^{124}Sn(^{13}C,5nγ) 1995Ju09

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. A. Rodionov and S. Sakharov, Balraj Singh	NDS 104, 497 (2005)	10-Feb-2005

1995Ju09: E=65.5 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma(\theta)$(DCO) using NORDBALL array of 15 Ge detectors.
Other:
2003Fo04: ^{173}Yb(^{24}Mg,Xγ), ^{197}Au(^{24}Mg,Xγ) E=134.5 MeV; ^{197}Au(^{23}Na,Xγ) E=129 MeV. Measured Eγ, Iγ, $\gamma\gamma$ following fission of compound nucleus. About ten γ rays assigned to ^{132}Ba, which are mostly from the yrast band.
Additional information 1.

^{132}Ba Levels

E(level)	J$^{\pi}$[†]	Comments
0.0[‡]	0$^+$	
464.62[‡] *8*	2$^+$	
1032.00[#] *8*	2$^+$	
1128.02[‡] *10*	4$^+$	
1511.26[@] *9*	3$^+$	
1729.92[#] *9*	4$^+$	
1932.45[‡] *11*	6$^+$	
1944.97 *12*	(4$^+$)	J$^{\pi}$: 1995Ju09 proposed 4$^-$ and possibly As a bandhead, but 4$^+$ is preferred from $\gamma\gamma(\theta)$ data In ^{132}La ε decay.
2027.59[f] *10*	4$^-$	
2120.22[c] *10*	5$^-$	
2141.53? *14*	(6$^+$)	E(level): this level is suspect (evaluators, not reported in any other study). See also comment for 1013.5γ.
2226.50[@] *12*	(5$^+$)	
2241.32[#] *11*	6$^+$	
2313.18[e] *14*	5$^-$	
2358.29[d] *11*	6$^-$	
2423.35[f] *11*	6$^-$	
2440.0 *5*		
2483.71[c] *11*	17$^-$	
2718.86[e] *11*	7$^-$	
2800.75[‡] *11*	8$^+$	
2867.61[#] *11*	8$^+$	
2901.23[d] *11*	8$^-$	
2902.28[h] *13*	7$^-$	
2935.60[@] *15*	(7$^+$)	
2961.68 *15*	8$^-$	
3095.34[f] *11*	8$^-$	
3105.51[i] *11*	8$^-$	
3116.77[‡] *12*	10$^+$	
3122.76 *15*	(8$^+$)	
3188.99[c] *12*	9$^-$	
3340.81[h] *11*	9$^-$	
3356.93 *13*	9$^-$	
3482.90[e] *13*	9$^-$	
3505.76 *18*	(9$^+$)	
3546.15 *15*	9	
3599.27[a] *13*	10$^+$	
3659.87[d] *13*	10$^-$	

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^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

^{132}Ba Levels (continued)

E(level)	J$^{\pi}$[†]
3678.46[#] *13*	10$^+$
3721.96[i] *12*	10$^-$
3805.87 *13*	10$^+$
3906.71 *14*	11$^+$
3916.49[‡] *13*	12$^+$
3943.86 *13*	10$^+$
3950.84[h] *12*	11$^-$
4062.15[c] *13*	11$^-$
4229.8 *6*	
4362.34[#] *15*	12$^+$
4365.80[e] *16*	(11$^-$)
4440.99[i] *13*	12$^-$
4547.68 *13*	12$^+$
4557.00[d] *13*	12$^-$
4565.07[a] *14*	12$^+$
4689.86 *17*	12$^+$
4704.96 *17*	12$^+$
4711.88[h] *14*	13$^-$
4805.97[‡] *14*	14$^+$
4811.81[b] *14*	11$^+$
4820.63[c] *13*	13$^-$
4985.20[&] *16*	13$^+$
4997.14[b] *13*	12$^+$
5033.69 *14*	13$^-$
5085.71 *15*	14$^+$
5104.83 *16*	13$^-$
5200.96[b] *14*	13$^+$
5283.04[c] *17*	15$^-$
5321.45[d] *14*	14$^-$
5336.64[i] *15*	14$^-$
5376.31 *17*	14$^+$
5436.79[b] *14*	14$^+$
5476.26 *14*	14$^+$
5540.36[&] *16*	15$^+$
5574.56[h] *15*	15$^-$
5630.9[a] *4*	(14$^+$)
5721.34[g] *14*	14$^-$
5771.73[b] *15*	15$^+$
5836.60[‡] *16*	16$^+$
5871.04 *16*	15$^-$
5872.68 *18*	15$^+$
5891.30[g] *14*	15$^-$
5991.35[d] *19*	16$^-$
6107.09[g] *15*	16$^-$
6134.28 *18*	15
6196.32[b] *18*	16$^+$
6268.31 *20*	16$^+$
6274.94[i] *18*	16$^-$
6295.0[c] *3*	17$^-$

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^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

^{132}Ba Levels (continued)

E(level)	J$^{\pi}$[†]	Comments
6374.79[&] *17*	17$^+$	
6414.77[g] *16*	17$^-$	
6485.22[h] *16*	17$^-$	
6665.3[b] *6*	(17$^+$)	
6691.70[‡] *18*	18$^+$	
6821.67[g] *19*	18$^-$	
6955.41 *19*	18$^+$	
7144.3[b] *8*	(18$^+$)	
7239.1[c] *3*	19$^-$	
7287.7[g] *4*	(19$^-$)	
7397.49[&] *20*	(19$^+$)	
7624.41[‡] *21*	20$^+$	
7751.7[g] *6*	(20$^-$)	J$^{\pi}$: 1995Ju09 give (21$^-$) In figure 2, which is probably a misprint.
8311.1[c] *6*	(21$^-$)	

[†] As proposed by 1995Ju09 based on authors' $\gamma\gamma(\theta)$ data and band assignments. 1995Ju09 state that DCO=1.4 for ΔJ=2, quadrupole and DCO=0.8 for ΔJ=1, dipole transitions. The assignments are the same As In Adopted Levels, except that parentheses have been added (by the evaluators) when strong arguments are lacking.
[‡] Band(A): yrast band.
[#] Band(B): γ band, α=0.
[@] Band(b): γ band, α=1.
[&] Band(C): band based on 13$^+$.
[a] Band(D): band based on 10$^+$.
[b] Band(E): ΔJ=1 band based on 11$^+$. Possibly a dipole magnetic-rotational structure.
[c] Band(F): band based on 5$^-$.
[d] Band(G): band based on 6$^-$.
[e] Band(H): band based on 5$^-$.
[f] Band(h): Band based on 4$^-$.
[g] Band(I): ΔJ=1 band based on 14$^-$. Possibly a dipole magnetic-rotational structure.
[h] Band(J): band based on 7$^-$.
[i] Band(K): band based on 8$^-$.

γ(^{132}Ba)

E$_\gamma$[†]	I$_\gamma$	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$	Comments
125.5 *1*	4.0 *6*	2483.71	17$^-$	2358.29	6$^-$	DCO= 0.50 *7*.
151.9 *1*	0.38 *7*	3340.81	9$^-$	3188.99	9$^-$	DCO= 1.06 *10*.
169.9 *1*	2.7 *2*	5891.30	15$^-$	5721.34	14$^-$	DCO= 0.73 *5*.
175.3 *1*	0.70 *5*	2120.22	5$^-$	1944.97	(4$^+$)	DCO= 0.58 *8*.
185.4 *1*	0.40 *5*	4997.14	12$^+$	4811.81	11$^+$	DCO= 0.82 *8*.
187.7 *1*	1.2 *1*	2120.22	5$^-$	1932.45	6$^+$	DCO= 0.79 *5*.
203.9 *1*	1.8 *1*	5200.96	13$^+$	4997.14	12$^+$	DCO= 0.76 *3*.
215.7 *1*	5.0 *3*	6107.09	16$^-$	5891.30	15$^-$	DCO= 0.75 *3*.
229.0 *1*	0.70 *5*	3950.84	11$^-$	3721.96	10$^-$	DCO= 0.65 *7*.
235.2 *1*	1.3 *2*	3340.81	9$^-$	3105.51	8$^-$	DCO= 0.71 *6*.
235.9 *1*	2.3 *2*	5436.79	14$^+$	5200.96	13$^+$	DCO= 0.72 *4*.
236.1 *1*	0.7 *2*	6107.09	16$^-$	5871.04	15$^-$	DCO= 0.73 *7*.

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^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

γ(^{132}Ba) (continued)

E_γ †	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
238.1 *1*	7.4 *4*	2358.29	6^-	2120.22	5^-	DCO= 0.55 *3*.
242.5 *1*	5.5 *3*	2483.71	17^-	2241.32	6^+	DCO= 0.78 *4*.
245.5 *1*	0.60 *5*	3340.81	9^-	3095.34	8^-	DCO= 0.40 *8*.
249.1 *1*	1.5 *1*	3116.77	10^+	2867.61	8^+	DCO= 1.39 *11*.
275.3 *1*	0.80 *8*	5476.26	14^+	5200.96	13^+	DCO= 0.66 *5*.
285.6 *1*	3.0 *2*	2313.18	5^-	2027.59	4^-	DCO= 0.72 *7*.
287.7 *1*	1.3 *1*	3188.99	9^-	2901.23	8^-	DCO= 0.66 *5*.
295.4 *1*	0.90 *6*	5771.73	15^+	5476.26	14^+	DCO= 0.45 *4*.
295.6 *1*	1.1 *1*	2718.86	7^-	2423.35	6^-	DCO= 0.43 *4*.
296.0 *1*	0.4 *1*	5836.60	16^+	5540.36	15^+	
297.6 *1*	0.3 *1*	2027.59	4^-	1729.92	4^+	DCO= 0.84 *8*.
303.1 *1*	4.0 *2*	2423.35	6^-	2120.22	5^-	DCO= 0.65 *3*.
307.7 *1*	3.5 *2*	6414.77	17^-	6107.09	16^-	DCO= 0.72 *5*.
316.0 *1*	36 *2*	3116.77	10^+	2800.75	8^+	DCO= 1.39 *2*.
317.0 *1*	0.5 *1*	6691.70	18^+	6374.79	17^+	
330.7 *1*	0.9 *1*	2358.29	6^-	2027.59	4^-	
335.0 *1*	2.3 *2*	5771.73	15^+	5436.79	14^+	DCO= 0.62 *4*.
360.5 *1*	0.81 *5*	2718.86	7^-	2358.29	6^-	DCO= 0.75 *6*.
363.5 *1*	19.5 *10*	2483.71	17^-	2120.22	5^-	DCO= 1.46 *3*.
376.5 *1*	1.2 *1*	3095.34	8^-	2718.86	7^-	DCO= 0.57 *5*.
378.1 *1*	0.80 *7*	6485.22	17^-	6107.09	16^-	DCO= 0.54 *9*.
381.1 *1*	0.60 *5*	3721.96	10^-	3340.81	9^-	DCO= 0.62 *4*.
383.0 *1*	0.20 *4*	1511.26	3^+	1128.02	4^+	
383.0 *1*	0.40 *5*	3505.76	(9^+)	3122.76	(8^+)	DCO= 0.68 *7*.
386.6 *1*	0.70 *6*	3105.51	8^-	2718.86	7^-	DCO= 0.51 *4*.
387.6 *1*	0.33 *5*	3482.90	9^-	3095.34	8^-	
390.3 *1*	20.0 *10*	2120.22	5^-	1729.92	4^+	DCO= 0.73 *3*.
395.7 *1*	3.1 *2*	2423.35	6^-	2027.59	4^-	DCO= 1.5 *2*.
402.1 *1*	0.91 *14*	4062.15	11^-	3659.87	10^-	DCO= 0.69 *8*.
406.9 *1*	1.3 *1*	6821.67	18^-	6414.77	17^-	DCO= 0.66 *7*.
417.5 *1*	6.0 *3*	2901.23	8^-	2483.71	17^-	DCO= 0.43 *4*.
424.6 *1*	2.2 *2*	6196.32	16^+	5771.73	15^+	DCO= 0.56 *4*.
438.4 *1*	1.5 *2*	3340.81	9^-	2902.28	7^-	DCO= 1.32 *8*.
439.5 *1*	0.90 *10*	3340.81	9^-	2901.23	8^-	DCO= 0.39 *3*.
455.0 *5*	0.68 *6*	5540.36	15^+	5085.71	14^+	DCO= 0.61 *5*.
455.5 *1*	1.0 *2*	3356.93	9^-	2901.23	8^-	DCO= 0.46 *4*.
462.4 *1*	8.3 *4*	5283.04	15^-	4820.63	13^-	DCO= 1.34 *6*.
464.6 *1*		464.62	2^+	0.0	0^+	DCO= 1.19 *2*.
466.0 *5*	<0.5	7287.7	(19^-)	6821.67	18^-	
469.0 *5*	<0.5	6665.3	(17^+)	6196.32	16^+	
470.8 *1*	0.90 *6*	3659.87	10^-	3188.99	9^-	DCO= 0.60 *2*.
477.8 *1*	1.7 *2*	2901.23	8^-	2423.35	6^-	DCO= 1.25 *7*.
479.0 *5*	0.5 *1*	7144.3	(18^+)	6665.3	(17^+)	
479.3 *1*	2.0 *2*	1511.26	3^+	1032.00	2^+	
490.2 *1*	0.60 *6*	4440.99	12^-	3950.84	11^-	DCO= 0.72 *7*.
494.6 *1*	<0.2	4557.00	12^-	4062.15	11^-	
511.3 *1*	5.2 *3*	2241.32	6^+	1729.92	4^+	DCO= 1.40 *7*.
516.2 *1*	3.8 *2*	2027.59	4^-	1511.26	3^+	DCO= 0.85 *8*.
537.8 *1*	1.5 *1*	6374.79	17^+	5836.60	16^+	E_γ: level-energy difference=538.2. DCO= 0.62 *6*.
540.0 *1*	2.1 *1*	3340.81	9^-	2800.75	8^+	DCO= 0.77 *5*.
542.8 *1*	0.45 *7*	2901.23	8^-	2358.29	6^-	DCO= 1.2 *2*.
547.0 *5*	0.3 *1*	5104.83	13^-	4557.00	12^-	
551.3 *1*	1.0 *1*	2483.71	17^-	1932.45	6^+	DCO= 0.63 *6*.
559.5 *1*	2.6 *2*	2800.75	8^+	2241.32	6^+	DCO= 1.35 *9*.
567.4 *1*	12.3 *7*	1032.00	2^+	464.62	2^+	DCO= 0.95 *4*.

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^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

γ(^{132}Ba) (continued)

E_γ[†]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
593.7 *1*	0.34 *6*	3950.84	11^-	3356.93	9^-	
598.7 *1*	5.1 *3*	2718.86	7^-	2120.22	5^-	DCO= 1.39 *6*.
601.7 *1*	6.3 *4*	1729.92	4^+	1128.02	4^+	DCO= 0.80 *4*.
603.4 *1*	1.5 *1*	2961.68	8^-	2358.29	6^-	DCO= 1.40 *14*.
608.0 *5*	0.3 *1*	5891.30	15^-	5283.04	15^-	
610.2 *1*	10.0 *5*	3950.84	11^-	3340.81	9^-	DCO= 1.39 *6*.
616.5 *1*	1.9 *1*	3721.96	10^-	3105.51	8^-	DCO= 1.51 *14*.
621.8 *1*	1.3 *1*	3105.51	8^-	2483.71	17^-	DCO=0.62.
622.1 *1*	2.3 *2*	3340.81	9^-	2718.86	7^-	
624.8 *1*	0.37 *5*	5336.64	14^-	4711.88	13^-	
626.2 *1*	1.3 *1*	2867.61	8^+	2241.32	6^+	
626.7 *1*	1.2 *1*	3721.96	10^-	3095.34	8^-	DCO= 1.5 *2*.
630.9 *1*	0.60 *8*	4547.68	12^+	3916.49	12^+	DCO= 1.37 *13*.
663.3 *1*	100	1128.02	4^+	464.62	2^+	DCO= 1.26 *2*.
671.4 *1*	1.3 *2*	5376.31	14^+	4704.96	12^+	DCO= 1.43 *12*.
672.0 *1*	1.5 *1*	3095.34	8^-	2423.35	6^-	DCO= 1.4 *2*.
682.1 *1*	1.5 *2*	3105.51	8^-	2423.35	6^-	DCO= 1.4 *2*.
683.8 *1*	1.3 *1*	4362.34	12^+	3678.46	10^+	DCO= 1.5 *2*.
686.4 *1*	0.7 *2*	5376.31	14^+	4689.86	12^+	DCO= 1.3 *2*.
697.9 *1*	16.8 *9*	1729.92	4^+	1032.00	2^+	DCO= 1.35 *2*.
705.2 *10*	16.3 *9*	3188.99	9^-	2483.71	17^-	DCO= 1.36 *3*.
708.3 *1*	1.2 *2*	5991.35	16^-	5283.04	15^-	DCO= 0.45 *6*.
709.1 *1*	0.60 *10*	2935.60	(7^+)	2226.50	(5^+)	
715.2 *1*	1.6 *2*	2226.50	(5^+)	1511.26	3^+	
[x]716.2[‡] *1*	0.8 *2*					DCO= 1.13 *12*.
719.0 *1*	2.9 *2*	4440.99	12^-	3721.96	10^-	DCO= 1.16 *9*.
723.3 *1*	0.55 *5*	5085.71	14^+	4362.34	12^+	DCO= 1.43 *13*.
724.0 *5*	0.16 *4*	4229.8		3505.76	(9^+)	
731.8 *1*	1.1 *2*	3599.27	10^+	2867.61	8^+	DCO= 1.3 *2*.
734.6 *1*	2.9 *2*	5540.36	15^+	4805.97	14^+	DCO= 0.46 *3*.
737.2 *1*	0.75 *9*	3095.34	8^-	2358.29	6^-	DCO= 1.5 *3*.
745.4 *1*	0.8 *1*	3546.15	9	2800.75	8^+	DCO= 0.85 *8*.
747.3 *1*	1.0 *1*	3105.51	8^-	2358.29	6^-	DCO= 1.4 *2*.
758.4 *1*	8.6 *5*	4820.63	13^-	4062.15	11^-	DCO= 1.40 *4*.
758.7 *1*	4.8 *3*	3659.87	10^-	2901.23	8^-	DCO= 1.41 *5*.
761.1 *1*	8.2 *5*	4711.88	13^-	3950.84	11^-	DCO= 1.36 *4*.
763.0 *5*	0.8 *2*	4362.34	12^+	3599.27	10^+	DCO= 1.3 *2*.
764.0 *1*	1.5 *2*	3482.90	9^-	2718.86	7^-	DCO= 1.3 *2*.
764.4 *1*	0.79 *8*	5321.45	14^-	4557.00	12^-	DCO= 1.4 *2*.
783.1 *1*	1.0 *1*	4689.86	12^+	3906.71	11^+	DCO= 0.39 *5*.
789.9 *1*	5.0 *3*	3906.71	11^+	3116.77	10^+	DCO= 0.39 *4*.
798.3 *1*	1.2 *2*	4704.96	12^+	3906.71	11^+	DCO= 0.39 *14*.
798.6 *1*	4.4 *4*	3599.27	10^+	2800.75	8^+	
799.6 *1*	30.0 *15*	3916.49	12^+	3116.77	10^+	DCO= 1.37 *3*.
804.2 *1*	64 *4*	1932.45	6^+	1128.02	4^+	DCO= 1.29 *3*.
810.9 *1*	3.7 *2*	3678.46	10^+	2867.61	8^+	DCO= 1.22 *6*.
817.0 *1*	1.0 *1*	1944.97	(4^+)	1128.02	4^+	
[x]828.5[‡] *1*	1.2 *2*					
834.9 *1*	0.90 *7*	6374.79	17^+	5540.36	15^+	E_γ: level-energy difference=834.4. DCO= 1.4 *2*.
837.4 *1*	1.2 *1*	5871.04	15^-	5033.69	13^-	DCO= 1.26 *13*.
840.2 *1*	1.0 *2*	6414.77	17^-	5574.56	15^-	
855.0 *1*	1.0 *2*	6691.70	18^+	5836.60	16^+	DCO= 1.3 *2*.
857.3 *1*	1.7 *3*	3340.81	9^-	2483.71	17^-	DCO= 1.31 *8*.
857.6 *1*	1.6 *1*	5891.30	15^-	5033.69	13^-	DCO= 1.32 *11*.

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^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

γ(^{132}Ba) (continued)

E_γ[†]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
862.7 *1*	5.9 *3*	5574.56	15^-	4711.88	13^-	DCO= 1.32 *7*.
868.3 *1*	48 *3*	2800.75	8^+	1932.45	6^+	DCO= 1.29 *3*.
871.7 *1*	0.8 *2*	5436.79	14^+	4565.07	12^+	DCO= 1.6 *2*.
873.0 *5*		7287.7	(19^-)	6414.77	17^-	
873.1 *1*	13.7 *7*	4062.15	11^-	3188.99	9^-	DCO= 1.36 *4*.
880.5 *1*	0.40 *5*	5321.45	14^-	4440.99	12^-	DCO= 1.5 *2*.
882.9 *1*	0.80 *7*	4365.80	(11^-)	3482.90	9^-	
889.1 *1*	1.3 *3*	5436.79	14^+	4547.68	12^+	DCO= 1.39 *10*.
889.6 *1*	15.7 *8*	4805.97	14^+	3916.49	12^+	DCO= 1.36 *3*.
892.0 *1*	1.0 *3*	6268.31	16^+	5376.31	14^+	DCO= 1.3 *2*.
895.6 *1*	1.5 *1*	5336.64	14^-	4440.99	12^-	DCO= 1.46 *11*.
897.3 *1*	2.3 *2*	4557.00	12^-	3659.87	10^-	DCO= 1.30 *8*.
899.7 *1*	4.6 *2*	2027.59	4^-	1128.02	4^+	DCO= 1.13 *7*.
900.5 *1*	0.30 *3*	5721.34	14^-	4820.63	13^-	DCO= 0.67 *7*.
904.0 *1*	0.90 *7*	4820.63	13^-	3916.49	12^+	DCO= 0.73 *7*.
[x]908.1[‡] *1*	0.9 *2*					
910.7 *1*	1.7 *1*	6485.22	17^-	5574.56	15^-	DCO= 1.3 *2*.
911.2 *1*	0.26 *6*	5476.26	14^+	4565.07	12^+	
915.5 *1*	0.44 *6*	5721.34	14^-	4805.97	14^+	DCO= 1.40 *14*.
928.5 *1*	0.5 *1*	5476.26	14^+	4547.68	12^+	
930.0 *5*		7751.7	(20^-)	6821.67	18^-	
932.7 *1*	2.0 *5*	7624.41	20^+	6691.70	18^+	DCO= 1.5 *2*.
935.1 *1*	8.0 *4*	2867.61	8^+	1932.45	6^+	DCO= 1.32 *6*.
938.1 *1*	1.5 *2*	3805.87	10^+	2867.61	8^+	DCO= 1.40 *13*.
938.3 *1*	0.9 *2*	6274.94	16^-	5336.64	14^-	DCO= 1.36 *12*.
944.0 *1*	1.7 *2*	7239.1	19^-	6295.0	17^-	DCO= 1.37 *14*.
948.6 *1*	1.7 *2*	4547.68	12^+	3599.27	10^+	DCO= 1.39 *12*.
965.8 *1*	1.8 *2*	4565.07	12^+	3599.27	10^+	DCO= 1.37 *11*.
969.7 *1*	2.5 *3*	2902.28	7^-	1932.45	6^+	DCO= 0.89 *5*.
971.6 *1*	3.2 *1*	5033.69	13^-	4062.15	11^-	DCO= 1.38 *7*.
992.3 *1*	14.2 *7*	2120.22	5^-	1128.02	4^+	DCO= 0.77 *4*.
1005.3 *1*	0.5 *1*	3805.87	10^+	2800.75	8^+	DCO= 1.6 *3*.
1012.0 *2*		6295.0	17^-	5283.04	15^-	
1013.5 *1*	3.2 *2*	2141.53?	(6^+)	1128.02	4^+	DCO= 1.34 *11*. E_γ: placement seems suspect in 1995Ju09, 6^+ γ-vibration level is at 2241 with a 1113.5γ from this level to 4^+ level.
1022.7 *1*	0.35 *7*	7397.49	(19^+)	6374.79	17^+	
1030.4 *1*	4.0 *3*	5836.60	16^+	4805.97	14^+	DCO= 1.39 *4*.
1032.0 *1*	7.0 *10*	1032.00	2^+	0.0	0^+	DCO= 1.36 *6*.
1042.7 *1*	0.80 *10*	5104.83	13^-	4062.15	11^-	DCO= 1.22 *12*.
1046.7 *1*	4.4 *3*	1511.26	3^+	464.62	2^+	DCO= 1.00 *9*.
1053.1 *1*	0.45 *8*	4997.14	12^+	3943.86	10^+	DCO= 1.45 *10*.
1066.0 *5*	0.28 *5*	5630.9	(14^+)	4565.07	12^+	
1066.7 *1*	0.6 *2*	5872.68	15^+	4805.97	14^+	DCO= 0.6 *2*.
1068.7 *1*	0.8 *2*	4985.20	13^+	3916.49	12^+	DCO= 0.4 *1*.
1072.0 *5*		8311.1	(21^-)	7239.1	19^-	
1076.2 *1*	0.50 *5*	3943.86	10^+	2867.61	8^+	DCO= 1.3 *2*.
1080.7 *1*	0.20 *5*	4997.14	12^+	3916.49	12^+	
1083.0 *5*	0.22 *6*	5630.9	(14^+)	4547.68	12^+	
1090.4 *1*	0.30 *3*	4997.14	12^+	3906.71	11^+	DCO= 0.64 *6*.
1098.5 *1*	<0.2	2226.50	(5^+)	1128.02	4^+	
1113.5 *1*	7.2 *4*	2241.32	6^+	1128.02	4^+	DCO= 1.25 *11*.
1118.8 *1*	0.72 *5*	6955.41	18^+	5836.60	16^+	DCO= 1.35 *9*.
1143.0 *1*	0.50 *7*	3943.86	10^+	2800.75	8^+	I_γ: 0.5 *7* quoted In table 1 of 1995Ju09 is probably a misprint. DCO= 1.2 *2*.

Continued on next page (footnotes at end of table)

^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

γ(^{132}Ba) (continued)

E_γ [†]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
1169.3 *1*	2.5 *2*	5085.71	14^+	3916.49	12^+	DCO= 1.42 *14*.
1190.3 *1*	0.90 *8*	3122.76	(8^+)	1932.45	6^+	DCO= 1.20 *11*.
1265.3 *1*	5.8 *3*	1729.92	4^+	464.62	2^+	DCO= 1.40 *9*.
1312.0 *5*	0.33 *5*	2440.0		1128.02	4^+	
1318.8 *1*		4997.14	12^+	3678.46	10^+	
1328.3 *1*	0.40 *5*	6134.28	15	4805.97	14^+	DCO= 0.9 *2*.
1695.1 *1*	0.20 *6*	4811.81	11^+	3116.77	10^+	

[†] For Eγ's with an uncertainty of 0.5 keV, the energy is quoted to nearest keV by 1995Ju09. The evaluators have added an extra significant digit to be consistent with specification of uncertainty.

[‡] Feeds band starting at 1945, 4^- through 603.4γ; but not assigned to a level.

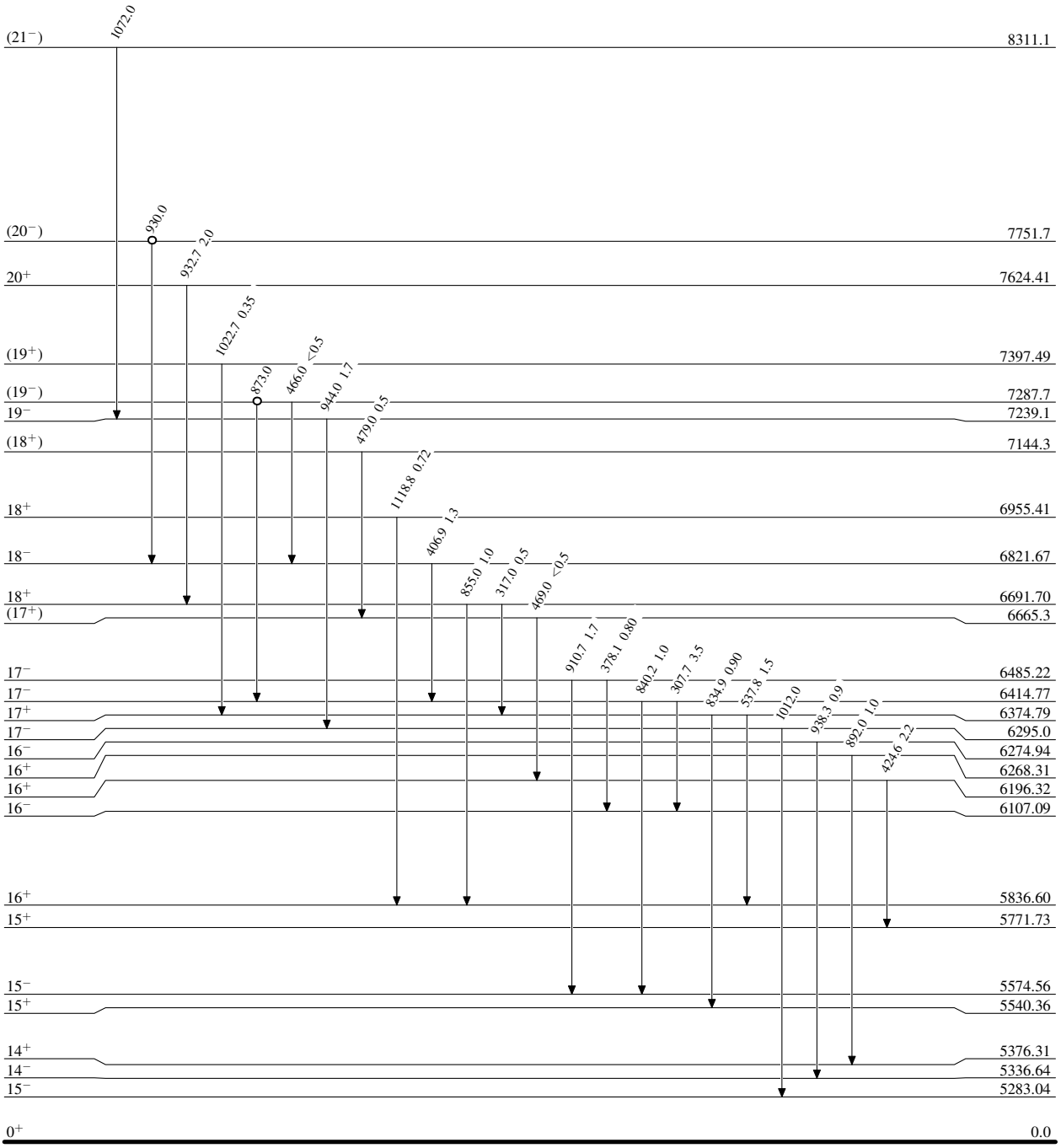
[x] γ ray not placed in level scheme.

^{124}Sn(^{13}C,5nγ) 1995Ju09

Level Scheme

Intensities: Relative I_γ

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

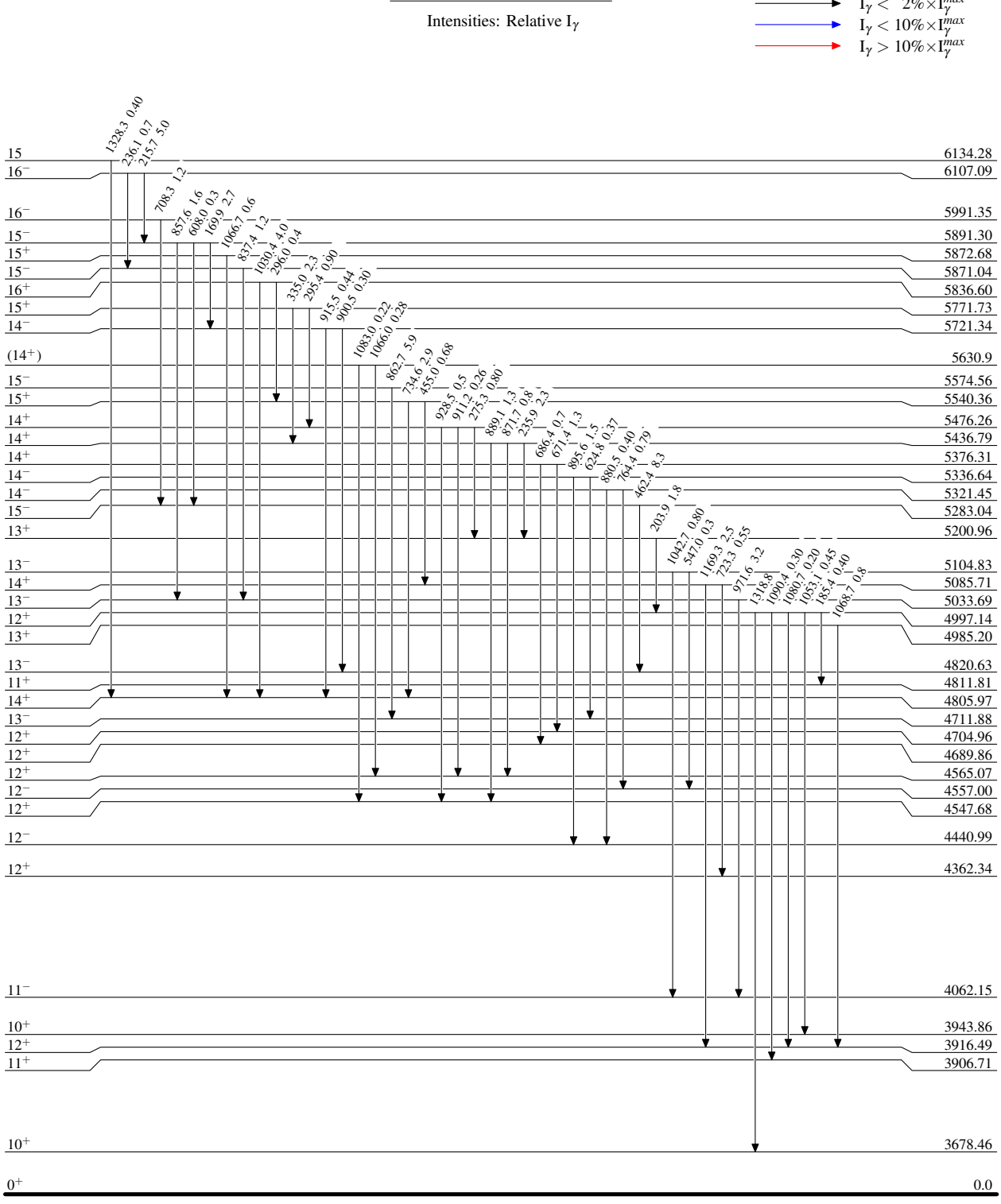


$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09

Level Scheme (continued)

Intensities: Relative I_γ



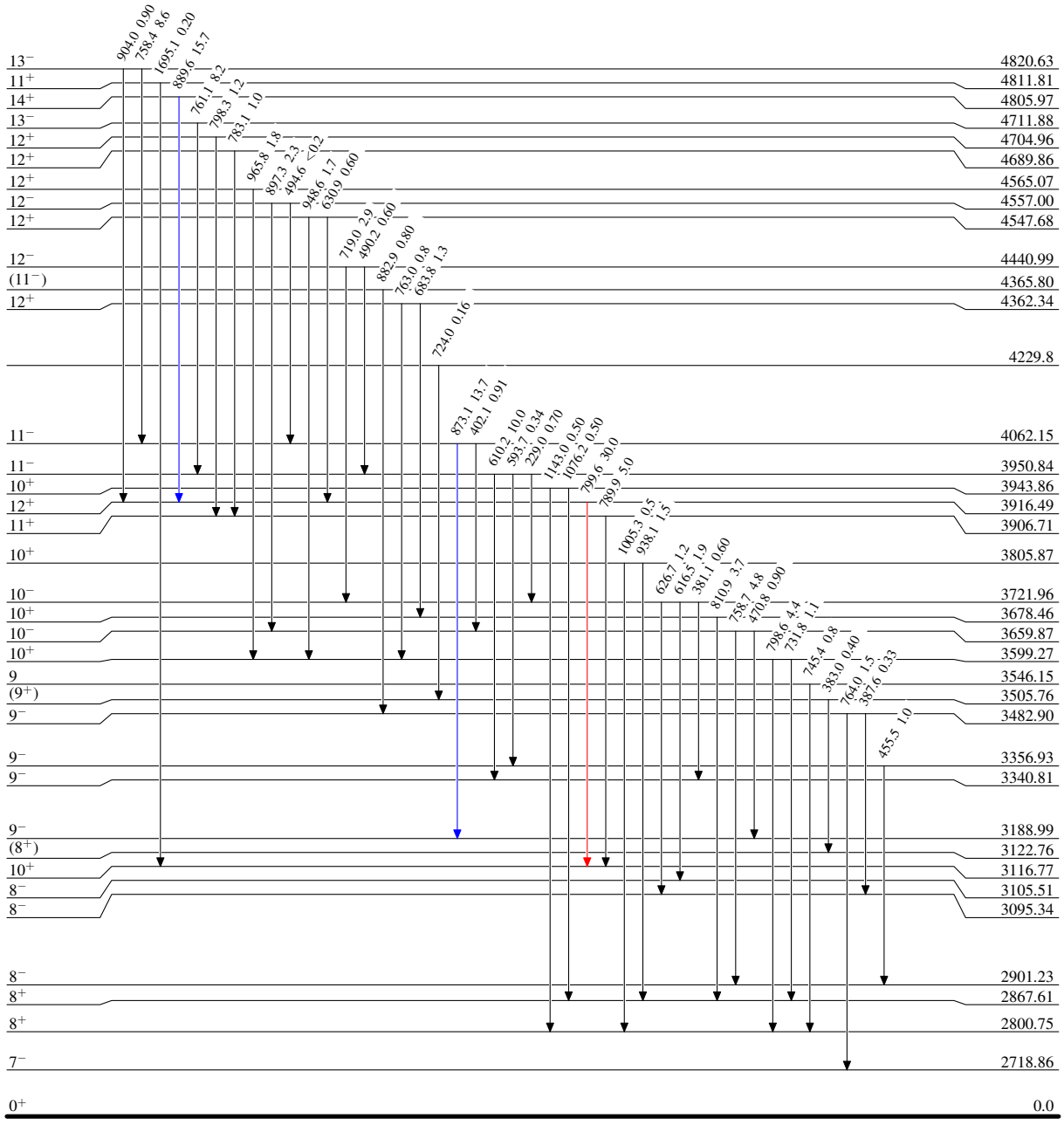
$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09

Level Scheme (continued)

Intensities: Relative I_γ

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

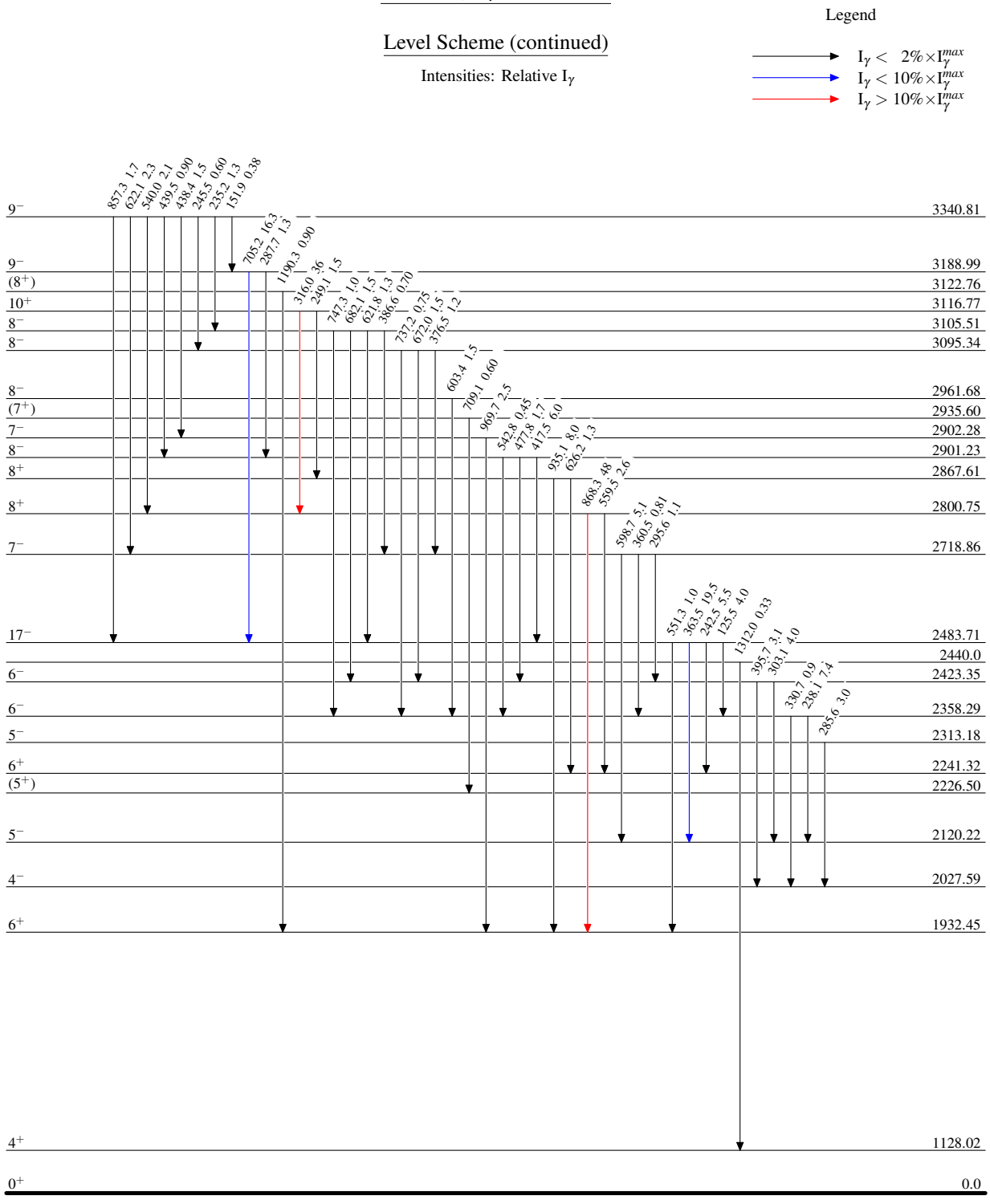


$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09

Level Scheme (continued)

Intensities: Relative I_γ

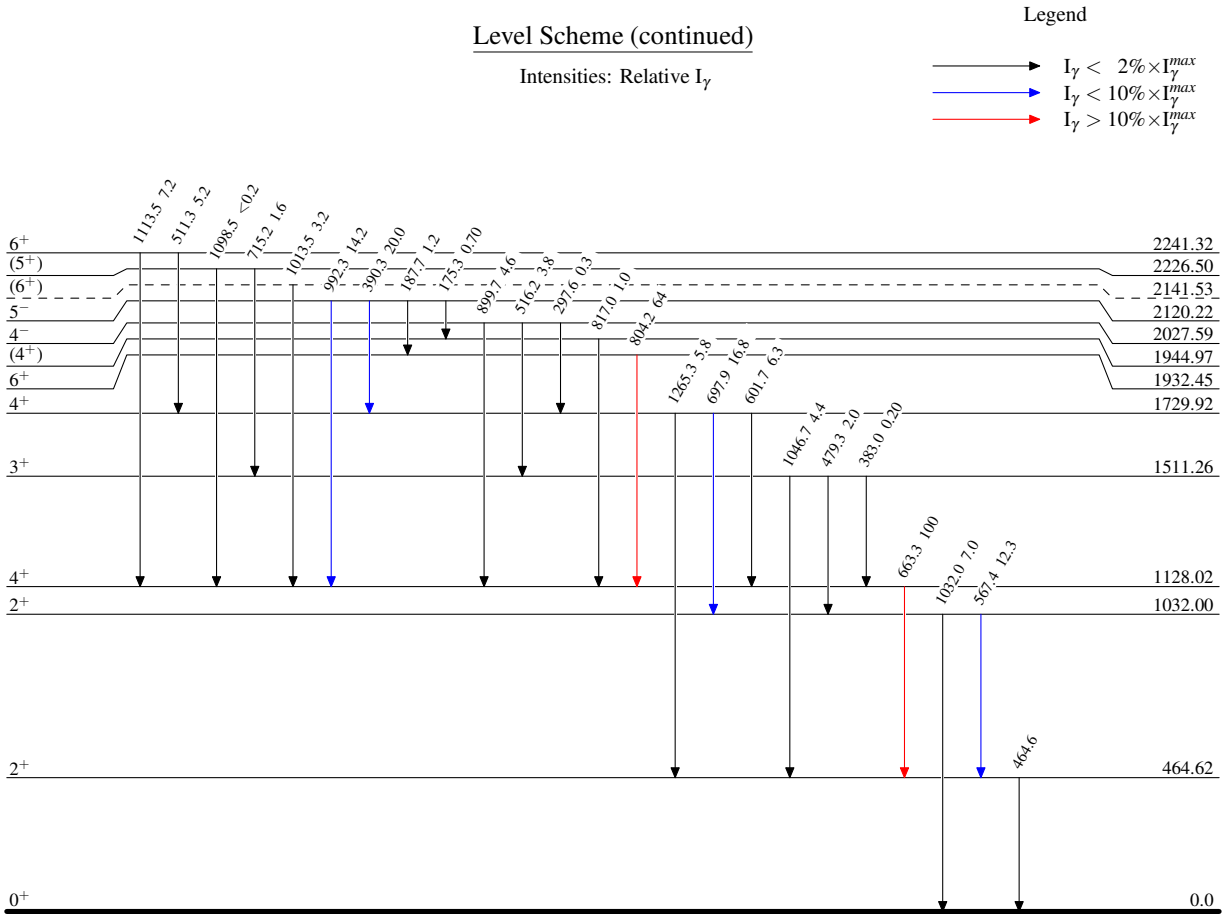


$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09

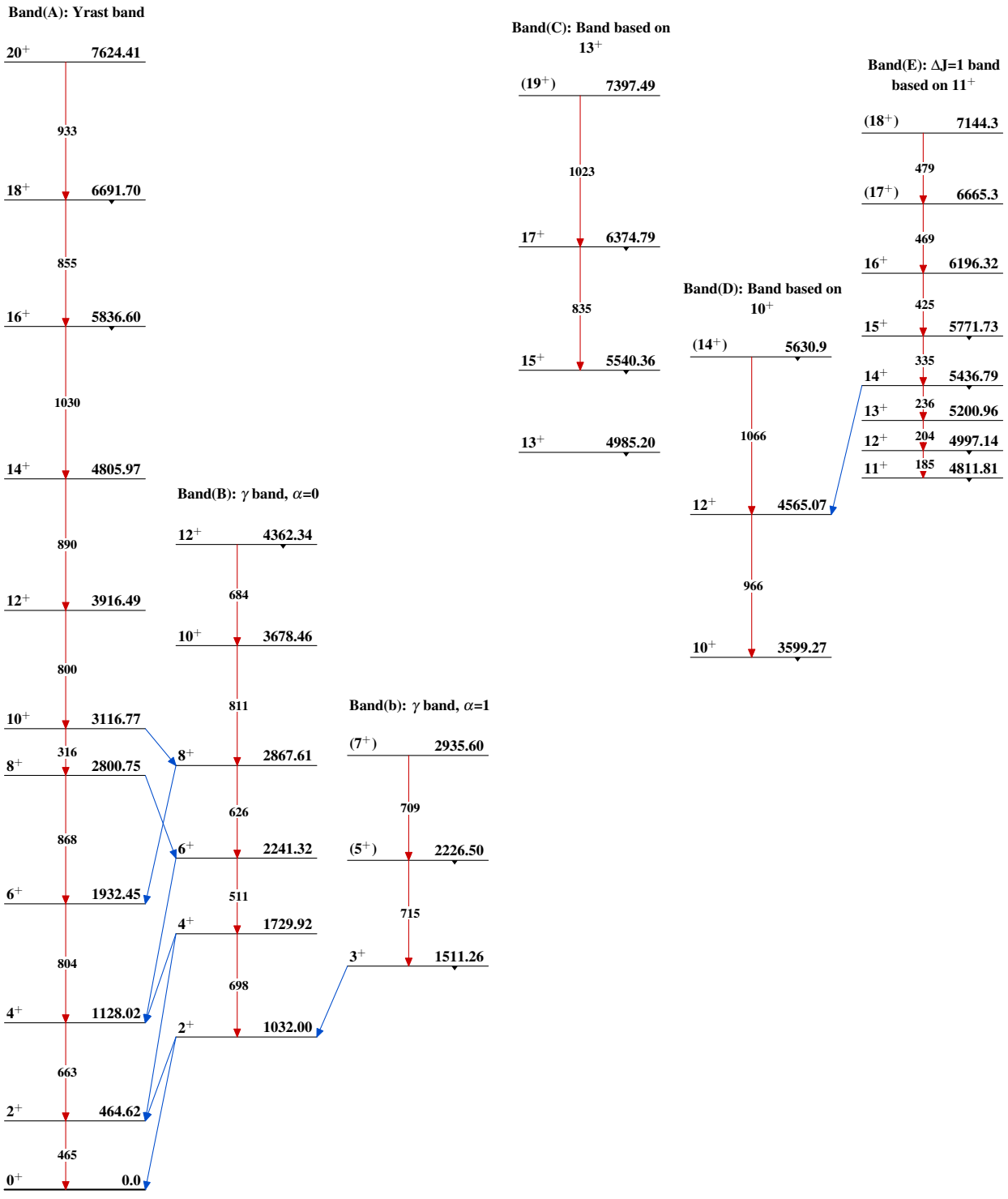
Level Scheme (continued)

Intensities: Relative I_γ



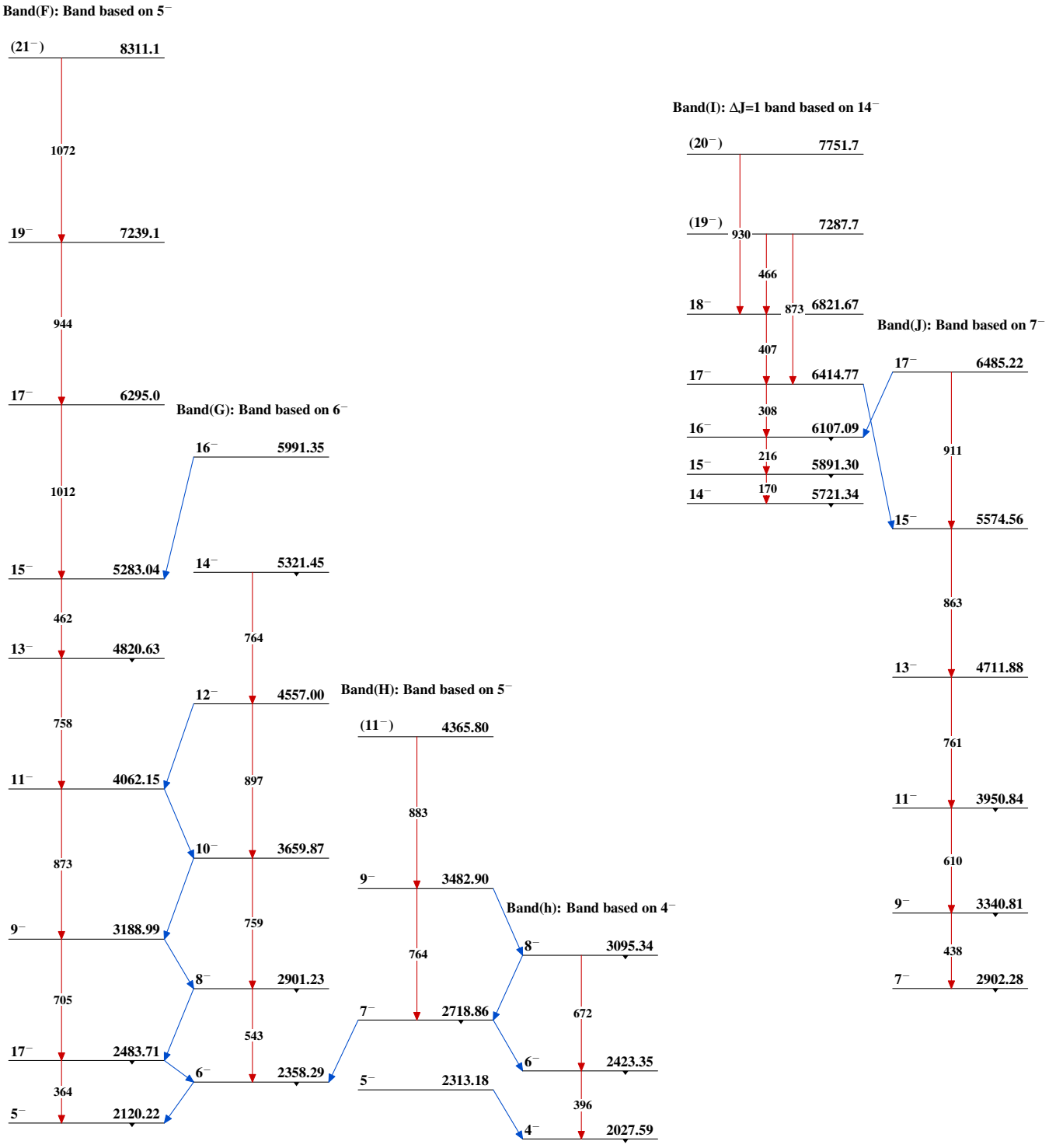
$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09



$^{132}_{56}Ba_{76}$

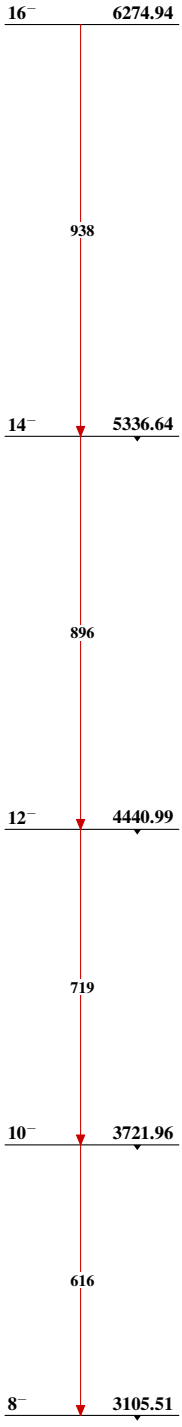
^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)



$^{132}_{56}Ba_{76}$

^{124}Sn(^{13}C,5nγ) 1995Ju09 (continued)

Band(K): Band based on 8$^-$



$^{132}_{56}Ba_{76}$