^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

History

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

2009Sc22: ^{76}Ge(^{11}B,4nγ), E(^{11}B)=45,50 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma(\theta)$(DCO) using the GASP spectrometer consisting of 40 Compton-suppressed HPGe detectors and an inner ball of 80 BGO elements; deduced $T_{1/2}$ using Doppler Shift Attenuation Method (DSAM) at E(^{11}B)=45 MeV. Earlier preliminary results by same group reported in 2000Sc17, 1998ScZN, and 1998ScZW.

2006Ga10: ^{76}Ge(^{11}B,4nγ), E(^{11}B)=50 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma(\theta)$(DCO) using 12 Compton-suppressed HPGe detectors and a 14 element BGO multiplicity filter; deduced $T_{1/2}$ using Doppler Shift Attenuation Method (DSAM).

1985Zh09: ^{76}Ge(^{10}B,3nγ), E(^{10}B)=30 MeV. Measured Eγ, Iγ, $\gamma(\theta)$ using a HPGe detector; deduced $T_{1/2}$ using Doppler Shift Attenuation Method (DSAM) and Recoil Distance Doppler Shift (RDDS) method. Subset of results published in 1985ZhZY.

The level schemes of 2009Sc22 and 2006Ga10 are for the most part consistent. The level scheme of 2009Sc22 is more extensive, and as such, is adopted here. Differences between 2009Sc22 and 2006Ga10 are noted. When $T_{1/2}$ measurements overlap, the values of 2009Sc22 and 1985Zh09 are generally consistent, whereas, those from 2006Ga10 are usually considerably smaller. In those cases, weighted averages of 2009Sc22 and 1985Zh09 are adopted, and the values from 2006Ga10 are provided in the comments.

^{83}Rb Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$[#]	Comments
0.0[e]	5/2$^-$		
5.23[d] *9*	3/2$^-$		
42.20[f] *13*	9/2$^+$		
736.99[d] *15*	7/2$^-$	10.4[a] ps *69*	
793.77[f] *15*	13/2$^+$	4.2[a] ps *7*	
805.0[&] *10*	(7/2)$^+$	0.76 ps *14*	
1038.16 *19*	11/2$^+$	0.55 ps *21*	
1096.7[&] *10*	(7/2$^+$,9/2$^+$)	2.1 ps *7*	J$^\pi$: proposed as (9/2$^+$) in 2009Sc22.
1102.66[e] *15*	9/2$^-$	0.83 ps *21*	
1587.2[&] *10*	(9/2,13/2)	1.94 ps *55*	
1753.67[d] *18*	11/2$^-$	0.69 ps *14*	
1780.7[&] *10*		1.73 ps *55*	
1889.36[f] *17*	17/2$^+$	1.05 ps *12*	$T_{1/2}$: weighted average of 1.07 ps *12* (2009Sc22) and 0.97 ps *21* (1985Zh09), both from DSAM. Other: 0.40 ps *+14−10* (2006Ga10) also from DSAM.
1942.78 *16*	15/2$^+$	1.25 ps *42*	
2067.4[h] *3*	11/2$^-$		
2073.7 *4*	13/2$^-$	0.55 ps *14*	
2101.79[e] *17*	13/2$^-$	1.18 ps *28*	
2206.4 *3*	(13/2)		J$^\pi$: proposed as 15/2$^+$ in 2009Sc22 and 2006Ga10.
2313.61[h] *16*	13/2$^-$	0.69 ps *21*	
2318.31 *22*	(17/2$^+$)	1.4 ps *7*	$T_{1/2}$: other: <3.5 ps (2009Sc22) from DSAM, deduced from the effective lifetime without feeding corrections.
2413.84[h] *16*	15/2$^-$	4.2[a] ns *21*	
2576.55[d] *23*	15/2$^-$	0.62 ps *14*	
2595.93[h] *17*	17/2$^-$	70[a] ps *35*	$T_{1/2}$: other: 1.5 ps *+6−4* from DSAM in 2006Ga10; value not adopted as it leads to a rather large B(M1)=1.9 W.u. for the 182 γ-ray transition.
2699.63[d] *17*	17/2$^-$		
2733.3? *7*	(19/2)$^+$		E(level): observed only by 2006Ga10, not included in the Adopted Levels.
2772.49[i] *23*	17/2$^-$		
2859.8[f] *3*	21/2$^+$	1.45 ps *14*	$T_{1/2}$: weighted average of 1.41 ps *13* (2009Sc22) and 2.0 ps *5* (1985Zh09), both from DSAM. Other: 0.64 ps *+26−12* (2006Ga10), also from DSAM.

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^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

^{83}Rb Levels (continued)

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]	Comments
2958.12[h] *17*	19/2$^-$	6.9 ps *+69−35*	T$_{1/2}$: other: 0.69 ps *21* from DSAM in 2006Ga10; value is not adopted as it leads to a rather large B(E2)=310 W.u. for the 362 γ-ray transition.
3016.2 *5*			
3139.3[c] *6*	(19/2)		
3195.17 *22*	19/2$^-$	<0.90[@b] ps	J$^\pi$: other: (19/2) in 2006Ga10.
3329.84 *22*	21/2$^+$	<0.90[@b] ps	
3363.20[h] *19*	21/2$^-$	1.9 ps *5*	
3440.38[i] *22*	21/2$^-$		
3537.0 *4*			
3559.51 *20*	21/2$^-$	0.24 ps *+14−10*	T$_{1/2}$: from DSAM in 2006Ga10.
3601.31[j] *22*	21/2$^-$	0.28[@] ps *6*	
3726.9[f] *3*	23/2$^+$	0.17 ps *6*	T$_{1/2}$: weighted average of 0.159 ps *28* (2009Sc22) and 0.62 ps *21* (1985Zh09), both from DSAM.
3765.6 *3*	(21/2$^+$)		J$^\pi$: proposed as 21/2$^-$ in 2009Sc22.
3803.0? *7*	(23/2$^-$)		E(level): observed only by 2006Ga10, not included in the Adopted Levels.
3992.3[k] *3*	25/2$^+$	0.67[@] ps *6*	T$_{1/2}$: other: 0.39 ps *+15−11* (2006Ga10).
4084.81[j] *22*	23/2$^-$	0.229[@] ps *21*	
4129.7 *4*			
4134.85[h] *24*	23/2$^-$		
4164.1 *3*	23/2$^-$		J$^\pi$: proposed as 23/2$^+$ in 2006Ga10.
4407.1[c] *8*			J$^\pi$: proposed as (23/2$^-$) in 2006Ga10.
4435.5[f] *3*	25/2$^+$	0.31[@] ps *10*	
4461.2[g] *4*	(25/2$^+$)	0.29[@] ps *8*	
4642.17[j] *23*	25/2$^-$	0.270[@] ps *35*	
4686.47[i] *21*	25/2$^-$	0.33[@] ps *4*	
4715.3 *4*			
4963.6[g] *3*	(27/2$^+$)		
5051.0 *7*			
5216.3[f] *3*	(27/2$^+$)		
5316.2[k] *3*	29/2$^+$	0.236[@] ps *35*	
5349.6[h] *3*	27/2$^-$		
5422.1[c] *13*	(25/2$^-$)		
5448.3[j] *3*	(27/2$^-$)	0.035[@] ps *14*	
5577.4 *3*			
5667.0[g] *3*	(29/2$^+$)	<0.40 ps	T$_{1/2}$: from DSAM in 2006Ga10.
5869.3[i] *3*	29/2$^-$	0.39[@] ps *6*	
5970.8[j] *3*	29/2$^-$	0.312[@] ps *35*	
6088.1 *6*			
6250.0 *7*			
6356.7[l] *5*	(29/2$^-$)		
6423.4 *7*			
6438.3[g] *4*	(31/2$^+$)		
6470.4 *5*	(31/2$^+$)		
6557.1[h] *4*	(31/2$^-$)		
6668.9 *5*			J$^\pi$: proposed as (31/2)$^+$ in 2009Sc22 and 2006Ga10.
6688.1[j] *4*	(31/2$^-$)	0.111[@] ps *21*	
6912.3 *8*			
6913.2[k] *5*	(33/2$^+$)	0.125[@] ps *14*	
6933.9[l] *5*	(31/2$^-$)		

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^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

^{83}Rb Levels (continued)

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]	Comments
7068.2[i] *4*	33/2$^-$	0.19[@] ps *6*	
7167.4[g] *4*	(33/2$^+$)		
7372.5[j] *5*	(33/2$^-$)	0.062[@] ps *21*	
7447.5[l] *4*	(33/2$^-$)		
7633.3 *8*			
7906.3[l] *4*	(35/2$^-$)		
8032.8[h] *5*	(35/2$^-$)		
8094.5[j] *6*	(35/2$^-$)	0.17[@] ps *6*	
8193.6[g] *5*	(35/2$^+$)		
8419.7[i] *5*	37/2$^-$		
8672.1[j] *6*	(37/2$^-$)	0.166[@] ps *28*	T$_{1/2}$: from line shape analysis of 576.9γ, may have small contribution from 577.3γ (2009Sc22).
8837.6[k] *8*	(37/2$^+$)		
8962.5 *9*			
9341.4[j] *6*	(39/2$^-$)		
9633.9[h] *8*	(39/2$^-$)		
9910.4[i] *6*	41/2$^-$		
11715.1[i] *9*	(45/2$^-$)		
13926.5[i] *12*	(49/2$^-$)		

[†] From least-squares fit to Eγ, by evaluator. Two Eγ's (400.3 and 602.2) were omitted from the fit due to energy mismatching by 2-4 keV. Several other γ rays are also poorly fitted; Eγ derived from level energy difference is included in the comments for these transitions.

[‡] From the Adopted Levels. J^π assignments mainly follow those of 2009Sc22, except that additional parentheseses have been added by the evaluator, particularly at high spin. Cases where there are disagreements between the J^π's in the Adopted Levels and those proposed in 2009Sc22 or 2006Ga10, are indicated in the comments.

[#] From DSAM in 1985Zh09, except where noted.

[@] From DSAM in 2009Sc22. Statistical, side feeding and stopping power uncertainties are included, except where noted.

[&] Observed only by 1985Zh09.

[a] From RDDS method in 1985Zh09.

[b] Upper limit deduced from the effective lifetime without feeding corrections.

[c] Observed only in 2006Ga10.

[d] Band(A): Band based on 3/2$^-$.

[e] Band(B): Band based on 5/2$^-$.

[f] Band(C): Band based on 9/2$^+$.

[g] Band(D): ΔJ=1 band based on (25/2$^+$).

[h] Band(E): Band based on 11/2$^-$. ΔJ=1 up to 23/2$^-$, ΔJ=2 above this spin.

[i] Band(F): Band based on 17/2$^-$.

[j] Band(G): ΔJ=1 band based on 21/2$^-$.

[k] Band(H): Band based on 25/2$^+$.

[l] Band(I): Band based on (29/2$^-$).

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

γ(^{83}Rb)

DCO ratios correspond to 35°/145° and 90° geometry in 2009Sc22 and 144° and 98° geometry in 2006Ga10. For both setups expected values are 1.0 if the gating transition is of a similar character, ≈0.5 for a ΔJ=1, dipole transition gated on stretched quadrupole, ≈2 for a ΔJ=2, quadrupole transition if the gate is on a ΔJ=1, dipole transition, and 0 to 2 for ΔJ=1 D+Q transition depending on the value of the mixing ratio. Gating transitions are specified in the comments.

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	I_γ[&]	Comments
(5.23[a] 9)		5.23	3/2$^-$	0.0	5/2$^-$				
(42.33[a] 15)		42.20	9/2$^+$	0.0	5/2$^-$				
100.1 1	15.2 5	2413.84	15/2$^-$	2313.61	13/2$^-$	D(+Q)	+0.01 4	11.7 9	Mult.: R(DCO)=1.07 7 gated on D 182γ/362γ (2009Sc22), R(DCO)=0.98 7 gated on D 182γ (2006Ga10). δ: from δ=+0.02 3 or −0.01 2 (2006Ga10).
103.3 1	2.4 1	2699.63	17/2$^-$	2595.93	17/2$^-$	D		1.7 4	E_γ: level-energy difference=103.7. Other: 104.2 (2006Ga10). Mult.: R(DCO)=2.7 10 gated on D 182γ/362γ (2009Sc22), R(DCO)=1.6 4 gated on D 182γ (2006Ga10).
123.1 2	5.7 2	2699.63	17/2$^-$	2576.55	15/2$^-$	D+Q		5.0 8	Mult.: R(DCO)=0.82 12 gated on Q 752γ (2009Sc22), R(DCO)=1.02 6 gated D+Q 258γ (2006Ga10).
176.5 2	1.3 1	2772.49	17/2$^-$	2595.93	17/2$^-$	(D)		0.5 1	Mult.: R(DCO)=1.1 4 gated on D 182γ/362γ (2009Sc22).
181.9 1	43.8 13	2595.93	17/2$^-$	2413.84	15/2$^-$	D(+Q)	+0.01 2	18.9 25	Mult.: R(DCO)=0.60 4 gated on Q 752γ (2009Sc22), R(DCO)=0.98 12 gated on D 1620γ (2006Ga10).
196.5 2	2.0 1	3559.51	21/2$^-$	3363.20	21/2$^-$			<1	
207.7 3	2.0 1	2413.84	15/2$^-$	2206.4	(13/2)	(D)		1.5 2	Mult.: R(DCO)=0.87 8 gated on D 182γ/362γ (2009Sc22).
211.2 3	0.7 1	2313.61	13/2$^-$	2101.79	13/2$^-$				
223.5[e]		3363.20	21/2$^-$	3139.3	(19/2)				E_γ: from 2006Ga10, γ not observed in 2009Sc22.
237.2 3	1.0 1	3195.17	19/2$^-$	2958.12	19/2$^-$	(D)			Mult.: R(DCO)=2.17 24 gated on D 182γ/362γ (2009Sc22).
238.1 2	1.5 1	3601.31	21/2$^-$	3363.20	21/2$^-$				
243.3[e] 10		3803.0?	(23/2$^-$)	3559.51	21/2$^-$				E_γ: from 2006Ga10, γ not observed in 2009Sc22.
243.9[e]		6913.2	(33/2$^+$)	6668.9				<1	E_γ: from 2006Ga10, γ not observed in 2009Sc22.
245.0 2	2.5 1	1038.16	11/2$^+$	793.77	13/2$^+$	D+Q		<1	E_γ: level-energy difference=244.4. Mult.: R(DCO)=0.84 12 gated on Q 752γ (2009Sc22).
246.6 3	2.6 1	2313.61	13/2$^-$	2067.4	11/2$^-$	(D)		1.8 2	Mult.: R(DCO)=1.25 11 gated on D 182γ/362γ (2009Sc22).
258.3 1	11.0 3	2958.12	19/2$^-$	2699.63	17/2$^-$	D+Q	−0.20 6	4.1 3	Mult.: R(DCO)=0.52 7 gated on Q 752γ (2009Sc22), R(DCO)=1.06 7 gated on D 405γ (2006Ga10).
263.2 4	2.6 1	2576.55	15/2$^-$	2313.61	13/2$^-$	D		2.4 3	Mult.: R(DCO)=1.4 9 gated on D 124γ (2006Ga10).
265.4 2	6.5 2	3992.3	25/2$^+$	3726.9	23/2$^+$	D		3.4 4	Mult.: R(DCO)=0.54 4 gated on Q 752γ (2009Sc22), R(DCO)=0.53 8 gated on Q 1096γ (2006Ga10).
272.0 2	2.0 1	4435.5	25/2$^+$	4164.1	23/2$^-$	D			Mult.: R(DCO)=0.58 11 gated on Q 752γ (2009Sc22).
286.0 1	4.7 1	2699.63	17/2$^-$	2413.84	15/2$^-$	D		1.4 2	Mult.: R(DCO)=0.45 15 gated on Q 752γ (2009Sc22).
312.1 1	11.7 4	2413.84	15/2$^-$	2101.79	13/2$^-$	D		6.9 5	Mult.: R(DCO)=1.07 3 gated on D 182γ/362γ (2009Sc22), R(DCO)=0.99 7 gated on D 182γ (2006Ga10).
340.5 5	1.7 1	2413.84	15/2$^-$	2073.7	13/2$^-$	(D)		1.4 3	Mult.: R(DCO)=1.17 12 gated on D 182γ/362γ (2009Sc22).
348.4 4	1.8 1	2101.79	13/2$^-$	1753.67	11/2$^-$	D		1.0 2	Mult.: R(DCO)=1.11 15 gated on D 182γ/362γ (2009Sc22).
352.6 3	3.6 1	5316.2	29/2$^+$	4963.6	(27/2$^+$)	D		2.2 2	Mult.: R(DCO)=0.49 5 gated on Q 752γ (2009Sc22).

$^{83}_{37}Rb_{46}$-4

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

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

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	Iγ[&]	Comments
358.7 *4*	4.8 *2*	2772.49	17/2$^-$	2413.84	15/2$^-$	D+Q		3.2 *4*	Mult.: R(DCO)=1.0 *3* gated on Q 752γ (2009Sc22), R(DCO)=1.28 *15* gated on D 100γ (2006Ga10).
362.4 *1*	35.3 *11*	2958.12	19/2$^-$	2595.93	17/2$^-$	D+Q	−0.02 *1*	12.5 *5*	Mult.: R(DCO)=0.55 *3* gated on Q 752γ (2009Sc22), R(DCO)=0.96 *4* gated on D 182γ (2006Ga10).
366.0 *3*	3.4 *1*	1102.66	9/2$^-$	736.99	7/2$^-$			1.9 *11*	
366.4 *10*		3139.3	(19/2)	2772.49	17/2$^-$			<1	
387.0 *4*	1.0 *1*	8419.7	37/2$^-$	8032.8	(35/2$^-$)				
396.9 *4*	3.6 *1*	3726.9	23/2$^+$	3329.84	21/2$^+$	D		<1	Mult.: R(DCO)=0.64 *9* gated on Q 752γ (2009Sc22).
400.3 *4*	1.4 *1*	4164.1	23/2$^-$	3765.6	(21/2$^+$)	D			Eγ: poor fit, not used in the fitting procedure. Level-energy difference=396.6. Mult.: R(DCO)=0.60 *10* gated on Q 752γ (2009Sc22).
405.1 *1*	22.4 *1*	3363.20	21/2$^-$	2958.12	19/2$^-$	D+Q	−0.03 *1*	6.0 *4*	Mult.: R(DCO)=0.51 *3* gated on Q 752γ (2009Sc22), R(DCO)=0.98 *6* gated on D 362γ (2006Ga10).
420.3 *6*	0.7 *1*	3016.2		2595.93	17/2$^-$				
428.4	2.4 *1*	2318.31	(17/2$^+$)	1889.36	17/2$^+$				Eγ: from 2006Ga10. Eγ=425.4 *4* in 2009Sc22 is 3 keV different from Eγ derived from level energy difference.
437.0 *4*	0.6 *1*	3765.6	(21/2$^+$)	3329.84	21/2$^+$	D			Mult.: R(DCO)=0.46 *11* gated on Q 752γ (2009Sc22).
440.0[e] *10*		3803.0?	(23/2$^-$)	3363.20	21/2$^-$				Eγ: from 2006Ga10, γ not observed in 2009Sc22.
443.0 *4*	0.7 *1*	4435.5	25/2$^+$	3992.3	25/2$^+$	(D)			Mult.: R(DCO)=0.9 *4* gated on Q 752γ (2009Sc22).
451.1 *3*	3.9 *1*	5667.0	(29/2$^+$)	5216.3	(27/2$^+$)	D			Mult.: R(DCO)=0.49 *6* gated on Q 752γ (2009Sc22).
458.4 *5*	0.8 *1*	7906.3	(35/2$^-$)	7447.5	(33/2$^-$)				
470.5 *4*	1.8 *1*	3329.84	21/2$^+$	2859.8	21/2$^+$	(D)			Mult.: R(DCO)=1.07 *13* gated on Q 752γ (2009Sc22).
471.0 *4*	1.4 *1*	2413.84	15/2$^-$	1942.78	15/2$^+$			1.4 *3*	
483.5 *1*	4.2 *1*	4084.81	23/2$^-$	3601.31	21/2$^-$	D			Mult.: R(DCO)=0.39 *8* gated on Q 752γ (2009Sc22).
502.9 *8*	3.1 *1*	4963.6	(27/2$^+$)	4461.2	(25/2$^+$)	D			Mult.: R(DCO)=0.49 *5* gated on Q 752γ (2009Sc22).
513.6 *8*	2.7 *1*	8419.7	37/2$^-$	7906.3	(35/2$^-$)	D			Mult.: R(DCO)=1.1 *3* gated on D 182γ/362γ (2009Sc22).
513.7 *5*	1.8 *1*	7447.5	(33/2$^-$)	6933.9	(31/2$^-$)				
520.0 *4*	1.0 *1*	5869.3	29/2$^-$	5349.6	27/2$^-$				
522.5 *4*	2.6 *1*	5970.8	29/2$^-$	5448.3	(27/2$^-$)				
528.2 *4*	1.6 *1*	4963.6	(27/2$^+$)	4435.5	25/2$^+$	D			Mult.: R(DCO)=0.47 *23* gated on Q 752γ (2009Sc22).
533.6 *8*	1.6 *1*	4134.85	23/2$^-$	3601.31	21/2$^-$	D			Mult.: R(DCO)=1.1 *3* gated on D 182γ/362γ (2009Sc22).
542.3 *8*	0.7 *1*	2859.8	21/2$^+$	2318.31	(17/2$^+$)			<1	
543.4 *8*	1.4 *1*	3559.51	21/2$^-$	3016.2					
543.5 *10*		3139.3	(19/2)	2595.93	17/2$^-$	D+Q		1.4 *3*	Mult.: R(DCO)=0.63 *14* gated on D 182γ (2006Ga10).
549.0[b]		1587.2	(9/2,13/2)	1038.16	11/2$^+$	D+Q[c]	−0.3[c] *1*		
557.4 *4*	6.9 *2*	4642.17	25/2$^-$	4084.81	23/2$^-$	D+Q			Mult.: R(DCO)=0.70 *11* gated on Q 752γ (2009Sc22).
559.8 *2*	7.2 *2*	2313.61	13/2$^-$	1753.67	11/2$^-$			5.8 *6*	
576.8 *5*	1.2 *1*	4134.85	23/2$^-$	3559.51	21/2$^-$				Eγ: level-energy difference=575.3.
576.9 *4*	2.4 *1*	8672.1	(37/2$^-$)	8094.5	(35/2$^-$)	D			Mult.: R(DCO)=1.3 *3* gated on D 182γ/362γ (2009Sc22).
577.3 *4*	1.0 *1*	6933.9	(31/2$^-$)	6356.7	(29/2$^-$)	D+Q			Mult.: R(DCO)=0.70 *13* gated on Q 752γ (2009Sc22).
585.3 *5*	1.0 *1*	8032.8	(35/2$^-$)	7447.5	(33/2$^-$)				
598.2[e]		2699.63	17/2$^-$	2101.79	13/2$^-$			1.3 *2*	Eγ: from 2006Ga10, γ not observed in 2009Sc22.

$^{83}_{37}Rb_{46}$-5

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

γ(^{83}Rb) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	Iγ[&]	Comments
599.5 *5*	5.2 *2*	3195.17	19/2$^-$	2595.93	17/2$^-$				E_γ: from 2006Ga10. Eγ=597.3 *5* in 2009Sc22 is 1.9 keV different from Eγ derived from level energy difference.
601.3 *2*	18.1 *6*	3559.51	21/2$^-$	2958.12	19/2$^-$	D+Q	−0.03 *2*	4.2 *3*	Mult.: R(DCO)=0.45 *24* gated on Q 752γ (2009Sc22), R(DCO)=0.98 *7* gated on D 362γ (2006Ga10).
604.2 *10*		4407.1		3803.0?	(23/2$^-$)			<1	E_γ: from 2006Ga10, γ not observed in 2009Sc22.
606.2 *50*	3.4 *1*	4686.47	25/2$^-$	4084.81	23/2$^-$				E_γ: poor fit, not used in the fitting procedure. Level-energy difference=601.7.
643.3 *3*	9.9 *3*	3601.31	21/2$^-$	2958.12	19/2$^-$	D			Mult.: R(DCO)=0.38 *7* gated on Q 752γ (2009Sc22).
651.2 *5*	3.9 *1*	1753.67	11/2$^-$	1102.66	9/2$^-$			3.4 *3*	
653.2 *2*	13.6 *4*	2595.93	17/2$^-$	1942.78	15/2$^+$	D+Q	+0.05 *4*	6.0 *4*	Mult.: R(DCO)=0.58 *4* gated on Q 752γ (2009Sc22), R(DCO)=0.62 *22* gated on Q 752γ (2006Ga10).
660.2 *3*	4.2 *1*	2413.84	15/2$^-$	1753.67	11/2$^-$	Q		4.0 *4*	Mult.: R(DCO)=2.06 *13* gated on D 182γ/362γ (2009Sc22).
663.3[d] *5*	1.5[d] *1*	3363.20	21/2$^-$	2699.63	17/2$^-$				
663.3[d] *5*	0.6[d] *1*	5349.6	27/2$^-$	4686.47	25/2$^-$				
668.0 *5*	2.8 *1*	3440.38	21/2$^-$	2772.49	17/2$^-$	Q		<1	Mult.: R(DCO)=1.8 *4* gated on D 182γ/362γ (2009Sc22).
669.0 *6*	0.9 *1*	9341.4	(39/2$^-$)	8672.1	(37/2$^-$)				
684.2 *5*	2.4 *1*	7372.5	(33/2$^-$)	6688.1	(31/2$^-$)				
688.4 *8*	1.6 *1*	6557.1	(31/2$^-$)	5869.3	29/2$^-$				
697.1 *5*	1.5 *1*	7167.4	(33/2$^+$)	6470.4	(31/2$^+$)	D			Mult.: R(DCO)=0.46 *9* gated on Q 752γ (2009Sc22).
699.8[e] *10*		3559.51	21/2$^-$	2859.8	21/2$^+$			<1	E_γ: from 2006Ga10, γ not observed in 2009Sc22.
703.2 *3*	4.6 *1*	5667.0	(29/2$^+$)	4963.6	(27/2$^+$)	D			Mult.: R(DCO)=0.53 *8* gated on Q 752γ (2009Sc22).
707.6 *6*	1.1 *1*	5349.6	27/2$^-$	4642.17	25/2$^-$				
708.5 *2*	14.5 *4*	4435.5	25/2$^+$	3726.9	23/2$^+$	D			Mult.: R(DCO)=0.41 *3* gated on Q 752γ (2009Sc22).
717.2 *3*	5.2 *2*	6688.1	(31/2$^-$)	5970.8	29/2$^-$				
721.0 *5*	2.2 *1*	8094.5	(35/2$^-$)	7372.5	(33/2$^-$)				
721.5 *2*	8.5 *3*	4084.81	23/2$^-$	3363.20	21/2$^-$	D			Mult.: R(DCO)=0.43 *16* gated on Q 752γ (2009Sc22).
729.2 *6*	2.1 *1*	7167.4	(33/2$^+$)	6438.3	(31/2$^+$)				
731.8 *4*	10.0 *10*	736.99	7/2$^-$	5.23	3/2$^-$	Q		6.4 *3*	Mult.: R(DCO)=1.01 *4* gated on Q 1017γ (2006Ga10).
734.0 *6*	7.1 *2*	4461.2	(25/2$^+$)	3726.9	23/2$^+$	D+Q			Mult.: R(DCO)=0.87 *14* gated on Q 752γ (2009Sc22).
737.0 *2*	28.7 *9*	736.99	7/2$^-$	0.0	5/2$^-$	D+Q	+0.82 *18*	18.1 *17*	Mult.: R(DCO)=1.40 *9* gated on Q 1017γ (2006Ga10). δ: other: +1.5 *+10−8* (1985Zh09).
741.1 *5*	1.9 *1*	3440.38	21/2$^-$	2699.63	17/2$^-$			1.8 *3*	
751.7 *1*	100.0 *2*	793.77	13/2$^+$	42.20	9/2$^+$	Q		100 *4*	Mult.: R(DCO)=1.04 *8* gated on Q 1096γ (2006Ga10).
756.3 *4*	2.3 *1*	5216.3	(27/2$^+$)	4461.2	(25/2$^+$)				E_γ: level-energy difference=755.1.
762.8[b]		805.0	(7/2)$^+$	42.20	9/2$^+$	D+Q[c]	+0.4[c] *+4−2*		
771.4 *4*	5.0 *4*	6438.3	(31/2$^+$)	5667.0	(29/2$^+$)	D+Q			Mult.: R(DCO)=0.79 *14* gated on Q 752γ (2009Sc22).
771.9 *4*	2.0 *2*	4134.85	23/2$^-$	3363.20	21/2$^-$				
780.5 *5*	7.3 *2*	5216.3	(27/2$^+$)	4435.5	25/2$^+$				
786.6 *6*	0.7 *1*	3559.51	21/2$^-$	2772.49	17/2$^-$				
803.4 *4*	3.3 *2*	6470.4	(31/2$^+$)	5667.0	(29/2$^+$)				
806.3 *3*	2.9 *1*	5448.3	(27/2$^-$)	4642.17	25/2$^-$	(D)			Mult.: R(DCO)=0.67 *13* gated on D 182γ/362γ (2009Sc22).
822.6 *5*	5.8 *2*	2576.55	15/2$^-$	1753.67	11/2$^-$	Q		5.2 *4*	Mult.: R(DCO)=1.02 *8* gated on Q 1017γ (2006Ga10).

$^{83}_{37}Rb_{46}$-6

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

γ(^{83}Rb) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	Iγ[&]	Comments
834.0 *5*	2.5 *1*	4164.1	23/2$^-$	3329.84	21/2$^+$				
838.1 *3*	4.7 *2*	7906.3	(35/2$^-$)	7068.2	33/2$^-$	(D)			Mult.: R(DCO)=1.4 *4* gated on D 182γ/362γ (2009Sc22).
844[e] *1*		2733.3?	(19/2)$^+$	1889.36	17/2$^+$				E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22.
844.5 *2*	14.8 *5*	3440.38	21/2$^-$	2595.93	17/2$^-$	Q		6.6 *11*	Mult.: R(DCO)=1.28 *10* gated on D 182γ/362γ (2009Sc22), R(DCO)=2.11 *16* gated on D 182γ (2006Ga10).
847.5 *10*		4407.1		3559.51	21/2$^-$			2.6 *3*	E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22.
867.0 *2*	29.3 *9*	3726.9	23/2$^+$	2859.8	21/2$^+$	D		13.8 *8*	Mult.: R(DCO)=0.45 *2* gated on Q 752γ (2009Sc22), R(DCO)=0.57 *9* gated on Q 970γ (2006Ga10).
877.5[e] *10*		3195.17	19/2$^-$	2318.31	(17/2$^+$)				E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22.
890.0 *4*	1.7 *1*	7447.5	(33/2$^-$)	6557.1	(31/2$^-$)				
904.8 *3*	3.2 *1*	1942.78	15/2$^+$	1038.16	11/2$^+$			4.4 *6*	
935.0 *2*	1.2 *1*	5577.4		4642.17	25/2$^-$				
939.4 *2*	3.9 *1*	4134.85	23/2$^-$	3195.17	19/2$^-$	Q			Mult.: R(DCO)=1.16 *25* gated on Q 752γ (2009Sc22).
963.7[e] *10*		3559.51	21/2$^-$	2595.93	17/2$^-$			<1	E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22.
965.8 *5*	2.4 *1*	2067.4	11/2$^-$	1102.66	9/2$^-$				
969.8 *5*	5.9 *2*	4164.1	23/2$^-$	3195.17	19/2$^-$				
969.9 *5*	58.6 *18*	2859.8	21/2$^+$	1889.36	17/2$^+$	Q		43.2 *18*	Mult.: R(DCO)=0.97 *4* gated on Q 752γ (2009Sc22), R(DCO)=0.97 *9* gated on Q 1096γ (2006Ga10).
971.1 *2*	8.2 *3*	4963.6	(27/2$^+$)	3992.3	25/2$^+$			5.1 *5*	
993.7[e] *10*		3726.9	23/2$^+$	2733.3?	(19/2)$^+$			≈1	E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22. E$_\gamma$: questionable placement, as $\Delta\pi$ of levels would indicate E3 or M4 multipolarity, both of which result in transition probabilities well above RUL. Not included in Adopted Gammas.
995.2 *3*	9.5 *4*	1038.16	11/2$^+$	42.20	9/2$^+$	D+Q[c]	−0.8[c] *+3−7*	17.0 *21*	
998.9 *3*	14.8 *5*	2101.79	13/2$^-$	1102.66	9/2$^-$	Q		9.4 *6*	Mult.: R(DCO)=1.89 *15* gated on D 312γ (2006Ga10).
1011.2 *5*	2.0 *1*	3329.84	21/2$^+$	2318.31	(17/2$^+$)				
1015.0 *10*		5422.1	(25/2$^-$)	4407.1				0.8 *3*	E$_\gamma$: from 2006Ga10, γ not observed in 2009Sc22.
1016.4 *3*	16.5 *5*	1753.67	11/2$^-$	736.99	7/2$^-$	Q		15.2 *8*	Mult.: R(DCO)=1.27 *8* gated on D 182γ/362γ (2009Sc22), R(DCO)=1.11 *9* gated on Q 823γ (2006Ga10).
1026.8 *5*	1.2 *1*	8193.6	(35/2$^+$)	7167.4	(33/2$^+$)				
1033.7 *6*	1.3 *1*	6250.0		5216.3	(27/2$^+$)				
1036.0 *6*	2.3 *1*	2073.7	13/2$^-$	1038.16	11/2$^+$				δ: −0.9 *+3−13* from 1985Zh09 would result in too large a B(M2) strength, assuming E1+M2 multipolarity for the transition derived from the level scheme.
1054.5[b]		1096.7	(7/2$^+$,9/2$^+$)	42.20	9/2$^+$				
1058.7 *6*	1.5 *1*	5051.0		3992.3	25/2$^+$				
1082.7 *4*	2.1 *1*	4642.17	25/2$^-$	3559.51	21/2$^-$				
1095.5 *1*	88 *3*	1889.36	17/2$^+$	793.77	13/2$^+$	Q		70 *3*	Mult.: R(DCO)=1.08 *4* gated on Q 752γ (2009Sc22), R(DCO)=1.00 *9* gated on Q 752γ (2006Ga10).
1102.4 *2*	18.3 *6*	1102.66	9/2$^-$	0.0	5/2$^-$	Q		24.2 *9*	Mult.: R(DCO)=1.73 *7* gated on D 182γ/362γ (2009Sc22), R(DCO)=0.93 *9* gated on Q 999γ (2006Ga10).

$^{83}_{37}Rb_{46}$-7

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

γ(^{83}Rb) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	Iγ[&]	Comments
1104.5 *5*	3.6 *1*	4435.5	25/2$^+$	3329.84	21/2$^+$			
1126.9 *1*	8.0 *2*	4686.47	25/2$^-$	3559.51	21/2$^-$	Q	2.8 *3*	Mult.: R(DCO)=2.06 *14* gated on D 182γ/362γ (2009Sc22), R(DCO)=1.8 *6* gated on D 362γ (2006Ga10).
1132.4 *1*	21.1 *6*	3992.3	25/2$^+$	2859.8	21/2$^+$	Q	14.2 *12*	Mult.: R(DCO)=1.1 *5* gated on Q 752γ (2009Sc22), R(DCO)=0.99 *10* gated on Q 1096γ (2006Ga10).
1142.4 *3*	2.7 *1*	5577.4		4435.5	25/2$^+$			
1149.0 *1*	19.3 *6*	1942.78	15/2$^+$	793.77	13/2$^+$	D	12.5 *14*	Mult.: R(DCO)=0.31 *2* gated on Q 752γ (2009Sc22), R(DCO)=0.44 *5* gated on Q 752γ (2006Ga10). δ: −0.9 *+3−4* from 1985Zh09 is calculated assuming J^π=13/2$^+$ for 1943-keV level (adopted J^π=15/2$^+$).
1168.5 *3*	1.7 *1*	2206.4	(13/2)	1038.16	11/2$^+$			
1178.1 *5*	0.5 *1*	4715.3		3537.0				
1182.7 *2*	9.4 *3*	5869.3	29/2$^-$	4686.47	25/2$^-$	Q	<1	Mult.: R(DCO)=2.38 *18* gated on D 182γ/362γ (2009Sc22).
1198.8 *3*	8.5 *3*	7068.2	33/2$^-$	5869.3	29/2$^-$	Q	<1	Mult.: R(DCO)=2.6 *3* gated on D 182γ/362γ (2009Sc22).
1207.1 *6*	1.5 *1*	6423.4		5216.3	(27/2$^+$)			
1207.3 *5*	4.7 *15*	6557.1	(31/2$^-$)	5349.6	27/2$^-$			
1210.5 *3*	6.9 *22*	2313.61	13/2$^-$	1102.66	9/2$^-$	Q	5.2 *5*	Mult.: R(DCO)=1.83 *13* gated on D 182γ/362γ (2009Sc22), R(DCO)=1.05 *9* gated on Q 1103γ (2006Ga10).
1214.8 *3*	6.6 *21*	5349.6	27/2$^-$	4134.85	23/2$^-$	Q		Initial level energy of 6422.6 in table I of 2009Sc22 is incorrect. Mult.: R(DCO)=2.2 *6* gated on D 182γ/362γ (2009Sc22).
1218.6 *5*	1.8 *1*	3537.0		2318.31	(17/2$^+$)			
1223.5 *5*	1.3 *1*	5216.3	(27/2$^+$)	3992.3	25/2$^+$			
1232.0 *6*	4.6 *14*	5667.0	(29/2$^+$)	4435.5	25/2$^+$			
1235.7[e] *10*		4963.6	(27/2$^+$)	3726.9	23/2$^+$		<1	Eγ: from 2006Ga10, γ not observed in 2009Sc22.
1239.5 *7*	0.4 *1*	6688.1	(31/2$^-$)	5448.3	(27/2$^-$)			
1246.2 *2*	9.0 *3*	4686.47	25/2$^-$	3440.38	21/2$^-$	Q	3.4 *5*	Mult.: R(DCO)=1.14 *17* gated on Q 752γ (2009Sc22), R(DCO)=1.9 *3* gated on D 182γ (2006Ga10).
1247.1 *4*	0.2 *1*	9341.4	(39/2$^-$)	8094.5	(35/2$^-$)			
1269.9 *3*	1.3 *1*	4129.7		2859.8	21/2$^+$			
1275.6 *5*	3.0 *1*	2313.61	13/2$^-$	1038.16	11/2$^+$		1.4 *2*	
1278.8 *2*	6.0 *2*	4642.17	25/2$^-$	3363.20	21/2$^-$	Q		Mult.: R(DCO)=1.78 *12* gated on D 182γ/362γ (2009Sc22).
1300.4 *5*	0.5 *1*	8672.1	(37/2$^-$)	7372.5	(33/2$^-$)			
1304.0[e] *10*		4164.1	23/2$^-$	2859.8	21/2$^+$			Eγ: from 2006Ga10, γ not observed in 2009Sc22.
1305.2 *3*	7.6 *2*	3195.17	19/2$^-$	1889.36	17/2$^+$	D		Mult.: R(DCO)=0.58 *8* gated on Q 752γ (2009Sc22).
1323.8 *3*	9.5 *3*	5316.2	29/2$^+$	3992.3	25/2$^+$	Q	7.0 *1*	Mult.: R(DCO)=1.20 *8* gated on Q 970γ/1133γ (2006Ga10).
1328.7 *3*	5.1 *2*	5970.8	29/2$^-$	4642.17	25/2$^-$	Q		Mult.: R(DCO)=1.84 *15* gated on D 182γ/362γ (2009Sc22).
1349.5 *4*	2.0 *1*	7906.3	(35/2$^-$)	6557.1	(31/2$^-$)			
1351.3 *5*	2.9 *1*	8419.7	37/2$^-$	7068.2	33/2$^-$	Q		Mult.: R(DCO)=0.91 *16* gated on Q 752γ (2009Sc22).
1351.9 *6*	0.9 *1*	6668.9		5316.2	29/2$^+$		<1	
1363.0 *5*	0.5 *1*	5448.3	(27/2$^-$)	4084.81	23/2$^-$			
1372.8 *5*	1.4 *1*	6088.1		4715.3				
1385.5 *4*	3.3 *1*	4715.3		3329.84	21/2$^+$			
1402.1 *7*	1.2 *1*	7372.5	(33/2$^-$)	5970.8	29/2$^-$			

$^{83}_{37}Rb_{46}$-8

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)

γ(^{83}Rb) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	Iγ[&]	Comments
1406.5 *6*	0.6 *1*	8094.5	(35/2$^-$)	6688.1	(31/2$^-$)				
1440.5 *2*	10.7 *3*	3329.84	21/2$^+$	1889.36	17/2$^+$	Q			Mult.: R(DCO)=1.19 *11* gated on Q 752γ (2009Sc22).
1448.2 *5*	0.7 *1*	3765.6	(21/2$^+$)	2318.31	(17/2$^+$)				
1474.3 *4*	1.5 *1*	6438.3	(31/2$^+$)	4963.6	(27/2$^+$)				
1476.0 *5*	0.7 *1*	8032.8	(35/2$^-$)	6557.1	(31/2$^-$)				
1490.7 *4*	1.7 *1*	9910.4	41/2$^-$	8419.7	37/2$^-$	Q			Mult.: R(DCO)=2.1 *4* gated on D 182γ/362γ (2009Sc22).
1500.7 *4*	1.8 *1*	7167.4	(33/2$^+$)	5667.0	(29/2$^+$)				
1524.7 *2*	5.1 *2*	2318.31	(17/2$^+$)	793.77	13/2$^+$				
1545.2 *5*	0.6 *1*	7633.3		6088.1					
1576.1 *6*	1.8 *1*	4435.5	25/2$^+$	2859.8	21/2$^+$				
1597.0 *4*	5.8 *2*	6913.2	(33/2$^+$)	5316.2	29/2$^+$			4.1 *8*	
1601.0 *6*	0.6 *1*	9633.9	(39/2$^-$)	8032.8	(35/2$^-$)				
1602.9 *4*	2.2 *1*	4461.2	(25/2$^+$)	2859.8	21/2$^+$				E_γ: level-energy difference=1601.5.
1620.2 *2*	10.1 *3*	2413.84	15/2$^-$	793.77	13/2$^+$	D+Q	+0.02 *1*	4.8 *8*	Mult.: R(DCO)=0.77 *5* gated on Q 752γ (2009Sc22), R(DCO)=0.56 *8* gated on Q 752γ (2006Ga10).
1670.4 *5*	0.8 *1*	6356.7	(29/2$^-$)	4686.47	25/2$^-$				
1696.0 *7*	0.9 *1*	6912.3		5216.3	(27/2$^+$)				
1706.0 *6*	1.6 *1*	6668.9		4963.6	(27/2$^+$)			<1	
1738.5[b]		1780.7		42.20	9/2$^+$				
1754.3 *6*	0.9 *1*	8193.6	(35/2$^+$)	6438.3	(31/2$^+$)				
1804.6 *7*	0.6 *1*	11715.1	(45/2$^-$)	9910.4	41/2$^-$				
1924.4 *6*	1.2 *1*	8837.6	(37/2$^+$)	6913.2	(33/2$^+$)			<1	
2025.1 *6*	0.9 *1*	2067.4	11/2$^-$	42.20	9/2$^+$				
2049.3 *8*	0.6 *1*	8962.5		6913.2	(33/2$^+$)				
2211.4 *8*	0.2 *1*	13926.5	(49/2$^-$)	11715.1	(45/2$^-$)				

[†] From 2009Sc22, except where noted.
[‡] From R(DCO) in 2009Sc22 and 2006Ga10, except where noted. R(DCO) values are included in the comments.
[#] From R(DCO) analysis in 2006Ga10, except where noted.
[@] From 2009Sc22.
[&] From 2006Ga10.
[a] From the Adopted Gammas.
[b] From 1985Zh09, not observed in 2009Sc22,2006Ga10.
[c] From $\gamma(\theta)$ in 1985Zh09.
[d] Multiply placed with intensity suitably divided.
[e] Placement of transition in the level scheme is uncertain.

$^{83}_{37}Rb_{46}$-9

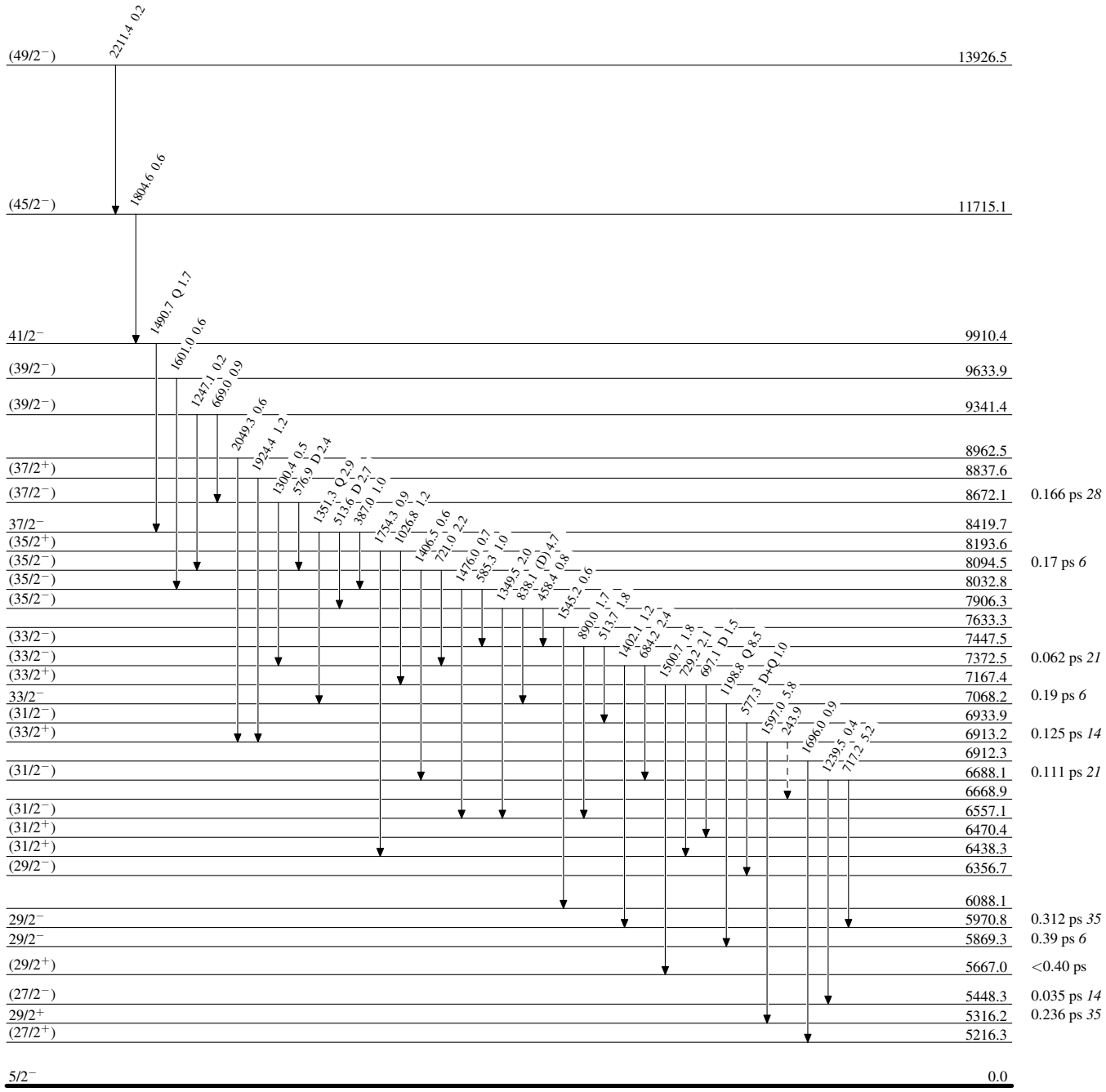
^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

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)

Level Scheme

Intensities: Relative I_γ



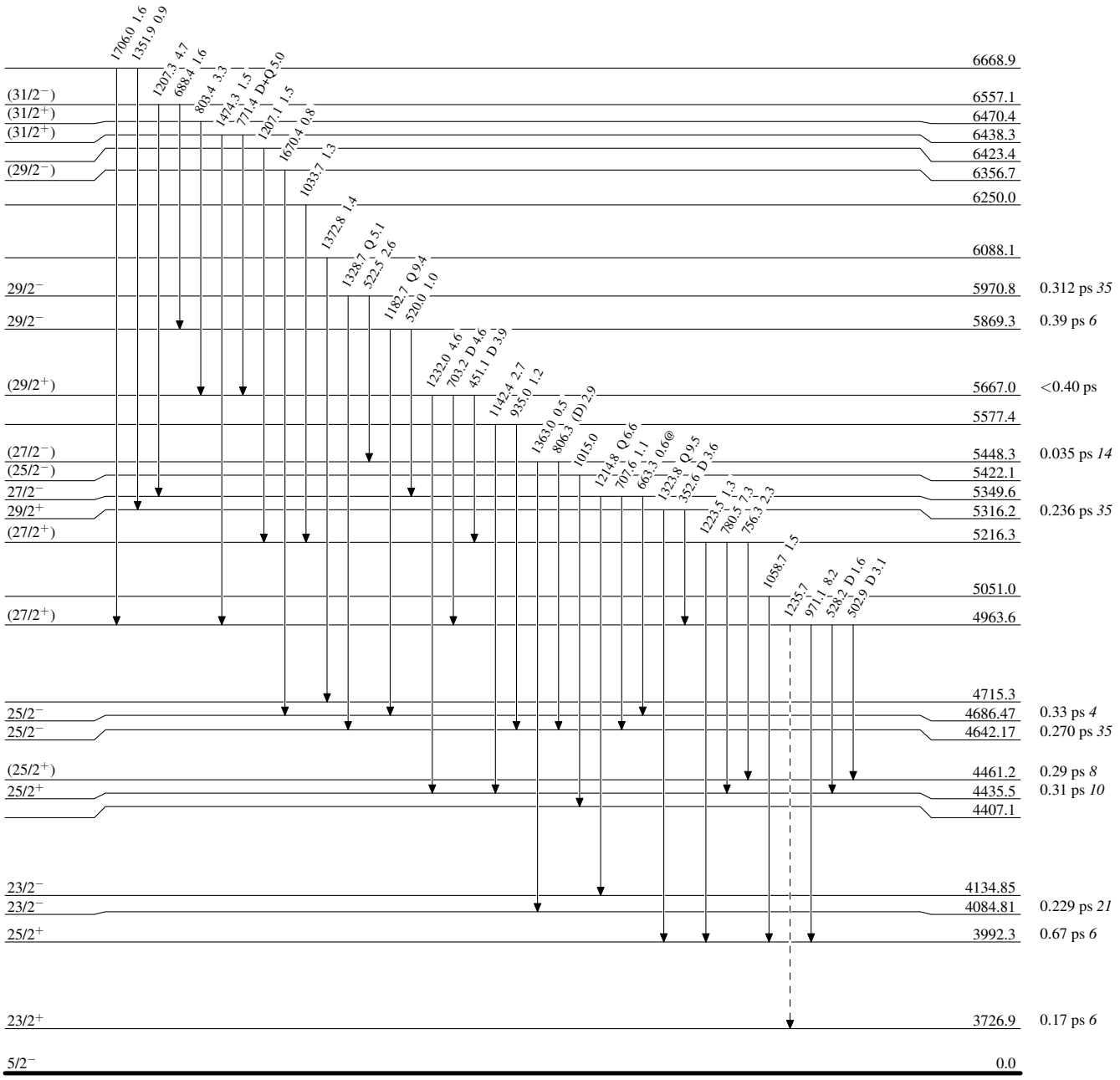
$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

Level 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)



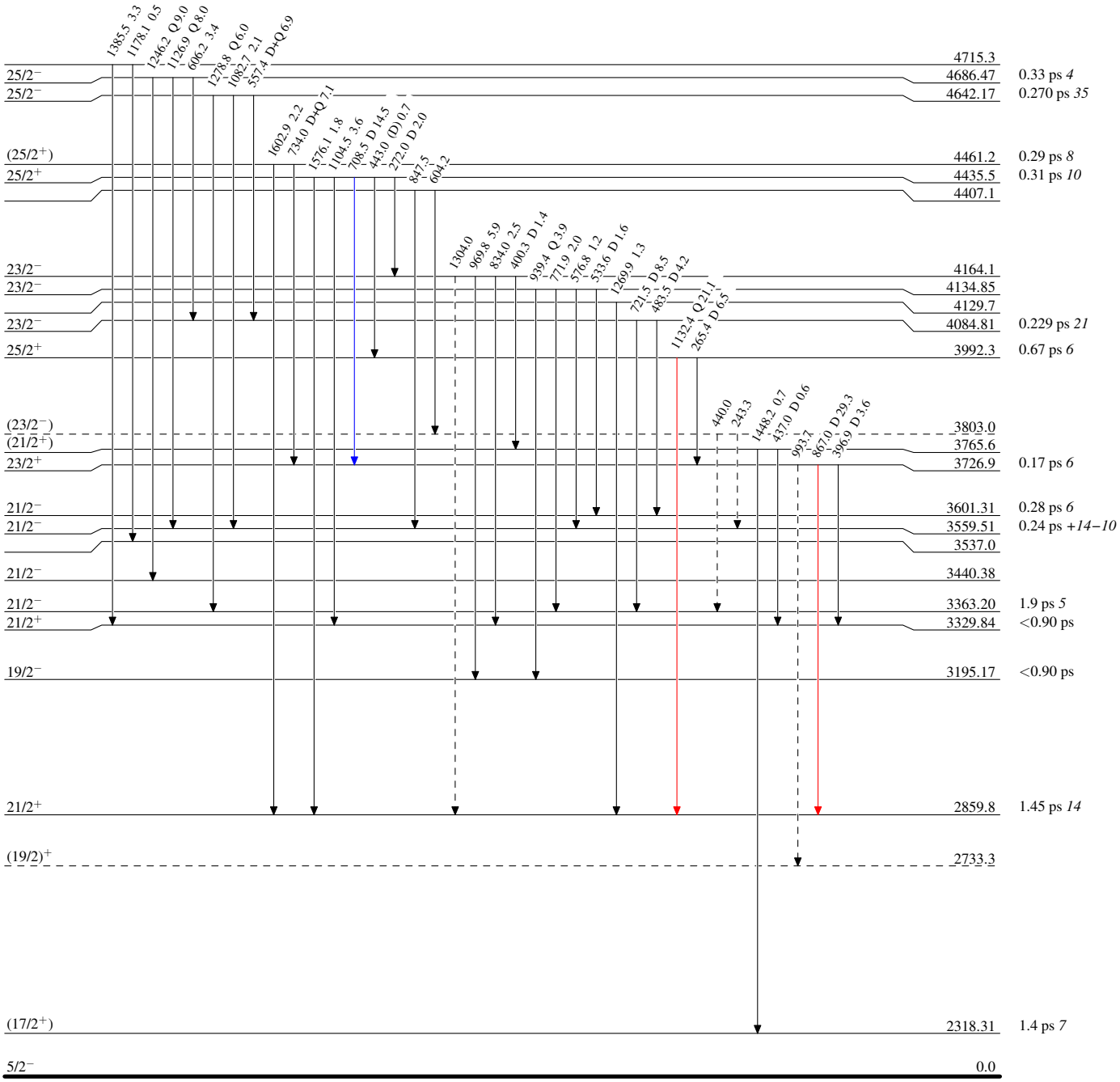
$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

Level 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)



$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

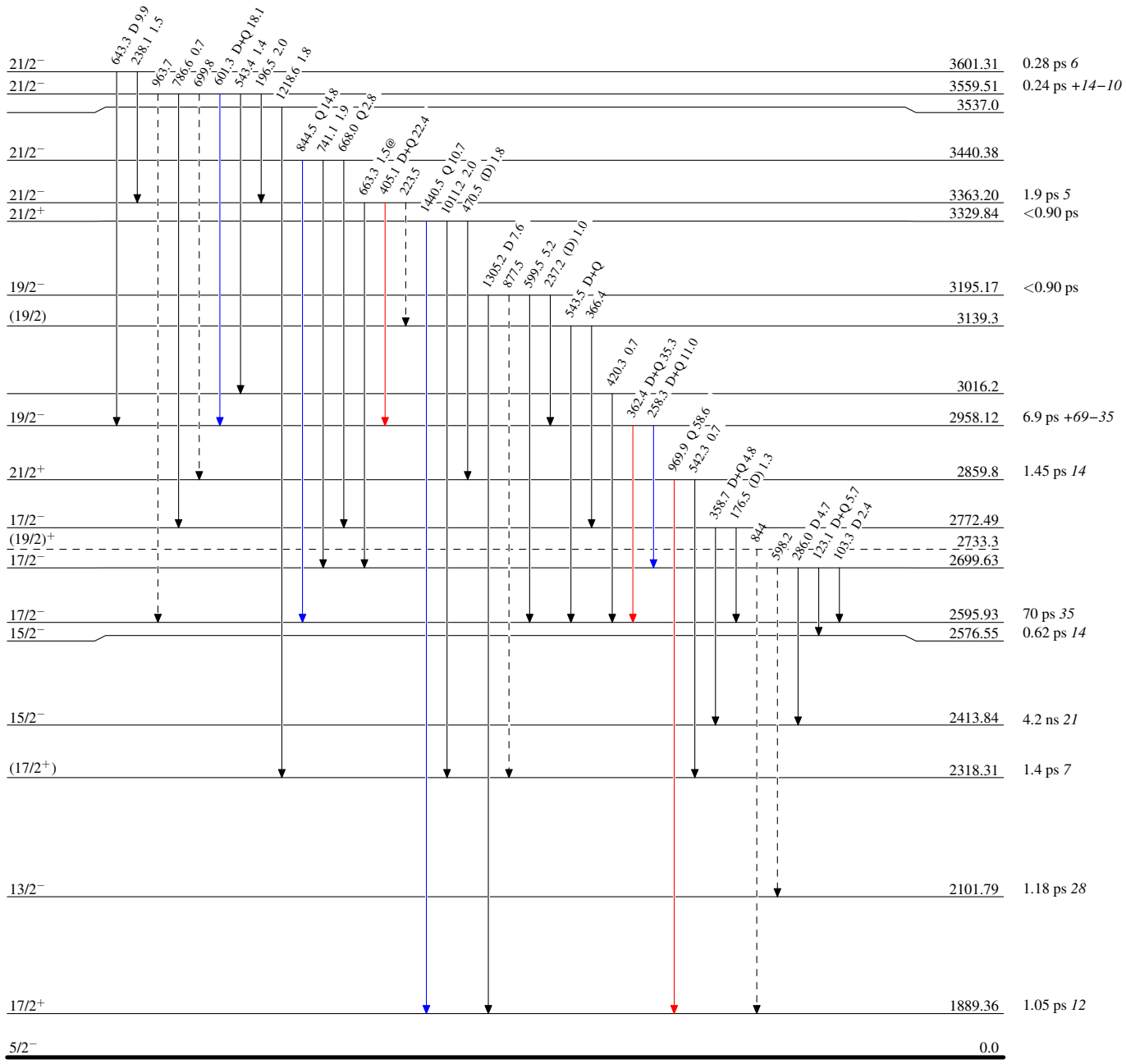
Level Scheme (continued)

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)



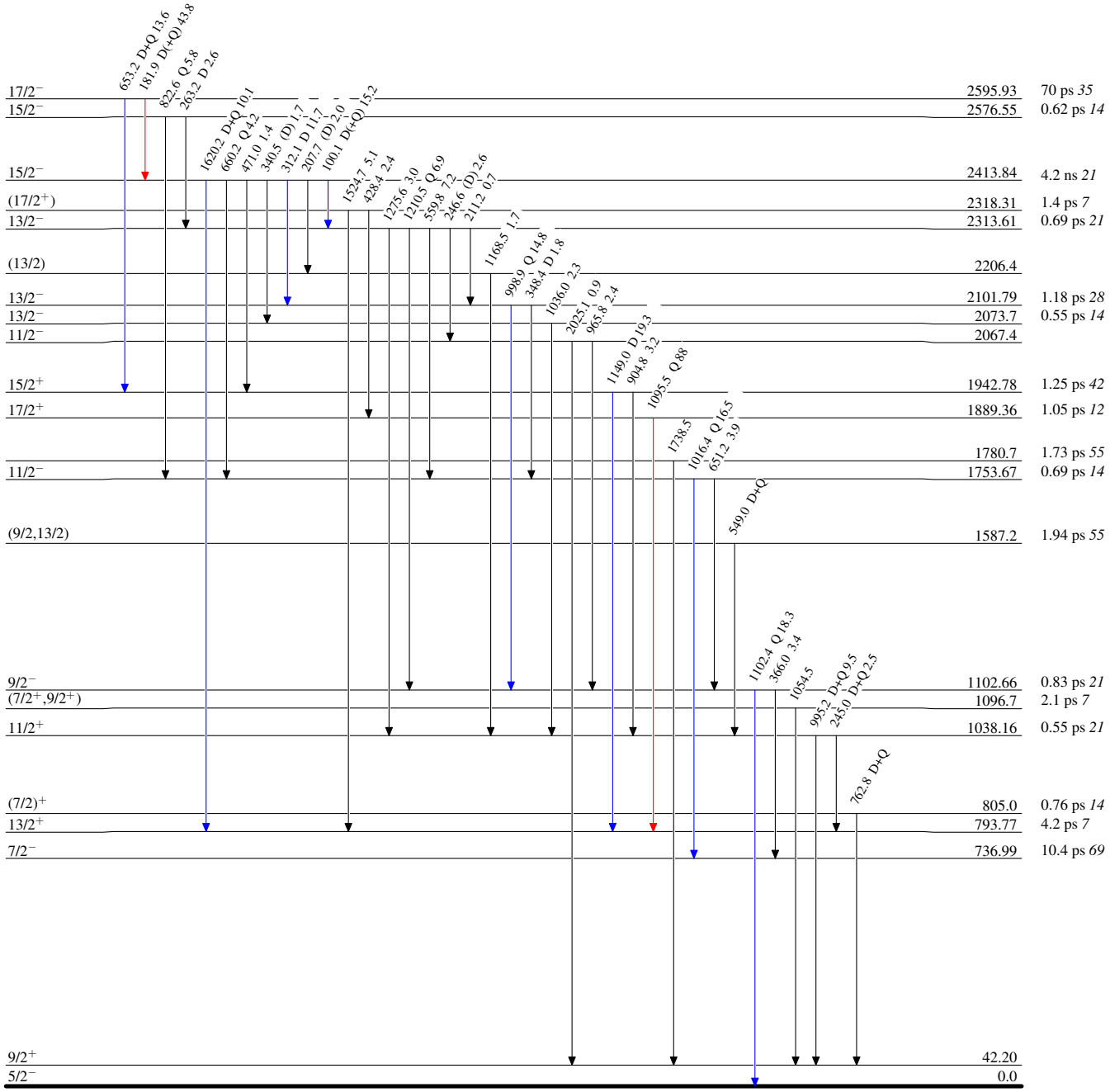
$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

Level Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

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

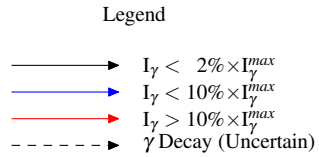


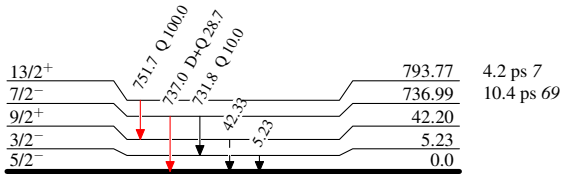
$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09

Level Scheme (continued)

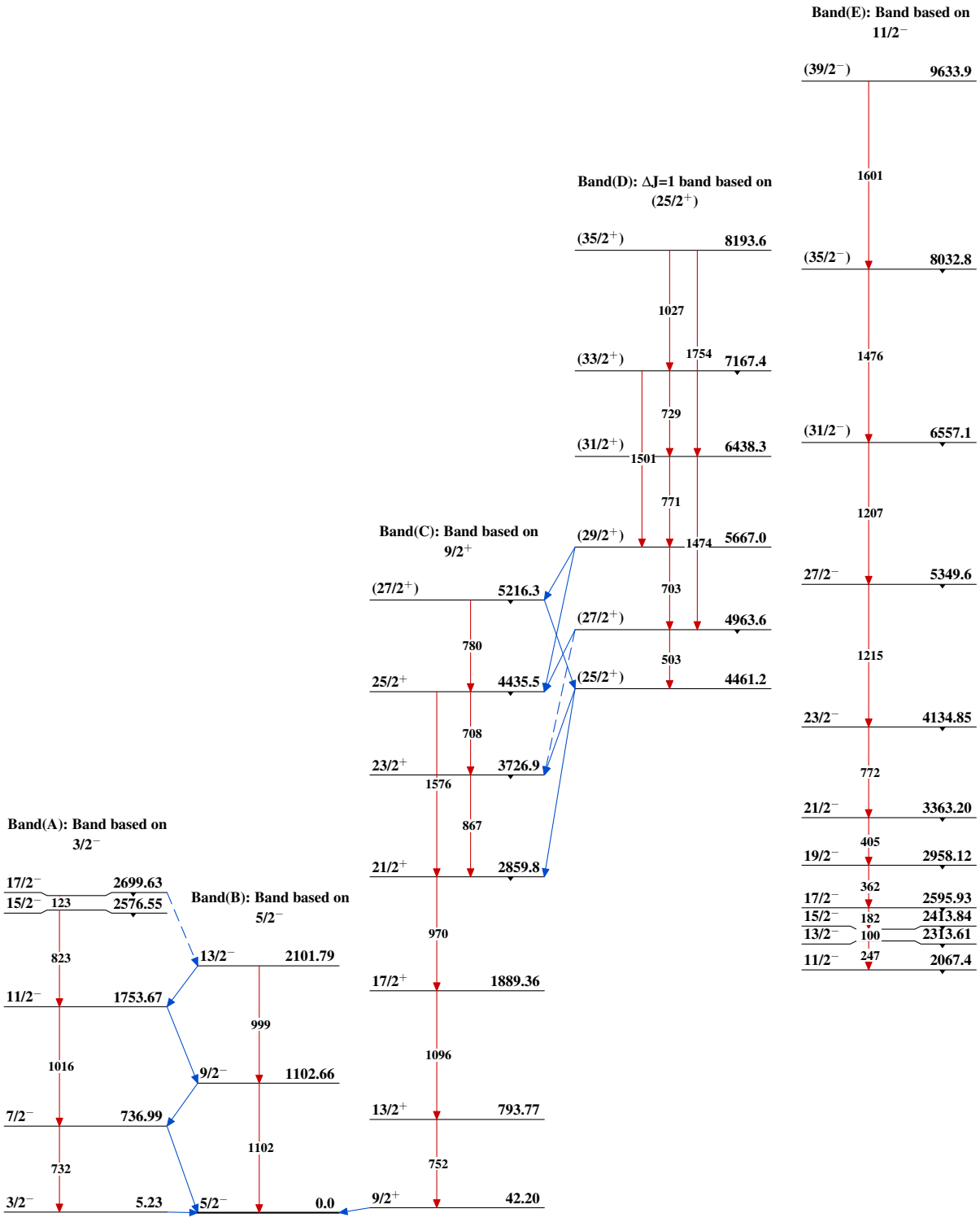
Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided





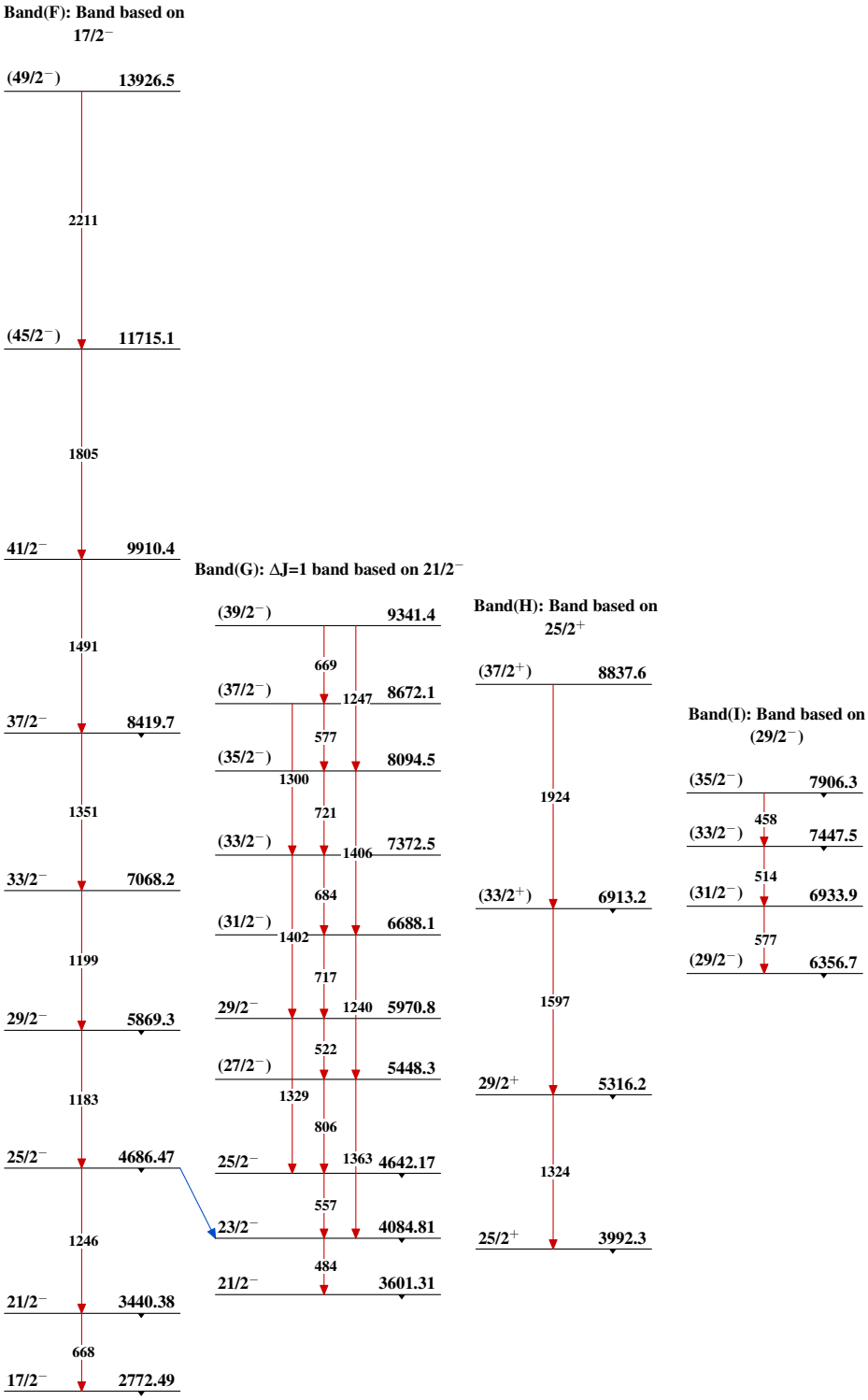
$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09



$^{83}_{37}Rb_{46}$

^{76}Ge(^{11}B,4nγ),^{76}Ge(^{10}B,3nγ) 2009Sc22,2006Ga10,1985Zh09 (continued)



$^{83}_{37}Rb_{46}$