(HI,xnγ) 1991Wa20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	H. Iimura, J. Katakura, S. Ohya	NDS 180, 1 (2022)	1-Oct-2021

1991Wa20: ^{96}Zr(^{34}S,4nγ), E(^{34}S)=155 MeV; ^{116}Sn(^{13}C,3nγ), E(^{13}C)=56 MeV; Compton-suppressed HPGe array γ, γγ, γ(θ), γγ(θ), DCO ratios, spin orientation ratios.
1986Sc11, 1987Sc14 ^{116}Sn(^{13}C,3nγ) E=46-61 MeV; Compton-suppressed Ge, Excitation function, γ, γγ, γ(θ), γ(t).
1979Se03: ^{114}Cd(^{16}O,4nγ) E=80 MeV; RDM.
Others: 1967Cl02: ^{115}In(^{14}N,3nγ) E(^{14}N)≈52 MeV. 1972Ku14: ^{114}Cd(^{16}O,4nγ) E(^{16}O)≈80 MeV. 1976Fl11, 1974Fl08: ^{114}Cd(^{16}O,4nγ) E=83 MeV, γγ, γ(θ), γ(pol). 1989Sc06: ^{100}Mo(^{30}Si,4n) E=130 MeV. Recoil-distance Doppler shift. 1993LuZX: ^{117}Sn(^{12}C,3n) E=52 MeV, γ(θ).
1998Li16: ^{116}Sn(^{16}O,2p4n) E=73 MeV, DSA.
1996De50: ^{110}Mo(^{30}Si,4n) E=130 MeV, enriched target 97 %, gasp spectrometer, ddcm.
The level scheme and band structures are that proposed by 1991Wa20.

^{126}Ba Levels

E(level)†	Jπ‡	$T_{1/2}$#	Comments
0.0@	0+	100 min *2*	
256.09@ *7*	2+	136 ps *5*	$T_{1/2}$: From Adopted Levels; Others: 187 ps *35* (1967Cl02), 120 ps *20* (1972Ku14), 130 ps *+7−21* (1979Se03), 118 ps *9* (1989Sc06), 141 ps *4* (1996De50).
711.21@ *9*	4+	5.99 ps *12*	Jπ: from γγ(θ) in in ε decay (54 s+50 s); E2 γ to 2+. $T_{1/2}$: weighted av of 6.4 ps *+7−8* (1979Se03), 6.5 ps *6* (1989Sc06) and 5.95 ps *13* (1996De50).
873.52a *8*	2+		
1236.13& *15*	3+		
1332.50@ *11*	6+	0.94 ps *4*	$T_{1/2}$: weighted av of 1.12 ps *+69−35* (1979Se03), 1.2 ps *6* (1989Sc06), 0.93 ps *4* (1996De50) and 1.02 ps *21* (1998Li16).
1345.50a *9*	4+		
1742.65f *13*	3−		
1807.86& *15*	5+		
1890.21a *13*	6(+)		
1938.87e *12*	5−		
2056.25f *12*	4−		
2089.76@ *13*	8+	0.284 ps *21*	$T_{1/2}$: from 1996De50; others: 1.48 ps *+24−18* (1979Se03), 0.76 ps *28* (1989Sc06) and 1.40 ps *24* (1998Li16).
2255.32h *12*	5		
2303.46e *13*	7−	3.3 ps *11*	$T_{1/2}$: from 1989Sc06.
2408.34f *14*	6(−)		
2429.68g *12*	6(−)		
2484.6& *4*	7+		
2530.20a *16*	8(+)		
2567.0 *8*			
2609.43h *15*	7(−)		
2773.00f *17*	8(−)		
2786.64e *14*	9−	2.8 ps *4*	$T_{1/2}$: from 1989Sc06.
2813.35g *16*	8(−)		
2886.5i *8*			
2942.13@ *15*	10+	0.173 ps *21*	$T_{1/2}$: from 1996De50; others: 0.64 ps *+14−11* (1979Se03), 0.21 ps *14* (1989Sc06) and 1.01 ps *26* (1998Li16).
3096.53h *18*	9(−)		

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(HI,xnγ) 1991Wa20 (continued)

^{126}Ba Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$#	Comments
3236.67[f] *16*	$10^{(-)}$		
3243.7[&] *15*	(9^+)		
3261.51[a] *18*	$10^{(+)}$		
3375.39[e] *15*	11^-	1.39 ps *21*	$T_{1/2}$: from 1989Sc06.
3389.7 *4*			
3419.96[g] *20*	$10^{(-)}$		
3450.5[i] *5*	(8)		
3588.9 *8*			
3746.89[h] *24*	$11^{(-)}$		
3747.45[c] *18*	12^+	0.38 ps *+6−4*	$T_{1/2}$: weighted av of 0.30 ps *+21−7* (1979Se03), 0.28 ps *14* (1989Sc06) and 0.41 ps *4* (1996De50); other: 1.3 ps *4* (1998Li16).
3886.85[f] *25*	(12^-)		
3887.91[b] *18*	12^+		
4074.11[a] *21*	$12^{(+)}$		
4078.90[e] *18*	13^-	0.35 ps *14*	$T_{1/2}$: from 1989Sc06.
4093.2[&] *17*	(11^+)		
4110.3[g] *3*	$12^{(-)}$		
4121.5[i] *4*	(10)		
4419.66[c] *21*	14^+	0.69 ps *5*	$T_{1/2}$: from 1996De50; others: 1.25 ps *+21−42* (1979Se03), 1.5 ps *3* (1989Sc06) and 0.49 ps *7* (1998Li16).
4456.9[h] *6*	$13^{(-)}$		
4670.6[b] *4*	$14^{(+)}$		
4714.0[f] *4*	(14^-)		
4764.4[j] *8*	(12)		
4845.7[g] *5*	$14^{(-)}$		
4851.7[a] *7*	$14^{(+)}$		
4856.3[&] *20*	(13^+)		
4896.5[i] *11*	(12)		
4900.30[e] *21*	15^-	0.35 ps *14*	$T_{1/2}$: from 1989Sc06.
4905.3[k] *7*	(13)		
5086.7 *11*			
5122.3[j] *12*	(14)		
5199.8[d] *4*	15		
5244.77[c] *23*	16^+	0.32 ps *6*	$T_{1/2}$: weighted av of 0.21 ps *14* (1989Sc06), 0.33 ps *10* (1996De50) and 0.34 ps *7* (1998Li16).
5255.8[h] *8*	(15^-)		
5398.3[k] *15*	(15)		
5509.6[b] *5*	$16^{(+)}$		
5650.7[a] *13*	(16^+)		
5662.6[f] *6*	(16^-)		
5707.8[g] *9*	$16^{(-)}$		
5725.3[j] *15*	(16)		
5806.40[e] *23*	17^-	0.28 ps *14*	$T_{1/2}$: from 1989Sc06.
6042.6[d] *4*	17		
6098.3[k] *16*	(17)		
6182.8[h] *11*	(17^-)		
6195.2[c] *6*	18^+	<0.5 ps	From 1998Li16. Effective value not corrected for side feeding. Other: 1989Sc06 reported an effective $T_{1/2}$ of 0.55 ps *14*.
6415.6[b] *11*	(18^+)		

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(HI,xnγ) 1991Wa20 (continued)

^{126}Ba Levels (continued)

E(level)[†]	Jπ[‡]	Comments
6513.3[j] 16	(18)	
6530.7[a] 16	(18$^+$)	
6585.6[f] 12	(18$^-$)	
6700.8[g] 14	(18$^-$)	
6721.6[e] 3	19$^{(-)}$	
6968.3[k] 17	(19)	
6995.9[d] 8	(19)	
7183.2[c] 12	20$^{(+)}$	
7387.6[b] 15	(20$^+$)	
7461.3[j] 19	(20)	
7636.8[e] 4	21$^{(-)}$	
8145.3[c] 15	22$^{(+)}$	
8388.6[b] 18	(22$^+$)	
8621.8[e] 11	23$^{(-)}$	
9202.3[c] 18	(24$^+$)	
9700.8[e] 15	(25$^-$)	
10308.3[c] 21	(26$^+$)	
10872.8[e] 18	(27$^-$)	
11475.3[c] 23	(28$^+$)	
12132.8[e] 21	(29$^-$)	
12718[c] 3	(30$^+$)	
13469.8[e] 23	(31$^-$)	
14041[c] 3	(32$^+$)	
14878.8[e] 25	(33$^-$)	
15434[c] 3	(34$^+$)	
16895[c] 3	(36$^+$)	
0.0+x[m]	(13)	Additional information 1.
180.0+x[l] 10	(14)	
425.0+x[m] 13	(15)	
693.0+x[l] 13	(16)	
1012.0+x[m] 14	(17)	
1377.0+x[l] 15	(18)	
1773.0+x[m] 16	(19)	
2206.0+x[l] 16	(20)	

[†] From a least-squares fit to E(γ′s). An uncertainty of 1 keV is given for each Eγ without an assigned uncertainty.
[‡] From γ(θ), γγ(θ), γ(pol) and $T_{1/2}$. Band structures are also considered. Most assignments are from 1991Wa20.
[#] From RDM, DSA and DDCM (Differential Decay Curve Method), except for the 256-keV level.
[@] Band(A): ground state band.
[&] Band(B): Band 1, γ-vibrational band below crossing, γ-vibrational band coupled with $\pi(h_{11/2})^2$ above crossing.
[a] Band(C): Band 2, γ-vibrational band below crossing, γ-vibrational band coupled with $\pi(h_{11/2})^2$ above crossing.
[b] Band(D): Band 3, ground state band below crossing, $\nu(h_{11/2})^2$ above crossing.
[c] Band(E): Band 5, ground state band below 1st crossing, $\pi(h_{11/2})^2$ below 2nd crossing, $\pi(h_{11/2})^2$ $\nu(h_{11/2})^2$ below 3rd crossing, $\pi(h_{11/2})^2$ $\nu(h_{11/2})^2$ $\pi(g_{7/2})^2$ above 3rd crossing.
[d] Band(F): band 6, could Be a continuation of band 1.
[e] Band(G): Band 7, $\pi(h_{11/2},g_{7/2})$ below crossing, $\pi(h_{11/2},g_{7/2})\nu(h_{11/2})^2$ above crossing.
[f] Band(H): Band 8, $\pi(h_{11/2},g_{7/2})$ below crossing, $\pi(h_{11/2},g_{7/2})\nu(h_{11/2})^2$ above crossing.

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(HI,xnγ) 1991Wa20 (continued)

^{126}Ba Levels (continued)

[g] Band(I): Band 9, $\nu(h_{11/2},g_{7/2})$ below crossing, $\pi(h_{11/2},g_{9/2})$ above crossing.
[h] Band(J): Band 10, $\nu(h_{11/2},g_{7/2})$ below crossing, $\pi(h_{11/2},g_{9/2})$ above crossing.
[i] Band(K): band 11 based on the 2887-keV level.
[j] Band(L): Band 12, $\nu(h_{11/2})^2$ $\pi(h_{11/2},g_{7/2})$ below crossing.
[k] Band(M): Band 13, $\nu(h_{11/2})^2$ $\pi(h_{11/2},g_{7/2})$ below crossing.
[l] Band(N): Band 14, $\nu(h_{11/2})^2$ $\pi(h_{11/2},d_{5/2})$ below crossing.
[m] Band(O): Band 15, $\nu(h_{11/2})^2$ $\pi(h_{11/2},d_{5/2})$ below crossing.

γ(^{126}Ba)

DCO=[Iγ(37°)/Iγ$_{gate}$(79°)]/[Iγ(79°)/Iγ$_{gate}$(37°)] with gates on Q transitions (1991Wa20). DCO≈1.0 are expected for streched Q transitions, while DCO≈0.5 for streched D transitions.
Spin orientation ratio in 1991Wa20 is defined as Iγ(spin 77°)/Iγ(spin 18°), expected to be approximately 1.4 and 0.8 for streched Q transitions and streched D transitions, respectively.

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
137	0.9 *2*	2567.0		2429.68	$6^{(-)}$	D		DCO=0.65 *4* (1991Wa20).
141	0.7 *2*	4905.3	(13)	4764.4	(12)	D		DCO=0.73 *5* (1991Wa20).
174.4 *1*	2.9 *3*	2429.68	$6^{(-)}$	2255.32	5	D(+Q)	+0.03 *5*	I_γ: other: 2.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). δ: other: +0.01 *10* (1987Sc14). DCO=0.65 *4*, spin orientation ratio=0.80 *4* (1991Wa20); A_2=−0.17 *5*, A_4=−0.02 *6* (1987Sc14).
179.8 *1*	7 *2*	2609.43	$7^{(-)}$	2429.68	$6^{(-)}$	D+Q	−0.13 *5*	I_γ: other: 7 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). δ: other: −0.07 *4* (1987Sc14). DCO=0.45 *5*, spin orientation ratio=0.77 *4* (1991Wa20); A_2=−0.40 *3*, A_4=−0.01 *4* (1987Sc14).
180	0.10 *5*	180.0+x	(14)	0.0+x	(13)			
204.0 *1*	6 *1*	2813.35	$8^{(-)}$	2609.43	$7^{(-)}$	D+Q	−0.34 *5*	I_γ: other: 7 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). δ: other: −1.0 *5* (1987Sc14). DCO=0.34 *4*, spin orientation ratio=0.65 *4* (1991Wa20); A_2=−0.55 *4*, A_4=+0.03 *6* (1987Sc14).
213.6 *5*	0.4 *1*	2303.46	7^-	2089.76	8^+			
217	1.3 *5*	5122.3	(14)	4905.3	(13)	D		DCO=0.37 *4* (1991Wa20).
241	0.2 *1*	5086.7		4845.7	$14^{(-)}$			
245	0.15 *5*	425.0+x	(15)	180.0+x	(14)			
246	2.0 *5*	2813.35	$8^{(-)}$	2567.0		D		DCO=0.44 *4* (1991Wa20).
256.10 *7*	110 *5*	256.09	2^+	0.0	0^+	E2		I_γ: others: 108 *5* in (^{34}S,4n) at 155 MeV (1991Wa20); (100) in (^{16}O,4nγ) at 83 MeV (1976Fl11). Spin orientation ratio=1.43 *3* (1991Wa20); A_2=+0.199 *4*, A_4=−0.036 *7*, pol.=+1.41 *4* (1976Fl11); A_2=+0.245 *10*, A_4=−0.081 *14* (1987Sc14).
268	0.6 *2*	693.0+x	(16)	425.0+x	(15)	D		DCO=0.48 *6* (1991Wa20).
276	1.2 *2*	5398.3	(15)	5122.3	(14)	D		DCO=0.58 *6* (1991Wa20).
283.2 *1*	4.9 *5*	3096.53	$9^{(-)}$	2813.35	$8^{(-)}$	D+Q	−0.37 *5*	I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20).

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
								δ: other: −1.5 *+12−7* (1987Sc14). DCO=0.33 *4*, spin orientation ratio=0.63 *4* (1991Wa20); A_2=−0.64 *7*, A_4=+0.09 *7* (1987Sc14).
313.6 *1*	2.5 *4*	2056.25	4^-	1742.65	3^-	M1+E2	−2.0 *+9−13*	I_γ: other: 1.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). Mult.: from adopted gammas. δ: from 1987Sc14. DCO=0.37 *3*, spin orientation ratio=0.55 *4* (1991Wa20); A_2=−0.68 *13*, A_4=+0.24 *18* (1987Sc14).
316.5 *1*	0.8 *2*	2255.32	5	1938.87	5^-			DCO=0.85 *4* (1991Wa20).
319	1.3 *3*	1012.0+x	(17)	693.0+x	(16)	D		I_γ: other: 1.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.74 *5* (1991Wa20).
323.4 *1*	2.4 *3*	3419.96	$10^{(-)}$	3096.53	$9^{(-)}$	D+Q	−0.5 *1*	I_γ: other: 3.1 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.30 *3*, spin orientation ratio=0.57 *4* (1991Wa20).
326.7 *3*	1.0 *3*	3746.89	$11^{(-)}$	3419.96	$10^{(-)}$	D+Q	−0.5 *1*	I_γ: other: 1.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.32 *4*, spin orientation ratio=0.58 *4* (1991Wa20).
327	0.1 *1*	3588.9		3261.51	$10^{(+)}$			
327	0.7 *2*	5725.3	(16)	5398.3	(15)	D		I_γ: other: 1.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.41 *6* (1991Wa20).
347	0.6 *2*	4456.9	$13^{(-)}$	4110.3	$12^{(-)}$			
352.1 *1*	3.3 *6*	2408.34	$6^{(-)}$	2056.25	4^-	Q		I_γ: other: 1.3 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.18 *5*, spin orientation ratio=1.63 *8* (1991Wa20); A_2=+0.21 *4*, A_4=−0.08 *6* (1987Sc14).
362.8 *3*	0.7 *2*	1236.13	3^+	873.52	2^+	E2(+M1)		Mult.: from adopted gammas.
363.6 *5*	0.4 *2*	4110.3	$12^{(-)}$	3746.89	$11^{(-)}$			
364.4 *3*	1.0 *3*	2303.46	7^-	1938.87	5^-			I_γ: other: 1.1 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
364.8 *2*	5.5 *1*	2773.00	$8^{(-)}$	2408.34	$6^{(-)}$	Q		I_γ: other: 4.3 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.01 *5* (1991Wa20).
365	0.4 *2*	1377.0+x	(18)	1012.0+x	(17)			
373	0.4 *2*	6098.3	(17)	5725.3	(16)			
373.4 *1*	3.6 *4*	2429.68	$6^{(-)}$	2056.25	4^-	Q		I_γ: other: 2.4 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.94 *5*, spin orientation ratio=1.45 *7* (1991Wa20).
383.5 *2*	0.9 *2*	2813.35	$8^{(-)}$	2429.68	$6^{(-)}$	Q		DCO=0.91 *5* (1991Wa20).
389	0.5 *2*	4845.7	$14^{(-)}$	4456.9	$13^{(-)}$			
396	0.25 *10*	1773.0+x	(19)	1377.0+x	(18)			
410	0.3 *1*	5255.8	(15^-)	4845.7	$14^{(-)}$			
415	0.25 *5*	6513.3	(18)	6098.3	(17)			
433	0.20 *10*	2206.0+x	(20)	1773.0+x	(19)			
433.3 *1*	1.2 *3*	3375.39	11^-	2942.13	10^+	D+Q	−0.05 *5*	I_γ: others: 2.0 *5* in (^{34}S,4n) at 155 MeV

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
								(1991Wa20); (4) in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.52 *3*, spin orientation ratio=0.82 *4* (1991Wa20).
440	0.6 *2*	2530.20	$8^{(+)}$	2089.76	8^+			DCO=0.79 *9* (1991Wa20).
447.6 *3*	1.0 *1*	3389.7		2942.13	10^+			I_γ: other: 1.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.93 *9* (1991Wa20).
450.0 *1*	2.7 *4*	3236.67	$10^{(-)}$	2786.64	9^-	D		DCO=0.66 *4* (1991Wa20).
452	0.5 *2*	5707.8	$16^{(-)}$	5255.8	(15^-)			
455[‡]		6968.3	(19)	6513.3	(18)			
455.09 *8*	100	711.21	4^+	256.09	2^+	E2		I_γ: others: 100 in (^{34}S,4n) at 155 MeV (1991Wa20); 97 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.01 *5*, spin orientation ratio=1.41 *5* (1991Wa20); A_2=+0.273 *6*, A_4=−0.078 *11*, pol.=+1.62 *5* (1976Fl11); A_2=+0.299 *18*, A_4=−0.08 *3* (1987Sc14).
463	0.25 *10*	1807.86	5^+	1345.50	4^+			
463.7 *1*	6.6 *1*	3236.67	$10^{(-)}$	2773.00	$8^{(-)}$	Q		I_γ: other: 6.3 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.16 *6*, spin orientation ratio=1.29 *6* (1991Wa20); A_2=+0.33 *4*, A_4=−0.05 *6* (1987Sc14).
469.2 *5*		2408.34	$6^{(-)}$	1938.87	5^-			I_γ: 1991Wa20 gives Iγ=5.0 *5* for the 469.2+469.4γ's. other: 4.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.52 *3*, spin orientation ratio=0.84 *4* (1991Wa20).
469.4 *5*		2773.00	$8^{(-)}$	2303.46	7^-			I_γ: 1991Wa20 gives Iγ=5.0 *5* for the 469.2+469.4γ's. other: 4.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.52 *3*, spin orientation ratio=0.84 *4* (1991Wa20).
471.9 *1*	4.7 *10*	1345.50	4^+	873.52	2^+	E2		Mult.: from adopted gammas. DCO=1.01 *6* (1991Wa20); A_2=+0.36 *6*, A_4=−0.13 *9* (1987Sc14).
475	0.25 *7*	6182.8	(17^-)	5707.8	$16^{(-)}$			
476	0.20 *7*	1807.86	5^+	1332.50	6^+			
483.2 *1*	13 *1*	2786.64	9^-	2303.46	7^-	E2		I_γ: others: 16 *1* in (^{34}S,4n) at 155 MeV (1991Wa20); 21 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.01 *5*, spin orientation ratio=1.30 *6* (1991Wa20); A_2=+0.29 *2*, A_4=−0.01 *4*, pol.=+1.34 *18* (1976Fl11); A_2=+0.35 *3*, A_4=−0.13 *4* (1987Sc14).
486	0.28 *10*	3747.45	12^+	3261.51	$10^{(+)}$			
487.0 *2*	2.6 *5*	3096.53	$9^{(-)}$	2609.43	$7^{(-)}$	Q		I_γ: other: 2.6 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.98 *5* (1991Wa20); A_2=+0.56 *16*, A_4=+0.23 *24* (1987Sc14).
490.8 *1*	2.8 *5*	2429.68	$6^{(-)}$	1938.87	5^-	(M1+E2)	−1.2 *4*	I_γ: other: 1.8 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.33 *3*, spin orientation ratio=0.58 *4* (1991Wa20).
511	0.8 *2*	3886.85	(12^-)	3375.39	11^-			

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
513	0.3 *1*	693.0+x	(16)	180.0+x	(14)			
525	0.3 *1*	1236.13	3^+	711.21	4^+	M1+E2	−1.7 *2*	Mult.: from adopted gammas. δ: from 1993LuZX.
532	0.5 *1*	4419.66	14^+	3887.91	12^+	E2		DCO=0.8 *1* (1991Wa20).
544.7 *1*	9.1 *1*	1890.21	$6^{(+)}$	1345.50	4^+	Q		I_γ: other: 4.8 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.95 *6*, spin orientation ratio=1.46 *6* (1991Wa20); A_2=+0.30 *4*, A_4=−0.16 *5* (1987Sc14).
557.9 *2*	1.8 *2*	1890.21	$6^{(+)}$	1332.50	6^+	(M1+E2)	+2.8 *+24−9*	δ: from 1993LuZX. DCO=1.02 *6* (1991Wa20).
564	0.3 *2*	3450.5	(8)	2886.5		Q		DCO=1.0 *1* (1991Wa20).
571.8 *1*	2.0 *3*	1807.86	5^+	1236.13	3^+	Q		DCO=1.17 *6* (1991Wa20).
587	0.5 *3*	1012.0+x	(17)	425.0+x	(15)			
588.7 *1*	19.5 *10*	3375.39	11^-	2786.64	9^-	E2		I_γ: others: 26 *3* in (^{34}S,4n) at 155 MeV (1991Wa20); 17 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.00 *5*, spin orientation ratio=1.41 *6* (1991Wa20); A_2=+0.32 *2*, A_4=−0.11 *3*, pol.=+1.9 *3* (1976Fl11); A_2=+0.34 *5*, A_4=−0.09 *7* (1987Sc14).
603	0.4 *2*	5725.3	(16)	5122.3	(14)			
606.5[c] *5*	1.7[c] *3*	1938.87	5^-	1332.50	6^+	E1		
606.5[c] *5*	4.2[c] *5*	3419.96	$10^{(-)}$	2813.35	$8^{(-)}$	Q		I_γ: other: 1.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.97 *5* (1991Wa20).
617.4 *1*	4.8 *5*	873.52	2^+	256.09	2^+	M1+E2	+5 *+2−1*	I_γ: other: 2.9 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). Mult.: from adopted gammas. δ: from 1987Sc14; others: 1>(1991Wa20), +5.1 *+10−20* (1993LuZX). DCO=0.66 *4*, spin orientation ratio=1.02 *5* (1991Wa20); A_2=+0.106 *18*, A_4=−0.13 *3* (1987Sc14).
621.32 *8*	89 *4*	1332.50	6^+	711.21	4^+	E2		I_γ: others: 86 *4* in (^{34}S,4n) at 155 MeV (1991Wa20); 72 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.00 *5*, spin orientation ratio=1.47 *6* (1991Wa20); A_2=+0.286 *11*, A_4=−0.032 *17*, pol.=+1.50 *4* (1976Fl11); A_2=+0.332 *12*, A_4=−0.102 *16* (1987Sc14).
634.3 *1*	7.5 *10*	1345.50	4^+	711.21	4^+	M1+E2	>1	I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). Mult.: from adopted gammas. δ: other: >+4.1 (1993LuZX). DCO=0.74 *4*, spin orientation ratio=0.86 *4* (1991Wa20).
640.0 *1*	9.5 *15*	2530.20	$8^{(+)}$	1890.21	$6^{(+)}$	Q		I_γ: other: 6 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.03 *5*, spin orientation ratio=1.02 *5* (1991Wa20); A_2=+0.18 *4*, A_4=−0.09 *5* (1987Sc14).
650.2 *2*	5.4 *7*	3886.85	(12^-)	3236.67	$10^{(-)}$			I_γ: other: 8 *2* in (^{34}S,4n) at 155 MeV (1991Wa20).
650.5 *2*	3.6 *5*	3746.89	$11^{(-)}$	3096.53	$9^{(-)}$	Q		I_γ: other: 5.2 *8* in (^{34}S,4n) at 155 MeV (1991Wa20).

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ [†]	I_γ [#]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [&]	Comments
							DCO=0.99 *5*, spin orientation ratio=1.29 *5* (1991Wa20).
671	0.4 *2*	4121.5	(10)	3450.5	(8)		
672.2 *1*	12 *1*	4419.66	14^+	3747.45	12^+	E2	I_γ: others: 26 *3* in (^{34}S,4n) at 155 MeV (1991Wa20); 12 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.99 *5*, spin orientation ratio=1.39 *6* (1991Wa20); A_2=+0.35 *5*, A_4=−0.13 *7*, pol.=+1.44 *14* (1976Fl11); A_2=+0.35 *4*, A_4=−0.11 *6* (1987Sc14).
676.7 *3*	2.3 *2*	2484.6	7^+	1807.86	5^+	Q	I_γ: other: 1.0 *3* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.0 *1* (1991Wa20).
684	0.20 *5*	1377.0+x	(18)	693.0+x	(16)		
690.3 *2*	2.5 *3*	4110.3	$12^{(-)}$	3419.96	$10^{(-)}$	Q	I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.22 *7*, spin orientation ratio=1.57 *9* (1991Wa20).
696.8 *1*	13.5 *15*	2786.64	9^-	2089.76	8^+	E1	I_γ: others: 15 *2* in (^{34}S,4n) at 155 MeV (1991Wa20); 9 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.54 *3*, spin orientation ratio=0.78 *4* (1991Wa20); A_2=−033 *3*, A_4=+0.05 *5*, pol.=+1.38 *20* (1976Fl11); A_2=+0.34 *4*, A_4=−0.01 *7* (1987Sc14).
700	0.3 *1*	6098.3	(17)	5398.3	(15)		
703.5 *1*	13.2 *15*	4078.90	13^-	3375.39	11^-	E2	I_γ: others: 23 *3* in (^{34}S,4n) at 155 MeV (1991Wa20); 11 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.00 *5*, spin orientation ratio=1.44 *5* (1991Wa20); A_2=+0.46 *5*, A_4=−0.22 *6*, pol.=+1.8 *3* (1976Fl11); A_2=+0.28 *6*, A_4=+0.04 *7* (1987Sc14).
710	2.5 *3*	4456.9	$13^{(-)}$	3746.89	$11^{(-)}$	Q	I_γ: other: 2.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.20 *6* (1991Wa20).
731.3 *1*	4.7 *6*	3261.51	$10^{(+)}$	2530.20	$8^{(+)}$	Q	I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.06 *7* (1991Wa20); A_2=+0.38 *9*, A_4=+0.01 *12* (1987Sc14).
735.4 *4*	1.1 *2*	4845.7	$14^{(-)}$	4110.3	$12^{(-)}$	Q	I_γ: other: 2.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.3 *2* (1991Wa20).
757.2 *1*	60 *3*	2089.76	8^+	1332.50	6^+	E2	I_γ: others: 62 *4* in (^{34}S,4n) at 155 MeV (1991Wa20); 46 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.99 *5*, spin orientation ratio=1.46 *6* (1991Wa20); A_2=+0.271 *17*, A_4=−0.064 *2*, pol.=+1.44 *7* (1976Fl11); A_2=+0.348 *17*, A_4=−0.106 *20* (1987Sc14).
759.1 *14*	3.0 *8*	3243.7	(9^+)	2484.6	7^+		
761	0.2 *1*	1773.0+x	(19)	1012.0+x	(17)		
763	1.6 *2*	4856.3	(13^+)	4093.2	(11^+)	Q	DCO=1.0 *1* (1991Wa20).
775	0.8 *2*	4896.5	(12)	4121.5	(10)		
777.7 *9*	1.5 *3*	4851.7	$14^{(+)}$	4074.11	$12^{(+)}$	Q	I_γ: other: 1.2 *4* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.8 *1* (1991Wa20).
780.2 *3*	3.0 *5*	5199.8	15	4419.66	14^+	D	I_γ: other: 5 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.32 *2* (1991Wa20).
783.0 *4*	3.3 *5*	4670.6	$14^{(+)}$	3887.91	12^+	Q	I_γ: other: 5 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.95 *7* (1991Wa20).
784	0.25 *10*	4905.3	(13)	4121.5	(10)		
788	0.30 *10*	6513.3	(18)	5725.3	(16)		
797.5 *4*	0.5 *2*	6042.6	17	5244.77	16^+		I_γ: other: 3.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
799	0.85 *20*	5255.8	(15^-)	4456.9	$13^{(-)}$		
799	0.9 *2*	5650.7	(16^+)	4851.7	$14^{(+)}$		I_γ: other: 1.5 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
802	0.25 *10*	6995.9	(19)	6195.2	18^+		
805.3 *1*	19.5 *5*	3747.45	12^+	2942.13	10^+	E2	I_γ: others: 30 *2* in (^{34}S,4n) at 155 MeV (1991Wa20); 18 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.02 *5*, spin orientation ratio=1.40 *6* (1991Wa20); A_2=+0.34 *5*, A_4=−0.11 *7*, pol.=+1.62 *21* (1976Fl11); A_2=+0.38 *5*, A_4=−0.07 *6* (1987Sc14).

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	Comments
812.6 *1*	2.9 *4*	4074.11	$12^{(+)}$	3261.51	$10^{(+)}$	Q	I_γ: other: 2.2 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.92 *7* (1991Wa20).
821.4 *1*	9.2 *1*	4900.30	15^-	4078.90	13^-	E2	I_γ: others: 13 *2* in (^{34}S,4n) at 155 MeV (1991Wa20); 9 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.09 *6*, spin orientation ratio=1.44 *6* (1991Wa20); A_2=+0.44 *10*, A_4=−0.05 *15*, pol.=+2.3 *8* (1976Fl11); A_2=+0.35 *11*, A_4=−0.14 *16* (1987Sc14).
825.1 *1*	5.2 *5*	5244.77	16^+	4419.66	14^+	E2	I_γ: others: 20 *3* in (^{34}S,4n) at 155 MeV (1991Wa20); 9 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=1.06 *5*, spin orientation ratio=1.44 *6* (1991Wa20); A_2=+0.40 *9*, A_4=−0.26 *15*, pol.=+1.37 *23* (1976Fl11); A_2=+0.42 *12*, A_4=−0.24 *18* (1987Sc14).
827.1 *2*	5.1 *5*	4714.0	(14^-)	3886.85	(12^-)	Q	I_γ: other: 6 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.98 *7*, spin orientation ratio=1.27 *6* (1991Wa20); A_2=+0.43 *13*, A_4=−0.13 *19* (1987Sc14).
829	0.10 *5*	2206.0+x	(20)	1377.0+x	(18)		
839.0 *3*	2.8 *3*	5509.6	$16^{(+)}$	4670.6	$14^{(+)}$	Q	I_γ: other: 5 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.91 *7*, spin orientation ratio=1.21 *6* (1991Wa20).
842.9 *4*	1.0 *2*	6042.6	17	5199.8	15	Q	I_γ: other: 3 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.88 *8* (1991Wa20).
849.5[‡] *8*		4093.2	(11^+)	3243.7	(9^+)		
852.4 *1*	36 *4*	2942.13	10^+	2089.76	8^+	E2	I_γ: others: 45 *4* in (^{34}S,4n) at 155 MeV (1991Wa20); 29 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.98 *5*, spin orientation ratio=1.45 *6* (1991Wa20); A_2=+0.28 *2*, A_4=−0.04 *3*, pol.=+1.44 *10* (1976Fl11); A_2=+0.321 *20*, A_4=−0.06 *3* (1987Sc14).
860	0.6 *2*	4121.5	(10)	3261.51	$10^{(+)}$	Q	DCO=0.85 *9* (1991Wa20).
862	1 *3*	5707.8	$16^{(-)}$	4845.7	$14^{(-)}$	Q	I_γ: other: 1.3 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). Spin orientation ratio=1.37 *7* (1991Wa20).
870	0.10 *5*	6968.3	(19)	6098.3	(17)		
873.5 *1*	2.1 *4*	873.52	2^+	0.0	0^+	E2	Mult.: from adopted gammas. DCO=0.85 *9* (1991Wa20).
880	0.5 *2*	6530.7	(18^+)	5650.7	(16^+)		I_γ: other: 1.2 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
906	0.8 *2*	6415.6	(18^+)	5509.6	$16^{(+)}$		I_γ: other: 2.6 *4* in (^{34}S,4n) at 155 MeV (1991Wa20).
906.1 *1*	3.0 *3*	5806.40	17^-	4900.30	15^-	E2	I_γ: other: 10 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.06 *8*, spin orientation ratio=1.48 *6* (1991Wa20).
909.8 *1*	4.5 *6*	2255.32	5	1345.50	4^+	D	I_γ: other: 4.6 *8* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.69 *3*, spin orientation ratio=1.28 *7* (1991Wa20); A_2=+0.29 *12*, A_4=+0.07 *20* (1987Sc14).
915.2[b] *2*	1.4[b] *2*	6721.6	$19^{(-)}$	5806.40	17^-	Q	I_γ: other: 13 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.04 *15*, spin orientation ratio=1.59 *8* (1991Wa20).
915.2[b] *2*	1.4[b] *2*	7636.8	$21^{(-)}$	6721.6	$19^{(-)}$	Q	I_γ: other: 13 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.04 *15*, spin orientation ratio=1.59 *8* (1991Wa20).
922.9 *4*	1.4 *2*	4670.6	$14^{(+)}$	3747.45	12^+		I_γ: other: 2.3 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
923	0.5 *1*	6585.6	(18^-)	5662.6	(16^-)	Q	I_γ: other: 2.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.95 *15*, spin orientation ratio=1.32 *6* (1991Wa20).
927	0.4 *2*	6182.8	(17^-)	5255.8	(15^-)		I_γ: other: 1.7 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
945.8 *1*	8.4 *8*	3887.91	12^+	2942.13	10^+	E2	I_γ: others: 6.5 *10* in (^{34}S,4n) at 155 MeV (1991Wa20); 7 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.98 *5*, spin orientation ratio=1.60 *8* (1991Wa20); A_2=+0.27 *10*, A_4=−0.10 *12*, pol.=+1.43 *20* (1976Fl11); A_2=+0.35 *6*, A_4=−0.04 *8* (1987Sc14).
948	0.3 *1*	7461.3	(20)	6513.3	(18)		
948.6 *5*	1.6 *2*	5662.6	(16^-)	4714.0	(14^-)		I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20).
950.8 *5*	1.8 *2*	6195.2	18^+	5244.77	16^+	E2[a]	I_γ: others: 19 *3* in (^{34}S,4n) at 155 MeV (1991Wa20); 4

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
								in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.91 *9*, spin orientation ratio=1.45 *7* (1991Wa20); A_2=+0.27 *17*, A_4=−0.02 *25*, pol.=+1.2 *3* (1976Fl11).
952	0.3 *5*	6995.9	(19)	6042.6	17			
962	<0.1	8145.3	22$^{(+)}$	7183.2	20$^{(+)}$	Q		I_γ: other: 4.5 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). Spin orientation ratio=1.61 *8* (1991Wa20).
971.0 *1*	19 *2*	2303.46	7$^-$	1332.50	6$^+$	E1		I_γ: others: 19 *2* in (^{34}S,4n) at 155 MeV (1991Wa20); 15 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.56 *3*, spin orientation ratio=0.77 *4* (1991Wa20); A_2=−0.20 *2*, A_4=−0.01 *3*, pol.=+1.14 *10* (1976Fl11); A_2=−0.273 *15*, A_4=+0.04 *4* (1987Sc14).
972	0.4 *1*	7387.6	(20$^+$)	6415.6	(18$^+$)			I_γ: other: 2.7 *4* in (^{34}S,4n) at 155 MeV (1991Wa20).
980.2 *2*	2.8 *3*	1236.13	3$^+$	256.09	2$^+$	M1+E2	+13 +*6*−*3*	I_γ: other: 1.0 *3* in (^{34}S,4n) at 155 MeV (1991Wa20). Mult.: from adopted gammas. δ: from 1993LuZX. DCO=0.9 *1* (1991Wa20).
985	≈0.1	8621.8	23$^{(-)}$	7636.8	21$^{(-)}$	Q		I_γ: other: 4.5 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). Spin orientation ratio=1.5 *1* (1991Wa20).
988	0.6 *2*	7183.2	20$^{(+)}$	6195.2	18$^+$	Q		I_γ: other: 11.5 *2* in (^{34}S,4n) at 155 MeV (1991Wa20). Spin orientation ratio=1.49 *7* (1991Wa20).
993	0.20 *5*	6700.8	(18$^-$)	5707.8	16$^{(-)}$			I_γ: other: 1.3 *4* in (^{34}S,4n) at 155 MeV (1991Wa20).
1001	0.12 *3*	8388.6	(22$^+$)	7387.6	(20$^+$)			I_γ: other: 2.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1017[c]	0.5[c@]	4764.4	(12)	3747.45	12$^+$			
1017[c]	0.3[c@]	4905.3	(13)	3887.91	12$^+$			
1031.4 *2*	1.1 *2*	1742.65	3$^-$	711.21	4$^+$	E1		Mult.: from adopted gammas. DCO=0.93 *7* (1991Wa20).
1057	<0.1	9202.3	(24$^+$)	8145.3	22$^{(+)}$			I_γ: other: 4.3 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1059[‡]		3588.9		2530.20	8$^{(+)}$			
1076.1 *3*	1.9 *3*	2408.34	6$^{(-)}$	1332.50	6$^+$	D		DCO=1.2 *1* (1991Wa20); A_2=+0.32 *9*, A_4=+0.03 *13* (1987Sc14).
1079	<0.1	9700.8	(25$^-$)	8621.8	23$^{(-)}$			I_γ: other: 4.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1089.6 *2*	2.6 *3*	1345.50	4$^+$	256.09	2$^+$	Q		DCO=0.95 *7* (1991Wa20); A_2=+0.22 *4*, A_4=−0.17 *6* (1987Sc14).
1096.3 *2*	1.1 *3*	1807.86	5$^+$	711.21	4$^+$	D		DCO=1.04 *9* (1991Wa20).
1097.1 *2*	3.4 *4*	2429.68	6$^{(-)}$	1332.50	6$^+$			DCO=1.09 *7*, spin orientation ratio=1.3 *1* (1991Wa20).
1104	1.05 *10*	4851.7	14$^{(+)}$	3747.45	12$^+$	Q		DCO=0.8 *1* (1991Wa20).
1106	<0.1	10308.3	(26$^+$)	9202.3	(24$^+$)			I_γ: other: 3.3 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1132	0.6 *1*	4074.11	12$^{(+)}$	2942.13	10$^+$			
1153	0.7 *2*	2484.6	7$^+$	1332.50	6$^+$			DCO=1.1 *1* (1991Wa20).
1167	<0.1	11475.3	(28$^+$)	10308.3	(26$^+$)			I_γ: other: 3.0 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).

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(HI,xnγ) 1991Wa20 (continued)

γ(^{126}Ba) (continued)

E_γ †	I_γ #	E_i(level)	J_i^π	E_f	J_f^π	Mult. &	Comments
1172	0.7 *2*	3261.51	$10^{(+)}$	2089.76	8^+		
1172	<0.1	10872.8	(27^-)	9700.8	(25^-)		I_γ: other: 3.8 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1178.0 *5*	1.1 *2*	1890.21	$6^{(+)}$	711.21	4^+	Q	DCO=1.1 *1* (1991Wa20).
1179.4 *4*	2.3 *3*	4121.5	(10)	2942.13	10^+		I_γ: other: 4 *1* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=0.96 *9*, spin orientation ratio=1.3 *1* (1991Wa20).
1227.7 *2*	9 *1*	1938.87	5^-	711.21	4^+	E1	I_γ: others: 9 *1* in (^{34}S,4n) at 155 MeV (1991Wa20); 6 in (^{16}O,4nγ) at 83 MeV (1976Fl11). DCO=0.63 *4*, spin orientation ratio=0.85 *5* (1991Wa20); A_2=−0.25 *4*, A_4=+0.11 *12*, pol.=+0.72 *21* (1976Fl11); A_2=+0.18 *5*, A_4=+0.04 *7* (1987Sc14).
1243	<0.1	12718	(30^+)	11475.3	(28^+)		I_γ: other: 2.8 *5* in (^{34}S,4n) at 155 MeV (1991Wa20).
1260	<0.1	12132.8	(29^-)	10872.8	(27^-)		I_γ: other: 2.0 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
1323	<0.1	14041	(32^+)	12718	(30^+)		I_γ: other: 2.2 *4* in (^{34}S,4n) at 155 MeV (1991Wa20).
1337	<0.1	13469.8	(31^-)	12132.8	(29^-)		I_γ: other: 1.6 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
1345.0 *2*	3.6 *5*	2056.25	4^-	711.21	4^+	D	I_γ: other: 4.6 *5* in (^{34}S,4n) at 155 MeV (1991Wa20). DCO=1.1 *6*, spin orientation ratio=1.6 *2* (1991Wa20); A_2=+0.45 *7*, A_4=+0.07 *11* (1987Sc14).
1360.8 *6*	1.3 *2*	3450.5	(8)	2089.76	8^+		DCO=0.95 *7* (1991Wa20).
1393	<0.1	15434	(34^+)	14041	(32^+)		I_γ: other: 1.6 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
1409	<0.1	14878.8	(33^-)	13469.8	(31^-)		I_γ: other: 1.4 *4* in (^{34}S,4n) at 155 MeV (1991Wa20).
1461	<0.1	16895	(36^+)	15434	(34^+)		I_γ: other: 1.5 *3* in (^{34}S,4n) at 155 MeV (1991Wa20).
1486.6 *2*	2.0 *2*	1742.65	3^-	256.09	2^+	D	DCO=0.78 *5* (1991Wa20); A_2=+0.28 *12*, A_4=−0.15 *18* (1987Sc14).
1545	0.23 *5*	2255.32	5	711.21	4^+		
1554	0.6 *1*	2886.5		1332.50	6^+		

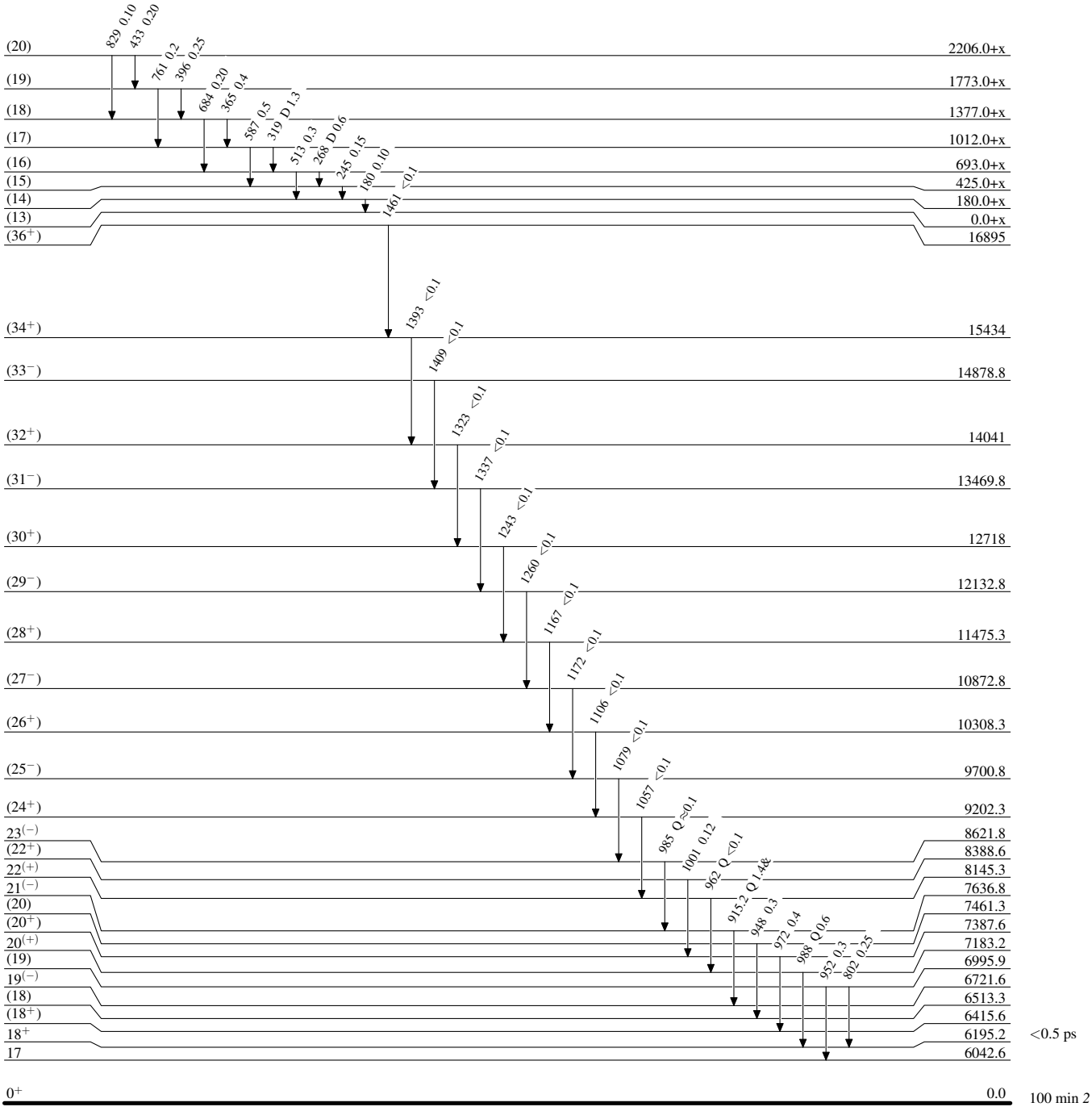
† Eγ with uncertainty are from 1987Sc14, and the Eγ without uncertainty are from 1991Wa20.
‡ Intensity was not given by authors.
# From (^{13}C,3nγ) at 55 MeV (1991Wa20).
@ Uncertainty of intensity was not given by authors.
& From DCO ratio and RUL or γ(pol) in 1991Wa20, unless otherwise noted. D+Q with large δ suggests M1+E2.
a From (^{16}O,4nγ)(1976Fl11).
b Multiply placed with undivided intensity.
c Multiply placed with intensity suitably divided.

(HI,xnγ) 1991Wa20

Level Scheme

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



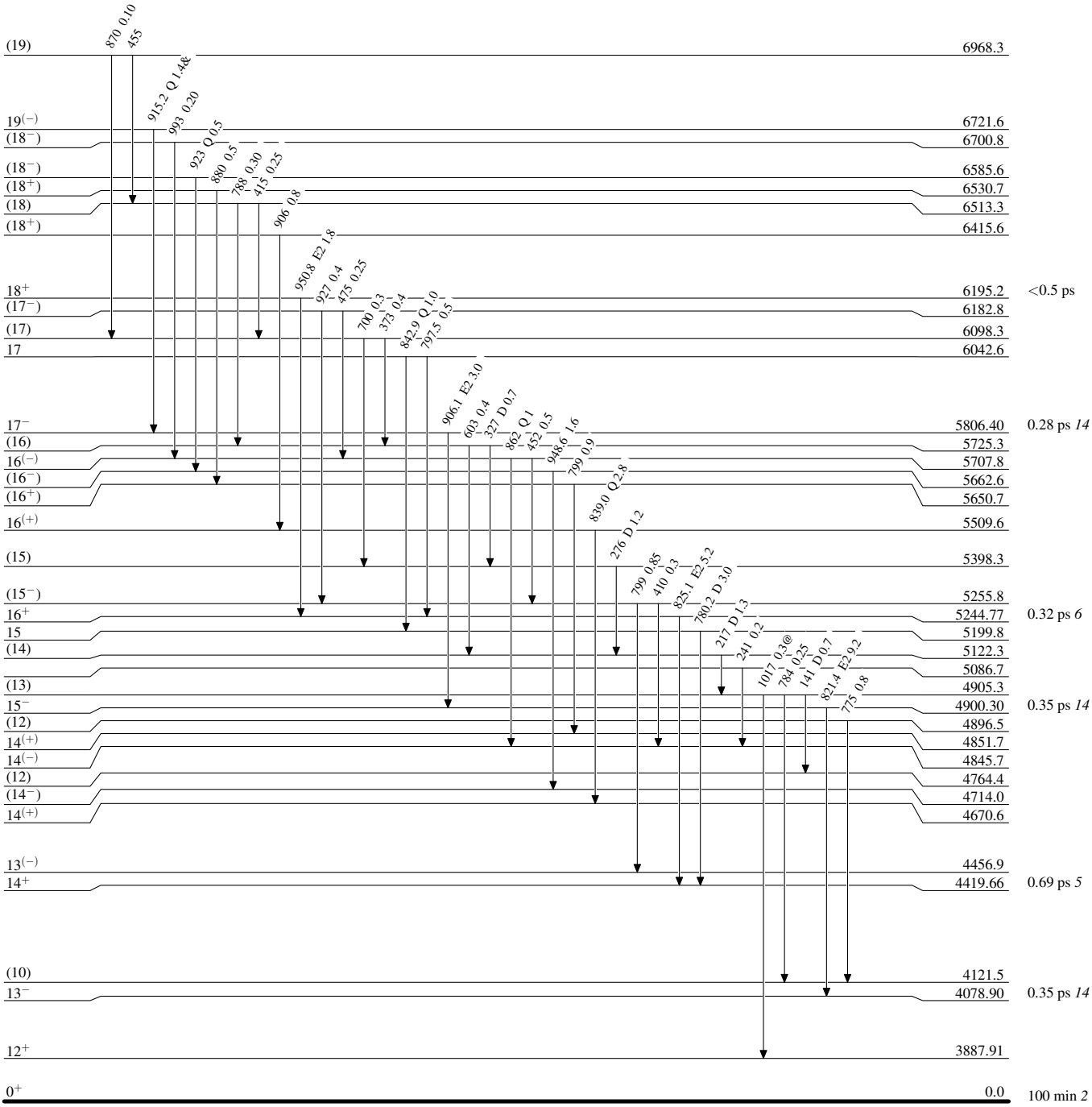
$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



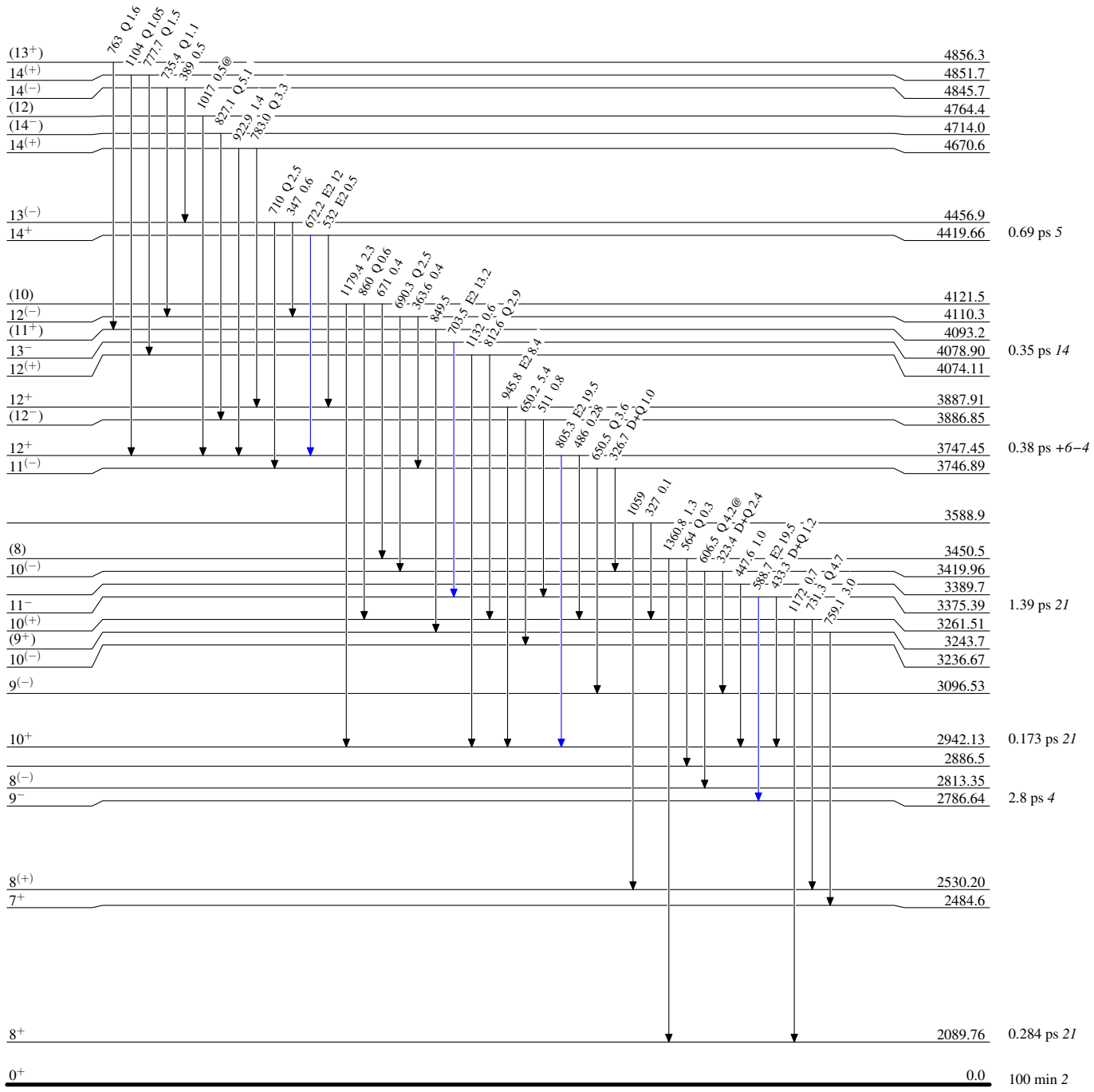
$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



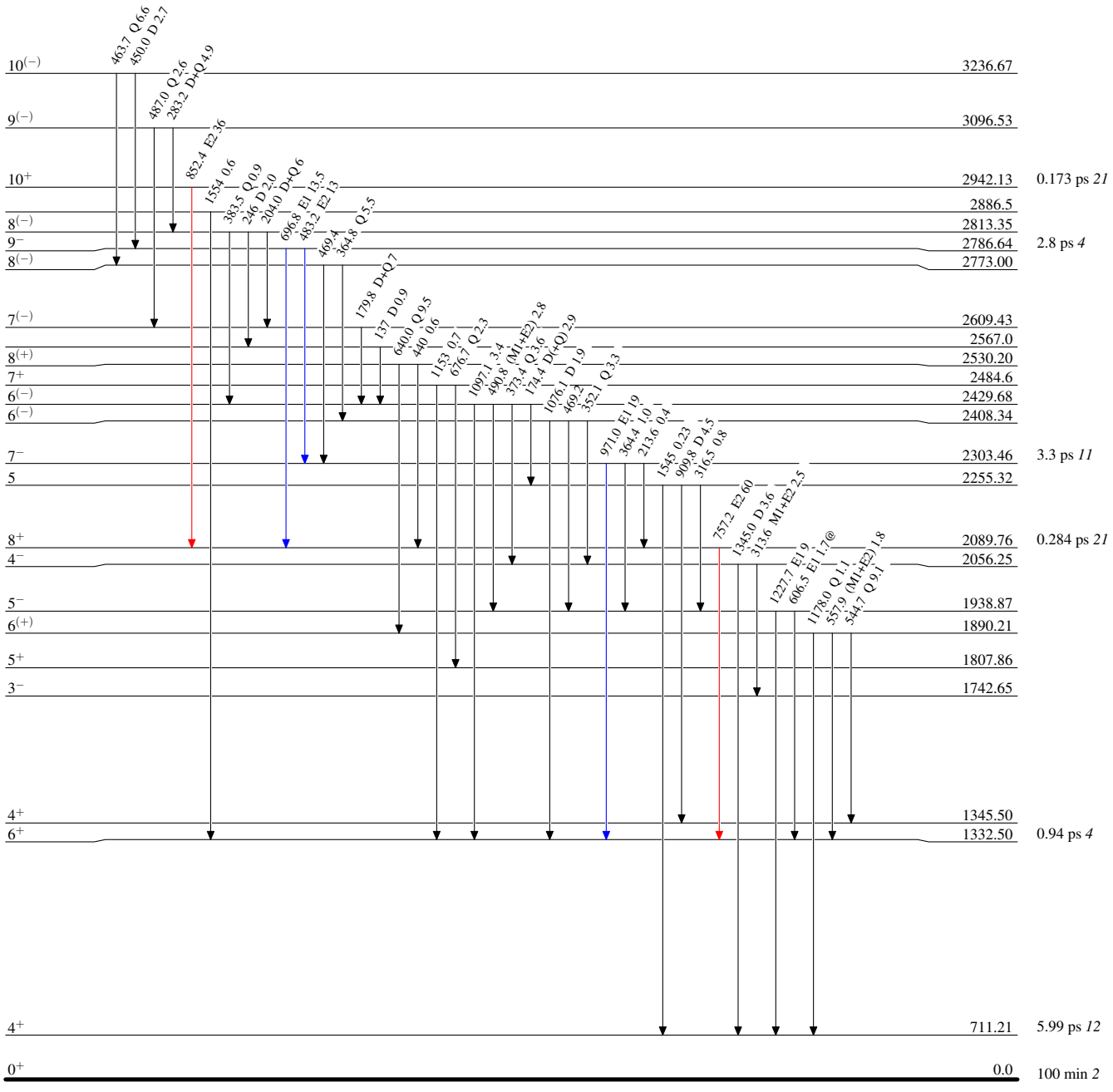
$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



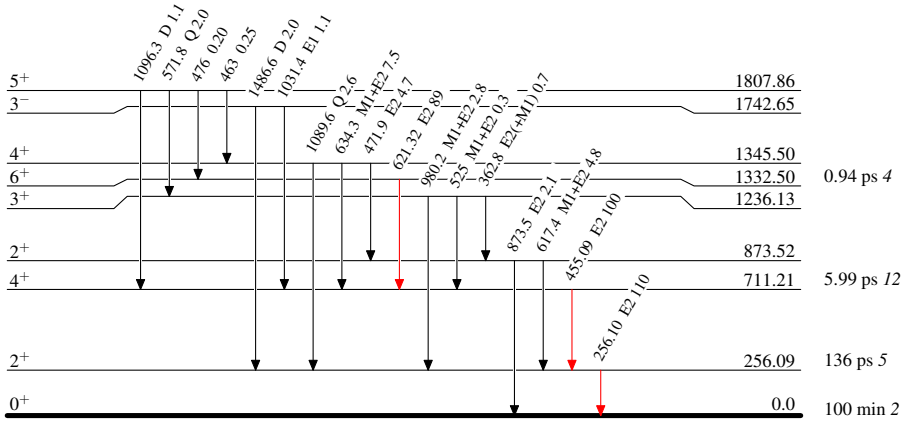
$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20

Level Scheme (continued)

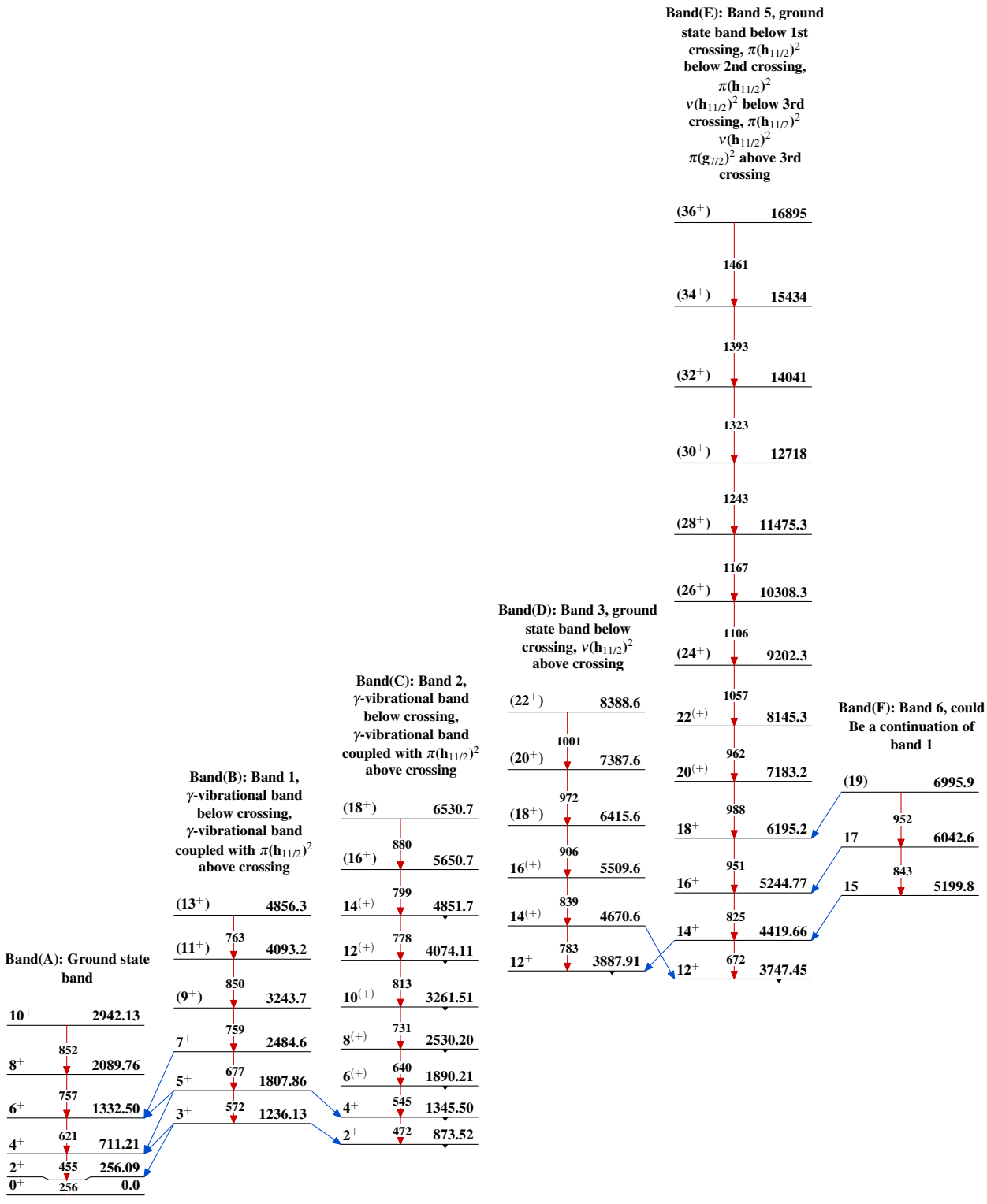
Intensities: Relative I_γ
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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

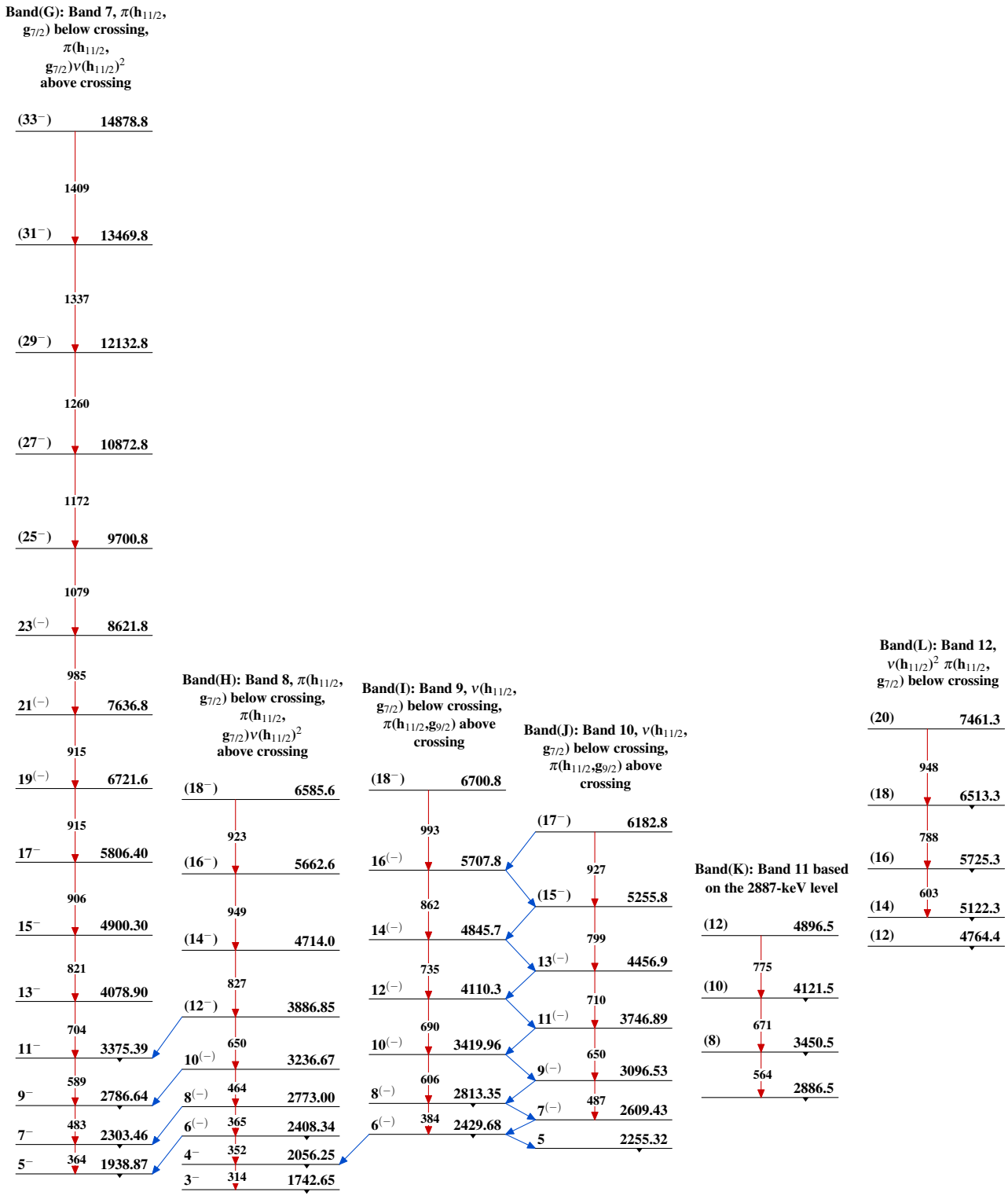


$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20



(HI,xnγ) 1991Wa20 (continued)



$^{126}_{56}Ba_{70}$

(HI,xnγ) 1991Wa20 (continued)