Adopted Levels, Gammas

History

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

Q(β^-)=−4796 *10*; S(n)=10018.3 *14*; S(p)=7599.3 *14*; Q(α)=−1258.0 *14* 2021Wa16

^{126}Xe Levels

Cross Reference (XREF) Flags

A	^{126}Cs ε decay	E	^{126}Te(^{3}He,3nγ), ^{126}Te(α,4nγ)	I	^{124}Te(α,2nγ)
B	^{126}I β^- decay	F	^{127}I(p,2nγ)	J	^{82}Se(^{48}Ca,4nγ)
C	Coulomb excitation	G	^{123}Te(α,nγ)	K	^{126}Xe(γ,γ')
D	^{116}Cd(^{13}C,3nγ)	H	^{124}Te(^{3}He,n)	L	^{122}Sn(^{9}Be,5nγ)

E(level)†	Jπ‡	$T_{1/2}$&	XREF	Comments
0.0[c]	0+	stable	ABCDEFGHIJKL	$T_{1/2}$: lower limit is given as 1.9×10^{22} y for the 2ν2K decay mode from the measurement with liquid xenon scintillation detector (2018Ab04).
388.632[c] *9*	2+	38 ps *3*	ABCDEFG IJKL	μ=+0.54 *8* μ: IMPAC value relative to 132Xe 668-keV level (1975Go18,2020StZV). Others: +0.74 *14* IPAC value (1977Ar19), 0.44 *10* (1976Sa28), 0.74 *14* (1974NoZD). $T_{1/2}$: from 2016Pr01. Other: 41.3 ps *14* in (β)(388.633γ)(t) (1963De21). Jπ: E2 γ to 0+.
879.872[f] *10*	2+	8.7 ps *15*	ABCDEFG JKL	Jπ: E2 γ to 0+.
942.00[c] *3*	4+	3.8 ps *6*	A CDEFG IJ L	Jπ: stretched E2 γ to 2+. Member of ground-state band.
1313.88[g] *3*	0+	2.8 ps *5*	A C G	Jπ: from $\gamma\gamma(\theta)$ in ^{126}Cs ε decay (1979Si11).
1317.680[e] *25*	3+	7.6 ps *12*	A CDEFG J L	
1488.38[f] *4*	4+	2.7 ps *3*	CDEFG J L	
1634.99[c] *5*	6+	1.06 ps *19*	CDEFG IJ L	
1678.573[g] *22*	2+	5.9 ps *8*	A C G	
1760.55 *10*	0+	0.23 ps *7*	A C GH	Jπ: L(^{3}He,n)=0.
1867.21 *21*	(6+)		E	Jπ: $\gamma(\theta)$ in ^{126}Te(^{3}He,3nγ). (E2) γ to 4+.
1903.13[h] *7*	4+		G	
1903.50[e] *5*	5+		A DEFG J L	
2004.88[i] *6*	3(−)		A C G	
2042.10[g] *11*	4(+)		G	
2064.0 *4*	2(+)	≤0.29 ps	A G	$T_{1/2}$: from DSAM in (α,nγ) (2000Ga08).
2086.30 *6*	2+	≤1.8 ps	A C G	Jπ: γ's to 0+ and 4+, log *ft*=6.78 *3* from 1+.
2187.94 *18*			E	
2214.32[f] *7*	6+		DEFG J L	
2215.18 *7*	(1,2+)		A	Jπ: γ's to 0+ and 2+.
2228.65 *7*	(1,2+)[@]	≤1.6[a] ps	A K	
2258.79 *21*	(4,5)		G	
2262.48 *11*	(3)	≤0.46 ps	G	$T_{1/2}$: from DSAM in (α,nγ) (2000Ga08).
2301.56[k] *7*	5(−)		CD G IJ	
2302.2 *5*			J	
2304.62 *7*	4(−)		G	
2305.36 *9*	(2,3)		G	
2314.90 *9*	(3−)		C G	
2321.56[j] *6*	4(−)		G	

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$&	XREF	Comments
2347.24 *5*	0^+,1,2		A	Jπ: log *ft*=6.159 *25* from 1^+; γ to 2^+.
2350.57 *7*	(2,3)		G	
2358.59 *7*	1^+	0.0292[a] ps *+26−23*	A G K	Jπ: γ ray angular distribution ratio in ^{126}Xe(γ,γ′), and γ ray transition strength to 0^+; (2^+) is reported from γ(θ) in ^{123}Te(α,nγ) (2000Ga08). $T_{1/2}$: other: < 0.070 ps from DSAM in (α,nγ) (2000Ga08).
2363.08[h] *7*	5^+		E G	
2395.30 *8*	($3,4^+$)		G	
2414.29[i] *7*	$5^{(-)}$		C G J	
2419.24 *6*	1^+,2^+		A G	Jπ: log *ft*=6.66 *3* from 1^+; γ(θ) in ^{123}Te(α,nγ).
2435.71[c] *10*	8^+	0.8 ps *3*	DEFG IJ L	$T_{1/2}$: calculated from B(E2) value which was quoted in 2000Ga18 as an unpublished result.
2455.324 *23*	2^+	0.13 ps *3*	A C	Jπ: γ′s to 0^+ and 4^+, log *ft*=5.68 *3* from 1^+.
2489.36 *5*	(2^+)	≤0.25 ps	A G	$T_{1/2}$: from DSAM in (α,nγ) (2000Ga08).
2492.61 *8*	(6^+)		G	
2502.56 *5*	0^+,1,2		A	Jπ: log *ft*=5.924 *24* from 1^+; γ′s to 2^+.
2515.21 *11*	(3)		G	
2520.87 *8*	0^+,1,2		A G	Jπ: log *ft*=6.65 *4* from 1^+; γ′s to 2^+.
2525.7 *3*			G	
2537.78 *11*	4		G	
2553.03 *10*	0^+		A	Jπ: E0 to 0^+.
2562.14[l] *8*	6^-		DEFG J	
2565.16 *4*			A G	Jπ: 2000Ga08 reported J=(3^+) from γγ(θ). However, this assignment is inconsistent with log *ft*=6.14 *3* from 1^+.
2566.8 *4*	1[@]	0.09[a] ps *3*	K	
2591.40[n] *8*	7^-	<0.2 ns	DE G IJ	$T_{1/2}$: from centroid shift (1996Ko16); see 2758-keV level.
2594.7 *5*			G	
2598.59 *9*	5		G	
2603.9 *5*			G	
2608.88 *8*	(4,5)		G	
2622.92 *9*	5,6		G	
2631.8 *4*			G	
2632.4 *5*			G	
2642.4 *3*			G	
2661.43[e] *12*	7^+		DE G J L	
2664.56 *8*	$6^{(+)}$		G	
2677.85[k] *8*	7^-		DE G IJ	
2681.0 *5*			G	
2685.7 *5*			G	
2694.7 *4*			G	
2702.2 *4*			G	
2739.7 *5*			G	
2741.86 *9*	$5^{(-)}$		G	
2753.6 *3*	3^+,4,5^+		G	Jπ: γ′s to 3^+ and 5^+.
2756.9 *5*			G	
2758.22[m] *11*	8^-	1.4 ns *2*	DE G IJ	$T_{1/2}$: weighted av. of 1.3 *2* from centroid shift (1996Ko16) and 1.9 *5* from γγ(t)-coin (1982Ha44). The latter value was given as the half-life of 2591-keV 7^- level; other: 1993Se01 quote unpublished result of 1.51 ns.
2759.46 *10*			A G	
2762.60[j] *6*	6^-		G	
2765.6 *5*	(3^+,5^+)		G	Jπ: from γγ(θ) in ^{123}Te(α,nγ).
2768.0 *5*	1[@]	0.72[a] ps *+36−18*	K	

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)[†]	Jπ[‡]	T$_{1/2}$[&]	XREF	Comments
2779.8 *7*			G	
2788.16 *10*	(5$^+$,6$^-$)		G	
2790.0 *3*	(5)		G	Jπ: from γγ(θ) in ^{123}Te(α,nγ).
2796.42 *8*	0$^+$,1,2		A G	Jπ: log *ft*=6.07 *3* from 1$^+$; γ′s to 2$^+$.
2801.0 *5*			G	
2811.6 *4*			G	
2818.7 *5*			G	
2830.9 *4*			G	
2847.0 *5*	1[@]	0.32[a] ps *+6−4*	K	
2848.6 *4*			G	
2850.4 *5*			G	
2859.7 *5*			G	
2875.5 *5*	(5$^+$,7$^+$)		G	Jπ: from γγ(θ) in ^{123}Te(α,nγ).
2877.3 *4*			G	
2878.3 *3*			G	
2881.00[i] *9*	7$^-$		D G J	
2884.7 *4*			G	
2885.0 *4*			G	
2885.5 *5*			G	
2893.18 *5*	2$^+$		A	Jπ: γ′s to 0$^+$ and 4$^+$.
2898.0 *5*			G	
2907.6 *4*	3$^+$,4,5$^+$		G	Jπ: γ′s to 3$^+$ and 5$^+$.
2915.0 *4*			G	
2918.9 *3*	1[@]	4.35[a] fs *+25−23*	K	
2929.0 *5*			G	
2934.7 *5*	(5$^+$,7$^+$)		G	Jπ: from γγ(θ) in ^{123}Te(α,nγ).
2941.58 *23*			G	
2941.9 *5*			G	
2948.0 *3*			G	
2950.8 *4*	1[@]	20.9[a] fs *+23−21*	K	
2952.31 *9*	(7,8)		G	
2953.0 *5*			G	
2962.12 *11*			A G	
2965.9 *5*			G	
2973.9 *4*	(4,5,6)		G	Jπ: γ′s to 4$^+$ and (6$^+$).
2994.1 *4*			G	
2996.1 *5*			G	
2999.0 *5*			G	
3001.7 *5*			G	
3003.0 *5*			G	
3025.9 *5*			G	
3049.7 *4*			G	
3050.1 *5*			G	
3051.5 *4*			G	
3061.70[f] *24*	8$^+$		D G J L	Jπ: From band structure and γ ray DCO ratio in (^{9}Be,5nγ).
3064.31[n] *13*	9$^-$		DE G IJ	
3073.0 *5*			G	
3075.6 *5*			G	
3084.8 *5*			G	
3091.0 *4*			G	
3094.25[l] *15*	(8$^-$)		D G J	
3099.3 *4*			G	
3106.0 *5*			G	
3117.20[o] *13*	(8$^+$)		D G J	

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$[&]	XREF	Comments
3123.6 *5*			G	
3132.0 *5*	1[@]	0.37[a] ps *+9−6*	K	
3156.4 *4*			G	
3157.4 *6*			G	
3160.0 *5*	1[@]	0.40[a] ps *+10−7*	K	
3170.3 *5*			G	
3188.6 *5*			G	
3194.7 *5*			G	
3195.9 *4*	1[@]	10[a] fs *3*	K	
3196.0 *5*			G	
3198.00[j] *10*	(8^{-})		D G J	
3209.0 *5*	1[@]	0.198[a] ps *+30−23*	K	
3217.6 *5*			G	
3218.3 *4*			G	
3219.02[k] *10*	(9^{-})		D G IJ	
3236.0 *5*	1[@]	0.35[a] ps *+11−7*	K	
3243.0 *5*			G	
3252.1 *4*			G	
3254.0 *5*	1[@]	16.1[a] fs *+12−10*	K	
3271.0 *5*			G	
3286.7 *5*			G	
3294.69[i] *16*	9^{-}[#]		D G J	
3298.0 *5*			G	
3312.7 *4*			G	
3313.3 *5*			G	
3314.15[d] *16*	10^{+}		DE G J	
3329.0 *5*			G	
3359.68[c] *14*	10^{+}		DE G J	
3360.0 *5*			G	
3369.4 *6*			G	
3381.4 *5*			G	
3383.80[o] *14*	(9^{+})		D G J	
3386.9 *5*			G	
3396.1 *5*			G	
3427.9 *4*	1[@]	12.6[a] fs *9*	K	
3446.32[m] *14*	10^{-}		D G J	
3461.9 *4*	1[@]	0.101[a] ps *+30−23*	K	
3471.1 *5*			G	
3508.1 *5*	1[@]	0.25[a] ps *+10−6*	K	
3520.43[e] *16*	9^{+}		D G J L	J$^{\pi}$: From band structure and γ ray DCO ratio in (^{9}Be,5nγ).
3521.2 *6*			G	
3544.0 *5*			G	
3578.7 *5*			G	
3591.9 *6*			G	
3625.7 *5*			G	
3760.07[l] *20*	(10^{-})[#]		D J	
3783.31[n] *18*	11^{-}		D G J	
3791.1 *5*	1[@]	0.046[a] ps *6*	K	
3875.29[j] *17*	(10^{-})[#]		D J	
3884.58[d] *16*	12^{+}		DE J	
3905.0 *4*	1[@]	0.015[a] ps *4*	K	

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)[†]	Jπ[‡]	XREF		E(level)[†]	Jπ[‡]	XREF	
3920.90[k] 19		D	J	7587.4[d] 6	20+#	D	J
3963.86[i] 21	11−#	D	J	7615.6[p] 7	19(+)#	D	J
3998.5[o] 3		D	J	7757.2[s] 5	20(−)#		J
4240.72[m] 20	12−#	D	J	8001.0[m] 8	20−#		J
4274.41[c] 24	12+#	D	J	8013.4[u] 8	20+#		J
4532.4[l] 3	(12−)#	D	J	8037.7[p] 7	20(+)#	D	J
4566.8[n] 3	13−#	D	J	8166.3[r] 5	21−#		J
4597.16[j] 21	(12−)#	D	J	8235.7[n] 5	21−#		J
4619.50[d] 21	14+#	DE	J	8433.3[p] 7	21(+)#	D	J
4701.1 3		D		8646.5[s] 5	22(−)#		J
4732.84[k] 23	13−#	D	J	8745.2[d] 6	22+#	D	J
4737.3[i] 3	13−#	D	J	8837.8[v] 7	22+#		J
4769.2[o] 3		D	J	8927.2[p] 7	22+#		J
5090.0[b] 4	14+#	D	J	9018.8[t] 9	(22−)#		J
5097.2[m] 4	14−#	D	J	9034.1[m] 10	22−#		J
5264.2 5	14+#		J	9054.6[u] 9	22+#		J
5334.0[j] 3	14(−)#		J	9258.7[r] 6	23−#		J
5365.9[l] 5	(14−)#		J	9369.8[n] 6	23−#		J
5392.8[n] 3	15−#	D	J	9457.5[p] 7	23(+)#		J
5508.8[d] 4	16+#	D	J	9751.5[s] 6	24(−)#		J
5636.3 4		D		9876.0[q] 7	24+#		J
5694.8[o] 4		D	J	9915.9[d] 7	24+#		J
5726.9[r] 4	15−#		J	9916.2[p] 7	24(+)#		J
5923.1[b] 5	16+#	D	J	9968.7[u] 7	24+#		J
5955.3[s] 4			J	10040.8[t] 8	24(−)#		J
6013.5[m] 4	16−#	D	J	10161.7[u] 9	24+#		J
6126.1[u] 8	16+#		J	10408.9[r] 6	25−#		J
6199.0[j] 5	(16−)#		J	10507.8[p] 7	25(+)#		J
6249.0[n] 4	17−#	D	J	10524.7[n] 7	25−#		J
6256.2[l] 7	(16−)#		J	10909.7[p] 7	26(+)#		J
6346.1[r] 4	17−#		J	10930.1[s] 7	26(−)#		J
6509.7[d] 5	18+#	D	J	10933.0[q] 8	26+#		J
6597.6[p] 7	16+#	D	J	11083.4 7	26(−)#		J
6611.1 7	16+#		J	11130.6[t] 7	26(−)#		J
6876.6[p] 6	17(+)#	D	J	11151.6[v] 8	26+#		J
6916.0[s] 5	18(−)#		J	11335.3[u] 9	26+#		J
6982.5[m] 7	18−#		J	11530.1[p] 9	(27+)#		J
7039.1[u] 6	18+#		J	11579.9[r] 7	27−#		J
7186.0[n] 4	19−#	D	J	11678.8[n] 7	27−#		J
7208.0[r] 4	19−#		J	12049.2[s] 8	28(−)#		J
7245.2 7	18#		J	12093.2[q] 10	28+#		J
7252.7[p] 7	18(+)#	D	J	12282.4[t] 8	28(−)#		J
7297.6?[l] 11	(18−)#		J	12448.8[v] 9	28+#		J

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
12572.7[u] 9	28+#	J	
12849.1 10		J	
12854.6[n] 9	29−#	J	
13247.4[q] 11	30+#	J	
13332.7[s] 9	30(−)#	J	
13526.9[t] 9	30(−)#	J	
13858.4[v] 9	30+#	J	
13891.8[u] 10	30+#	J	
14859.0[t] 11	32(−)#	J	
15261.0[u] 10	32+#	J	
16290.5[t] 12	34(−)#	J	
16733.3[u] 11	34+#	J	
17831.2[t] 13	36(−)#	J	
18298.6[u] 12	36+#	J	
19489.4[t] 14	38(−)#	J	
19960.1[u] 13	38+#	J	
21270.7[t] 15	40(−)#	J	
21716.7[u] 14	40+#	J	
23178.1[t] 16	42(−)#	J	
23568.8[u] 15	42+#	J	
25214.9[t] 16	44(−)#	J	
25516.3[u] 16	44+#	J	
27378.6[t] 17	46(−)#	J	
27558.2[u] 17	46+#	J	
29662.4[t] 18	48(−)#	J	
29696.1[u] 17	48+#	J	
31927.1[u] 18	50+#	J	
32016.4[t] 19	50(−)#	J	
32083.4 19		J	
34244.2[u] 19	52+#	J	
34365.4[t] 19	(52−)#	J	
34533.4 19		J	
36605.1[u] 20	54+#	J	
36807.5[t] 20	(54−)#	J	
38941.4[u] 20	56+#	J	
39322.5[t] 21	(56−)#	J	
0.0+x[x]	(23−)#	J	Additional information 1.
1034.7+x[x] 5	(25−)#	J	
2184.2+x[x] 7	(27−)#	J	
3453.0+x[x] 9	(29−)#	J	
4839.6+x[x] 10	(31−)#	J	
6341.8+x[x] 12	(33−)#	J	
7944.7+x[x] 13	(35−)#	J	
9654.3+x[x] 14	(37−)#	J	

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Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
10255.8+x *14*		J	
11477.6+x[x] *15*	(39$^-$)[#]	J	
13417.2+x[x] *15*	(41$^-$)[#]	J	
15467.0+x[x] *16*	(43$^-$)[#]	J	
17617.0+x[x] *17*	(45$^-$)[#]	J	
19853.8+x[x] *18*	(47$^-$)[#]	J	
22174.7+x[x] *18*	(49$^-$)[#]	J	
24599.1+x?[x] *19*	(51$^-$)[#]	J	
0.0+y[w]	(23$^+$)[#]	J	Additional information 2.
1156.4+y[w] *5*	(25$^+$)[#]	J	
2380.6+y[w] *7*	(27$^+$)[#]	J	
3673.3+y[w] *9*	(29$^+$)[#]	J	
5043.4+y[w] *10*	(31$^+$)[#]	J	
6488.3+y[w] *12*	(33$^+$)[#]	J	
8014.4+y[w] *13*	(35$^+$)[#]	J	
9624.1+y[w] *14*	(37$^+$)[#]	J	
11320.9+y[w] *15*	(39$^+$)[#]	J	
13107.6+y[w] *15*	(41$^+$)[#]	J	
14984.8+y[w] *16*	(43$^+$)[#]	J	
16953.3+y[w] *17*	(45$^+$)[#]	J	
19004.1+y[w] *18*	(47$^+$)[#]	J	
21097.2+y[w] *18*	(49$^+$)[#]	J	
23226.6+y[w] *19*	(51$^+$)[#]	J	
25414.0+y[w] *20*	(53$^+$)[#]	J	
27673.7+y[w] *20*	(55$^+$)[#]	J	
30018.2+y[w] *21*	(57$^+$)[#]	J	
32345.9+y?[w] *22*	(59$^+$)[#]	J	

[†] From a least-squares fit to the adopted Eγ′s. If ΔEγ is not given, the evaluators have assigned 0.5 keV.
[‡] γ(θ), linear polarization, and band structure in ^{123}Te(α,nγ) and ^{116}Cd(^{13}C,3nγ), unless otherwise noted.
[#] From band structure and γ ray angular distribution ratio in ^{82}Se(^{48}Ca,4nγ).
[@] γ ray angular distribution ratio in ^{126}Xe(γ,γ′).
[&] From Coulomb excitation, unless otherwise noted.
[a] Calculated from Γ_0 in ^{126}Xe(γ,γ′) and adopted branching.
[b] Band(A): Band 1, (π,α)=(+,0), Based on configuration=$(\pi\ h_{11/2})^2$.
[c] Band(B): band 2, ground-state band, (π,α)=(+,0).
[d] Band(C): Band 3, (π,α)=(+,0), based on configuration=$(\nu\ h_{11/2})^2$.
[e] Band(D): band 4, (π,α)=(+,1) quasi−γ band.
[f] Band(E): band 5, (π,α)=(+,0) quasi−γ band.
[g] Band(F): band ^{6,}K=0$^+$ band π=+.
[h] Band(G): band ^{7,}K=4$^+$ band.
[i] Band(H): Band 8, (π,α)=(-,1), signature partner of band 9, low K, based on $\nu(h_{11/2}+g_{7/2})$ or $\pi(h_{11/2}+d_{5/2})$.
[j] Band(I): Band 9, (π,α)=(-,0), signature partner of band 8, low K, based on $\nu(h_{11/2}+g_{7/2})$ or $\pi(h_{11/2}+d_{5/2})$.
[k] Band(J): Band 10, (π,α)=(-,1), signature partner of band 11, low K, based on $\nu(h_{11/2}+g_{7/2})$ or $\pi(h_{11/2}+d_{5/2})$.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{126}Xe Levels (continued)

[l] Band(K): Band 11, (π,α)=(-,0), signature partner of band 10, low K, based on $\nu(h_{11/2}+g_{7/2})$ or $\pi(h_{11/2}+d_{5/2})$.
[m] Band(L): Band 12, (π,α)=(-,0), coupled band with band 13, high K, based on $\nu(h_{11/2}+g_{7/2})$.
[n] Band(M): Band 13, (π,α)=(-,1), coupled band with band 12, high K, based on $\nu(h_{11/2}+g_{7/2})$.
[o] Band(N): band 14.
[p] Band(O): band 15.
[q] Band(P): BAND 16.
[r] Band(Q): BAND 17, (π,α)=(-,1), signature partner of band 18.
[s] Band(R): BAND 18, (π,α)=(-,0), signature partner of band 17.
[t] Band(S): BAND a, (π,α)=(-,0), signature partner of band d, Configuration=$\pi(g^2_{7/2}\otimes h^2_{11/2})$ $\nu(i_{13/2}\otimes h_{11/2})$.
[u] Band(T): BAND b, (π,α)=(+,0), signature partner of band c, Configuration=$\pi(g_{7/2}\otimes h_{11/2})$ $\nu(i_{13/2}\otimes h_{11/2})$.
[v] Band(U): BAND b+, (π,α)=(+,0).
[w] Band(V): BAND c, (π,α)=(+,1), signature partner of band b, Configuration=$\pi(g_{7/2}\otimes h_{11/2})$ $\nu(i_{13/2}\otimes h_{11/2})$, based on a level of unknown level energy.
[x] Band(W): BAND d, (π,α)=(-,1), signature partner of band a, Configuration=$\pi(g^2_{7/2}\otimes h^2_{11/2})$ $\nu(i_{13/2}\otimes h_{11/2})$, based on a level of unknown level energy.

Adopted Levels, Gammas (continued)

γ(^{126}Xe)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
388.632	2^+	388.633 *11*	100	0.0	0^+	E2		0.0187	B(E2)(W.u.)=44 *4* E_γ: from ^{126}I β^- decay.
879.872	2^+	491.243 *11*	100.0& *3*	388.632	2^+	M1+E2	+9.1 *+43−23*		B(M1)(W.u.)=0.00020 *20*; B(E2)(W.u.)=47 *9* E_γ: from ^{126}I β^- decay. δ: from γγ(θ) in ^{126}I ε decay.
		879.876 *13*	26.2& *4*	0.0	0^+	E2			B(E2)(W.u.)=0.68 *12* E_γ: from ^{126}I β^- decay.
942.00	4^+	553.38‡ *5*	100‡	388.632	2^+	E2			B(E2)(W.u.)=76 *12*
1313.88	0^+	434.01 *5*	24.5& *12*	879.872	2^+	E2		0.01345	B(E2)(W.u.)=69 *13*
		925.24 *5*	100.0& *16*	388.632	2^+	E2			B(E2)(W.u.)=6.4 *12*
1317.680	3^+	375.66 *9*	18.5& *7*	942.00	4^+	M1+E2		0.0218 *12*	E_γ: from weighted av from (^{13}C,3nγ) and (α,nγ).
		437.85 *5*	100.0& *3*	879.872	2^+	M1+E2	+8 *+3−2*	0.01314	B(M1)(W.u.)=0.00025 *19*; B(E2)(W.u.)=56 *9* E_γ: from ^{126}Cs ε decay.
		929.08 *5*	94.9 *11*	388.632	2^+	M1+E2	+1.6 *+3−7*		B(M1)(W.u.)=0.00045 *14*; B(E2)(W.u.)=0.91 *18* E_γ: from ^{126}Cs ε decay. I_γ: weighted av from all datasets with γ's except(^{13}C,3nγ); other: Iγ(929)/Iγ(438)=1.65 *13* in (^{13}C,3nγ).
1488.38	4^+	170.9[f] *2*	3.8 *13*	1317.680	3^+	[M1,E2]		0.23 *5*	E_γ,I_γ: from (^{3}He,3nγ),(α,4nγ).
		546.4 *1*	50.4& *4*	942.00	4^+	M1+E2	+3.0 *+10−9*		B(M1)(W.u.)=0.0014 *9*; B(E2)(W.u.)=30 *4*
		608.5 *1*	100.0& *5*	879.872	2^+	E2			B(E2)(W.u.)=38 *5*
		1099.8 *1*	21.1& *3*	388.632	2^+	E2			B(E2)(W.u.)=0.42 *5*
1634.99	6^+	692.93 *13*	100	942.00	4^+	E2			B(E2)(W.u.)=89 *16* E_γ,I_γ: from (^{3}He,3nγ),(α,4nγ).
1678.573	2^+	360.86‡ *5*	15.16‡ *11*	1317.680	3^+				
		364.70‡ *5*	29.0‡ *5*	1313.88	0^+	E2		0.0226	B(E2)(W.u.)=40 *6*
		736.54‡ *5*	25.3‡ *5*	942.00	4^+	E2			B(E2)(W.u.)=1.05 *15*
		798.65‡ *5*	71.5‡ *11*	879.872	2^+	M1(+E2)			
		1289.87‡ *5*	43.6‡ *11*	388.632	2^+	M1,E2			
		1678.51‡ *5*	100.0‡ *22*	0.0	0^+				
1760.55	0^+	881	13 *3*	879.872	2^+				E_γ,I_γ: from Coulomb excitation.
		1371.9 *1*	100 *4*	388.632	2^+				E_γ: from ^{126}Cs ε decay. I_γ: from Coulomb excitation.
1867.21	(6^+)	925.2 *2*	100	942.00	4^+	(E2)			E_γ,I_γ: from (^{3}He,3nγ),(α,4nγ). Mult.: from ^{126}Te(^{3}He,3nγ).
1903.13	4^+	414.8 *2*		1488.38	4^+				

From ENSDF

$^{126}_{54}Xe_{72}$-9

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
1903.13	4$^+$	585.3 *2*		1317.680	3$^+$				
		961.2 *2*		942.00	4$^+$				
		1023.2 *1*	100.0 *14*	879.872	2$^+$	E2			
1903.50	5$^+$	268.5 *2*	1.39 *15*	1634.99	6$^+$	D+Q			
		415.1 *1*	16.8[&] *16*	1488.38	4$^+$	M1+E2	+9 *+50−4*	0.0154	δ: from ^{126}Te(^{3}He,3nγ).
		585.8 *2*	100.0[&] *6*	1317.680	3$^+$	E2			
		961.6 *1*	45.0[&] *11*	942.00	4$^+$	M1+E2	+0.8 *3*		
2004.88	3$^{(-)}$	1062.9 *1*	20.7 *6*	942.00	4$^+$	(E1)			
		1126	3.28 *23*	879.872	2$^+$				E_γ,I_γ: from Coulomb excitation.
		1616.2 *1*	100.0 *17*	388.632	2$^+$	(E1)			E_γ: from ^{126}Cs ε decay.
		2005		0.0	0$^+$				E_γ: from Coulomb excitation.
2042.10	4$^{(+)}$	363.4 *2*	4.5 *23*	1678.573	2$^+$	Q			
		1100.2 *2*		942.00	4$^+$	D+Q	+0.19 *7*		
		1653.5 *2*	100.0 *23*	388.632	2$^+$	(Q)			
2064.0	2$^{(+)}$	1184.0 *5*	37.5 *11*	879.872	2$^+$	(M1+E2)			I_γ: from ^{126}Cs ε decay; other: Iγ(1184)/Iγ(1676)=0.76 *4* in (α,nγ).
		1675.5 *5*	100 *3*	388.632	2$^+$	D(+Q)	+0.00 *5*		I_γ: from ^{126}Cs ε decay.
2086.30	2$^+$	1144.4[‡] *1*	57[‡] *3*	942.00	4$^+$				
		1206.4[‡] *1*	100[‡] *3*	879.872	2$^+$	D+Q	+0.9 *+5−3*		Mult.: from γγ(θ) in ^{123}Te(α,nγ).
		2086.2[‡] *1*	27.4[‡] *21*	0.0	0$^+$				
2187.94		1245.93 *17*	100	942.00	4$^+$				E_γ,I_γ: from (^{3}He,3nγ),(α,4nγ).
2214.32	6$^+$	579.3 *1*	27.9[&] *4*	1634.99	6$^+$	M1+E2	+0.7 *2*		
		725.9 *1*	100.0[&] *11*	1488.38	4$^+$	E2			
		1272.1 *2*	10.4[&] *4*	942.00	4$^+$	E2			
2215.18	(1,2$^+$)	1826.9[‡] *1*	100[‡] *5*	388.632	2$^+$				
		2214.8[‡] *1*	24[‡] *4*	0.0	0$^+$				
2228.65	(1,2$^+$)	1348.9[‡] *1*	100[‡] *6*	879.872	2$^+$				
		1839.9[‡] *1*	100[‡] *6*	388.632	2$^+$				
		2228		0.0	0$^+$	(Q)[c]			E_γ: from ^{126}Xe(γ,γ′).
2258.79	(4,5)	770.4 *2*	100	1488.38	4$^+$				
2262.48	(3)	944.8 *1*	100 *3*	1317.680	3$^+$	D+Q			
		1382.1 *19*	26.9 *15*	879.872	2$^+$				
2301.56	5$^{(-)}$	666.3 *2*	29.6 *14*	1634.99	6$^+$	(E1)			
		813.0 *3*	3.1 *5*	1488.38	4$^+$				
		1359.4 *1*	100 *2*	942.00	4$^+$	(E1)			
2302.2		670.3[f]	100	1634.99	6$^+$				E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
2304.62	4$^{(-)}$	401.4 *3*	13.3 *15*	1903.13	4$^+$				

From ENSDF

$^{126}_{54}Xe_{72}$-10

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
2304.62	4(−)	816.2 *1*	25.2 *7*	1488.38	4+	(E1)			
		987.0 *1*	100 *4*	1317.680	3+	(E1)			
2305.36	(2,3)	1425.8 *1*	100	879.872	2+				
2314.90	(3−)	1373	45 *4*	942.00	4+				E_γ,I_γ: from Coulomb excitation.
		1435.1 *1*	100 *4*	879.872	2+				
		1925.9 *2*	21.9 *14*	388.632	2+				
2321.56	4(−)	316.7 *1*	26.4 *7*	2004.88	3(−)				
		1003.9 *2*	45.1 *14*	1317.680	3+	(E1)			
		1379.6 *1*	100 *2*	942.00	4+	(E1)			
2347.24	0+,1,2	1958.59[‡] *5*	100[‡]	388.632	2+				
2350.57	(2,3)	1032.9 *1*	84.4 *22*	1317.680	3+				
		1408.3 *3*	37.8 *22*	942.00	4+				
		1470.7 *1*	100 *7*	879.872	2+				
2358.59	1+	1969.8 *1*	86 *11*	388.632	2+	[M1+E2]	+0.8 *+10−5*		B(M1)(W.u.)=0.03 *3*; B(E2)(W.u.)=3 *+5−3* E_γ: from ^{126}Cs ε decay. I_γ: from ^{126}Xe(γ,γ′); other: Iγ(1970)/Iγ(2359)=0.73 *22* in ^{126}Cs ε decay.
		2358.7 *1*	100	0.0	0+	[M1][c]			B(M1)(W.u.)=0.031 *+3−4* E_γ: from ^{126}Cs ε decay. I_γ: from ^{126}Xe(γ,γ′).
2363.08	5+	459.8 *1*	55.9 *10*	1903.50	5+	M1,E2		0.0126 *13*	
		460.0 *2*		1903.13	4+				
		727.7 *2*	31.4 *10*	1634.99	6+	M1,E2			E_γ: not reported in (^{3}He,3nγ).
		874.5 *2*	28.4 *10*	1488.38	4+	M1+E2			E_γ: not reported in (^{3}He,3nγ).
		1045.3 *1*	100.0 *20*	1317.680	3+	E2			E_γ: not reported in (^{3}He,3nγ).
2395.30	(3,4+)	906.8 *1*	33 *3*	1488.38	4+				
		1077.2 *2*	20.0 *17*	1317.680	3+				
		1453.5 *1*	100 *3*	942.00	4+	D+Q			
2414.29	5(−)	409.6 *3*	2.1 *7*	2004.88	3(−)				
		779.2 *2*	8 *6*	1634.99	6+	(E1)			
		926.1 *1*	31 *3*	1488.38	4+	(E1)			
		1472.1 *1*	100 *3*	942.00	4+	D(+Q)[b]			
2419.24	1+,2+	1101.8[‡] *1*	36[‡] *4*	1317.680	3+				
		1539.4[‡] *1*	100[‡] *4*	879.872	2+				
		2030.3[‡] *1*	56[‡] *3*	388.632	2+				
2435.71	8+	800.85 *14*	100	1634.99	6+	E2			B(E2)(W.u.)=57 *22* E_γ,I_γ: from (^{3}He,3nγ),(α,4nγ).
2455.324	2+	776.74[‡] *1*	1.8[‡] *6*	1678.573	2+				

From ENSDF

$^{126}_{54}Xe_{72}$-11

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	Comments
2455.324	2+	1137.9[‡] *1*	5.5[‡] *4*	1317.680	3+			
		1513.6[‡] *1*	9.2[‡] *4*	942.00	4+			
		1575.6[‡] *1*	24.8[‡] *6*	879.872	2+			
		2066.8[‡] *1*	100.0[‡] *24*	388.632	2+			
		2455.3[‡] *1*	18.2[‡] *5*	0.0	0+			
2489.36	(2+)	1609.43[‡] *5*	100.0[‡] *20*	879.872	2+	D+Q		
		2100.9[‡] *1*	36.9[‡] *11*	388.632	2+			
2492.61	(6+)	857.7 *1*	100.0 *21*	1634.99	6+	(M1,E2)		
		1004.2 *2*		1488.38	4+			E_γ: not reported in (^{3}He,3nγ).
		1550.5 *1*	20.0 *11*	942.00	4+			E_γ: not reported in (^{3}He,3nγ).
2502.56	0+,1,2	1622.65[‡] *5*	100.0[‡] *15*	879.872	2+			
		2114.0[‡] *1*	3.3[‡] *3*	388.632	2+			
2515.21	(3)	1573.2 *1*	100	942.00	4+			
2520.87	0+,1,2	1641.1[‡] *1*	30[‡] *3*	879.872	2+			
		2132.1[‡] *1*	100[‡] *3*	388.632	2+			
2525.7		521		2004.88	3(−)			
		847		1678.573	2+			
		1208		1317.680	3+			
2537.78	4	1220.1 *1*	100	1317.680	3+			
2553.03	0+	2553.0 *1*		0.0	0+	E0		E_γ: from ^{126}Cs ε decay.
2562.14	6−	257.1 *1*	2.9 *10*	2304.62	4(−)			
		259.9	50 *30*	2302.2				E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
		260.4 *1*	19 *1*	2301.56	5(−)	D+Q	−0.5 *+2−17*	
		347.5[f] *3*	23 *6*	2214.32	6+			E_γ,I_γ: from (p,nγ).
		658.5 *2*	100 *1*	1903.50	5+	E1		
		927.1[f]	<5	1634.99	6+			E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
2565.16		1247.49[‡] *5*	37.5[‡] *14*	1317.680	3+			
		2176.50[‡] *5*	100[‡] *2*	388.632	2+			
2566.8	1	2178[@]	1.3×10^2[@] *5*	388.632	2+			
		2567[@]	100[@]	0.0	0+	D[c]		
2591.40	7−	289.9 *2*	3.7 *5*	2301.56	5(−)			
		377.1 *1*	12.3 *5*	2214.32	6+			
		956.4 *1*	100.0 *11*	1634.99	6+	E1		B(E1)(W.u.)>1.3×10^{-6}
2594.7		2206		388.632	2+			
2598.59	5	184.5 *3*	18.6 *23*	2414.29	5(−)			
		1110.4 *2*	65.1 *23*	1488.38	4+			

From ENSDF

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
2598.59	5	1656.5 *1*	100 *5*	942.00	4^+				
2603.9		1724		879.872	2^+				
2608.88	(4,5)	705.4 *1*	96 *11*	1903.50	5^+				
		973.9 *1*	100 *4*	1634.99	6^+				
		1120.6 *2*	79 *4*	1488.38	4^+				
		1666.0 *4*		942.00	4^+				
2622.92	5,6	408.6 *2*	22.1 *15*	2214.32	6^+				
		719.4 *2*		1903.50	5^+				
		719.5 *2*	16 *3*	1903.13	4^+				
		988.0 *1*	100 *7*	1634.99	6^+				
2631.8		1314		1317.680	3^+				
		1752		879.872	2^+				
2632.4		1144		1488.38	4^+				
2642.4		1154		1488.38	4^+				
		1700		942.00	4^+				
		1763		879.872	2^+				
2661.43	7^+	447.4 *2*	2.6 *9*	2214.32	6^+				
		757.8 *2*	100 *13*	1903.50	5^+	E2			
		1026.6[f]	3.1 *10*	1634.99	6^+				E_γ,I_γ: from (^{9}Be,5nγ).
2664.56	$6^{(+)}$	622.5 *2*	78 *3*	2042.10	$4^{(+)}$	(E2)			
		1029.4 *1*	72 *3*	1634.99	6^+				
		1722.7 *1*	100 *6*	942.00	4^+	(E2)			
2677.85	7^-	376.2 *1*	≤30	2301.56	$5^{(-)}$				
		463.3 *2*	11 *1*	2214.32	6^+				
		1042.9 *1*	100 *8*	1634.99	6^+	E1			
2681.0		1739		942.00	4^+				
2685.7		2297		388.632	2^+				
2694.7		335.8		2358.59	1^+				
		1815.1		879.872	2^+				
2702.2		1214		1488.38	4^+				
		1760		942.00	4^+				
2739.7		1422		1317.680	3^+				
2741.86	$5^{(-)}$	420.6 *2*	100 *4*	2321.56	$4^{(-)}$	M1+E2	−0.9 +*7*−*17*	0.0161 *11*	
		737.0 *3*		2004.88	$3^{(-)}$				
		1253.5 *1*	96 *4*	1488.38	4^+	(E1)			
		1799.4 *2*	54 *4*	942.00	4^+				
2753.6	3^+,4,5^+	358.2		2395.30	$(3,4^+)$				
		850.0		1903.50	5^+				
		1265.4		1488.38	4^+				
		1435.8		1317.680	3^+				
2756.9		1877		879.872	2^+				

From ENSDF

$^{126}_{54}Xe_{72}$-13

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
2758.22	8⁻	166.8 *1*	100 *2*	2591.40	7⁻	M1+E2	−3.9 *+13−19*	0.296 *7*	B(M1)(W.u.)=0.00014 *9*; B(E2)(W.u.)=53 *8* Mult.: α(K)exp and γ(θ) in ^{126}Te(^{3}He,3nγ). δ: from (α,nγ). Other: −7.1 *11* in (^{3}He,3nγ).
		322.5 *2*	18 *2*	2435.71	8⁺	[E1]			B(E1)(W.u.)=7.0×10^{-7} *13*
2759.46		2370.8[‡] *1*	100[‡]	388.632	2⁺				
2762.60	6⁻	348.3 *2*	28.1 *18*	2414.29	5(⁻)	(M1,E2)		0.0270 *9*	
		441.04 *2*	49 *5*	2321.56	4(⁻)	(E2)		0.0128	
		461.1 *2*	36.8 *18*	2301.56	5(⁻)				
		859.1 *1*	79 *4*	1903.50	5⁺	(E1)			
		1127.6 *1*	100 *2*	1634.99	6⁺	E1			δ: 0.0 *+12−4* in (α,nγ).
2765.6	(3⁺,5⁺)	1823.6		942.00	4⁺	D+Q			Mult.: from γγ(θ) in ^{123}Te(α,nγ).
2768.0	1	2768		0.0	0⁺	D[c]			E_γ: from ^{126}Xe(γ,γ′).
2779.8		715.8		2064.0	2(⁺)				
2788.16	(5⁺,6⁻)	226.2 *2*	17 *3*	2562.14	6⁻				
		483.6 *2*	100 *4*	2304.62	4(⁻)				
		884.6 *1*	93 *6*	1903.50	5⁺				
2790.0	(5)	376		2414.29	5(⁻)				
		1155		1634.99	6⁺				
		1847.8		942.00	4⁺	D+Q			Mult.: from γγ(θ) in ^{123}Te(α,nγ).
2796.42	0⁺,1,2	1916.7[‡] *1*	6.8[‡] *6*	879.872	2⁺				
		2407.6[‡] *1*	100[‡] *2*	388.632	2⁺				
2801.0		1859		942.00	4⁺				
2811.6		908		1903.50	5⁺				
		1494		1317.680	3⁺				
2818.7		2430		388.632	2⁺				
2830.9		617		2214.32	6⁺				
		1342		1488.38	4⁺				
2847.0	1	2847		0.0	0⁺	D[c]			E_γ: from ^{126}Xe(γ,γ′).
2848.6		527		2321.56	4(⁻)				
		1531		1317.680	3⁺				
2850.4		1362		1488.38	4⁺				
2859.7		2471		388.632	2⁺				
2875.5	(5⁺,7⁺)	1240.5		1634.99	6⁺	D+Q			Mult.: from γγ(θ) in ^{123}Te(α,nγ).
2877.3		1560		1317.680	3⁺				
		1997		879.872	2⁺				
2878.3		464		2414.29	5(⁻)				
		975		1903.50	5⁺				
		1936		942.00	4⁺				
2881.00	7⁻	466.7 *3*	2.1 *11*	2414.29	5(⁻)				E_γ: not reported in (^{13}C,3nγ).

From ENSDF

$^{126}_{54}Xe_{72}$-14

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	Comments
2881.00	7⁻	667.2 *2*	100 *5*	2214.32	6⁺		E_γ: not reported in (^{13}C,3nγ).
		1245.8 *1*	41.8 *11*	1634.99	6⁺	E1	
2884.7		286		2598.59	5		
		347		2537.78	4		
2885.0		207		2677.85	7⁻		
		323		2562.14	6⁻		
2885.5		982		1903.50	5⁺		
2893.18	2⁺	1951.1[‡] *1*	20[‡] *5*	942.00	4⁺		
		2013.3[‡] *1*	58[‡] *3*	879.872	2⁺		
		2504.6[‡] *1*	100[‡] *1*	388.632	2⁺		
		2893.1[‡] *1*	12[‡] *1*	0.0	0⁺		
2898.0		1956		942.00	4⁺		
2907.6	3⁺,4,5⁺	1004		1903.50	5⁺		
		1590		1317.680	3⁺		
2915.0		600		2314.90	(3⁻)		
		1012		1903.13	4⁺		
2918.9	1	2039[@]	20.8[@] *24*	879.872	2⁺		
		2530[@]	13.7[@] *13*	388.632	2⁺		
		2919[@]	100[@]	0.0	0⁺	D[c]	
2929.0		1987		942.00	4⁺		
2934.7	(5⁺,7⁺)	1299.7		1634.99	6⁺	D+Q	Mult.: from $\gamma\gamma(\theta)$ in ^{123}Te(α,nγ).
2941.58		380		2562.14	6⁻		
		449		2492.61	(6⁺)		
		527		2414.29	5⁽⁻⁾		
		640		2301.56	5⁽⁻⁾		
		727		2214.32	6⁺		
2941.9		2062		879.872	2⁺		
2948.0		185		2762.60	6⁻		
		534		2414.29	5⁽⁻⁾		
		647		2301.56	5⁽⁻⁾		
		1044		1903.50	5⁺		
2950.8	1	2562[@]	100[@] *15*	388.632	2⁺		
		2951[@]	100[@]	0.0	0⁺	D[c]	
2952.31	(7,8)	737.7 *1*	100 *8*	2214.32	6⁺		
		1317.6 *1*		1634.99	6⁺		
2953.0		2011		942.00	4⁺		
2962.12		2020.1[‡] *1*	100[‡]	942.00	4⁺		
2965.9		651		2314.90	(3⁻)		

From ENSDF

$^{126}_{54}Xe_{72}$-15

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	δ[d]	α[e]	Comments
2973.9	(4,5,6)	481		2492.61	(6$^+$)				
		1071		1903.13	4$^+$				
2994.1		231		2762.60	6$^-$				
		1091		1903.50	5$^+$				
2996.1		1093		1903.13	4$^+$				
2999.0		2057		942.00	4$^+$				
3001.7		1684		1317.680	3$^+$				
3003.0		1368		1634.99	6$^+$				
3025.9		2146		879.872	2$^+$				
3049.7		372		2677.85	7$^-$				
		748		2301.56	5$^{(-)}$				
3050.1		687		2363.08	5$^+$				
3051.5		616		2435.71	8$^+$				
		837		2214.32	6$^+$				
3061.70	8$^+$	626.4	13 *3*	2435.71	8$^+$				E_γ,I_γ: from (^{9}Be,5nγ).
		847.4	100	2214.32	6$^+$				
3064.31	9$^-$	306.1 *1*	100.0[&] *19*	2758.22	8$^-$	M1+E2	−1.0 *+6−8*	0.0392	Mult.: from ^{126}Te(^{3}He,3nγ). δ: other: −1.4 *+9−5* in (^{3}He,3nγ).
		473.0 *2*	48[&] *3*	2591.40	7$^-$	E2		0.0105	
		628.4	17 *3*	2435.71	8$^+$				E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
3073.0		2131		942.00	4$^+$				
3075.6		771		2304.62	4$^{(-)}$				
3084.8		461.9		2622.92	5,6				
3091.0		210		2881.00	7$^-$				
		1456		1634.99	6$^+$				
3094.25	(8$^-$)	416.3 *2*	74 *11*	2677.85	7$^-$				
		532.2 *2*	100 *5*	2562.14	6$^-$	(Q)			
3099.3		795		2304.62	4$^{(-)}$				
		2157		942.00	4$^+$				
3106.0		1471		1634.99	6$^+$				
3117.20	(8$^+$)	681.5 *1*	100	2435.71	8$^+$	(M1,E2)			
3123.6		802		2321.56	4$^{(-)}$				
3132.0	1	3132		0.0	0$^+$	D[c]			E_γ: from ^{126}Xe(γ,γ′).
3156.4		721		2435.71	8$^+$				
		1521		1634.99	6$^+$				
3157.4		496		2661.43	7$^+$				
3160.0	1	3160		0.0	0$^+$	D[c]			E_γ: from ^{126}Xe(γ,γ′).
3170.3		756		2414.29	5$^{(-)}$				
3188.6		426		2762.60	6$^-$				
3194.7		1877		1317.680	3$^+$				

From ENSDF

$^{126}_{54}Xe_{72}$-16

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.[a]	α[e]	Comments
3195.9	1	2807[@]	5.4×10^2[@] *14*	388.632	2$^+$			
		3196[@]	100[@]	0.0	0$^+$	D[c]		
3196.0		1561		1634.99	6$^+$			
3198.00	(8$^-$)	317.0 *1*		2881.00	7$^-$			I_γ: Iγ(317)/Iγ(762)>9.6 in ^{82}Se(^{48}Ca,4nγ).
		435.5 *2*	100 *5*	2762.60	6$^-$	(E2)	0.0133	
		536.8 *2*		2661.43	7$^+$			
		762.1 *2*	41 *5*	2435.71	8$^+$			
3209.0	1	3209		0.0	0$^+$	D[c]		E_γ: from ^{126}Xe(γ,γ′).
3217.6		916		2301.56	5$^{(-)}$			
3218.3		337		2881.00	7$^-$			
		456		2762.60	6$^-$			
3219.02	(9$^-$)	460.7	2.9 *8*	2758.22	8$^-$			E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
		541.1 *1*	76 *7*	2677.85	7$^-$	(E2)		I_γ: others: Iγ(541)/Iγ(783)=0.52 *4* in ^{82}Se(^{48}Ca,4nγ), <0.49 in (^{13}C,3nγ).
		783.4 *1*	100 *6*	2435.71	8$^+$	(E1)		
3236.0	1	3236		0.0	0$^+$	D[c]		E_γ: from ^{126}Xe(γ,γ′).
3243.0		1608		1634.99	6$^+$			
3252.1		574		2677.85	7$^-$			
		661		2591.40	7$^-$			
3254.0	1	3254		0.0	0$^+$	D[c]		E_γ: from ^{126}Xe(γ,γ′).
3271.0		1636		1634.99	6$^+$			
3286.7		851		2435.71	8$^+$			
3294.69	9$^-$	233.0[#] *2*	27.6 *24*	3061.70	8$^+$			I_γ: from (^{13}C,3nγ).
		413.5[#] *2*	100 *3*	2881.00	7$^-$	E2[b]	0.0155	I_γ: from (^{13}C,3nγ).
		617.1	44 *3*	2677.85	7$^-$			E_γ,I_γ: from ^{82}Se(^{48}Ca,4nγ).
3298.0		1663		1634.99	6$^+$			
3312.7		722		2591.40	7$^-$			
		1677		1634.99	6$^+$			
3313.3		704.4		2608.88	(4,5)			
3314.15	10$^+$	878.43 *16*	100	2435.71	8$^+$	E2		
3329.0		1694		1634.99	6$^+$			
3359.68	10$^+$	924.01 *12*	100	2435.71	8$^+$	E2		E_γ: from weighted av from (^{13}C,3nγ) and (^{3}He,3nγ),(α,4nγ).
3360.0		1725		1634.99	6$^+$			
3369.4		708		2661.43	7$^+$			
3381.4		790		2591.40	7$^-$			
3383.80	(9$^+$)	266.6 *1*	17 *6*	3117.20	(8$^+$)			
		722.3 *2*	100 *22*	2661.43	7$^+$	(E2)		
		948		2435.71	8$^+$			E_γ: from ^{82}Se(^{48}Ca,4nγ).
3386.9		722.3		2664.56	6$^{(+)}$			
3396.1		1033		2363.08	5$^+$			

From ENSDF

$^{126}_{54}Xe_{72}$-17

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	α[e]	Comments
3427.9	1	3039[@]	33[@] *4*	388.632	2^+			
		3428[@]	100[@]	0.0	0^+	D[c]		
3446.32	10^-	382.0 *1*	48.4 *16*	3064.31	9^-	M1,E2	0.0209 *12*	I_γ: from (^{13}C,3nγ); others: Iγ(382)/Iγ(688)=0.27 *7* in (α,nγ), 0.66 *4* in ^{82}Se(^{48}Ca,4nγ).
		688.0 *2*	100 *3*	2758.22	8^-			I_γ: from (^{13}C,3nγ).
3461.9	1	3073[@]	50[@] *23*	388.632	2^+			
		3462[@]	100[@]	0.0	0^+	D[c]		
3471.1		806.5		2664.56	$6^{(+)}$			
3508.1	1	3508		0.0	0^+	D[c]		E_γ: from ^{126}Xe(γ,γ′).
3520.43	9^+	859.0 *1*	100	2661.43	7^+			
3521.2		763		2758.22	8^-			
3544.0		1909		1634.99	6^+			
3578.7		1143		2435.71	8^+			
3591.9		530.2		3061.70	8^+			
3625.7		1190		2435.71	8^+			
3760.07	(10^-)	541.2[#] *3*		3219.02	(9^-)			
		665.8[#] *2*		3094.25	(8^-)			
3783.31	11^-	336.9[#] *2*	18.1 *13*	3446.32	10^-			E_γ: not reported in (α,nγ).
		719.1 *2*	100 *3*	3064.31	9^-	E2		
3791.1	1	3791		0.0	0^+	D[c]		E_γ: from ^{126}Xe(γ,γ′).
3875.29	(10^-)	580.4[#] *2*	100 *14*	3294.69	9^-			
		677.4[#] *2*	26 *3*	3198.00	(8^-)			
3884.58	12^+	524.88 *12*	76.5 *17*	3359.68	10^+	Q		E_γ,I_γ: from weighted av from (^{13}C,3nγ) and (^{3}He,3nγ),(α,4nγ).
		570.40 *15*	100.0 *17*	3314.15	10^+	E2		E_γ,I_γ: from weighted av from (^{13}C,3nγ) and (^{3}He,3nγ),(α,4nγ).
3905.0	1	3025[@]	1.2×10^2[@] *4*	879.872	2^+			
		3905[@]	100[@]	0.0	0^+	D[c]		
3920.90		474.2	13.3 *15*	3446.32	10^-			
		701.9[#] *2*	100 *8*	3219.02	(9^-)			
3963.86	11^-	669.2[#] *2*	100	3294.69	9^-	E2[b]		
3998.5		614.5[#] *3*		3383.80	(9^+)			
		640		3359.68	10^+			
4240.72	12^-	457.4[#] *3*	44 *3*	3783.31	11^-			
		794.4[#] *2*	100 *3*	3446.32	10^-	E2[b]		
4274.41	12^+	914.6[#] *3*	100 *4*	3359.68	10^+	E2[b]		
		960.3[#] *3*	≤87	3314.15	10^+	E2[b]		

From ENSDF

$^{126}_{54}Xe_{72}$-18

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]	Comments
4532.4	(12$^-$)	772.4[#] *3*	100	3760.07	(10$^-$)		
4566.8	13$^-$	325.2	6.5 *12*	4240.72	12$^-$		
		783.6[#] *3*	100 *5*	3783.31	11$^-$	E2[b]	
4597.16	(12$^-$)	633.4[#] *2*	43 *9*	3963.86	11$^-$		
		721.8[#] *2*	100 *9*	3875.29	(10$^-$)		
4619.50	14$^+$	734.88 *13*	100	3884.58	12$^+$	E2[b]	E_γ: from weighted av from (^{13}C,3nγ) and (^{3}He,3nγ),(α,4nγ).
4701.1		737.2[#] *2*	100	3963.86	11$^-$		
4732.84	13$^-$	492.3	25 *4*	4240.72	12$^-$		
		811.8[#] *2*	100 *8*	3920.90			
4737.3	13$^-$	773.0	100 *8*	3963.86	11$^-$	E2[b]	
		816.6[#] *3*	12 *3*	3920.90			
4769.2		494		4274.41	12$^+$		
		770.8[#] *2*		3998.5			
5090.0	14$^+$	466.9[f]	<3	4619.50	14$^+$		
		815.6[#] *3*	100 *18*	4274.41	12$^+$	E2[b]	
5097.2	14$^-$	530.0	34 *5*	4566.8	13$^-$		
		856.9[#] *4*	100 *19*	4240.72	12$^-$	E2[b]	
5264.2	14$^+$	990.3	100	4274.41	12$^+$	E2[b]	
5334.0	14$^{(-)}$	596.7	13 *5*	4737.3	13$^-$		
		600.8	87 *8*	4732.84	13$^-$		
		737.0	100 *17*	4597.16	(12$^-$)		
		801.7	3.5 *17*	4532.4	(12$^-$)		
5365.9	(14$^-$)	833.7	100	4532.4	(12$^-$)		
5392.8	15$^-$	296.1	2.0 *7*	5097.2	14$^-$		
		825.9[#] *2*	100 *4*	4566.8	13$^-$	E2[b]	
5508.8	16$^+$	889.1[#] *3*	100	4619.50	14$^+$	E2[b]	
5636.3		1016.8[#] *3*	100	4619.50	14$^+$		
5694.8		925.6[#] *2*	100	4769.2			
5726.9	15$^-$	393.1	100 *5*	5334.0	14$^{(-)}$	D(+Q)[b]	
		989.9	63 *4*	4737.3	13$^-$	E2[b]	
		993.7	73 *4*	4732.84	13$^-$	E2[b]	
5923.1	16$^+$	413.2[f]	<10	5508.8	16$^+$		
		833.1[#] *2*	1×10^2 *1*	5090.0	14$^+$	E2[b]	
5955.3		589.6	4.0 *8*	5365.9	(14$^-$)		
		621.1	100 *10*	5334.0	14$^{(-)}$		

From ENSDF

$^{126}_{54}Xe_{72}$-19

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]
6013.5	16⁻	620.0[f]	<2	5392.8	15⁻	
		916.3[#] *2*	100 *14*	5097.2	14⁻	E2[b]
6126.1	16⁺	1505.7[f]	100	4619.50	14⁺	
6199.0	(16⁻)	865.0	100	5334.0	14⁽⁻⁾	
6249.0	17⁻	856.2[#] *2*	100	5392.8	15⁻	E2[b]
6256.2	(16⁻)	890.3	100	5365.9	(14⁻)	
6346.1	17⁻	147		6199.0	(16⁻)	
		391.0	0.7 *8*	5955.3		
		619.2	100 *4*	5726.9	15⁻	E2[b]
6509.7	18⁺	1000.8[#] *4*	100	5508.8	16⁺	E2[b]
6597.6	16⁺	1333.7	100	5264.2	14⁺	E2[b]
6611.1	16⁺	1347.0	100	5264.2	14⁺	E2[b]
6876.6	17⁽⁺⁾	265.7	42.6 *23*	6611.1	16⁺	D(+Q)[b]
		279.4	100 *4*	6597.6	16⁺	D(+Q)[b]
6916.0	18⁽⁻⁾	570.0	100 *4*	6346.1	17⁻	D(+Q)[b]
		960.6	<0.15	5955.3		
6982.5	18⁻	969.0	100	6013.5	16⁻	E2[b]
7039.1	18⁺	913.0	100	6126.1	16⁺	E2[b]
		1530		5508.8	16⁺	
7186.0	19⁻	937.0[#] *2*	100	6249.0	17⁻	E2[b]
7208.0	19⁻	292.0	29.5 *13*	6916.0	18⁽⁻⁾	D(+Q)[b]
		862.0	100 *4*	6346.1	17⁻	E2[b]
		958.6	19.3 *17*	6249.0	17⁻	E2[b]
7245.2	18	369.0	100	6876.6	17⁽⁺⁾	D(+Q)[b]
7252.7	18⁽⁺⁾	375.8	100	6876.6	17⁽⁺⁾	D(+Q)[b]
7297.6?	(18⁻)	1042.3[f]	100	6256.2	(16⁻)	
7587.4	20⁺	1077.6[#] *3*	100	6509.7	18⁺	E2[b]
7615.6	19⁽⁺⁾	362.6	100 *4*	7252.7	18⁽⁺⁾	D(+Q)[b]
		370.9	13.9 *11*	7245.2	18	D(+Q)[b]
		739.4	39 *3*	6876.6	17⁽⁺⁾	E2[b]
7757.2	20⁽⁻⁾	549.1	91 *4*	7208.0	19⁻	D(+Q)[b]
		841.1	100 *4*	6916.0	18⁽⁻⁾	E2[b]
8001.0	20⁻	1018.5	100	6982.5	18⁻	E2[b]
8013.4	20⁺	974.0	10×10[1] *5*	7039.1	18⁺	E2[b]
		1503.3[f]	<3×10[1]	6509.7	18⁺	
8037.7	20⁽⁺⁾	422.4	100 *4*	7615.6	19⁽⁺⁾	D(+Q)[b]
		785.0	18.4 *15*	7252.7	18⁽⁺⁾	
8166.3	21⁻	409.0	86 *4*	7757.2	20⁽⁻⁾	D(+Q)[b]
		958.1	100 *7*	7208.0	19⁻	E2[b]
8235.7	21⁻	1050.1	100	7186.0	19⁻	E2[b]
8433.3	21⁽⁺⁾	394.9	100 *4*	8037.7	20⁽⁺⁾	D(+Q)[b]
		817.8	38 *4*	7615.6	19⁽⁺⁾	E2[b]
8646.5	22⁽⁻⁾	411		8235.7	21⁻	
		480.1	23.5 *12*	8166.3	21⁻	D(+Q)[b]
		889.2	100 *5*	7757.2	20⁽⁻⁾	E2[b]
8745.2	22⁺	1157.8[#] *3*	100	7587.4	20⁺	
8837.8	22⁺	1250.1	100	7587.4	20⁺	E2[b]
8927.2	22⁺	493.8	100 *4*	8433.3	21⁽⁺⁾	D(+Q)[b]
		890.7	15.3 *25*	8037.7	20⁽⁺⁾	
9034.1	22⁻	1033.1	100	8001.0	20⁻	E2[b]
9054.6	22⁺	1040.9	100 *13*	8013.4	20⁺	E2[b]
		1466.3[f]	<5	7587.4	20⁺	
9258.7	23⁻	612.1	100 *5*	8646.5	22⁽⁻⁾	
		1092.3	40 *4*	8166.3	21⁻	E2[b]
9369.8	23⁻	1134.3	100	8235.7	21⁻	E2[b]
9457.5	23⁽⁺⁾	530.5	100 *5*	8927.2	22⁺	D(+Q)[b]
		1023.6	49 *5*	8433.3	21⁽⁺⁾	E2[b]
9751.5	24⁽⁻⁾	381.4	4.2 *7*	9369.8	23⁻	D(+Q)[b]
		492.8	4.8 *12*	9258.7	23⁻	
		1104.9	100 *4*	8646.5	22⁽⁻⁾	E2[b]
9876.0	24⁺	418.6	26.5 *25*	9457.5	23⁽⁺⁾	D(+Q)[b]
		949.3	24 *4*	8927.2	22⁺	E2[b]
		1130.3	100 *5*	8745.2	22⁺	E2[b]
9915.9	24⁺	1170.8	100	8745.2	22⁺	E2[b]
9916.2	24⁽⁺⁾	458.4	100 *6*	9457.5	23⁽⁺⁾	D(+Q)[b]
		989.3	35 *6*	8927.2	22⁺	

From ENSDF

$^{126}_{54}Xe_{72}$-20

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. [a]	Comments
9968.7	24^+	1130.5	10×10^1 *5*	8837.8	22^+	E2 [b]	
		1224.1	3×10^1 *6*	8745.2	22^+	[b]	
10040.8	$24^{(-)}$	1022.0	100	9018.8	(22^-)	(E2) [b]	
10161.7	24^+	1106.8	100	9054.6	22^+	E2 [b]	
10408.9	25^-	657.1	13 *4*	9751.5	$24^{(-)}$		
		1150.2	100 *7*	9258.7	23^-	E2 [b]	
10507.8	$25^{(+)}$	592.0	39 *17*	9916.2	$24^{(+)}$		
		1050.4	100 *10*	9457.5	$23^{(+)}$	E2 [b]	
10524.7	25^-	1155.3	100	9369.8	23^-	E2 [b]	
10909.7	$26^{(+)}$	402.3	100 *5*	10507.8	$25^{(+)}$	D(+Q) [b]	
		993.0	59 *6*	9916.2	$24^{(+)}$	E2 [b]	
		993.8	12 *3*	9915.9	24^+		
10930.1	$26^{(-)}$	407.0	1.1 *5*	10524.7	25^-		E_γ: poor fit. Level-energy difference=405.4.
		521.0	29.4 *14*	10408.9	25^-		
		1178.3	100 *3*	9751.5	$24^{(-)}$	E2 [b]	
10933.0	26^+	1057.0	100	9876.0	24^+	E2 [b]	
11083.4	$26^{(-)}$	1042	100 *23*	10040.8	$24^{(-)}$		
		1332.2	9×10^1 *5*	9751.5	$24^{(-)}$	(E2) [b]	
11130.6	$26^{(-)}$	1090.4	10×10^1 *8*	10040.8	$24^{(-)}$	E2 [b]	
		1378.7	8×10^1 *15*	9751.5	$24^{(-)}$	E2 [b]	
11151.6	26^+	1183.2	100	9968.7	24^+	E2 [b]	
11335.3	26^+	1173.4	100	10161.7	24^+	E2 [b]	
11530.1	(27^+)	620.4	100	10909.7	$26^{(+)}$		
11579.9	27^-	650.0	<0.8	10930.1	$26^{(-)}$		
		1171.0	100 *8*	10408.9	25^-	E2 [b]	
11678.8	27^-	749.8	7×10^1 *3*	10930.1	$26^{(-)}$		
		1153.0	10×10^1 *6*	10524.7	25^-	E2 [b]	
12049.2	$28^{(-)}$	469.5	8.6 *17*	11579.9	27^-		
		1119.0	100 *5*	10930.1	$26^{(-)}$	E2 [b]	
12093.2	28^+	1160.2	100	10933.0	26^+	E2 [b]	
12282.4	$28^{(-)}$	1152.2	100 *3*	11130.6	$26^{(-)}$	E2 [b]	
		1198.7	51 *17*	11083.4	$26^{(-)}$	E2 [b]	
12448.8	28^+	1297.5	100	11151.6	26^+	E2 [b]	
12572.7	28^+	1237.1	100	11335.3	26^+	E2 [b]	

From ENSDF

$^{126}_{54}Xe_{72}$-21

Adopted Levels, Gammas (continued)

γ(^{126}Xe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.[a]
12849.1		1319		11530.1	(27^+)	
12854.6	29^-	1175.8	100	11678.8	27^-	E2[b]
13247.4	30^+	1154.2	100	12093.2	28^+	E2[b]
13332.7	$30^{(-)}$	1283.4	100	12049.2	$28^{(-)}$	E2[b]
13526.9	$30^{(-)}$	1244.4	100	12282.4	$28^{(-)}$	E2[b]
13858.4	30^+	1285.8	<5	12572.7	28^+	
		1409.9	100 *21*	12448.8	28^+	E2[b]
13891.8	30^+	1318.7	100	12572.7	28^+	E2[b]
14859.0	$32^{(-)}$	1332.1	100	13526.9	$30^{(-)}$	E2[b]
15261.0	32^+	1368.8	100 *19*	13891.8	30^+	E2[b]
		1403.0	8×10^1 *3*	13858.4	30^+	E2[b]
16290.5	$34^{(-)}$	1431.5	100	14859.0	$32^{(-)}$	E2[b]
16733.3	34^+	1472.2	100	15261.0	32^+	E2[b]
17831.2	$36^{(-)}$	1540.7	100	16290.5	$34^{(-)}$	E2[b]
18298.6	36^+	1565.3	100	16733.3	34^+	E2[b]
19489.4	$38^{(-)}$	1658.2	100	17831.2	$36^{(-)}$	E2[b]
19960.1	38^+	1661.5	100	18298.6	36^+	E2[b]
21270.7	$40^{(-)}$	1781.3	100	19489.4	$38^{(-)}$	E2[b]
21716.7	40^+	1756.6	100	19960.1	38^+	E2[b]
23178.1	$42^{(-)}$	1907.4	100	21270.7	$40^{(-)}$	E2[b]
23568.8	42^+	1852.1	100	21716.7	40^+	E2[b]
25214.9	$44^{(-)}$	2036.8	100	23178.1	$42^{(-)}$	E2[b]
25516.3	44^+	1947.5	100	23568.8	42^+	E2[b]
27378.6	$46^{(-)}$	2163.6	100	25214.9	$44^{(-)}$	E2[b]
27558.2	46^+	2041.9	100	25516.3	44^+	E2[b]
29662.4	$48^{(-)}$	2283.8	100	27378.6	$46^{(-)}$	E2[b]
29696.1	48^+	2137.8	100	27558.2	46^+	E2[b]
31927.1	50^+	2231.0	100	29696.1	48^+	E2[b]
32016.4	$50^{(-)}$	2354.0	100	29662.4	$48^{(-)}$	E2[b]
32083.4		2421.0	100	29662.4	$48^{(-)}$	
34244.2	52^+	2317.1	100	31927.1	50^+	E2[b]
34365.4	(52^-)	2349.0	100	32016.4	$50^{(-)}$	(E2)[b]
34533.4		2450.0	100	32083.4		
36605.1	54^+	2360.9	100	34244.2	52^+	E2[b]
36807.5	(54^-)	2442.0	100	34365.4	(52^-)	
38941.4	56^+	2336.2	100	36605.1	54^+	E2[b]
39322.5	(56^-)	2515.0	100	36807.5	(54^-)	
1034.7+x	(25^-)	1034.7	100	0.0+x	(23^-)	E2[b]
2184.2+x	(27^-)	1149.5	100	1034.7+x	(25^-)	E2[b]
3453.0+x	(29^-)	1268.8	100	2184.2+x	(27^-)	E2[b]
4839.6+x	(31^-)	1386.6	100	3453.0+x	(29^-)	E2[b]
6341.8+x	(33^-)	1502.2	100	4839.6+x	(31^-)	E2[b]
7944.7+x	(35^-)	1602.9	100	6341.8+x	(33^-)	E2[b]
9654.3+x	(37^-)	1709.5	100	7944.7+x	(35^-)	E2[b]
10255.8+x		2311		7944.7+x	(35^-)	
11477.6+x	(39^-)	1823.3	100	9654.3+x	(37^-)	E2[b]
13417.2+x	(41^-)	1939.6	100	11477.6+x	(39^-)	E2[b]
15467.0+x	(43^-)	2049.8	100	13417.2+x	(41^-)	E2[b]
17617.0+x	(45^-)	2150.0	100	15467.0+x	(43^-)	E2[b]
19853.8+x	(47^-)	2236.8	100	17617.0+x	(45^-)	E2[b]
22174.7+x	(49^-)	2320.8	100	19853.8+x	(47^-)	E2[b]
24599.1+x?	(51^-)	2424.4[f]	100	22174.7+x	(49^-)	
1156.4+y	(25^+)	1156.4	100	0.0+y	(23^+)	
2380.6+y	(27^+)	1224.2	100	1156.4+y	(25^+)	E2[b]
3673.3+y	(29^+)	1292.7	100	2380.6+y	(27^+)	E2[b]
5043.4+y	(31^+)	1370.1	100	3673.3+y	(29^+)	E2[b]
6488.3+y	(33^+)	1444.9	100	5043.4+y	(31^+)	E2[b]
8014.4+y	(35^+)	1526.1	100	6488.3+y	(33^+)	E2[b]
9624.1+y	(37^+)	1609.6	100	8014.4+y	(35^+)	E2[b]
11320.9+y	(39^+)	1696.8	100	9624.1+y	(37^+)	E2[b]
13107.6+y	(41^+)	1786.7	100	11320.9+y	(39^+)	E2[b]
14984.8+y	(43^+)	1877.2	100	13107.6+y	(41^+)	E2[b]
16953.3+y	(45^+)	1968.5	100	14984.8+y	(43^+)	E2[b]
19004.1+y	(47^+)	2050.8	100	16953.3+y	(45^+)	E2[b]

From ENSDF

$^{126}_{54}Xe_{72}$-22

Adopted Levels, Gammas (continued)

$\gamma(^{126}Xe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[a]
21097.2+y	(49^+)	2093.0	100	19004.1+y	(47^+)	E2[b]
23226.6+y	(51^+)	2129.4	100	21097.2+y	(49^+)	E2[b]
25414.0+y	(53^+)	2187.4	100	23226.6+y	(51^+)	
27673.7+y	(55^+)	2259.7	100	25414.0+y	(53^+)	
30018.2+y	(57^+)	2344.5	100	27673.7+y	(55^+)	
32345.9+y?	(59^+)	2327.7[f]	100	30018.2+y	(57^+)	

† Except where noted otherwise, the data are from (α,nγ) up to the 3783-keV level and from (^{48}Ca,4nγ) for the higher levels.
‡ From ^{126}Cs ε decay.
# From (^{13}C,3nγ).
@ From ^{126}Xe(γ,γ').
& Weighted av from all datasets with γ's.
a From $\gamma(\theta)$, linear polarization in ^{123}Te(α,nγ) and ^{116}Cd(^{13}C,3nγ), and α(exp) in ^{126}Cs decay, unless otherwise noted.
b γ ray angular distribution ratio in ^{82}Se(^{48}Ca,4nγ).
c γ ray angular distribution ratio in ^{126}Xe(γ,γ').
d From $\gamma(\theta)$, $\gamma\gamma(\theta)$in ^{123}Te(α,nγ), unless otherwise noted.
e Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
f Placement of transition in the level scheme is uncertain.

From ENSDF

$^{126}_{54}Xe_{72}$-23

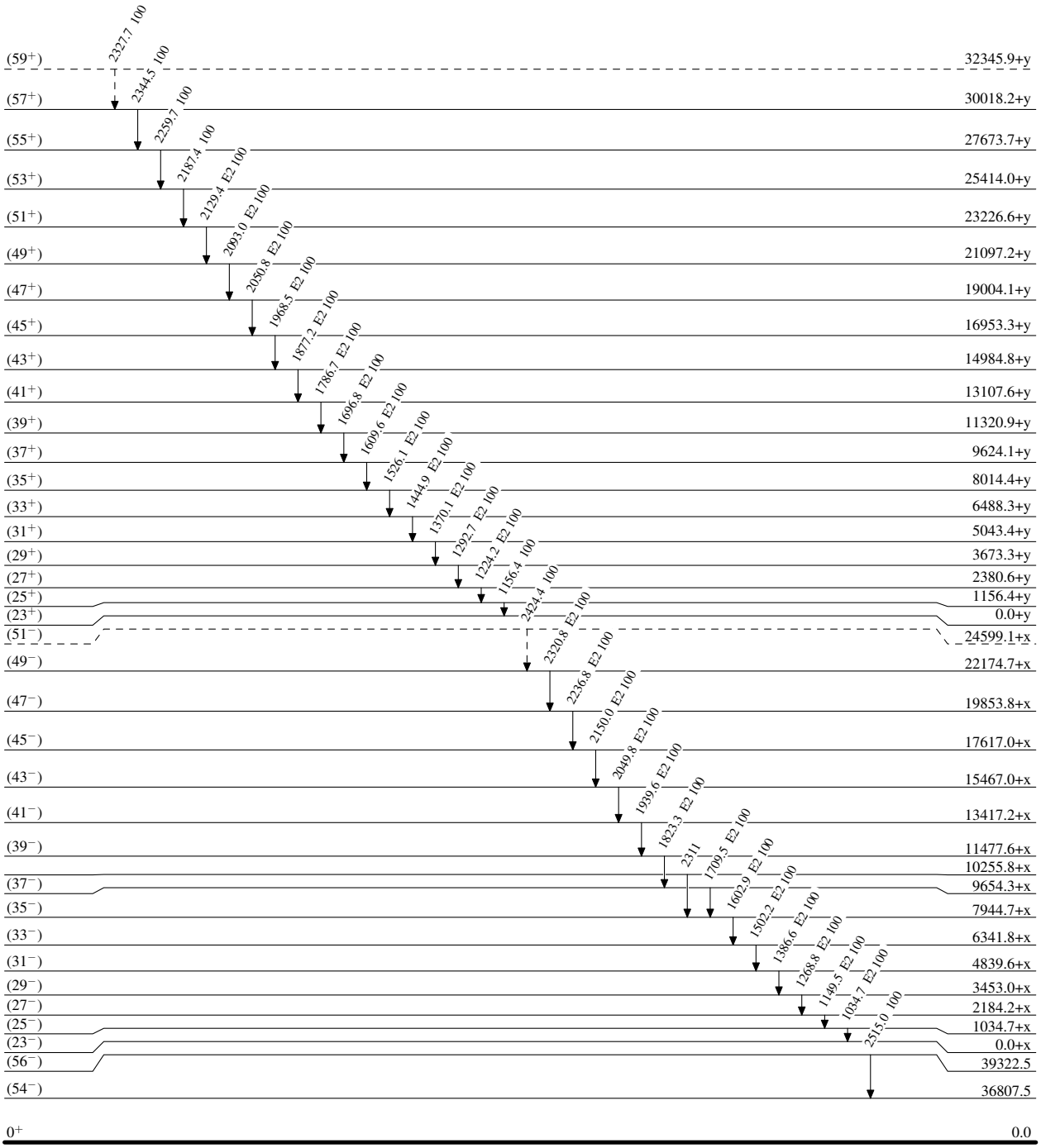
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

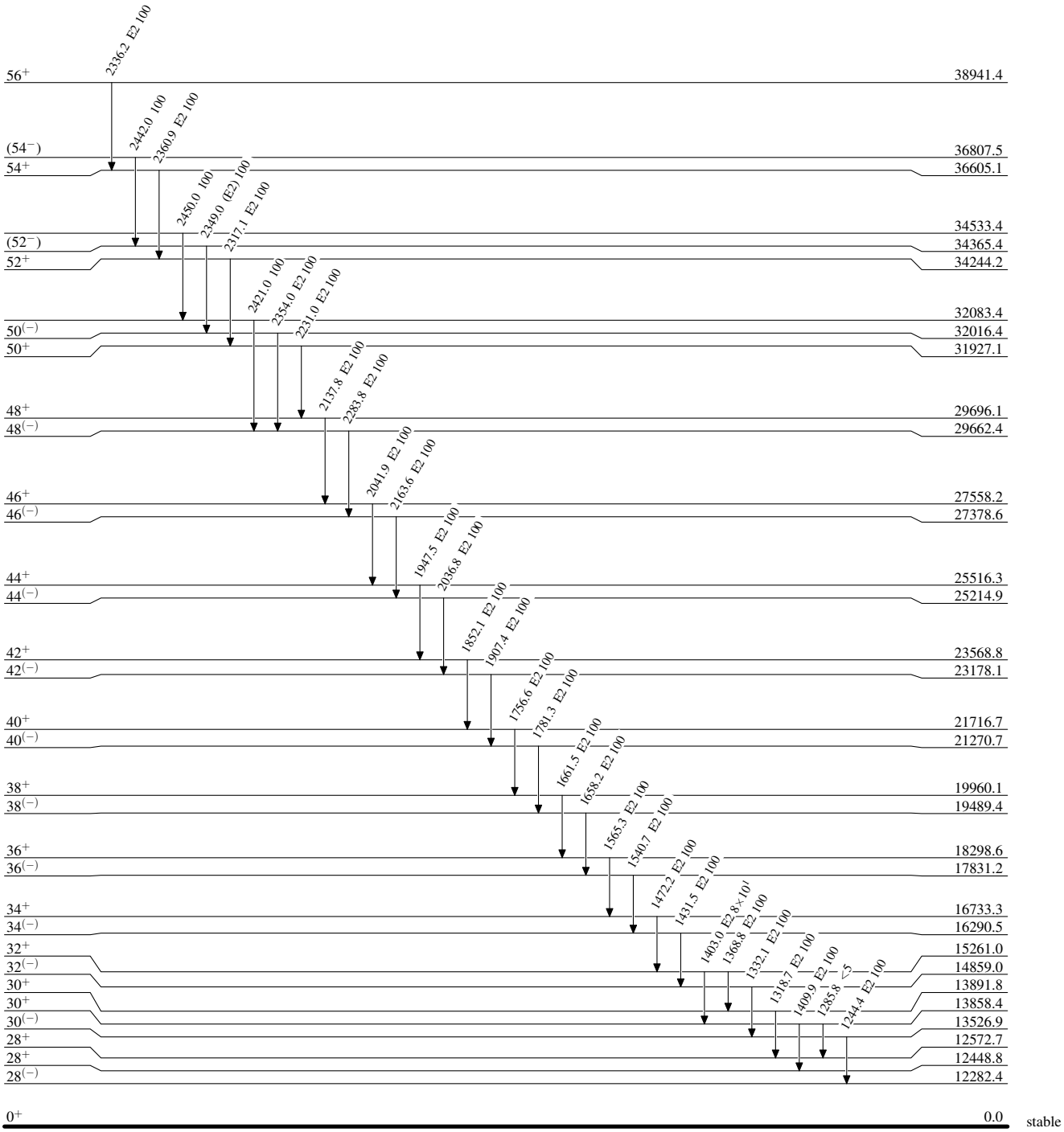


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

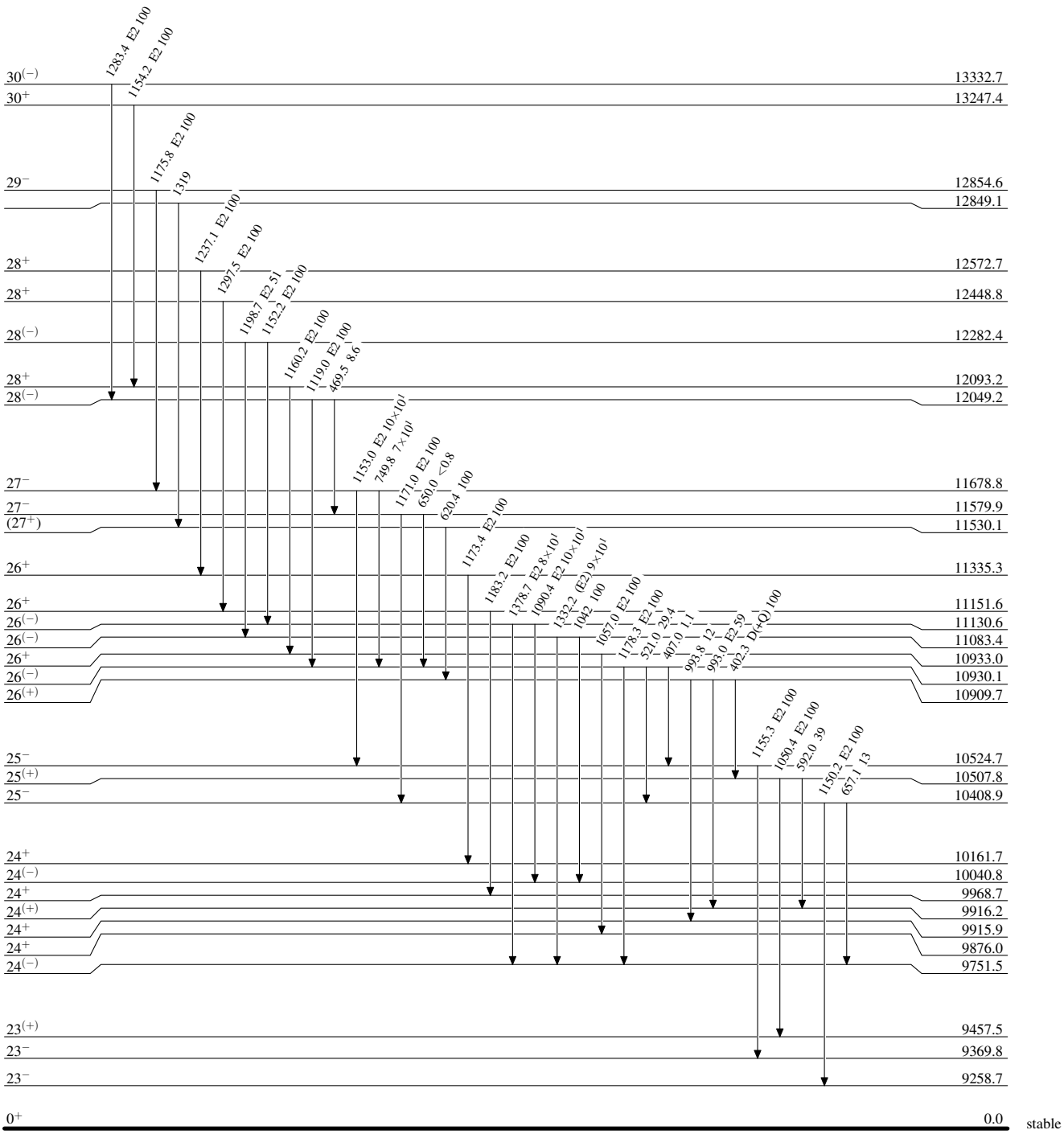


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{126}_{54}Xe_{72}$

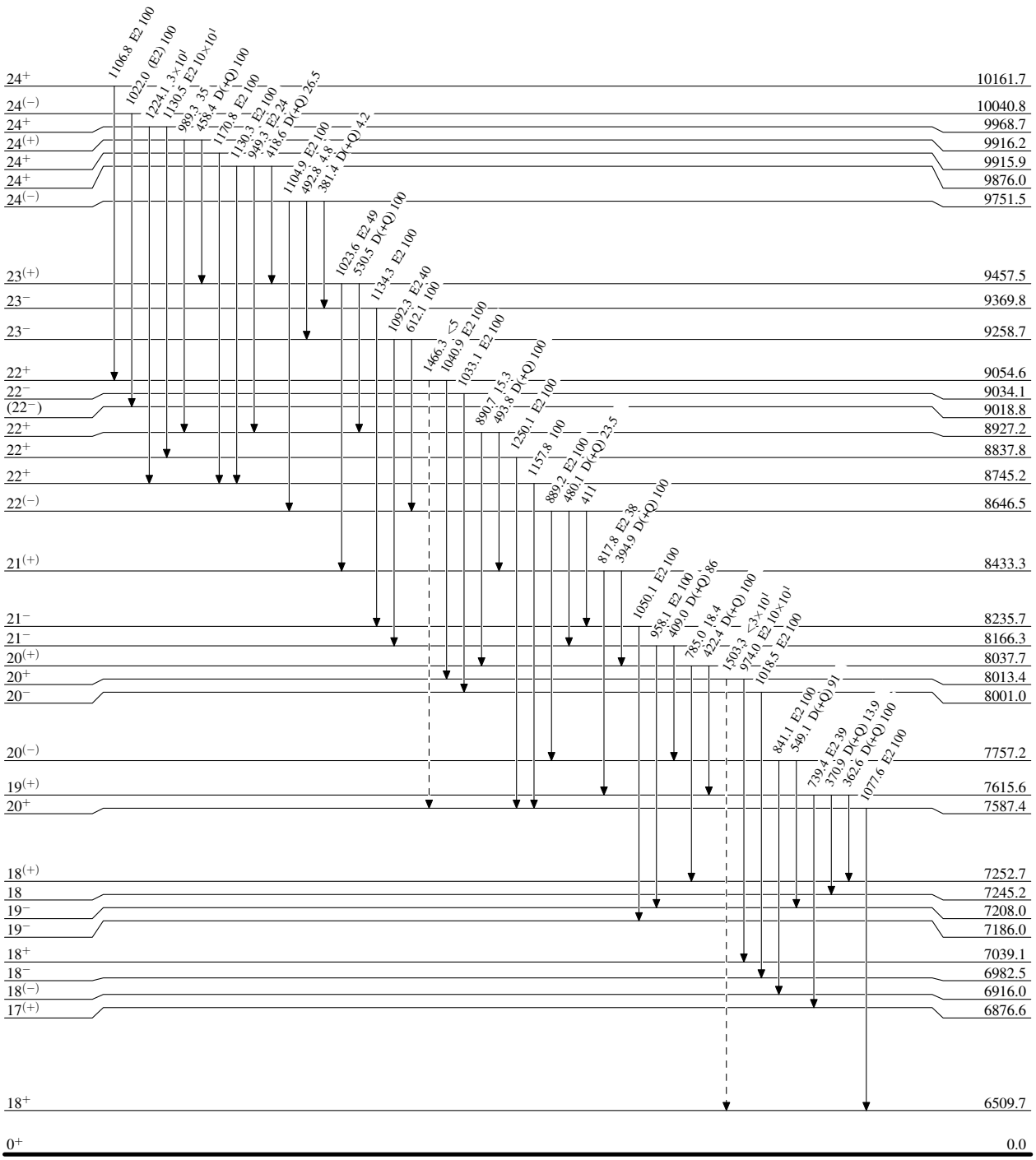
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{126}_{54}Xe_{72}$

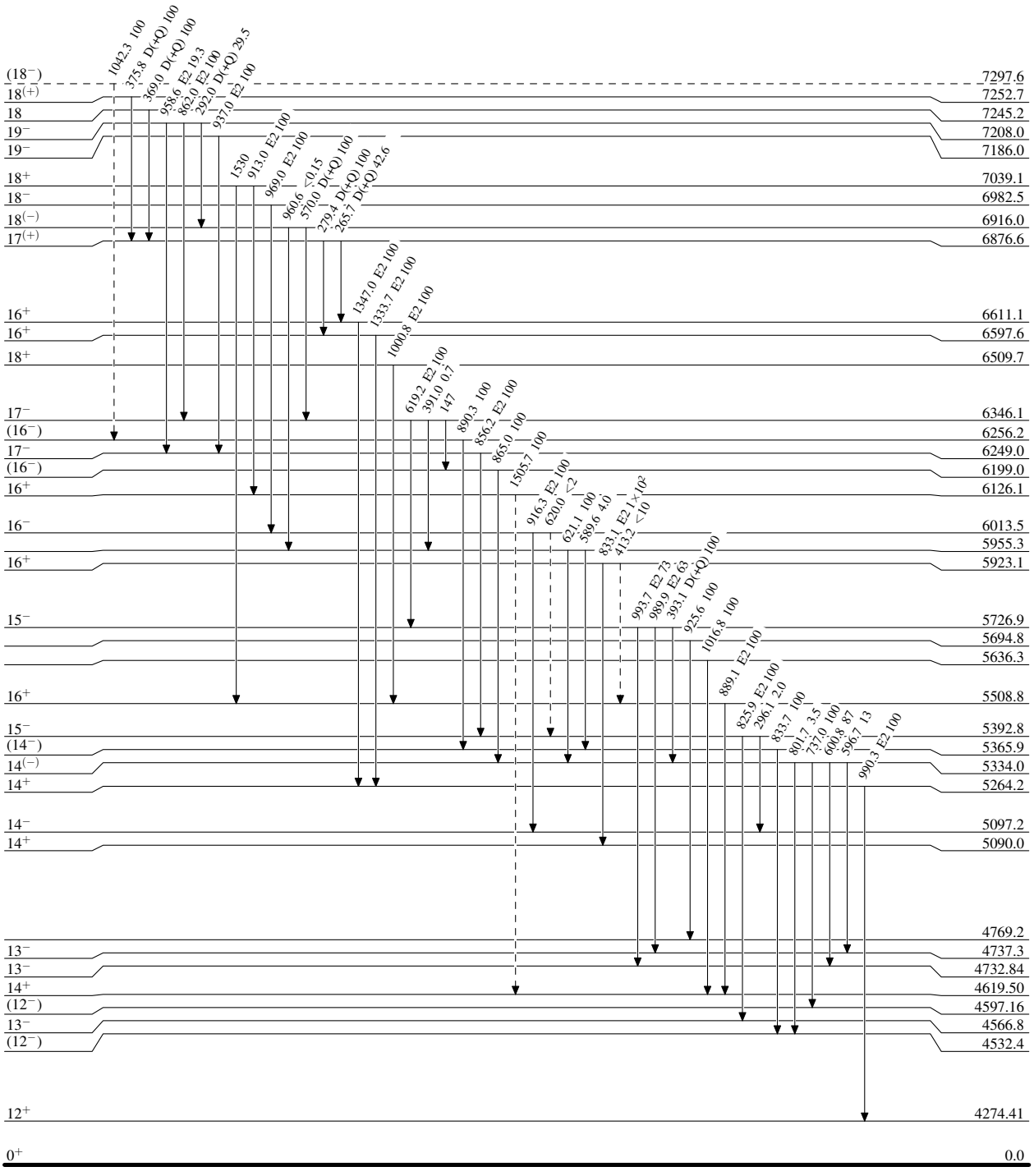
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{126}_{54}Xe_{72}$

Legend

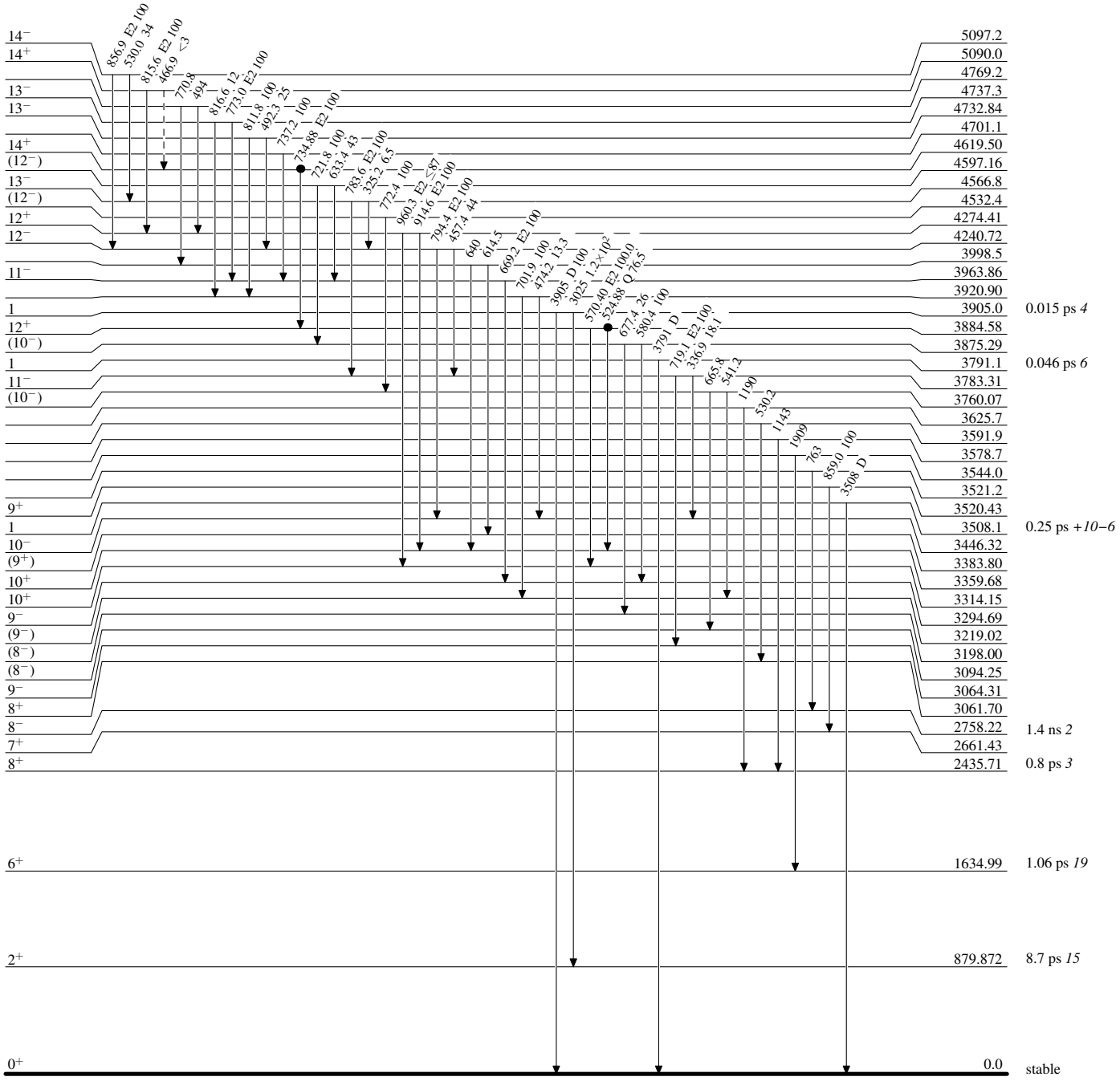
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

Coincidence



$^{126}_{54}Xe_{72}$

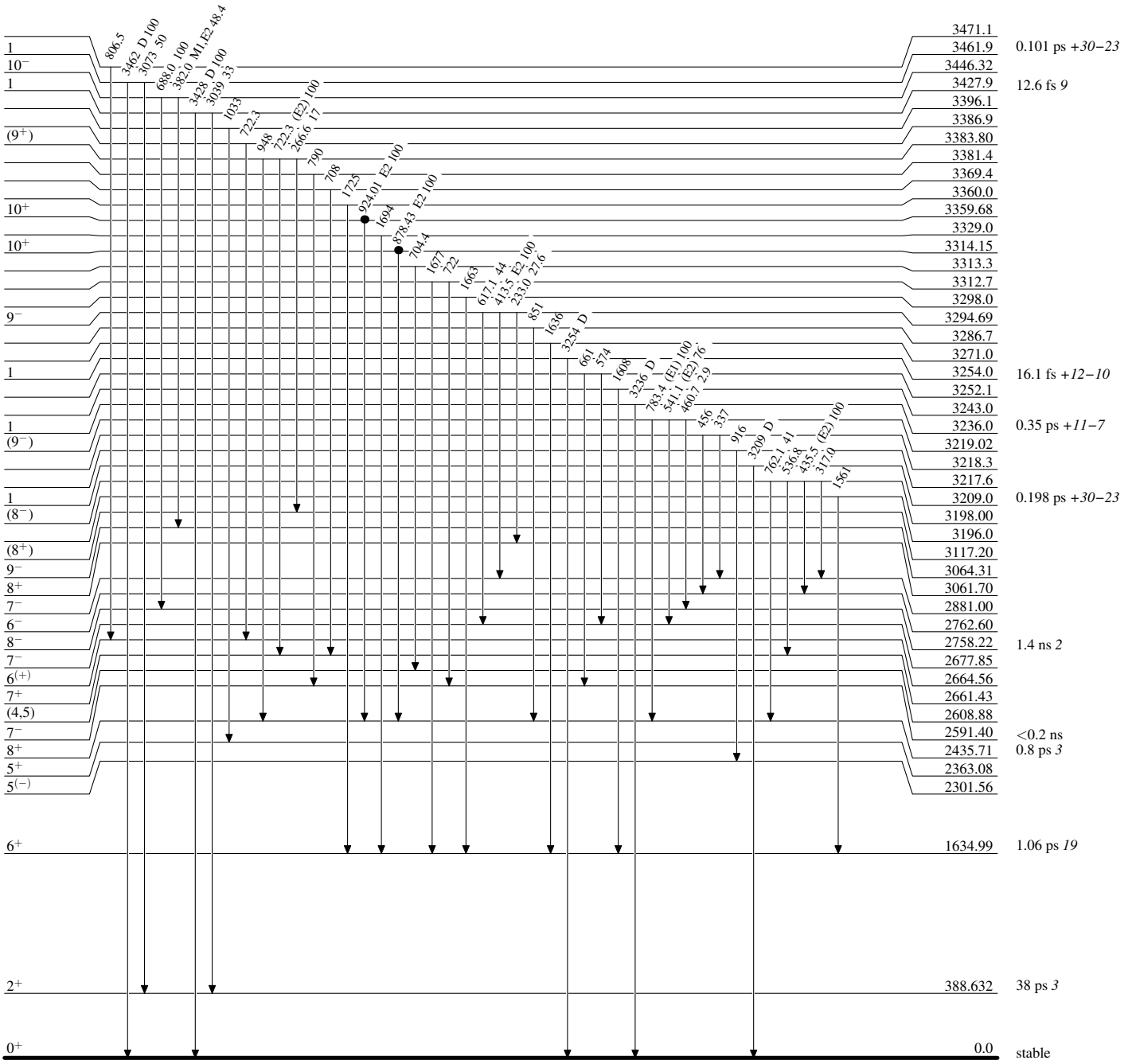
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence

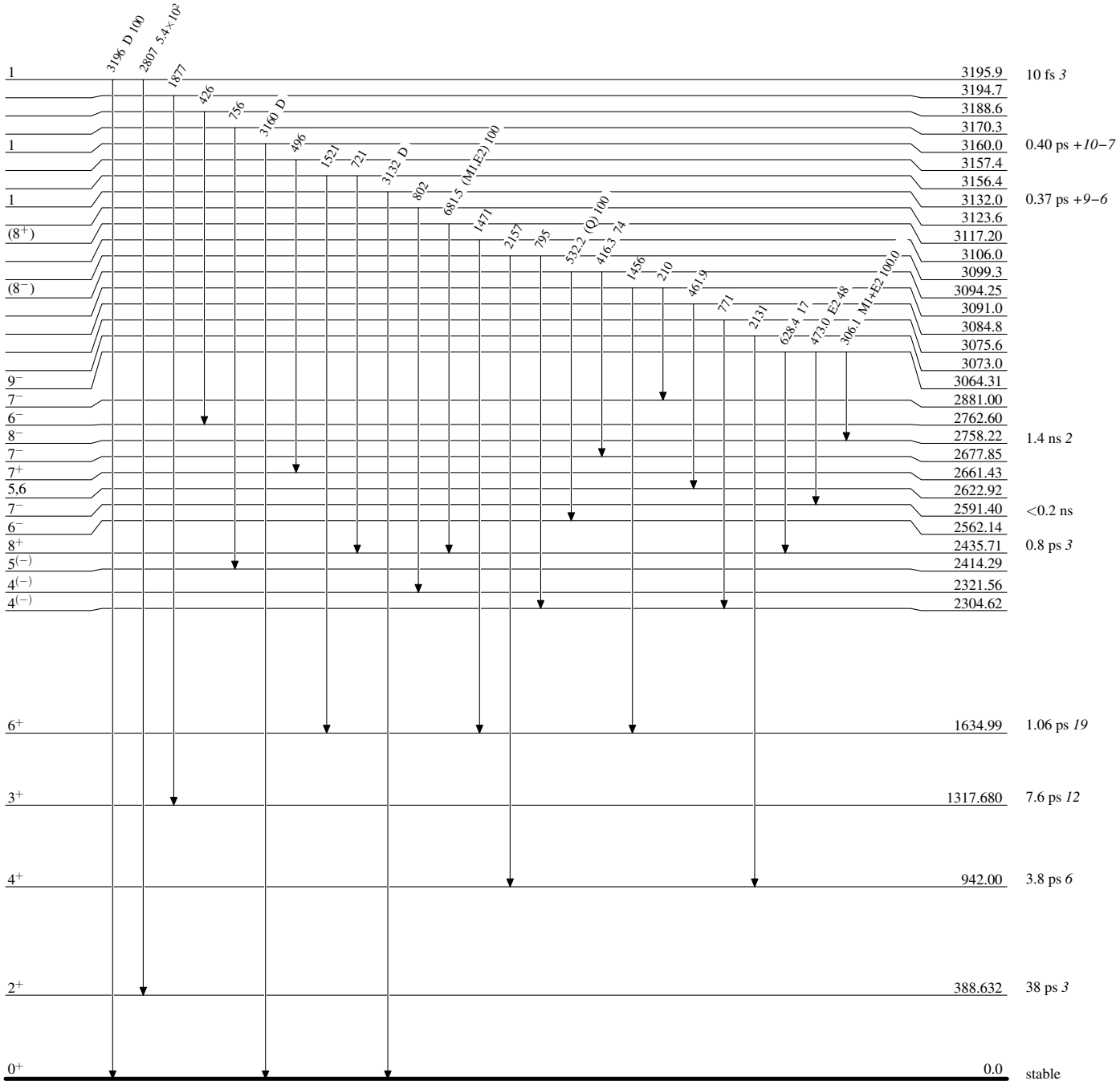


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

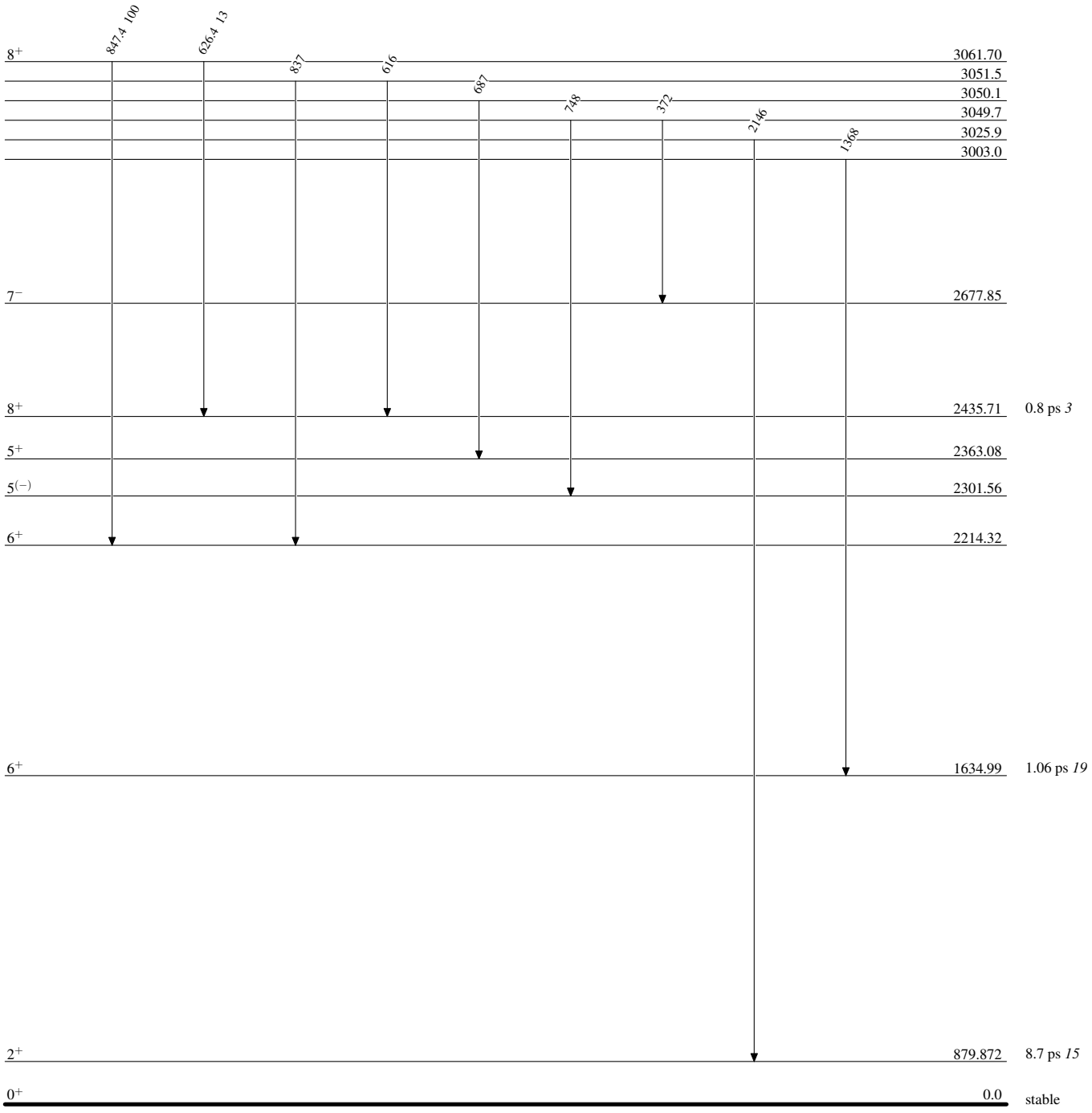


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

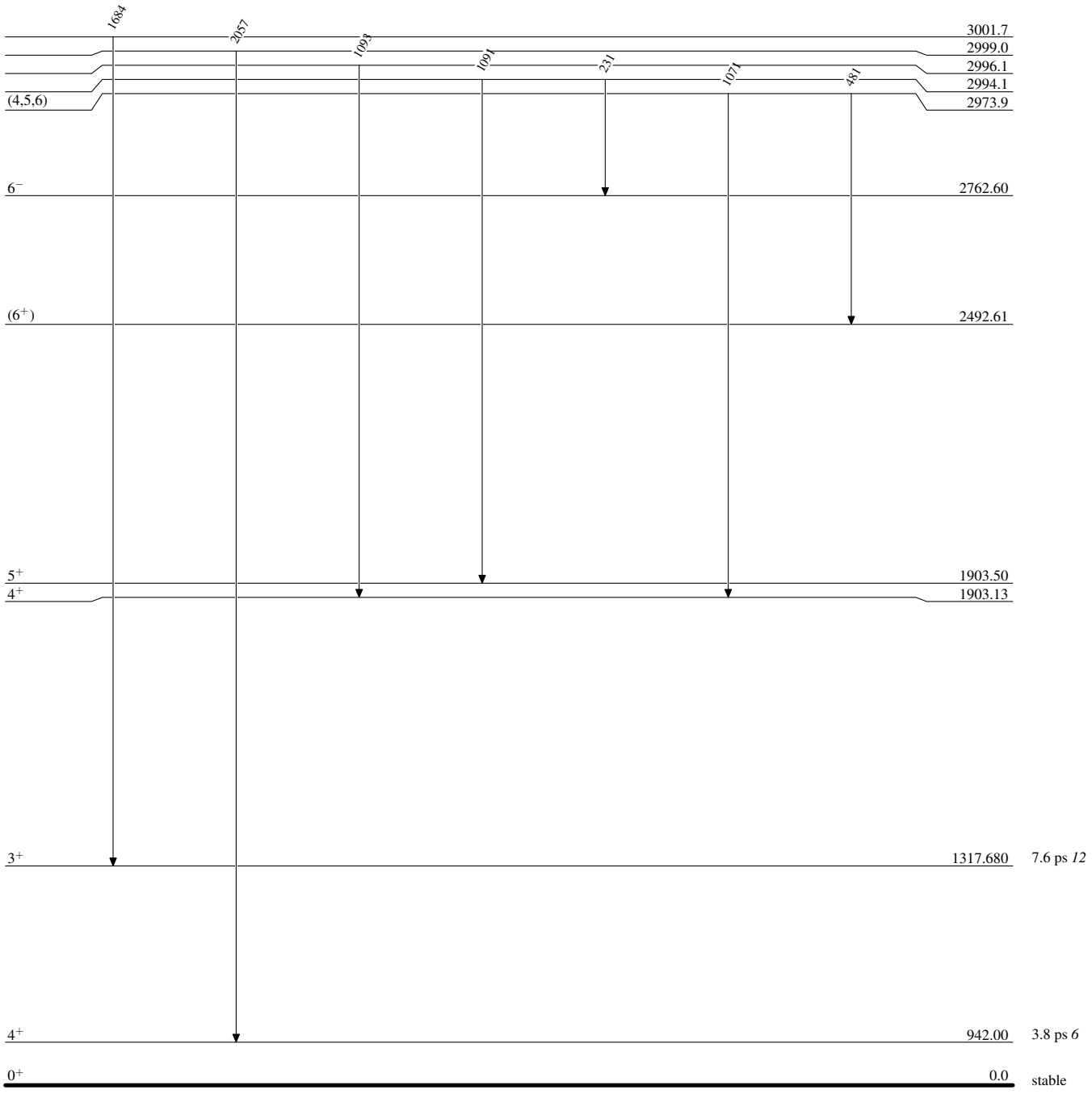


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

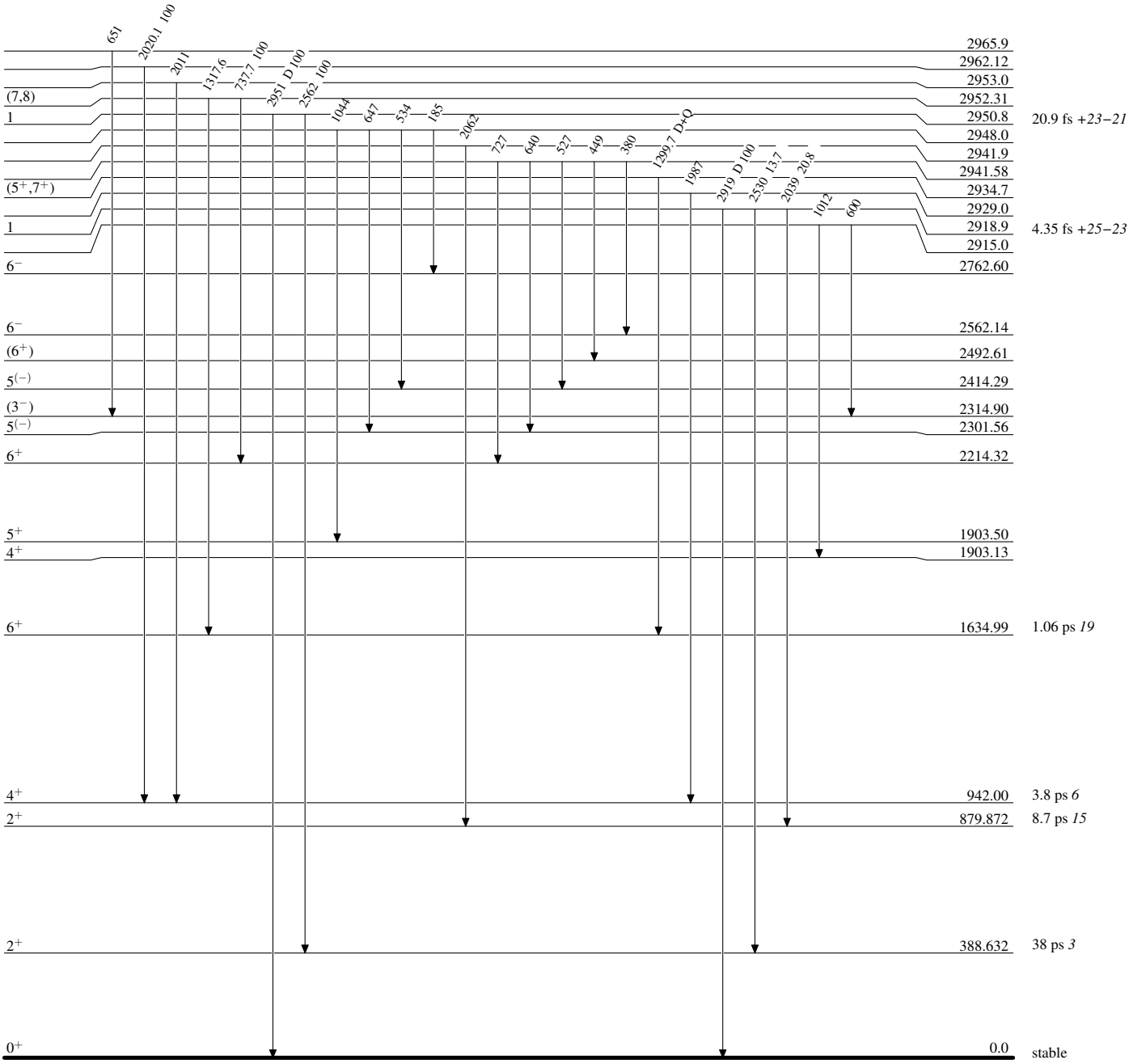


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

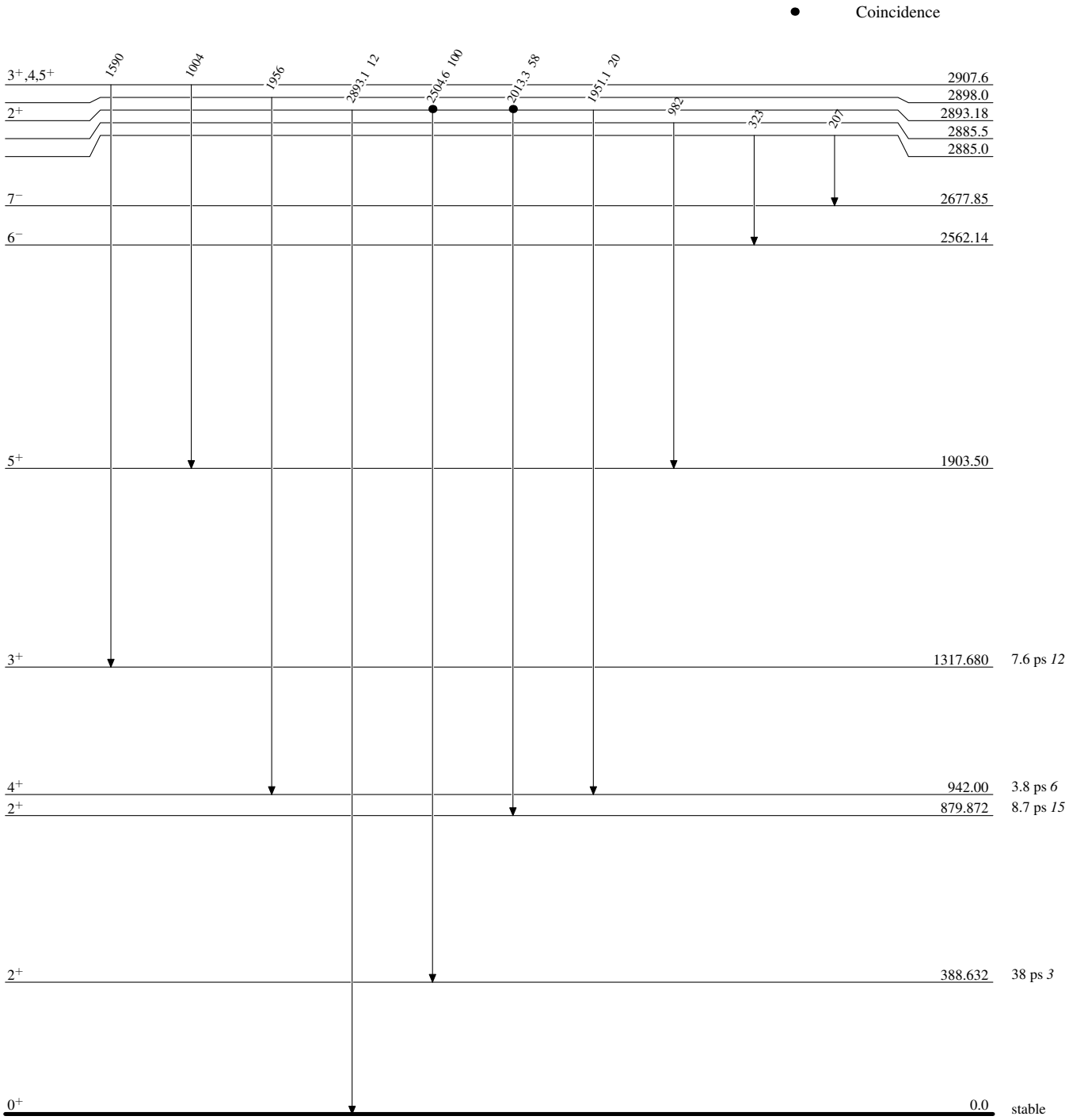


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

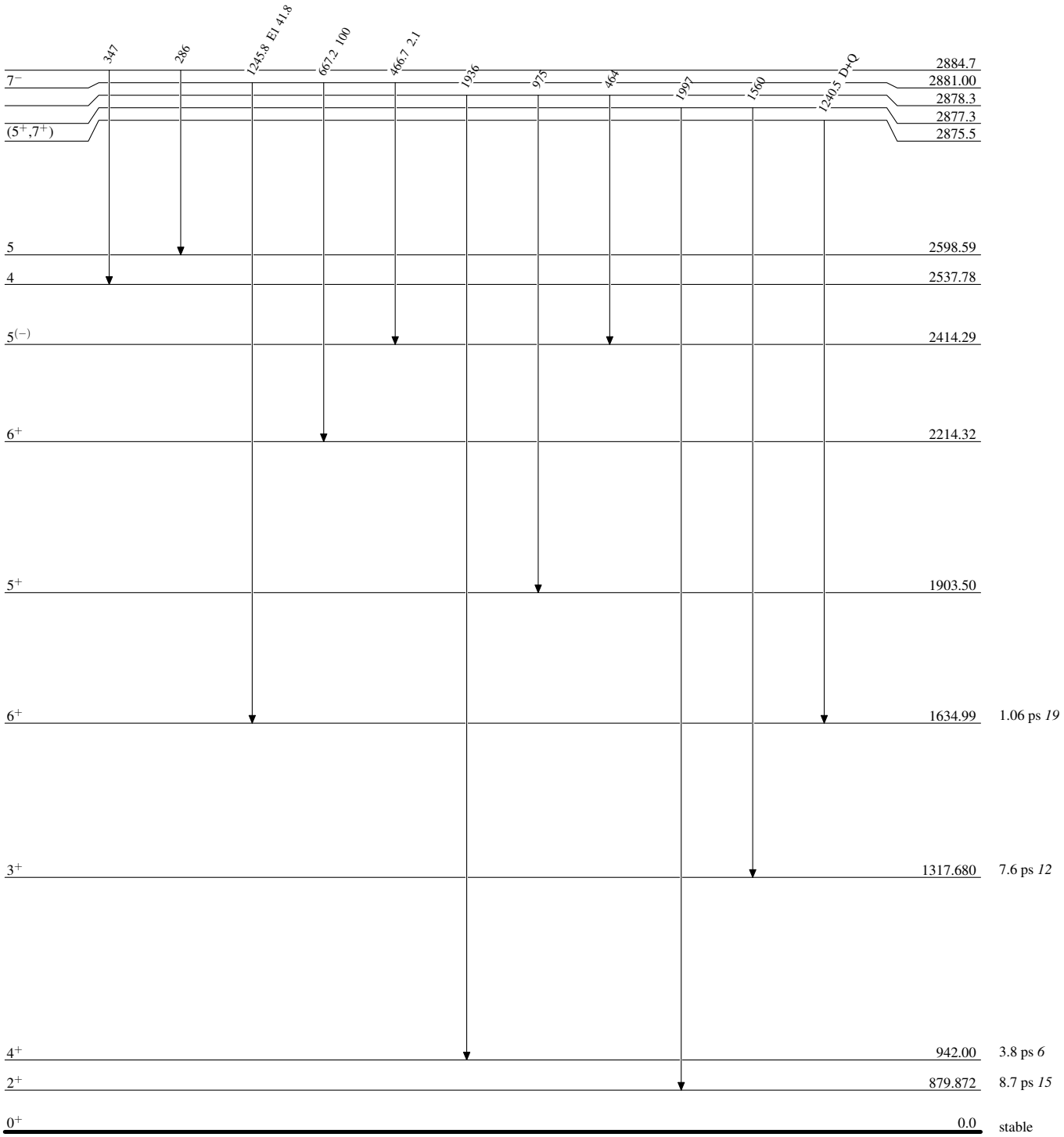


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

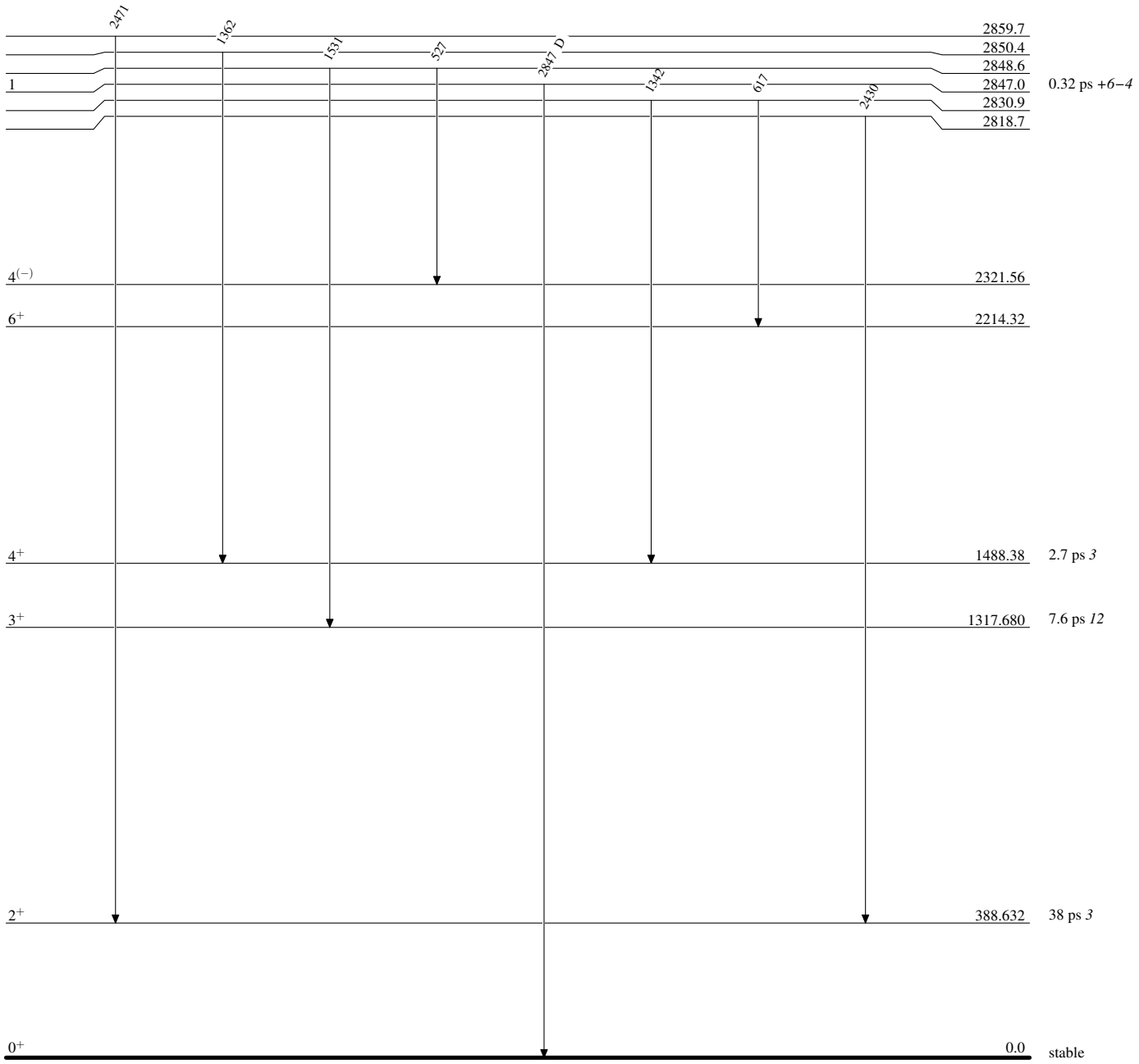


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{126}_{54}Xe_{72}$

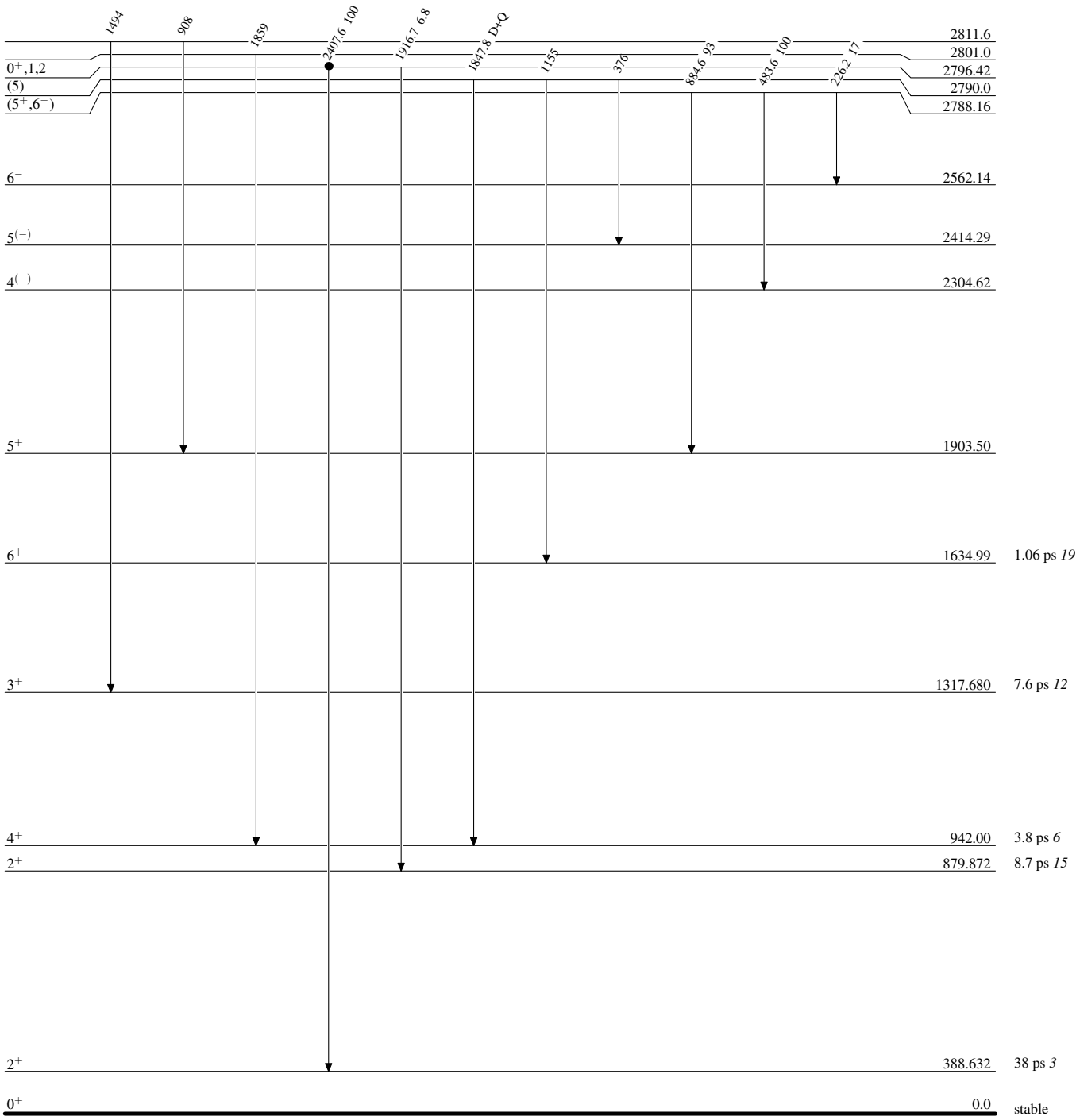
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

Legend

● Coincidence

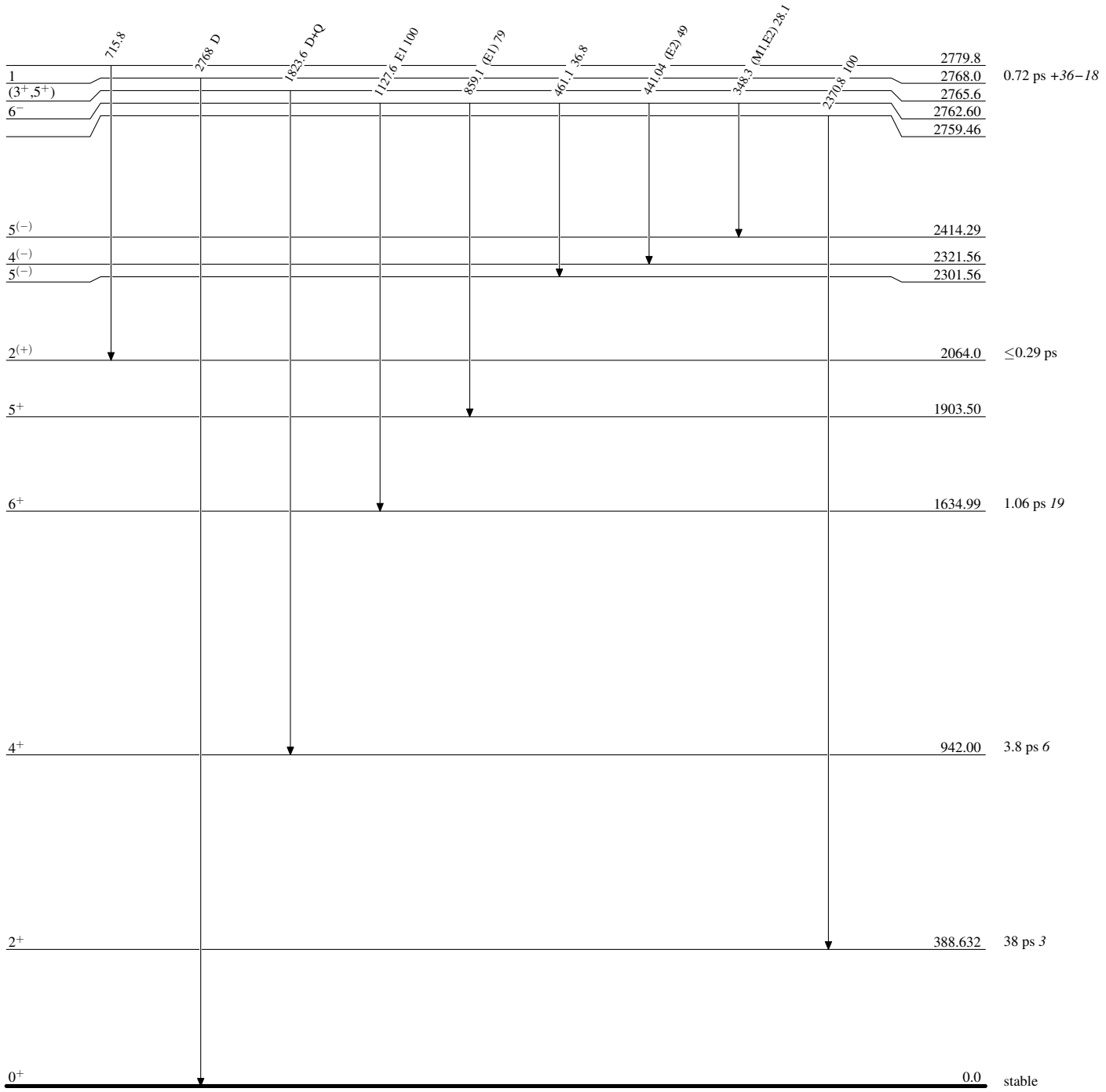


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

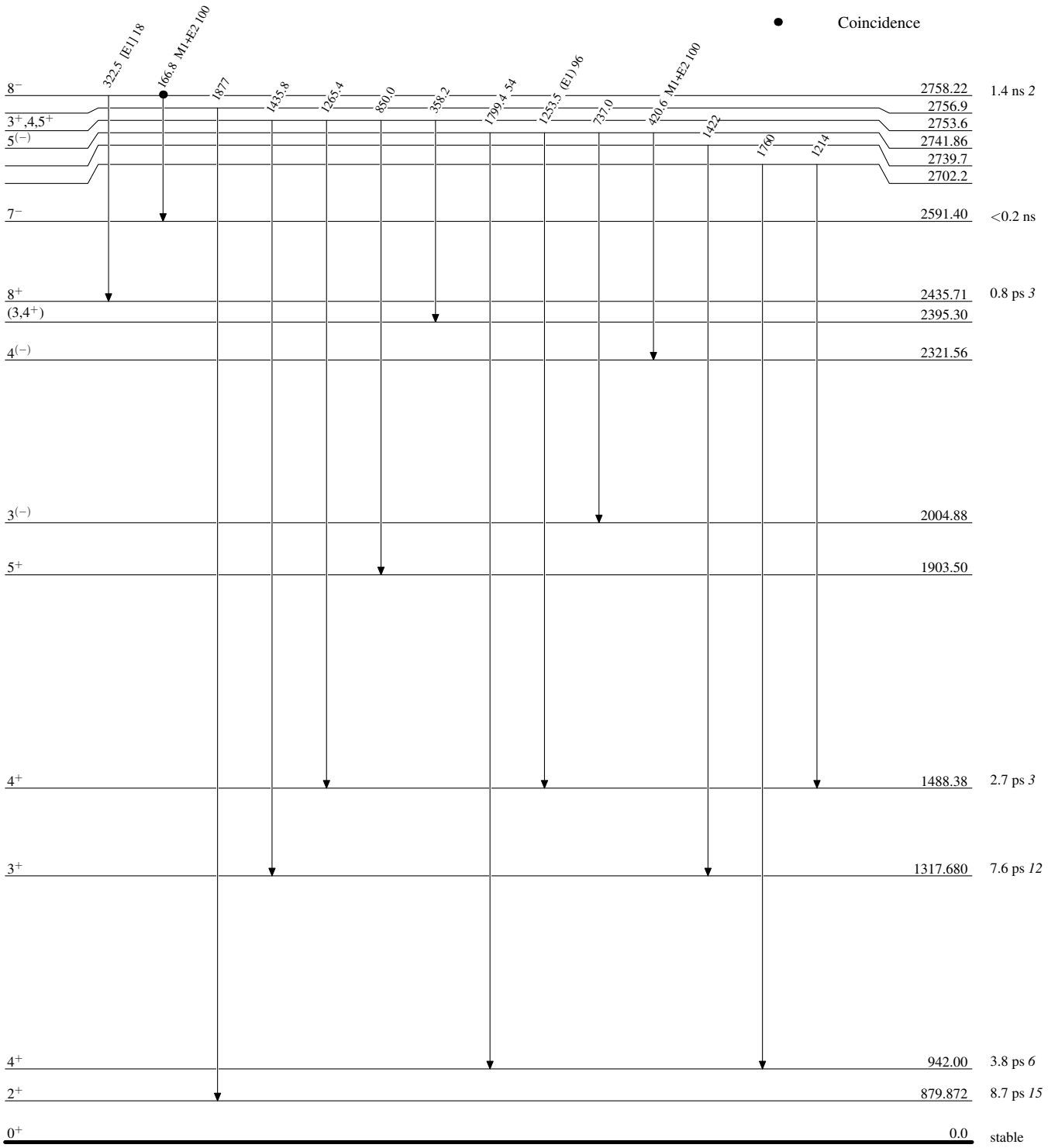


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

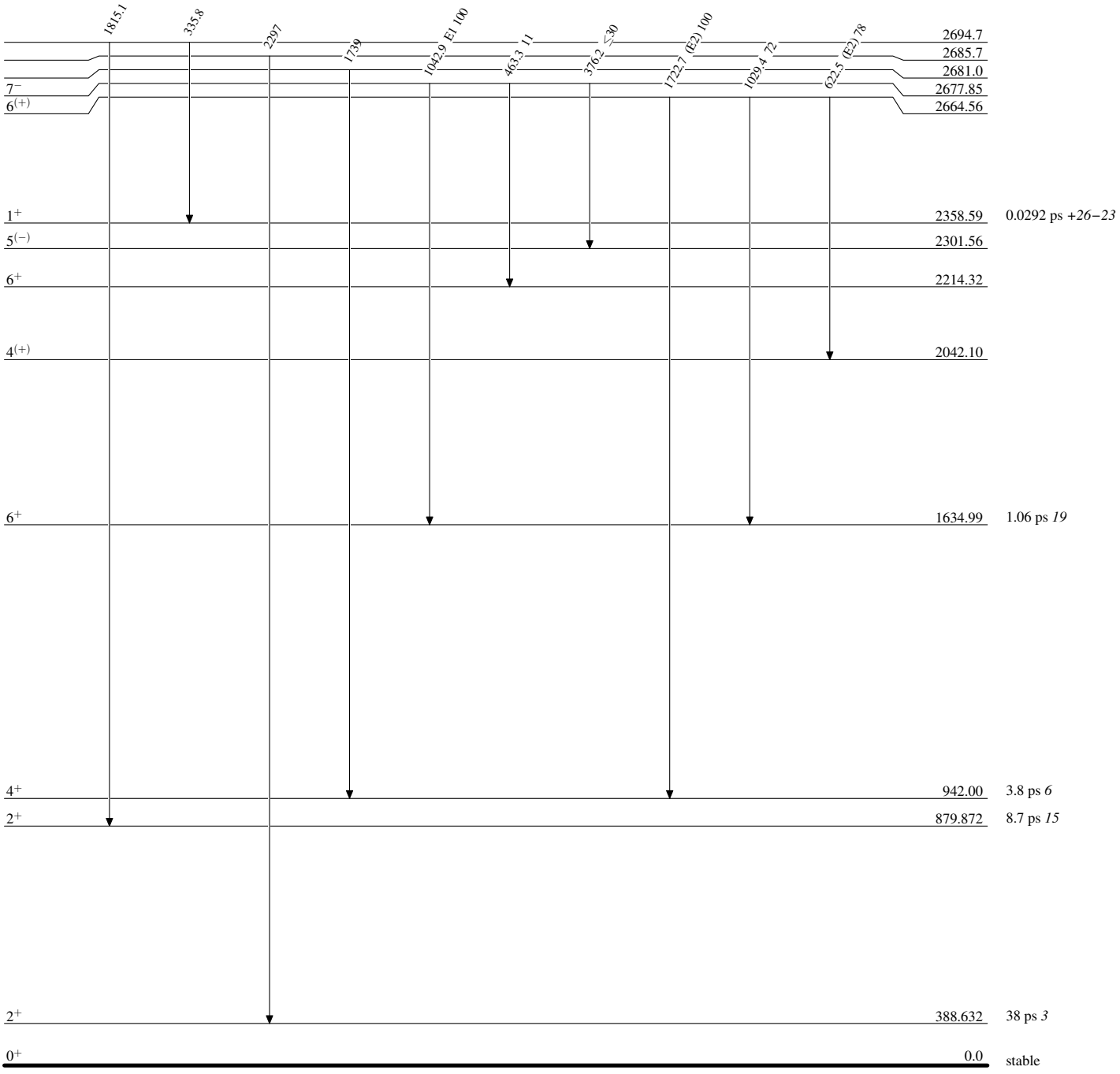


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



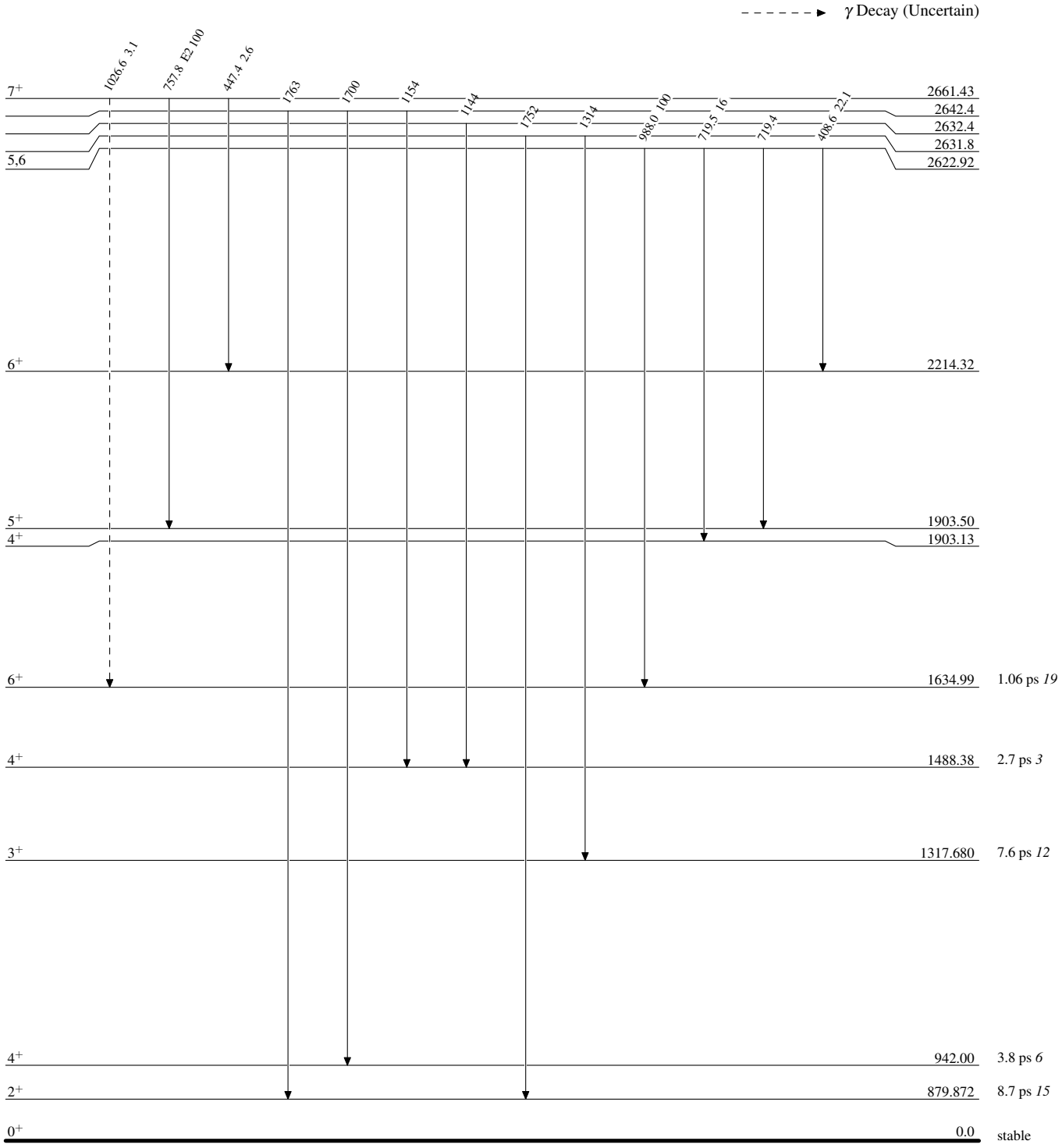
$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



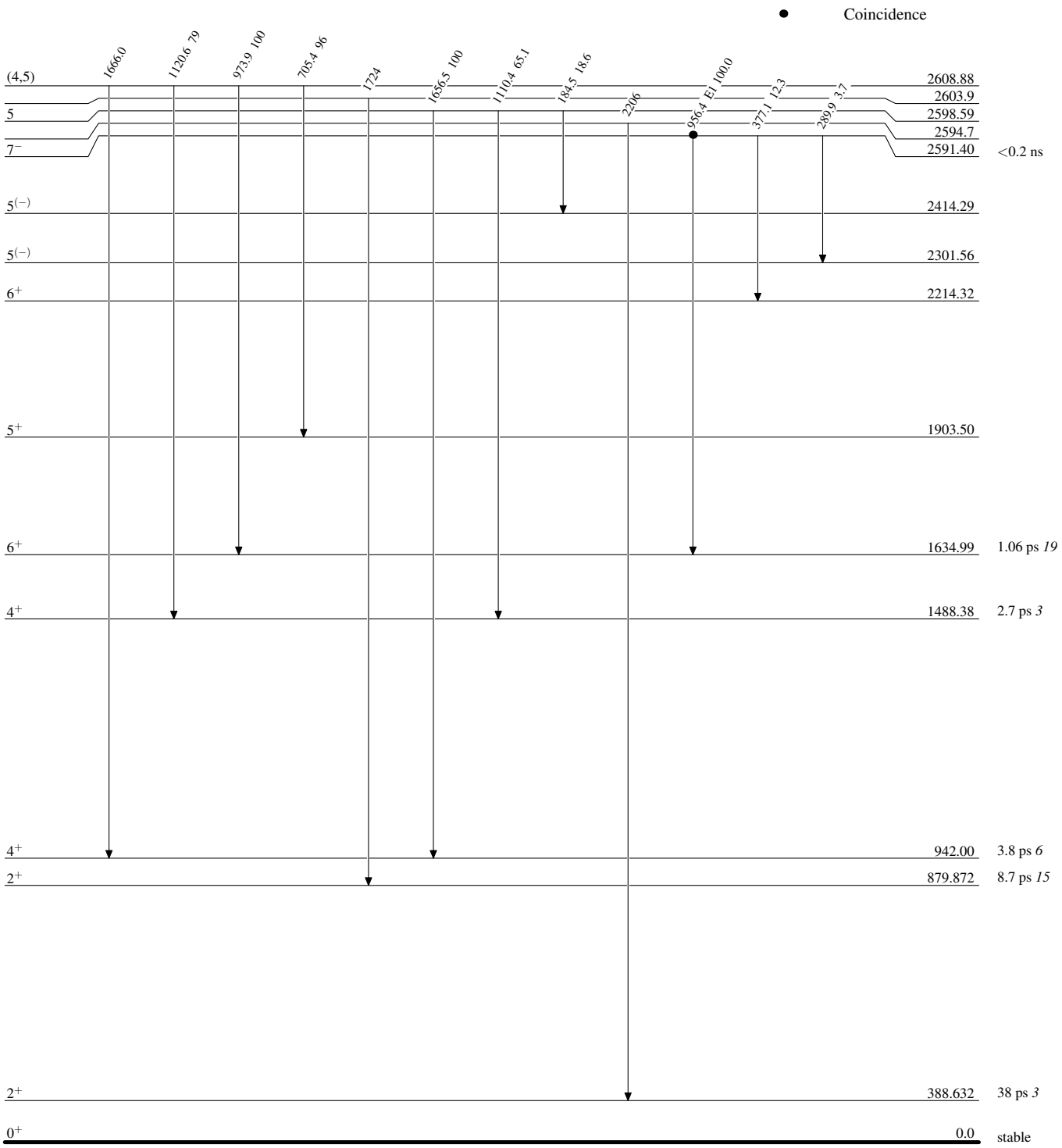
$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level



$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

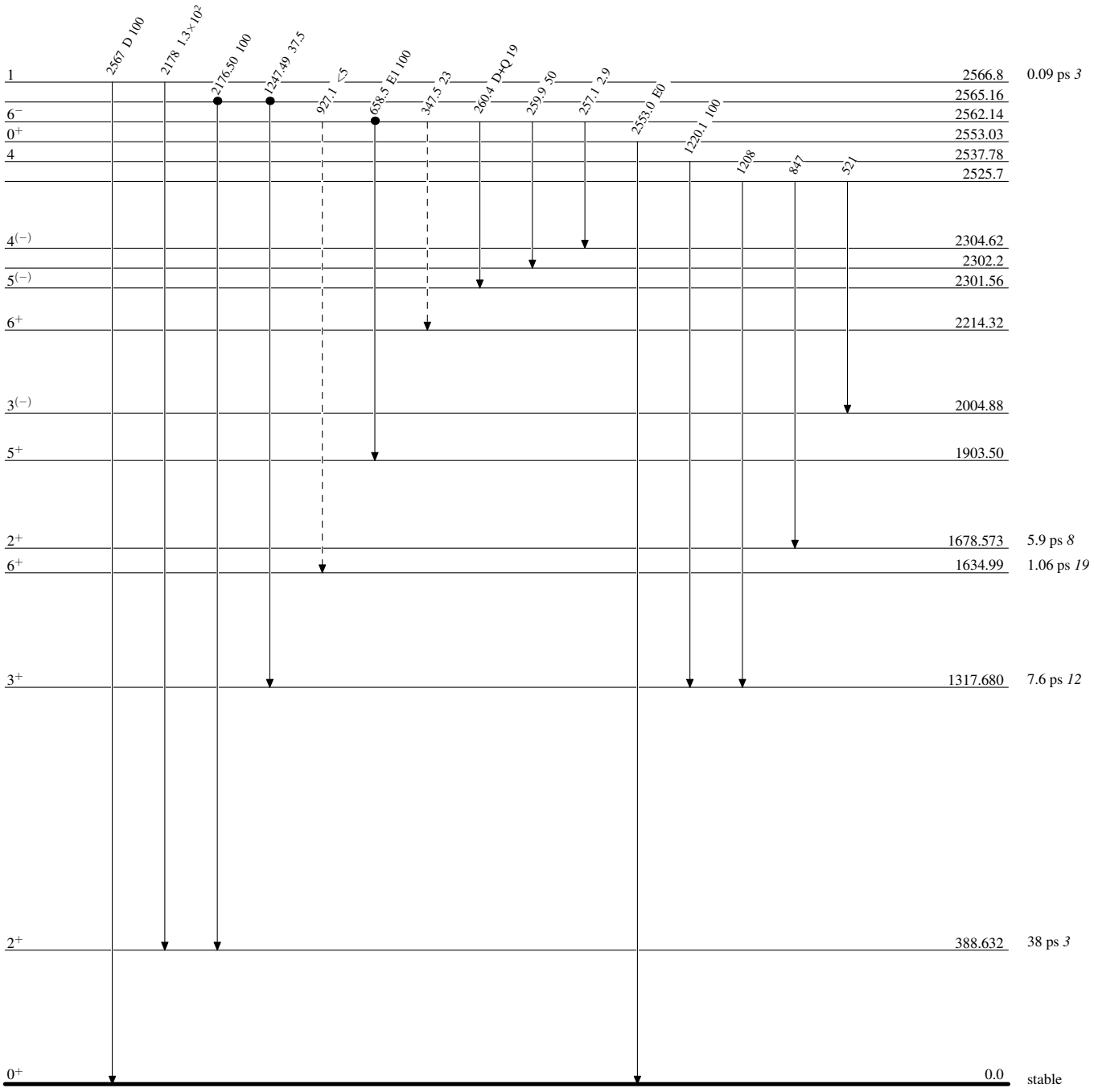
Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)

● Coincidence



$^{126}_{54}Xe_{72}$

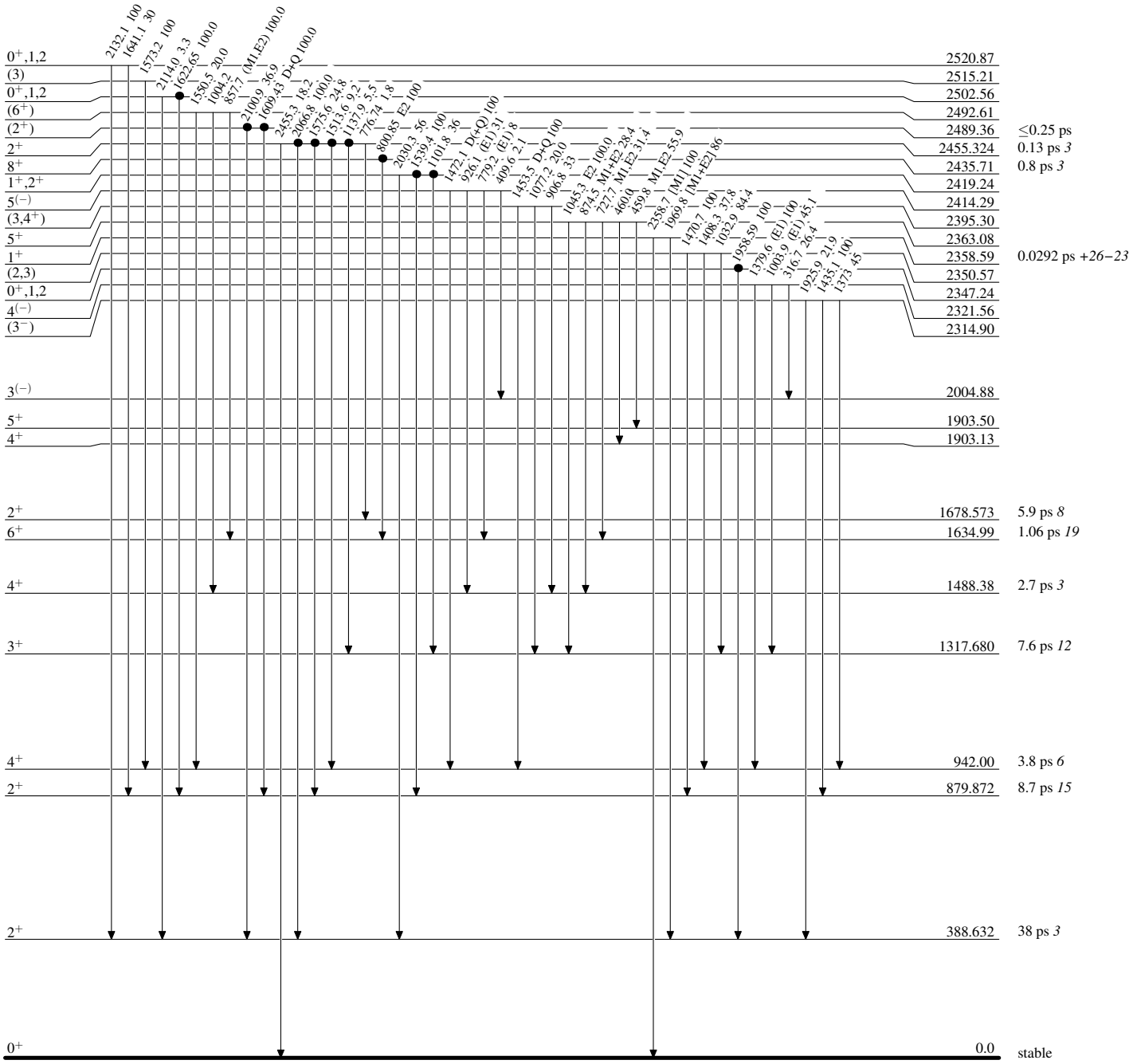
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence



$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

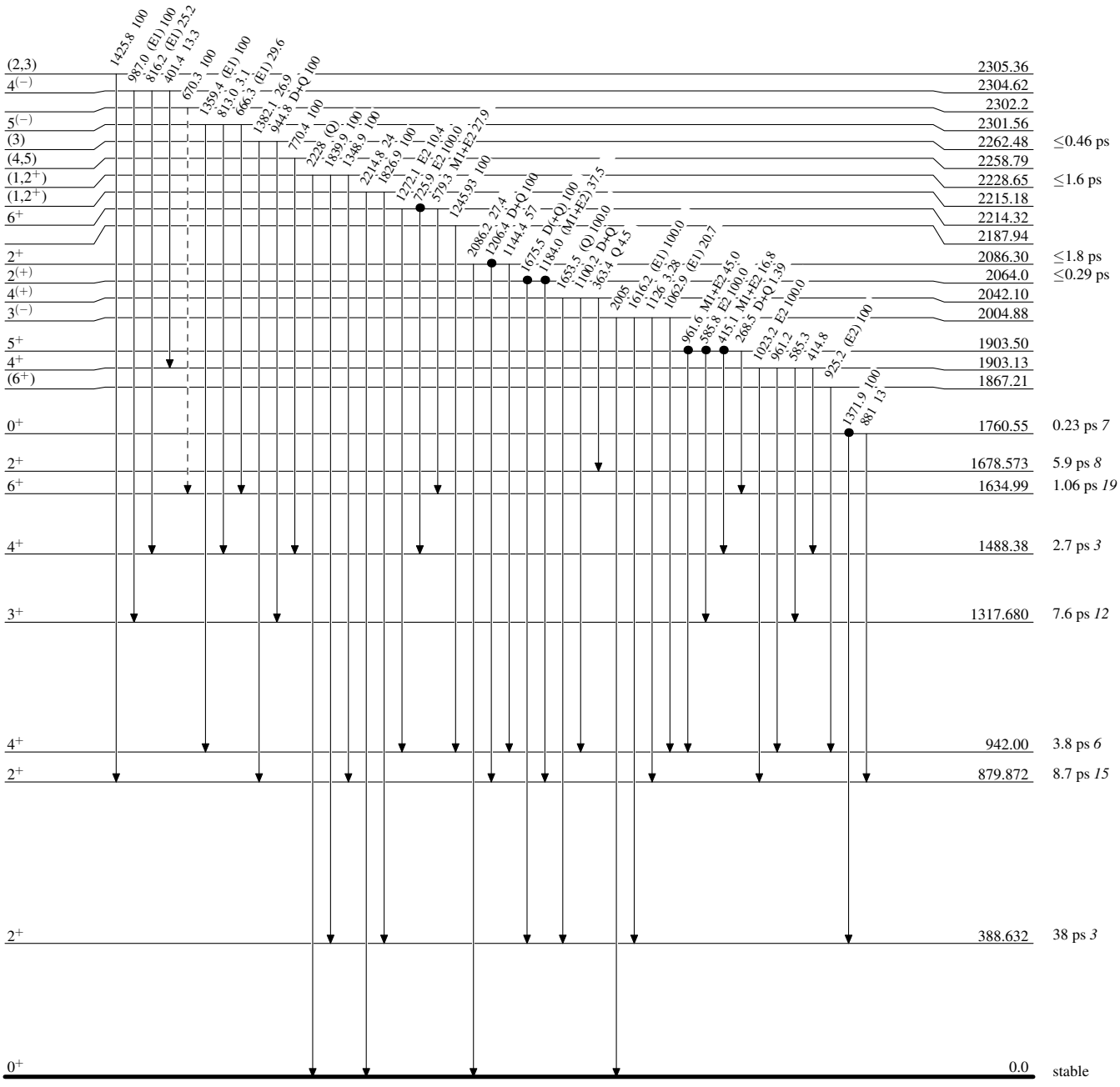
Level Scheme (continued)

Intensities: Relative photon branching from each level

Legend

- - - - - - ► γ Decay (Uncertain)

● Coincidence

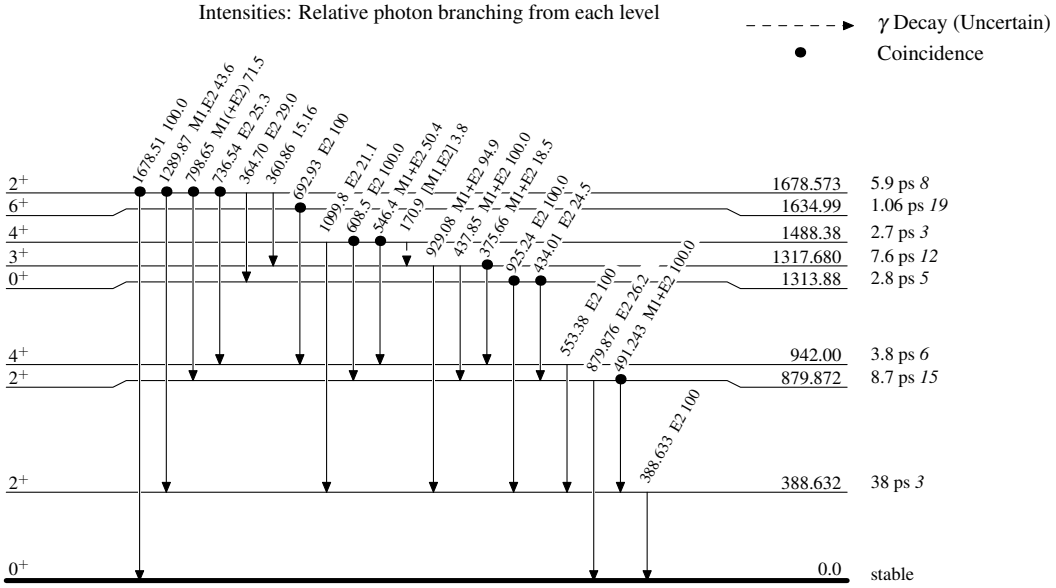


Adopted Levels, Gammas

Legend

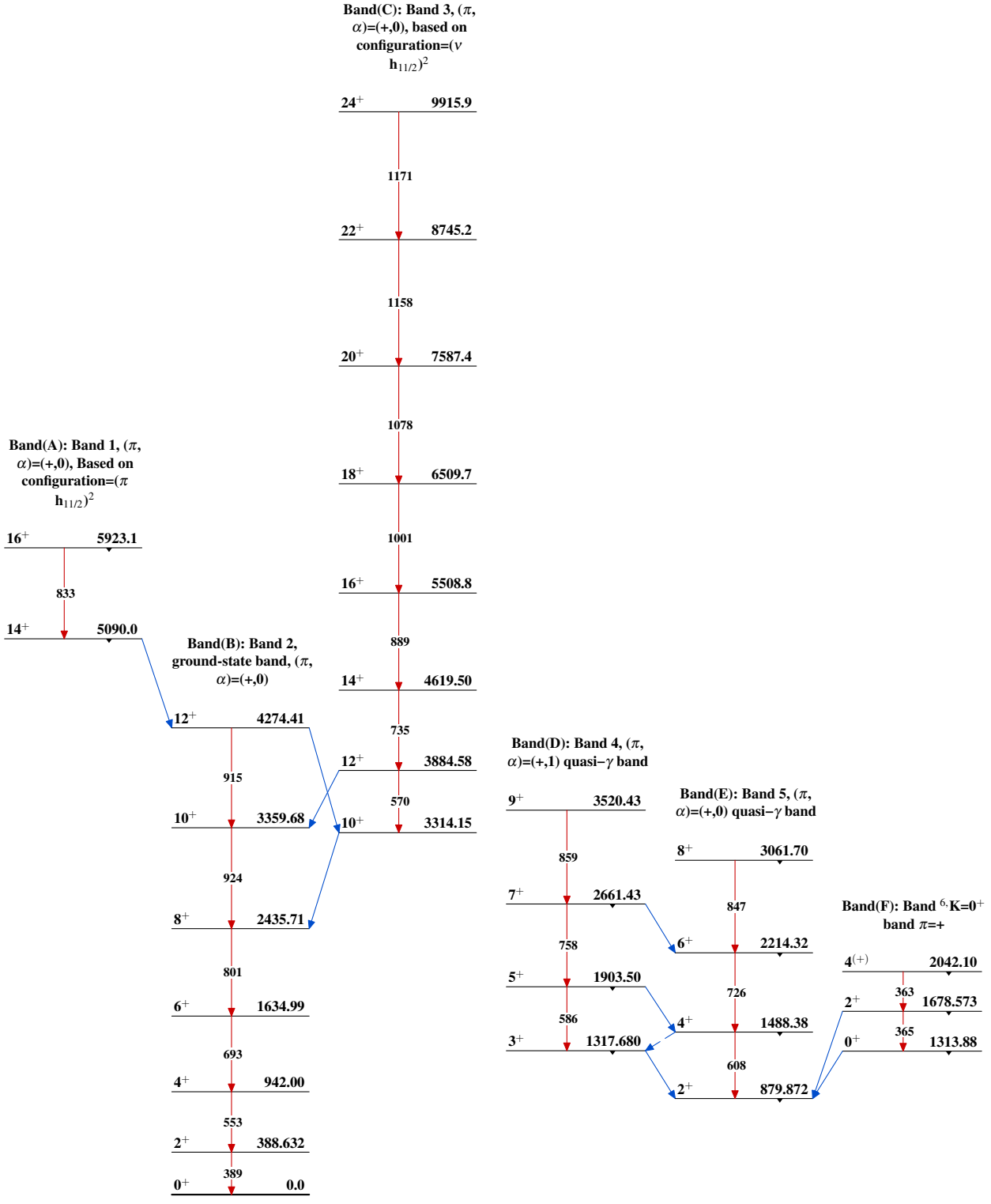
Level Scheme (continued)

Intensities: Relative photon branching from each level

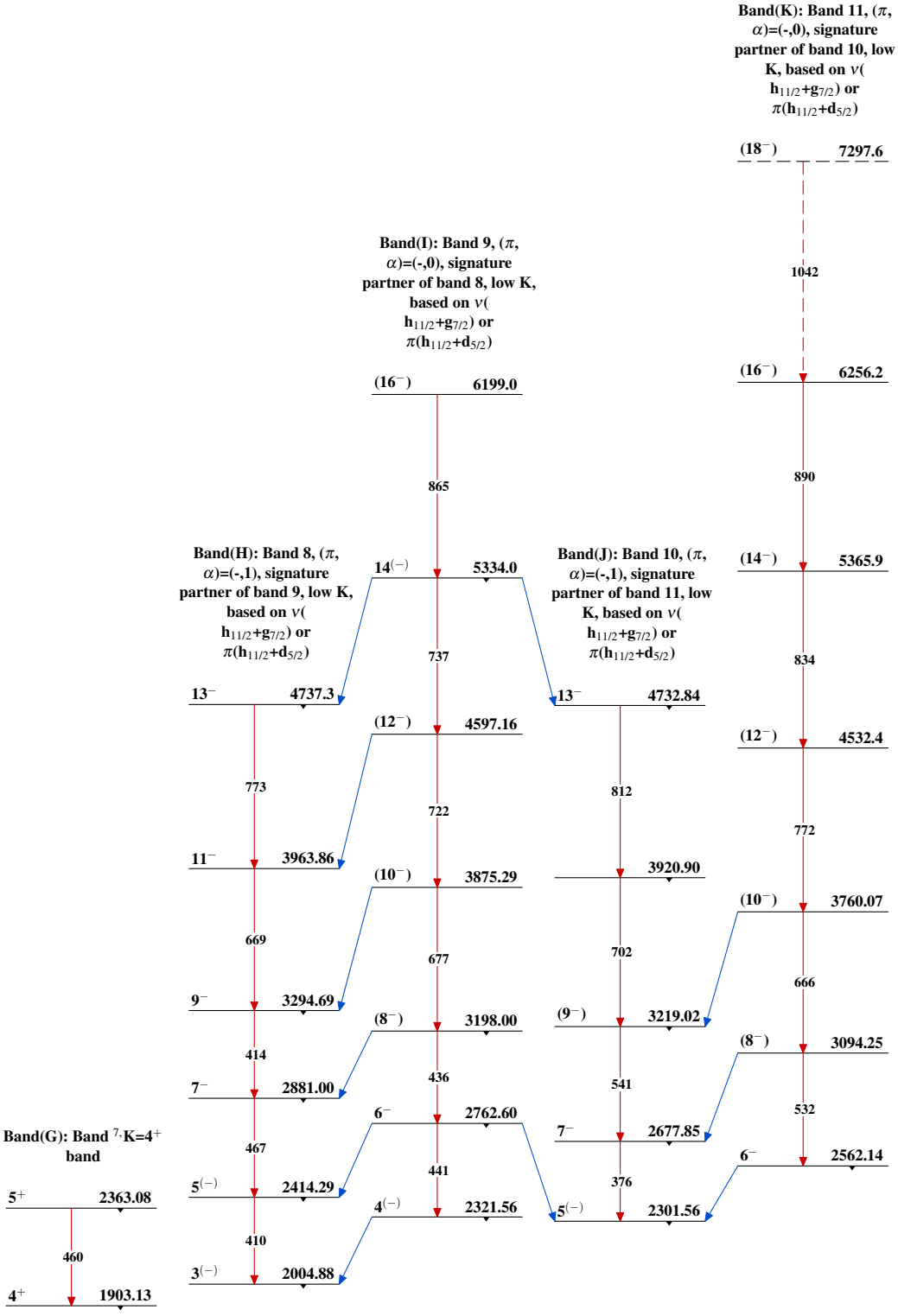


$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas

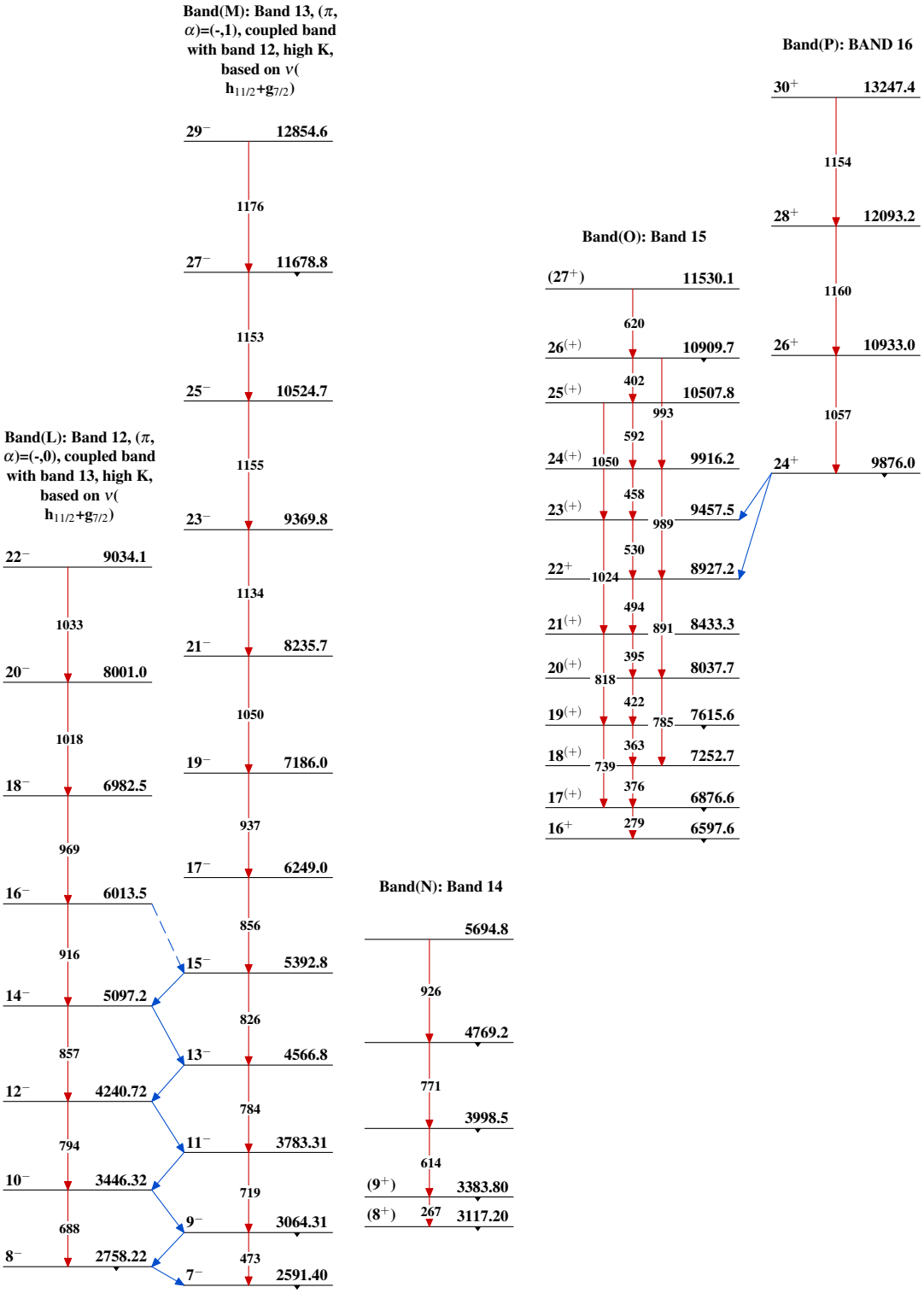


Adopted Levels, Gammas (continued)



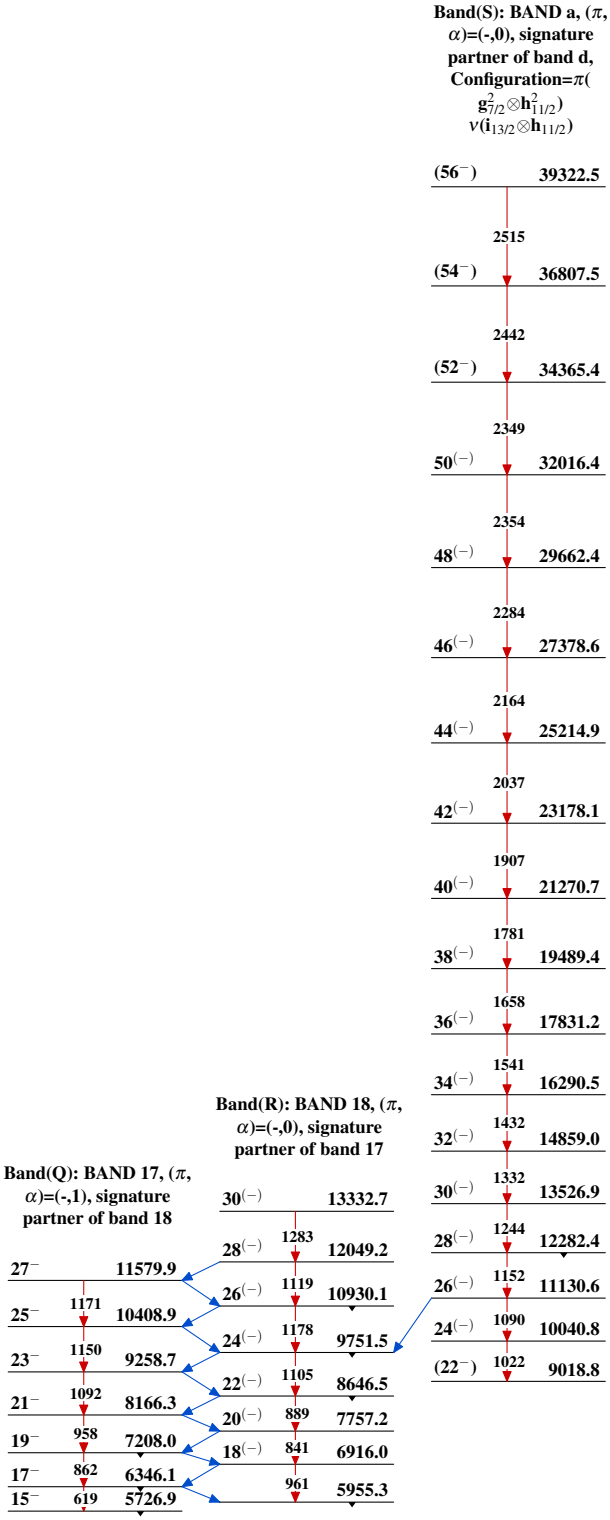
$^{126}_{54}Xe_{72}$

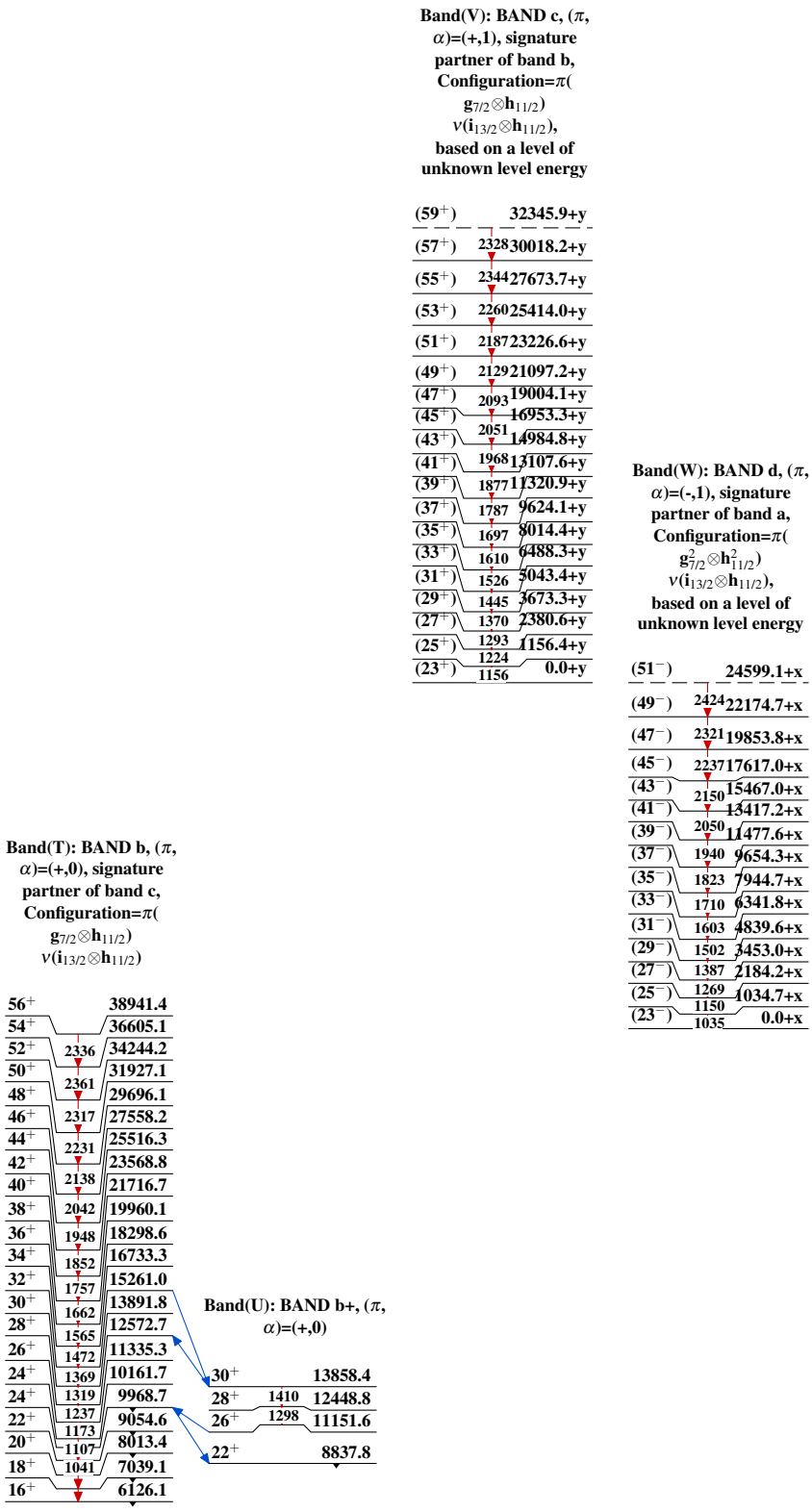
Adopted Levels, Gammas (continued)



$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas (continued)



$^{126}_{54}Xe_{72}$

Adopted Levels, Gammas (continued)