Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 159, 1 (2019)	30-Aug-2019

Q(β^-)=1397.4 *12*; S(n)=5566.40 *22*; S(p)=8.90×10^3 *10*; Q(α)=2.4×10^2 *SY* 2017Wa10

^{177}Yb Levels

Cross Reference (XREF) Flags

A	^{177}Yb IT decay (6.41 s)	D	^{176}Yb(d,p)
B	^{177}Tm β^- decay	E	(HI,xnγ)
C	^{176}Yb(n,γ) E=thermal		

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	XREF	Comments
0.0[#]	9/2$^+$	1.911 h *3*	ABCDE	%β^-=100 μ=−0.695 *15*; Q=+4.03 *6* δ<r^2>(^{176}Yb,^{177}Yb)=+0.0259 fm^2 *1* (2012Fl05). J$^\pi$: J=9/2 using collinear laser spectroscopy technique (2012Fl05,2014StZZ,2016St14). π from μ and band properties. T$_{1/2}$: Weighted average of 1.911 h *3* (1989Ab18), 1.9 h *1* (1963Li05), 1.88 h *10* (1956Co13), and 1.8 h *1* (1949Mc41). μ,Q: Using collinear laser spectroscopy technique (2012Fl05). configuration: ν9/2[624] Nilsson configuration.
104.51[@] *19*	7/2$^-$	4.48 ns *8*	ABCDE	XREF: D(109). T$_{1/2}$: Weighted average of 4.48 ns *8* (1965Ma08), 5.0 ns *4* (1964Lo09), and 4.15 ns *30* (1966Ve07). J$^\pi$: 104.5γ E1 to 9/2$^+$; configuration assignment. configuration: ν7/2[514] Nilsson configuration.
121.7[#] *4*	11/2$^+$		CDE	XREF: C(124.6)D(123). J$^\pi$: 121.2γ to 9/2$^+$; band assignment.
150.0?			B	
220.6[@] *4*	9/2$^-$		DE	J$^\pi$: 99.0γ to 11/2$^+$; 116γ to 7/2$^-$; band assignment.
265.4[#] *4*	13/2$^+$		DE	XREF: D(264.7). J$^\pi$: L=6 in ^{176}Yb(d,p). 143.4γ to 11/2$^+$, 265.7γ to 9/2$^+$; band assignment.
331.5[a] *3*	1/2$^-$	6.41 s *2*	ABCD	%IT=100 μ=+0.151 *15* δ<r^2>(^{176}Yb,^{177}Yb)=+0.0476 fm^2 *2* (2012Fl05). T$_{1/2}$: Weighted average of 6.50 s *5* (1962Fe02), 6.40 s *2* (1965BuZZ) and 6.4 s *1* (1960Ho10). J$^\pi$: J=1/2 using collinear laser spectroscopy technique (2012Fl05). π from μ and 227.0γ M3 to 7/2$^-$. μ: Using collinear laser spectroscopy technique (2012Fl05,2014StZZ). configuration: ν1/2[510] Nilsson configuration.
361.6[@] *7*	11/2$^-$		E	J$^\pi$: 141γ to 9/2$^-$, 257γ to 7/2$^-$; band assignment.
375.3[ae] *7*	(3/2)$^-$		CD	J$^\pi$: L=1 in ^{176}Yb(d,p); band assignment.
423.4[a] *4*	(5/2)$^-$		CD	J$^\pi$: L=3 in ^{176}Yb(d,p); 91.8γ (E2) to 1/2$^-$; band assignment.
430.9[#] *5*	15/2$^+$		E	J$^\pi$: 165.6γ to 13/2$^+$, 309.2γ to 11/2$^+$; band assignment.
432.9? *11*			C	
526.4[ae] *11*	(7/2)$^-$		D	J$^\pi$: L=3 in ^{176}Yb(d,p); band assignment.
527.6[@] *8*	13/2$^-$		E	J$^\pi$: 166γ to to 11/2$^-$, 307γ to 9/2$^-$; band assignment.
612.9[ae] *12*	(9/2$^-$)		D	J$^\pi$: Band assignment in ^{176}Yb(d,p).
618.1[#] *5*	17/2$^+$		E	J$^\pi$: 187.2γ to 15/2$^+$, 352.7γ to 13/2$^+$; band assignment.
622.0 *4*			B	

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Adopted Levels, Gammas (continued)

^{177}Yb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
703.7[b] 8	(3/2)⁻	CD	XREF: D(706.1). Jπ: L=1 in ^{176}Yb(d,p); 599.7γ to 7/2⁻; band assignment. configuration: ν3/2[512] Nilsson configuration.
715.4[e] 15		D	
719.6[@] 10	15/2⁻	E	Jπ: 192γ to 13/2⁻, 358γ to 11/2⁻; band assignment.
770.6[be] 11	(5/2)⁻	D	Jπ: L=3 in ^{176}Yb(d,p); band assignment.
827.5[#] 6	19/2⁺	E	Jπ: 209.4γ to 17/2⁺, 396.7γ to 15/2⁺; band assignment.
831.9 14	(1/2,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 499.7γ to 1/2⁻.
865.0[be] 15	(7/2)⁻	D	Jπ: L=3 in ^{176}Yb(d,p); band assignment.
866.7 7	(1/2,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 535.4γ to 1/2⁻.
935.6[@] 11	17/2⁻	E	Jπ: 216γ to 15/2⁻, 408γ to 13/2⁻; band assignment.
939.4 8	(1/2,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 608.2γ to 1/2⁻.
961.3[e] 20		D	
975.3[be] 12	(9/2⁻)	D	Jπ: L=(4,5,7) in ^{176}Yb(d,p); band assignment.
997.6 8	(1/2⁻,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 573.2γ to (5/2)⁻, 666.8γ to 1/2⁻.
1048.6[e] 18		D	
1057.5[#] 6	21/2⁺	E	Jπ: 229.9γ to 19/2⁺, 439.3γ to 17/2⁺; band assignment.
1108.9[be] 16	(11/2⁻)	D	Jπ: Band assignment in ^{176}Yb(d,p).
1125.5[e] 14		D	
1169.0[e] 19		D	
1175.8[c] 5	(15/2⁺)	E	Jπ: 910.6γ to 13/2⁺, 1054.0γ to 11/2⁺; proposed configuration. configuration: Probable K^{π}=15/2⁺, ν^3(1/2[510],7/2[514],9/2[624]).
1208.7 9	(3/2⁻,5/2⁺)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 1104.1γ to 7/2⁻.
1221.3[de] 11	(7/2)⁻	D	Jπ: L=3 in ^{176}Yb(d,p). configuration: Probable ν7/2[503] Nilsson configuration.
1283.9 8	(1/2⁻,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 859.6γ to (5/2)⁻, 953.2γ to 1/2⁻.
1310.1[#] 7	23/2⁺	E	Jπ: 252.4γ to 21/2⁺, 482.7γ to 19/2⁺; band assignment.
1319.3 8	(1/2⁻,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 896.2γ to (5/2)⁻, 987.4γ to 1/2⁻.
1358.5[&] 9	(3/2)⁻	CD	Jπ: L=1 in ^{176}Yb(d,p); 1254.6γ to 7/2⁻. configuration: ν3/2[501] Nilsson configuration.
1377.8[c] 10	(17/2⁺)	E	Jπ: 202γ to (15/2⁺); band assignment.
1416.6 11	(1/2,3/2,5/2⁺)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
1443.6[&] 12	(5/2)⁻	D	Jπ: L=3 in ^{176}Yb(d,p); band assignment.
1493.6 12	(3/2,5/2)⁺	D	Jπ: L=2 in ^{176}Yb(d,p).
1562.3[&e] 14	(7/2⁻)	D	Jπ: Band assignment in ^{176}Yb(d,p).
1591.8 13	(1/2,3/2,5/2⁺)	CD	XREF: D(1589.5). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 888.1γ to (3/2)⁻.
1600.8[c] 10	(19/2⁺)	E	Jπ: 223γ to (17/2⁺), 425γ to (15/2⁺); band assignment.
1625.9[e] 17		D	
1643.1[e] 11		D	
1657.4 9	(1/2,3/2,5/2⁺)	CD	XREF: D(1659.3). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 953.2γ to (3/2)⁻.
1690.4[e] 12		D	
1700.7 9	(1/2,3/2)	CD	XREF: D(1702.9). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 1367.8γ to 1/2⁻.
1725.3[&e] 12	(9/2⁻)	D	Jπ: Band assignment in ^{176}Yb(d,p).
1734?[e]		D	
1750.3[e] 14		D	
1826	(1/2,3/2,5/2⁺)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal;

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Adopted Levels, Gammas (continued)

^{177}Yb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
1844.8[c] *11*	(21/2$^+$)	E	Jπ: 244γ to (19/2$^+$), 467γ to (17/2$^+$); band assignment.
1849.9[e] *13*		D	
1863.3[e] *12*		D	
1876?[e]		D	
1899.0[&e] *21*	(11/2$^-$)	D	Jπ: Band assignment in ^{176}Yb(d,p).
1920.2 *17*	(1/2$^-$,3/2$^-$)	CD	XREF: D(1921). Jπ: L=1,2 in ^{176}Yb(d,p); 1588.0γ to 1/2$^-$ populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal;
1936.3[e] *12*		D	
1957.3[e] *12*		D	
1985.9[e] *12*		D	
1999.4[e] *12*	(3/2,5/2)$^+$	D	Jπ: L=2 in ^{176}Yb(d,p).
2020.8 *15*	(1/2,3/2,5/2$^+$)	CD	XREF: D(2022.5). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2031.4 *21*	(1/2$^-$,3/2,5/2$^+$)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 1608.0γ to (5/2)$^-$.
2060.6[e] *14*		D	
2067.1 *13*	(1/2,3/2,5/2$^+$)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2082.8[e] *16*		D	
2115.6[e] *12*		D	
2136.7 *21*	(1/2,3/2)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal; 1805.2γ to 1/2$^-$.
2144.9[&e] *16*	(13/2$^-$)	D	Jπ: Band assignment in ^{176}Yb(d,p).
2161.9 *14*	(3/2,5/2)$^+$	CD	Jπ: L=2 in ^{176}Yb(d,p); populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal;
2174.5[e] *27*		D	
2178.9 *13*	(1/2,3/2,5/2$^+$)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2194.0[e] *16*		D	
2210.9[e] *16*		D	
2227.2[e] *14*		D	
2242.5 *15*	(1/2,3/2,5/2$^+$)	CD	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2274.6[e] *14*		D	
2291.7[e] *14*		D	
2308.1[e] *13*		D	
2325.3[e] *14*		D	
2340.6[e] *20*		D	
2371.6[e] *32*		D	
2376.8 *15*	(1/2,3/2,5/2$^+$)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2384.6[e] *16*		D	
2394.9 *15*	(1/2,3/2,5/2$^+$)	CD	XREF: D(2396.3). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2423.5[e] *27*		D	
2441.7[e] *33*		D	
2460.7[e] *17*		D	
2476.2[e] *15*		D	
2479.4 *10*	(1/2,3/2,5/2$^+$)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2487[e] *3*		D	
2508.7[e] *22*		D	
2525.3[e] *15*		D	
2533[e] *3*		D	
2546.6[e] *20*		D	
2560.9[e] *19*		D	
2568[e] *3*		D	
2584.8[e] *12*		D	

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Adopted Levels, Gammas (continued)

^{177}Yb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
2601.8[e] *16*		D	
2622.6[e] *17*		D	
2635.1[e] *17*		D	
2653.1[e] *17*		D	
2667.4[e] *19*		D	
2703[e]		D	
2741.3 *10*	(1/2,3/2,5/2+)	CD	XREF: D(2743). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2777[e]		D	
2806[e]		D	
2835[e]		D	
2854.6 *15*	(1/2,3/2,5/2+)	CD	XREF: D(2856). Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2889[e]		D	
2907.9 *20*	(1/2,3/2,5/2+)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.
2935[e]		D	
2967[e]		D	
2984[e]		D	
3006[e]		D	
3306.1 *20*	(1/2,3/2,5/2+)	C	Jπ: populated by a primary γ-ray transition in ^{176}Yb(n,γ) E=thermal.

[†] From a least-squares fit to Eγ, unless otherwise stated.
[‡] Based on the observed band structures and their properties, multipolarities of primary γ rays in ^{176}Yb(n,γ) E=thermal, γ-ray decay patterns, L-transfer values, and comparisons of experimental (d,p) cross sections with values calculated using the DWBA theory, and Nilsson model.
[#] Band(A): ν9/2[624] band.
[@] Band(B): ν7/2[514] band.
[&] Band(C): ν3/2[501] band.
[a] Band(D): ν1/2[510] band.
[b] Band(E): ν3/2[512] band.
[c] Band(F): $K^{\pi}=15/2^{+}$, ν(1/2[510],7/2[514],9/2[624]) band.
[d] ν7/2[503] state.
[e] From ^{176}Yb(d,p).

Adopted Levels, Gammas (continued)

$\gamma(^{177}Yb)$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[@]	Comments
104.51	7/2$^-$	104.5 *2*	100	0.0	9/2$^+$	E1	0.305	α(K)=0.252 *4*; α(L)=0.0411 *7*; α(M)=0.00921 *14* α(N)=0.00212 *4*; α(O)=0.000279 *5*; α(P)=1.118×10^{-5} *17* B(E1)(W.u.)=3.22×10^{-5} *7* Mult.: α(K)exp=0.58 *15* (1966Ve07) and α(K)exp=0.39 *5* (1960Ho10).
121.7	11/2$^+$	121.5[‡] *5*	100[‡]	0.0	9/2$^+$	[M1+E2]	1.93 *4*	α(K)=1.62 *3*; α(L)=0.247 *5*; α(M)=0.0553 *11* α(N)=0.01298 *24*; α(O)=0.00185 *4*; α(P)=9.88×10^{-5} *19* E_γ: other: 124.6 *8* from ^{176}Yb(n,γ) E=thermal.
150.0?		44.5[#&] *5*	100[#]	104.51	7/2$^-$			
220.6	9/2$^-$	99.0[‡] *5*		121.7	11/2$^+$	[E1]	0.351 *7*	α(K)=0.290 *6*; α(L)=0.0478 *10*; α(M)=0.01070 *22* α(N)=0.00246 *5*; α(O)=0.000323 *7*; α(P)=1.276×10^{-5} *24*
		116[‡] *1*		104.51	7/2$^-$	[M1+E2]	2.21 *7*	α(K)=1.85 *6*; α(L)=0.282 *9*; α(M)=0.0631 *19* α(N)=0.0148 *5*; α(O)=0.00212 *6*; α(P)=0.000113 *4*
		220.5[‡] *5*		0.0	9/2$^+$	[E1]	0.0431 *7*	α(K)=0.0361 *6*; α(L)=0.00544 *9*; α(M)=0.001214 *19* α(N)=0.000282 *5*; α(O)=3.86×10^{-5} *6*; α(P)=1.77×10^{-6} *3*
265.4	13/2$^+$	143.4[‡] *5*	100[‡]	121.7	11/2$^+$	[M1+E2]	1.208 *21*	α(K)=1.011 *18*; α(L)=0.154 *3*; α(M)=0.0345 *6* α(N)=0.00809 *14*; α(O)=0.001157 *20*; α(P)=6.16×10^{-5} *11*
		265.7[‡] *5*	28[‡]	0.0	9/2$^+$	[E2]	0.1073 *17*	α(K)=0.0739 *11*; α(L)=0.0257 *4*; α(M)=0.00614 *10* α(N)=0.001413 *23*; α(O)=0.000175 *3*; α(P)=3.68×10^{-6} *6*
331.5	1/2$^-$	227.0[‡] *2*	100[‡]	104.51	7/2$^-$	M3	6.97	α(K)=4.69 *7*; α(L)=1.74 *3*; α(M)=0.432 *7* α(N)=0.1019 *15*; α(O)=0.01356 *20*; α(P)=0.000535 *8* B(M3)(W.u.)=0.0422 *6* Mult.: α(K)exp=3.75 *25* (1966Ve07) and α(K)exp=4.1 *4* (1960Ho10); ce(K):ce(L1)+ce(L2):ce(L3):ce(M):ce(N) exp=100:32:12:18:10 (1973PrZI).
361.6	11/2$^-$	141[‡] *1*		220.6	9/2$^-$	[M1+E2]	1.27 *4*	α(K)=1.06 *3*; α(L)=0.161 *4*; α(M)=0.0361 *9* α(N)=0.00849 *21*; α(O)=0.00121 *3*; α(P)=6.47×10^{-5} *16*
		257[‡] *1*		104.51	7/2$^-$	[E2]	0.1191 *23*	α(K)=0.0811 *15*; α(L)=0.0292 *6*; α(M)=0.00699 *15* α(N)=0.00161 *4*; α(O)=0.000199 *4*; α(P)=4.02×10^{-6} *7*
423.4	(5/2)$^-$	91.8 *2*	100	331.5	1/2$^-$	(E2)	4.47 *8*	α(K)=1.212 *18*; α(L)=2.49 *5*; α(M)=0.614 *11* α(N)=0.1401 *25*; α(O)=0.0160 *3*; α(P)=5.26×10^{-5} *8*
430.9	15/2$^+$	165.6[‡] *5*	100[‡]	265.4	13/2$^+$	[M1+E2]	0.806 *14*	α(K)=0.674 *11*; α(L)=0.1024 *17*; α(M)=0.0229 *4* α(N)=0.00538 *9*; α(O)=0.000770 *13*; α(P)=4.11×10^{-5} *7*
		309.2[‡] *5*	78[‡]	121.7	11/2$^+$	[E2]	0.0675	α(K)=0.0486 *8*; α(L)=0.01460 *23*; α(M)=0.00346 *6* α(N)=0.000798 *13*; α(O)=0.0001006 *16*; α(P)=2.49×10^{-6} *4*
432.9?		328.4[&]	100	104.51	7/2$^-$			
527.6	13/2$^-$	166[‡] *1*		361.6	11/2$^-$	[M1+E2]	0.800 *18*	α(K)=0.670 *15*; α(L)=0.1017 *23*; α(M)=0.0228 *5* α(N)=0.00535 *12*; α(O)=0.000765 *17*; α(P)=4.08×10^{-5} *9*
		307[‡] *1*		220.6	9/2$^-$	[E2]	0.0690 *12*	α(K)=0.0495 *9*; α(L)=0.0150 *3*; α(M)=0.00355 *7* α(N)=0.000819 *16*; α(O)=0.0001032 *19*; α(P)=2.54×10^{-6} *5*

$^{177}_{70}Yb_{107}$-5

Adopted Levels, Gammas (continued)

γ(^{177}Yb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[@]	Comments
618.1	17/2$^+$	187.2[‡] *5*	83[‡] *19*	430.9	15/2$^+$	[M1+E2]	0.572 *9*	α(K)=0.479 *8*; α(L)=0.0726 *12*; α(M)=0.0162 *3* α(N)=0.00381 *6*; α(O)=0.000546 *9*; α(P)=2.91×10^{-5} *5*
		352.7[‡] *5*	100[‡]	265.4	13/2$^+$	[E2]	0.0459	α(K)=0.0340 *5*; α(L)=0.00914 *14*; α(M)=0.00215 *4* α(N)=0.000497 *8*; α(O)=6.36×10^{-5} *10*; α(P)=1.79×10^{-6} *3*
622.0		517.5[#] *5*	100[#] *10*	104.51	7/2$^-$			
		622.0[#] *5*	35[#] *13*	0.0	9/2$^+$			
703.7	(3/2)$^-$	328.4 *10*	100	375.3	(3/2)$^-$			
		599.7 *15*	60	104.51	7/2$^-$			
719.6	15/2$^-$	192 *1*		527.6	13/2$^-$			
		358 *1*		361.6	11/2$^-$			
827.5	19/2$^+$	209.4[‡] *5*	95[‡] *23*	618.1	17/2$^+$	[M1+E2]	0.419 *7*	α(K)=0.351 *6*; α(L)=0.0531 *9*; α(M)=0.01188 *19* α(N)=0.00279 *5*; α(O)=0.000399 *7*; α(P)=2.13×10^{-5} *4*
		396.7[‡] *5*	100[‡]	430.9	15/2$^+$	[E2]	0.0330	α(K)=0.0250 *4*; α(L)=0.00613 *9*; α(M)=0.001435 *21* α(N)=0.000332 *5*; α(O)=4.30×10^{-5} *7*; α(P)=1.337×10^{-6} *20*
831.9	(1/2,3/2)	499.7 *20*	100	331.5	1/2$^-$			
866.7	(1/2,3/2)	434.4 *10*	43	432.9?				
		491.9 *10*	100	375.3	(3/2)$^-$			
		535.4 *10*	10	331.5	1/2$^-$			
935.6	17/2$^-$	216[‡] *1*		719.6	15/2$^-$			
		408[‡] *1*		527.6	13/2$^-$			
939.4	(1/2,3/2)	563.5 *10*	50	375.3	(3/2)$^-$			
		608.2 *8*	100	331.5	1/2$^-$			
997.6	(1/2$^-$,3/2)	573.2 *10*	41	423.4	(5/2)$^-$			
		622.9 *10*	100	375.3	(3/2)$^-$			
		666.8 *15*	39	331.5	1/2$^-$			
1057.5	21/2$^+$	229.9[‡] *5*	99[‡] *27*	827.5	19/2$^+$	[M1+E2]	0.324	α(K)=0.272 *5*; α(L)=0.0410 *7*; α(M)=0.00917 *14* α(N)=0.00215 *4*; α(O)=0.000308 *5*; α(P)=1.65×10^{-5} *3*
		439.3[‡] *5*	100[‡]	618.1	17/2$^+$	[E2]	0.0250	α(K)=0.0193 *3*; α(L)=0.00440 *7*; α(M)=0.001024 *15* α(N)=0.000237 *4*; α(O)=3.11×10^{-5} *5*; α(P)=1.045×10^{-6} *15*
1175.8	(15/2$^+$)	910.6[‡] *5*		265.4	13/2$^+$			
		1054.0[‡] *5*		121.7	11/2$^+$			
1208.7	(3/2$^-$,5/2$^+$)	833.8[&] *10*	100	375.3	(3/2)$^-$			
		1104.1 *10*	78	104.51	7/2$^-$			
1283.9	(1/2$^-$,3/2)	859.6 *10*	61	423.4	(5/2)$^-$			
		953.2 *10*	100	331.5	1/2$^-$			
1310.1	23/2$^+$	252.4[‡] *5*	81[‡] *25*	1057.5	21/2$^+$	[M1+E2]	0.251	α(K)=0.210 *4*; α(L)=0.0317 *5*; α(M)=0.00709 *11* α(N)=0.00166 *3*; α(O)=0.000238 *4*; α(P)=1.275×10^{-5} *20*
		482.7[‡] *5*	100[‡]	827.5	19/2$^+$	[E2]	0.0195	α(K)=0.01528 *22*; α(L)=0.00328 *5*; α(M)=0.000760 *11* α(N)=0.000176 *3*; α(O)=2.33×10^{-5} *4*; α(P)=8.35×10^{-7} *12*

$^{177}_{70}Yb_{107}$-6

Adopted Levels, Gammas (continued)

γ(^{177}Yb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π
1319.3	(1/2$^-$,3/2)	888.1& *10*	9	432.9?	
		896.2 *10*	23	423.4	(5/2)$^-$
		943.8 *10*	100	375.3	(3/2)$^-$
		987.4 *15*	19	331.5	1/2$^-$
1358.5	(3/2)$^-$	491.9 *10*	100	866.7	(1/2,3/2)
		982.5 *15*	24	375.3	(3/2)$^-$
		1254.6 *15*	15	104.51	7/2$^-$
1377.8	(17/2$^+$)	202‡ *1*		1175.8	(15/2$^+$)
1416.6	(1/2,3/2,5/2$^+$)	550.5 *10*	39	866.7	(1/2,3/2)
		982.5 *15*	100	432.9?	
1591.8	(1/2,3/2,5/2$^+$)	888.1 *10*	100	703.7	(3/2)$^-$
1600.8	(19/2$^+$)	223‡ *1*		1377.8	(17/2$^+$)
		425‡ *1*		1175.8	(15/2$^+$)
1657.4	(1/2,3/2,5/2$^+$)	791.3 *10*	100	866.7	(1/2,3/2)
		825.1 *15*	38	831.9	(1/2,3/2)
		953.2 *10*	48	703.7	(3/2)$^-$
1700.7	(1/2,3/2)	491.9 *10*	100	1208.7	(3/2$^-$,5/2$^+$)
1700.7	(1/2,3/2)	833.8& *10*	16	866.7	(1/2,3/2)
		998.5 *15*	10	703.7	(3/2)$^-$
		1367.8 *15*	12	331.5	1/2$^-$
1844.8	(21/2$^+$)	244‡ *1*		1600.8	(19/2$^+$)
		467‡ *1*		1377.8	(17/2$^+$)
1920.2	(1/2$^-$,3/2$^-$)	328.4 *10*	100	1591.8	(1/2,3/2,5/2$^+$)
		599.7& *15*	60	1319.3	(1/2$^-$,3/2)
		1488.5& *15*	75	432.9?	
		1588.0& *20*	49	331.5	1/2$^-$
2020.8	(1/2,3/2,5/2$^+$)	662.3 *15*	100	1358.5	(3/2)$^-$
		1588.0 *20*	58	432.9?	
2031.4	(1/2$^-$,3/2,5/2$^+$)	1608.0 *20*	100	423.4	(5/2)$^-$
2067.1	(1/2,3/2,5/2$^+$)	1069.5 *10*	100	997.6	(1/2$^-$,3/2)
2136.7	(1/2,3/2)	1805.2 *20*	100	331.5	1/2$^-$
2161.9	(3/2,5/2)$^+$	953.2 *10*	100	1208.7	(3/2$^-$,5/2$^+$)
2178.9	(1/2,3/2,5/2$^+$)	859.6 *10*	100	1319.3	(1/2$^-$,3/2)

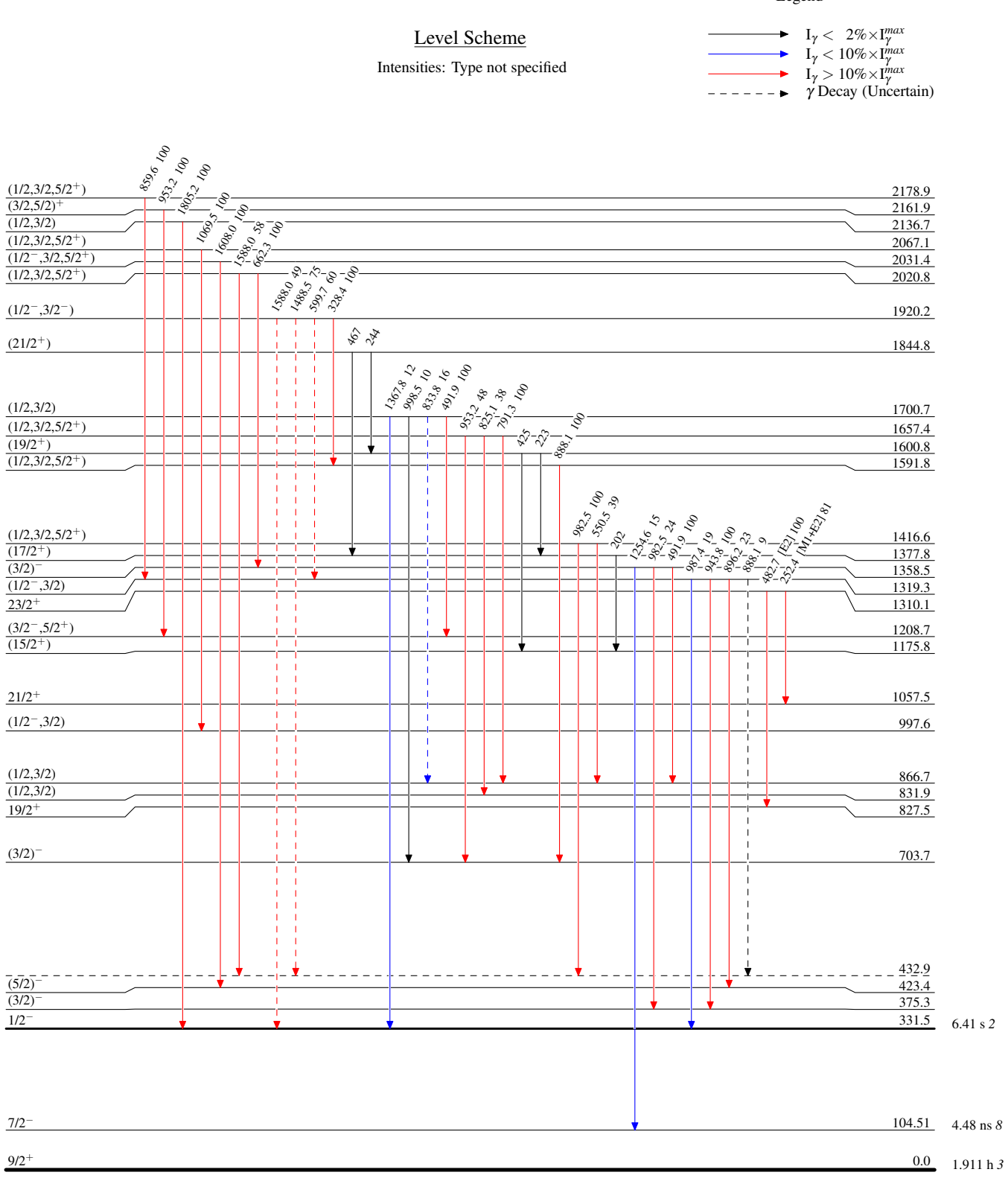
† From ^{176}Yb(n,γ) E=thermal, unless otherwise stated.
‡ From (HI,xnγ).
# From ^{177}Tm β^- decay.
@ Additional information 1.
& Placement of transition in the level scheme is uncertain.

$^{177}_{70}Yb_{107}$-7

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

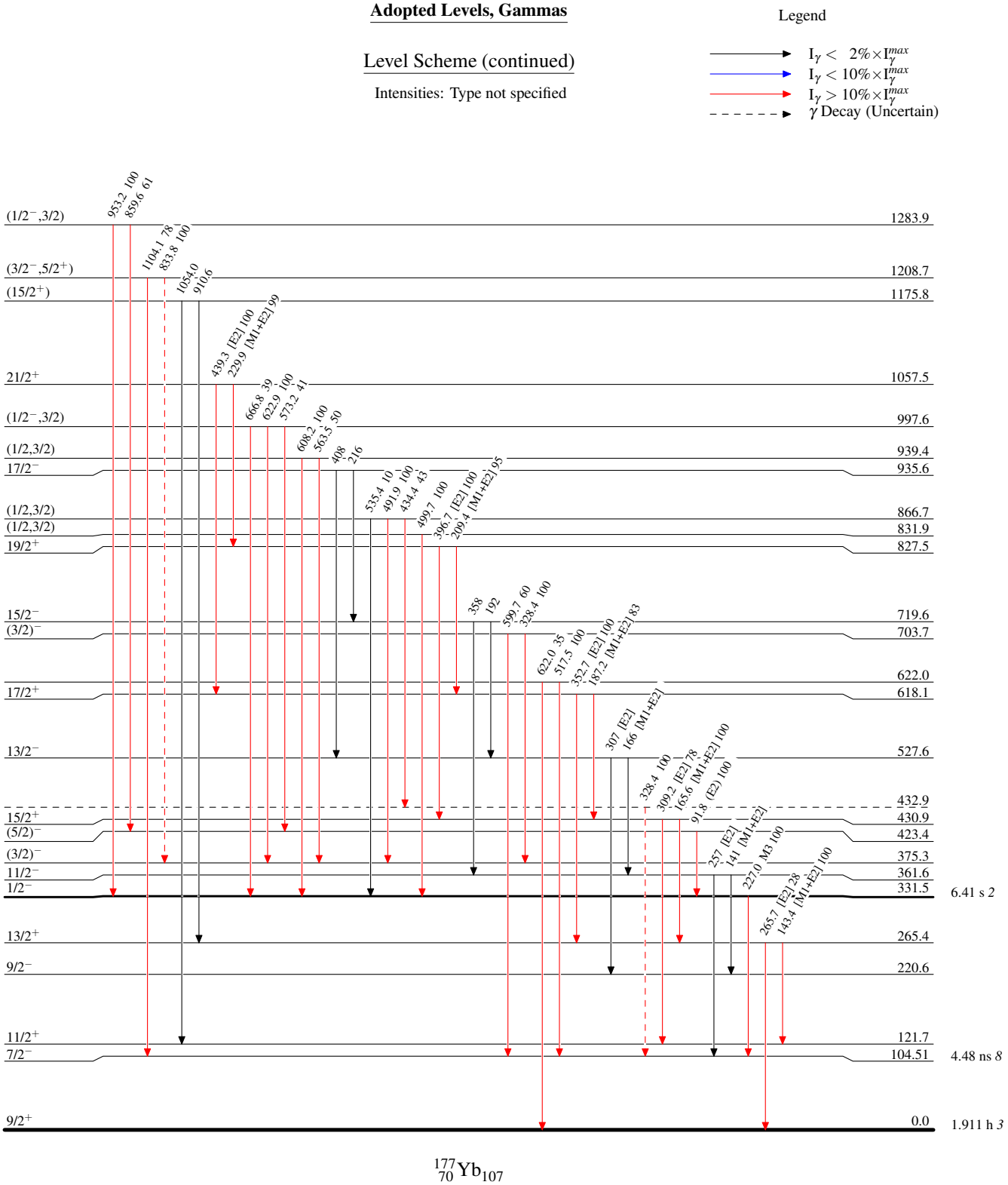


$^{177}_{70}Yb_{107}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

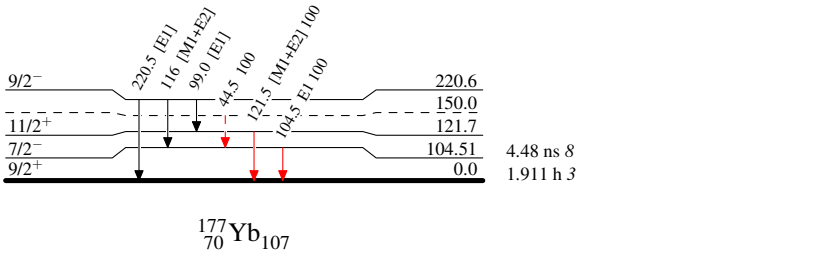


$^{177}_{70}Yb_{107}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



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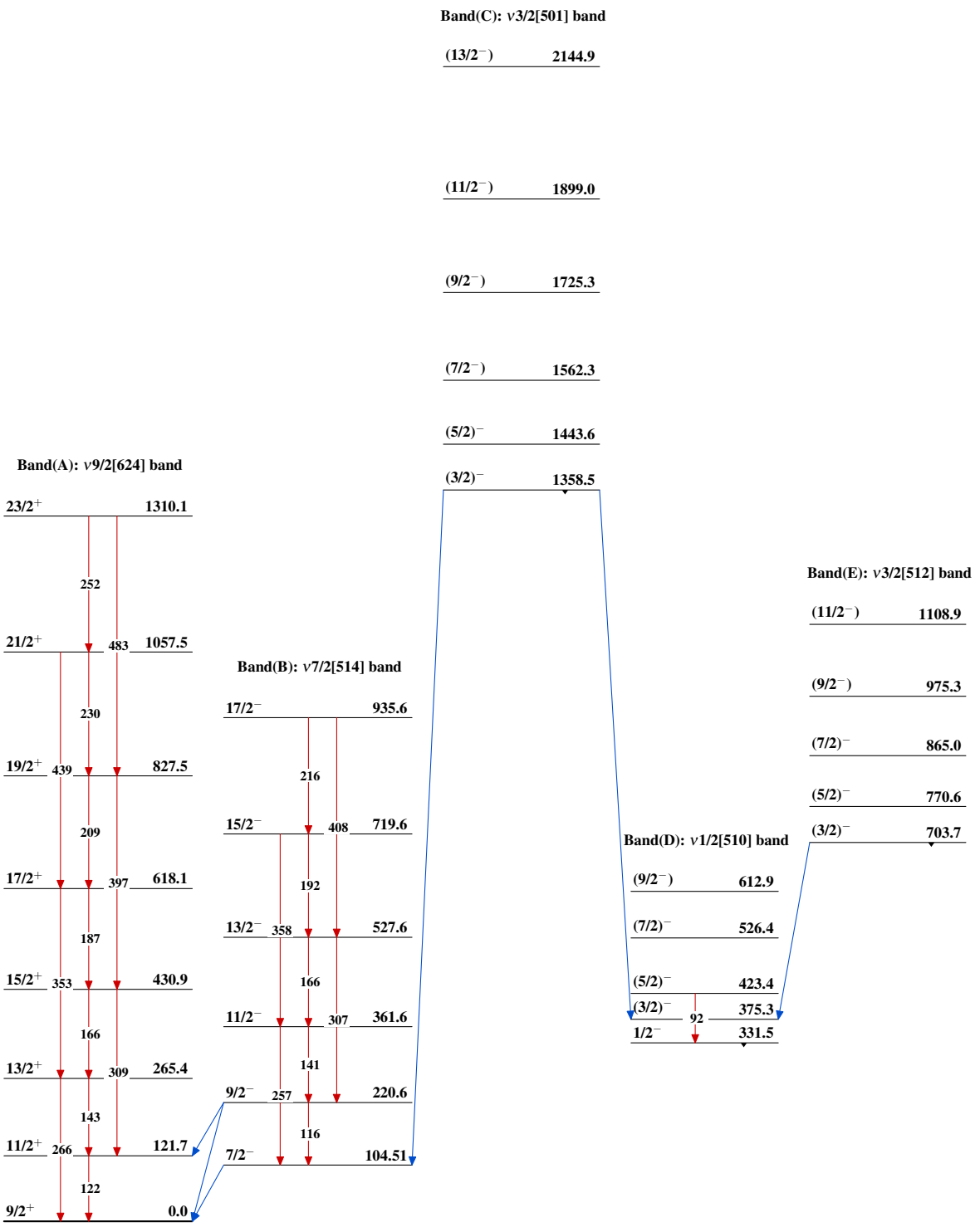
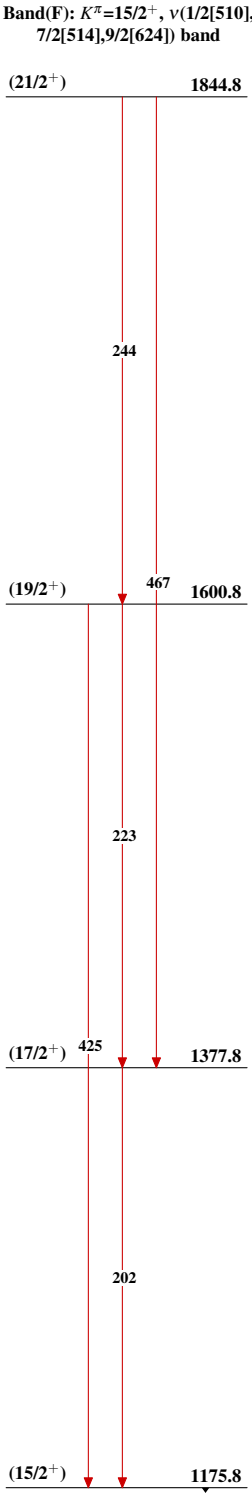
Adopted Levels, Gammas



$^{177}_{70}Yb_{107}$

Adopted Levels, Gammas (continued)



$^{177}_{70}Yb_{107}$