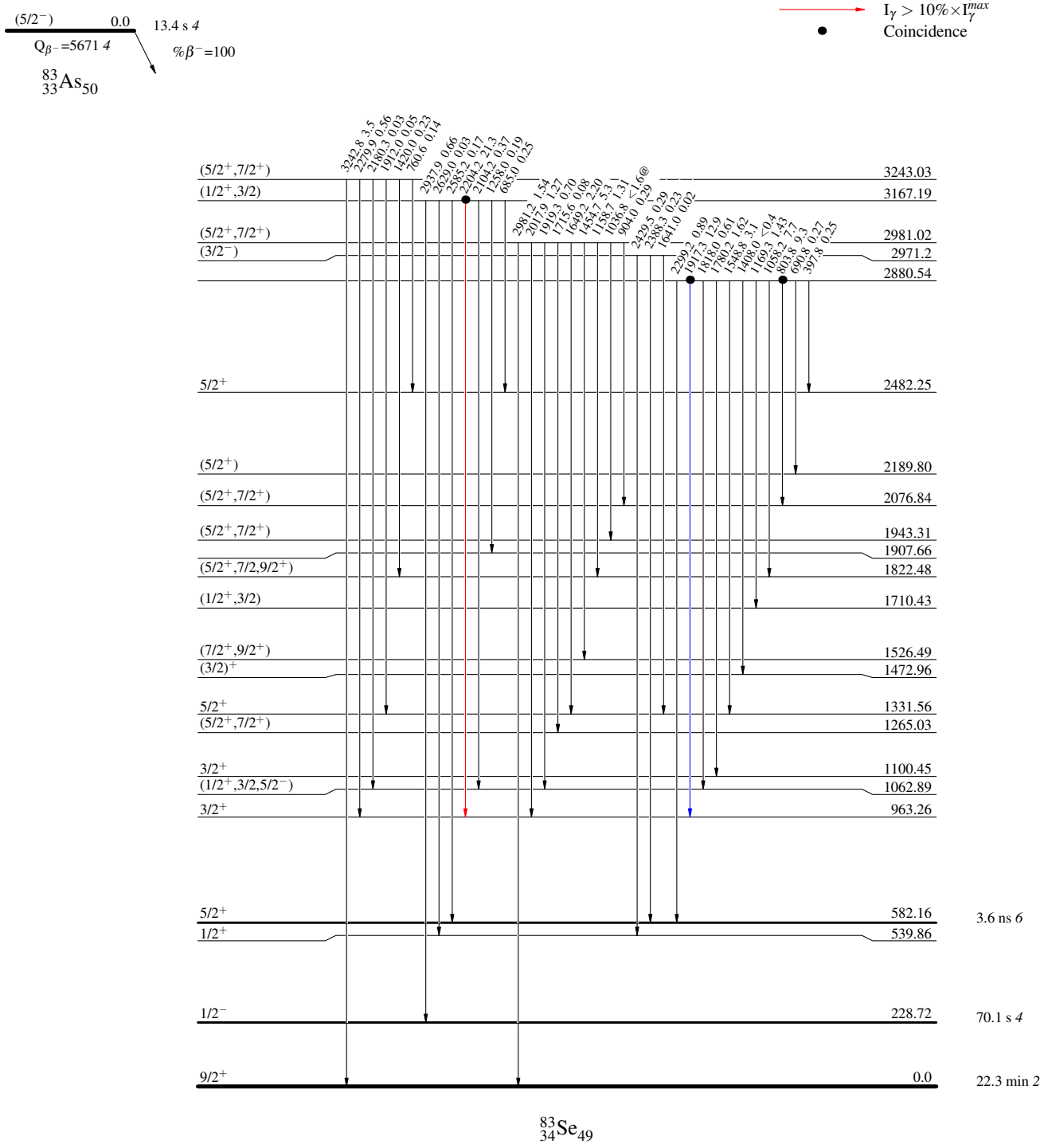


^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme (continued)

Intensities: Relative I_γ
@ 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

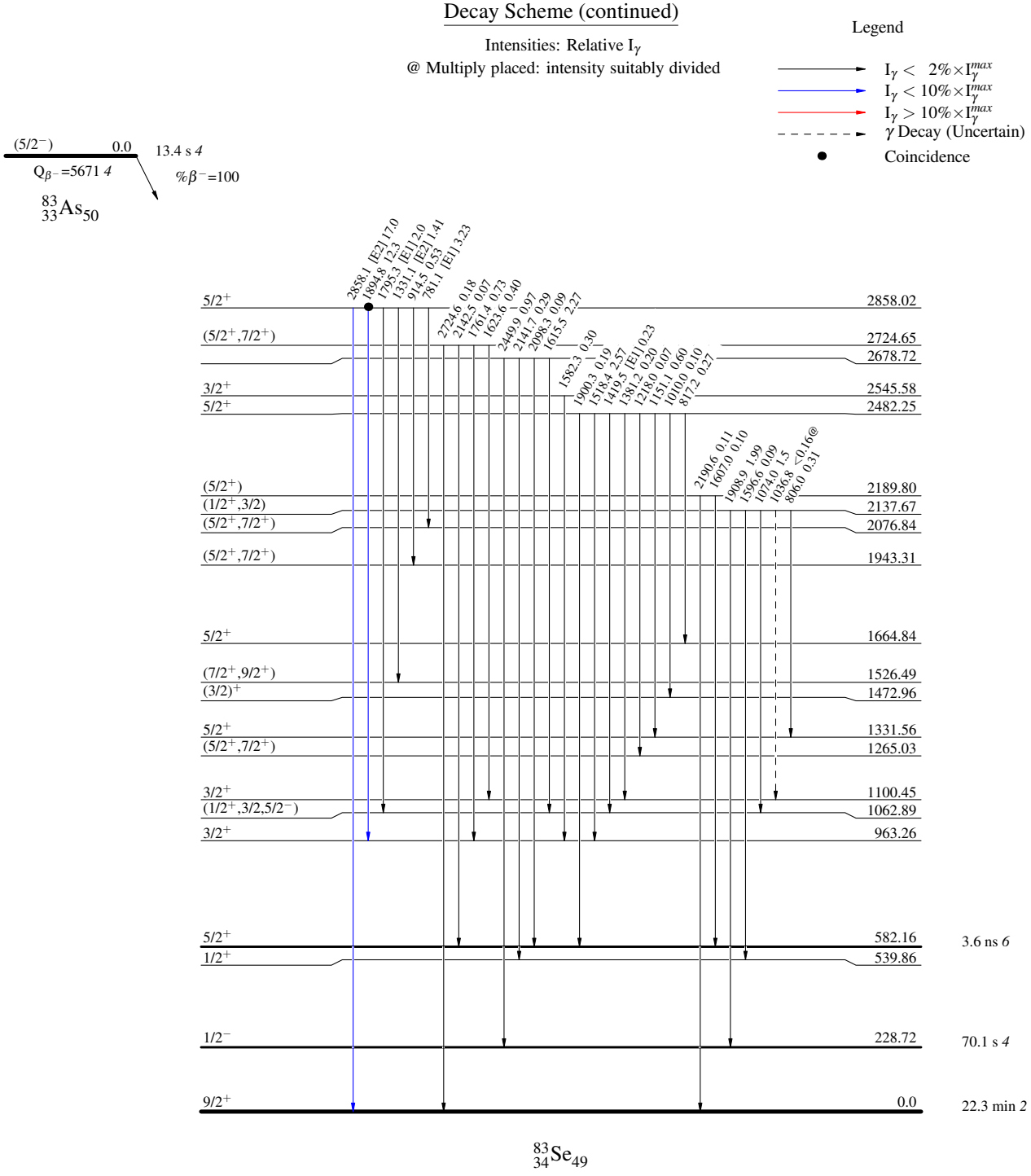


^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme (continued)

Intensities: Relative I_γ

@ Multiply placed: intensity suitably divided

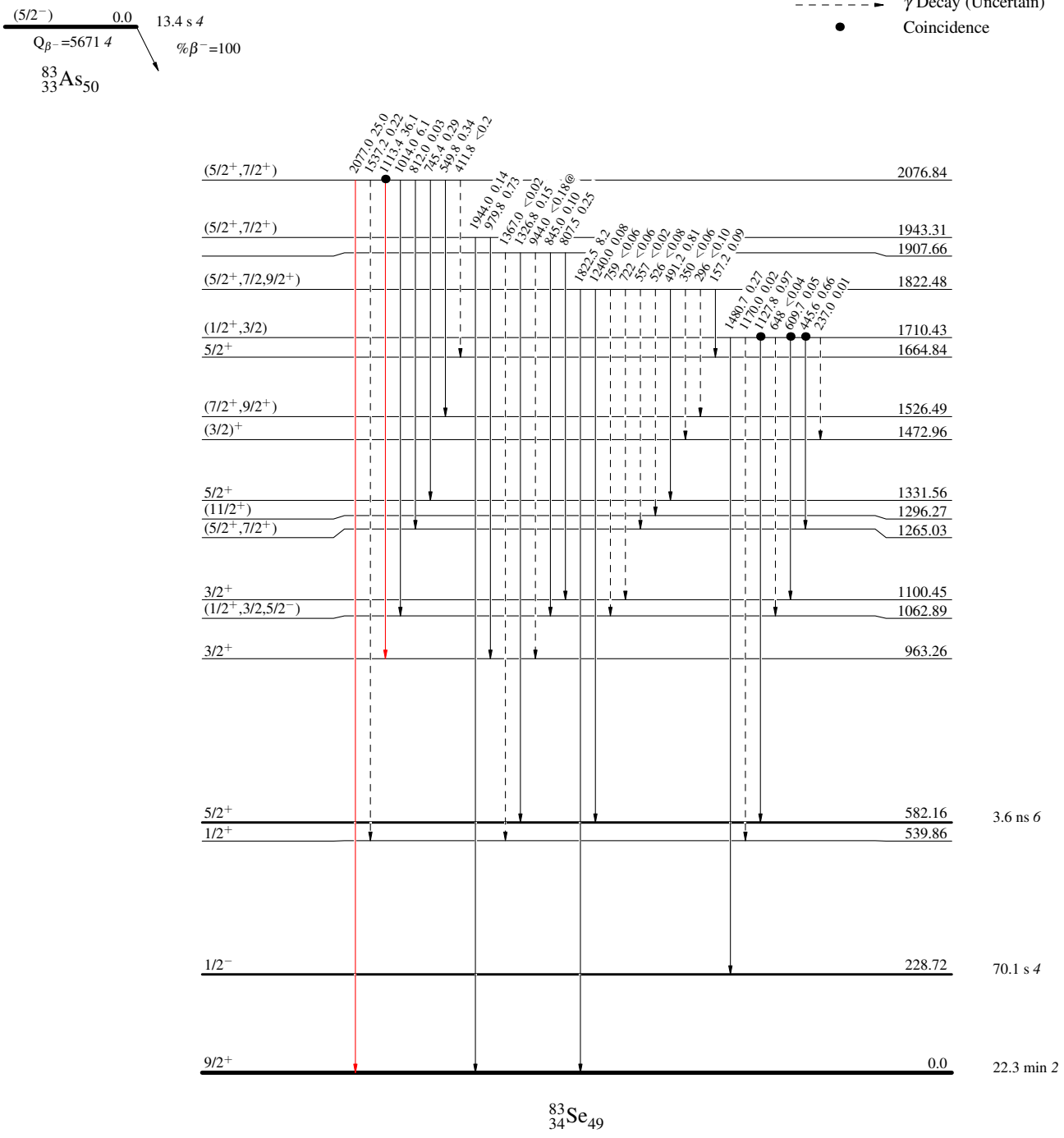


^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme (continued)

Intensities: Relative I_γ
@ 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

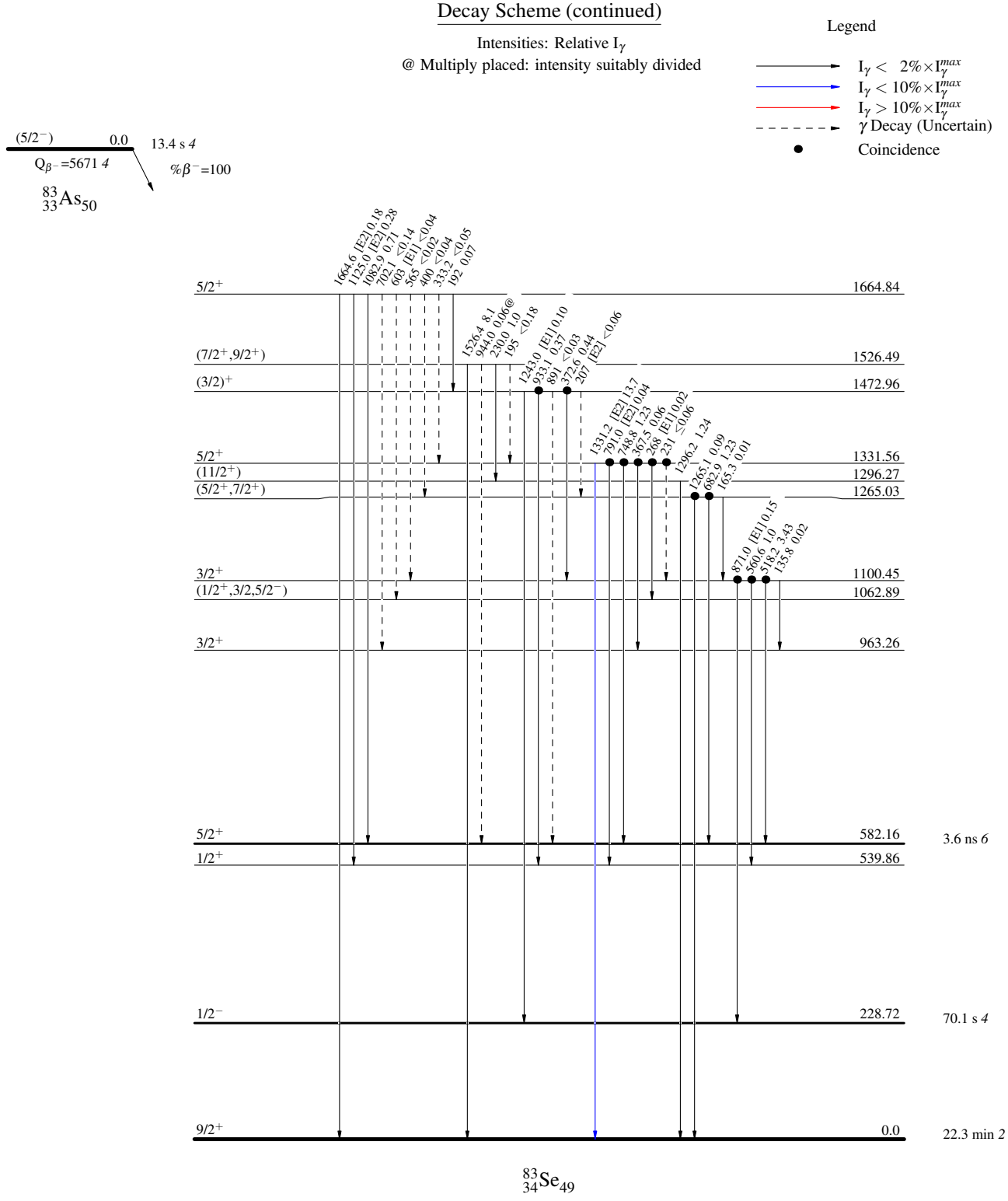


^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme (continued)

Intensities: Relative I_γ

@ Multiply placed: intensity suitably divided



^{83}As β^- decay 1975Kr08,1982Me01,1984LiZW

Decay Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided