(HI,xnγ) 2002McZY,2004Dr06

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

2002McZY: Reaction: ^{176}Yb(^{7}Li,α2n); Beam energy: E=37 MeV; Target: 2.3 mg/cm^2 in thickness, enriched to 96.43% in ^{176}Yb; Detectors: CAESAR array (6 HPGe detectors) and an array of fourteen fast/slow plastic scintillator detectors. Measured: Eγ, Iγ, $\gamma\gamma$(t) coin., particle-$\gamma\gamma$(t) coin.

2004Dr06: Reactions: ^{nat}Lu(^{136}Xe,Xγ), ^{174}Yb(^{136}Xe,Xγ) and ^{176}Lu(^{136}Xe,Xγ) at E=816 MeV; Targets: 6 mg/cm^2 in thickness; Measured Eγ, Iγ, $\gamma\gamma$(t) coin. with the GAMMASPHERE array which consisted of 96 escape-suppressed Ge detectors. Other (by the same collaboration): 2005DrZX.

Other: 2004Al04, 2002AlZX, 2002AlZY.

^{177}Lu Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	Comments
0.0[#]	7/2$^+$	6.6443 d *9*	T$_{1/2}$: From Adopted Levels.
121.53[#] *25*	9/2$^+$	0.117 ns *4*	T$_{1/2}$: From Adopted Levels.
150.3[@] *3*	9/2$^-$	136.6 ns *28*	T$_{1/2}$: From (138,162,186)γ-150γ(Δt) in 2002McZY and 2002DrZZ.
268.70[#] *25*	11/2$^+$		
289.0[@] *3*	11/2$^-$		
440.5[#] *3*	13/2$^+$		
451.4[@] *4*	13/2$^-$		
458.04[&] *25*	5/2$^+$	<4.2 ns	T$_{1/2}$: From (120,145)γ-458γ(Δt) in 2002McZY.
552.13[&] *24*	7/2$^+$		
569.7[a] *3*	1/2$^+$	155 μs *7*	T$_{1/2}$: From Adopted Levels.
573.6[a] *3*	3/2$^+$		
636.2[#] *4*	15/2$^+$		
637.0[@] *4*	15/2$^-$		
671.92[&] *25*	9/2$^+$		
709.4[a] *4*	5/2$^+$		
720.8[a] *5*	7/2$^+$		
761.7[b] *3*	5/2$^-$	29 ns *4*	T$_{1/2}$: From (146,244)γ-762γ(Δt) in 2002McZY.
795.2[b] *3*	(1/2$^-$)		
811.4[b] *3*	9/2$^-$		
816.6[&] *3*	11/2$^+$		
844.7[@] *4*	17/2$^-$		
854.1[#] *4*	17/2$^+$		
953.0[b] *6*	(3/2$^-$)		
956.8[a] *6*	9/2$^+$		
957.2[b] *6*	13/2$^-$		
970.0[e] *4*	23/2$^-$	160.4 d *3*	%β^-=77.30 *8*; %IT=22.70 *8* T$_{1/2}$: From Adopted Levels. %β^- and %IT are from Adopted Levels.
980.1[a] *7*	11/2$^+$		
985.2[&] *3*	13/2$^+$		
1073.7[@] *5*	19/2$^-$		
1088.6[b] *3*	(7/2$^-$)		
1093.6[#] *5*	19/2$^+$		
1176.7[&] *3*	15/2$^+$		

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(HI,xnγ) 2002McZY,2004Dr06 (continued)

^{177}Lu Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	Comments
1201.6[b] *8*	17/2⁻		
1230.3 *5*	11/2⁺		
1242.9[e] *5*	25/2⁻		
1287.2[b] *8*	(11/2⁻)		
1302.9[a] *7*	13/2⁺		
1305.4 *6*	11/2⁺		
1322.4[@] *5*	21/2⁻		
1324.2[f] *5*	25/2⁺	62 ns *4*	$T_{1/2}$: From γγ(t) in 2004Dr06.
1344.7[a] *8*	15/2⁺		
1352.4[#] *5*	21/2⁺		
1356.5[c] *4*	(15/2⁺)	11.1 ns *21*	$T_{1/2}$: From 233γ-(916,1088)γ(Δt) in 2002McZY and two-level fit.
1389.4[&] *4*	17/2⁺		
1437.9[d] *6*	(17/2⁻)	<13 ns	$T_{1/2}$: From 233γ-(916,1088)γ(Δt) in 2002McZY and two-level fit.
1502.6 *7*	13/2⁺		
1536.4[e] *5*	27/2⁻		
1542.9[b] *10*	(21/2⁻)		
1545.4[c] *6*	(17/2⁺)		
1564.5[b] *10*	(15/2⁻)		
1588.9[@] *6*	23/2⁻		
1605.6[f] *6*	27/2⁺		
1623.1[&] *5*	19/2⁺		
1629.6[#] *7*	23/2⁺		
1670.9[d] *8*	(19/2⁻)		
1678.8? *3*			
1749.0[c]	(19/2⁺)		
1772.9 *3*			
1804.2[a] *10*	19/2⁺		
1850.5[e] *6*	29/2⁻		
1872.3[@] *6*	25/2⁻		
1907.1[f] *6*	29/2⁺		
1921.9[#] *7*	25/2⁺		
1925.3[d] *8*	(21/2⁻)		
1976.9[b] *11*	(25/2⁻)		
2173.9[@] *8*	27/2⁻		
2184.8[e] *6*	31/2⁻		
2200.1[d] *8*	(23/2⁻)		
2228.7[f] *6*	31/2⁺		
2345.2[a] *14*	23/2⁺		
2497.9[b] *12*	(29/2⁻)		
2538.8[e] *6*	33/2⁻		
2771.4[g] *6*	33/2⁺	625 ns *62*	$T_{1/2}$: From γγ(t) in 2004Dr06.
2911.5[e] *6*	35/2⁻		
3127.7[g] *7*	35/2⁺		
3303.5[e] *7*	37/2⁻		
3505.1[g] *9*	37/2⁺		
3530.1[h] *7*	39/2⁻	6 μs *2*	%IT=100 $T_{1/2}$: From γγ(t), pulsed beam, private communication from G.D. Dracoulis (ANU), quoted in 2015Ko14. Others: β^--decaying, $K^\pi=39/2^-$ isomer ($T_{1/2}$=7 m *2*) was

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(HI,xnγ) 2002McZY,2004Dr06 (continued)

^{177}Lu Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	Comments
			proposed in 2004Al04, 2002AlZX, and 2002AlZY using a two isomers fit to the growth of γ-ray intensity as a function of time for transitions following the decay of the $K^{\pi}=37/2^{-}$ isomer ($T_{1/2}$=51.4 m *5*) in ^{177}Hf. However, no such isomer was confirmed in 2004Dr06. The short lifetime of the $K^{\pi}=39/2^{-}$ isomer is inconsistent with the proposed β^{-}-decaying branch in 2004Al04, 2002AlZX, and 2002AlZY.

[†] From least-squares fit to Eγ.
[‡] From 2002McZY and 2004Dr06, unless otherwise noted.
[#] Band(A): $K^{\pi}=7/2^{+}$, π7/2[404]. The assignment is supported by the observed in-band properties, such as alignment and g_K-g_R values, and systematics of similar structures in neighboring nuclei.
[@] Band(B): $K^{\pi}=9/2^{-}$, π9/2[514]. The assignment is supported by the observed in-band properties, such as alignment and g_K-g_R values, and systematics of similar structures in neighboring nuclei.
[&] Band(C): $K^{\pi}=5/2^{+}$, π5/2[402]. The assignment is supported by the observed in-band properties, such as alignment and g_K-g_R values, and systematics of similar structures in neighboring nuclei.
[a] Band(D): $K^{\pi}=1/2^{+}$, π1/2[411]. The assignment is supported by the observed in-band properties, such as alignment and large signature splittings, and systematics of similar structures in neighboring nuclei.
[b] Band(E): $K^{\pi}=1/2^{-}$, π1/2[541]. The assignment is supported by the observed in-band properties, such as alignment and large signature splittings, and systematics of similar structures in neighboring nuclei.
[c] Band(F): $K^{\pi}=15/2^{+}$, $\pi(7/2[404])\otimes\nu^2(1/2[510],7/2[514])$.
[d] Band(G): $K^{\pi}=17/2^{-}$, $\pi(9/2[514])\otimes\nu^2(1/2[510],7/2[514])$ or $\pi(7/2[404])\otimes\nu^2(1/2[510],9/2[624])$.
[e] Band(H): $K^{\pi}=23/2^{-}$, $\pi(7/2[404])\otimes\nu^2(7/2[514],9/2[624])$.
[f] Band(I): $K^{\pi}=25/2^{+}$, $\pi(9/2[514])\otimes\nu^2(7/2[514],9/2[624])$.
[g] Band(J): $K^{\pi}=33/2^{+}$, $\pi^3(1/2[411],7/2[404],9/2[514])\otimes\nu^2(7/2[514],9/2[624])$.
[h] $K^{\pi}=39/2^{-}$, $\pi^3(7/2[404],7/2[523],9/2[514])\otimes\nu^2(7/2[514],9/2[624])$.

γ(^{177}Lu)

Mixing ratios values are deduced using the branching ratios and the rotational model, and by assuming pure K.

E_γ[†]	I_γ[†]	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.	Comments
49.7 *5*	36 *14*	811.4	$9/2^{-}$	761.7	$5/2^{-}$		
81.2[‡] *5*	18.1[#] *13*	1324.2	$25/2^{+}$	1242.9	$25/2^{-}$	E1	Mult.: From α(exp) using intensity balances (2004Dr06).
81.4 *5*	53 *10*	1437.9	$(17/2^{-})$	1356.5	$(15/2^{+})$		
94.0 *5*	99 *25*	552.13	$7/2^{+}$	458.04	$5/2^{+}$		
111.7 *5*		569.7	$1/2^{+}$	458.04	$5/2^{+}$		
115.5 *5*	31 *5*	573.6	$3/2^{+}$	458.04	$5/2^{+}$		
115.8682 *23*		970.0	$23/2^{-}$	854.1	$17/2^{+}$		E_γ: From adopted gammas.
119.8 *5*	136 *12*	671.92	$9/2^{+}$	552.13	$7/2^{+}$		δ: 0.21 *5* assuming K=5/2.
121.5 *5*	850 *90*	121.53	$9/2^{+}$	0.0	$7/2^{+}$		
125.3 *2*		970.0	$23/2^{-}$	844.7	$17/2^{-}$		E_γ: From adopted gammas.
135.8 *5*	15 *4*	709.4	$5/2^{+}$	573.6	$3/2^{+}$		
138.4 *5*	868 *58*	289.0	$11/2^{-}$	150.3	$9/2^{-}$		
139.7 *5*	<10	709.4	$5/2^{+}$	569.7	$1/2^{+}$		
144.6 *5*	148 *10*	816.6	$11/2^{+}$	671.92	$9/2^{+}$		δ: 0.20 *2* assuming K=5/2.
145.8 *5*	313 *20*	957.2	$13/2^{-}$	811.4	$9/2^{-}$		
147.0 *5*	363 *30*	268.70	$11/2^{+}$	121.53	$9/2^{+}$		δ: 0.55 *3* assuming K=7/2.

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(HI,xnγ) 2002McZY,2004Dr06 (continued)

γ(^{177}Lu) (continued)

E_γ [†]	I_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	Comments
147.2 *5*	150 *10*	720.8	7/2$^+$	573.6	3/2$^+$		
150.2 *5*	1600 *67*	150.3	9/2$^-$	0.0	7/2$^+$		
162.3 *5*	761 *41*	451.4	13/2$^-$	289.0	11/2$^-$		δ: 0.20 *1* assuming K=9/2.
168.5 *5*	99 *12*	985.2	13/2$^+$	816.6	11/2$^+$		δ: 0.10 *2* assuming K=5/2.
171.7 *5*	173 *10*	440.5	13/2$^+$	268.70	11/2$^+$		δ: 0.47 *2* assuming K=7/2.
185.5 *5*	581 *28*	637.0	15/2$^-$	451.4	13/2$^-$		δ: 0.16 *1* assuming K=9/2.
188.0 *5*	190 *37*	761.7	5/2$^-$	573.6	3/2$^+$		
191.3 *5*	58 *10*	953.0	(3/2$^-$)	761.7	5/2$^-$		
191.5 *5*	60 *8*	1176.7	15/2$^+$	985.2	13/2$^+$		δ: 0.14 *1* assuming K=5/2.
195.4 *5*	108 *8*	636.2	15/2$^+$	440.5	13/2$^+$		δ: 0.41 *2* assuming K=7/2.
207.7 *5*	314 *13*	844.7	17/2$^-$	637.0	15/2$^-$		δ: 0.19 *1* assuming K=9/2.
209.5 *5*	138 *21*	761.7	5/2$^-$	552.13	7/2$^+$		
212.9 *5*	50 *6*	1389.4	17/2$^+$	1176.7	15/2$^+$		δ: 0.11 *2* assuming K=5/2.
214.0 *5*	35 *20*	671.92	9/2$^+$	458.04	5/2$^+$		
217.8 *5*	49 *11*	854.1	17/2$^+$	636.2	15/2$^+$		δ: 0.40 *5* assuming K=7/2.
221.600 *3*		795.2	(1/2$^-$)	573.6	3/2$^+$		E_γ: From adopted gammas.
225.53 *4*		795.2	(1/2$^-$)	569.7	1/2$^+$		E_γ: From adopted gammas.
226.7[‡] *5*	29.8[#] *23*	3530.1	39/2$^-$	3303.5	37/2$^-$	M1	Mult.: From α(exp)=0.32 *6* (2004Dr06).
228.8 *5*	174 *9*	1073.7	19/2$^-$	844.7	17/2$^-$		δ: 0.21 *2* assuming K=9/2.
233.4 *5*	30 *8*	1670.9	(19/2$^-$)	1437.9	(17/2$^-$)		
233.6 *5*	12 *3*	1623.1	19/2$^+$	1389.4	17/2$^+$		δ: 0.16 *3* assuming K=5/2.
235.9 *5*	73 *6*	956.8	9/2$^+$	720.8	7/2$^+$		
239.4 *5*	38 *9*	1093.6	19/2$^+$	854.1	17/2$^+$		δ: 0.32 *4* assuming K=7/2.
244.4 *5*	205 *22*	1201.6	17/2$^-$	957.2	13/2$^-$		
247.3 *5*	38 *5*	956.8	9/2$^+$	709.4	5/2$^+$		
248.4 *5*	56 *9*	1322.4	21/2$^-$	1073.7	19/2$^-$		δ: 0.18 *2* assuming K=9/2.
251.4 *5*	<10	709.4	5/2$^+$	458.04	5/2$^+$		
254.0 *5*	14 *5*	1925.3	(21/2$^-$)	1670.9	(19/2$^-$)		
258.7 *5*	24 *10*	1352.4	21/2$^+$	1093.6	19/2$^+$		δ: 0.28 *5* assuming K=7/2.
259.4 *5*	191 *9*	980.1	11/2$^+$	720.8	7/2$^+$		
264.4 *5*	84 *14*	816.6	11/2$^+$	552.13	7/2$^+$		
266.6 *5*	35 *7*	1588.9	23/2$^-$	1322.4	21/2$^-$		
268.8 *5*	367 *17*	268.70	11/2$^+$	0.0	7/2$^+$		
272.8[‡] *5*		1242.9	25/2$^-$	970.0	23/2$^-$		E_γ,I_γ: 272.6 keV and Iγ=65 *30* in 2002McZY.
274.0 *5*	11 *5*	2200.1	(23/2$^-$)	1925.3	(21/2$^-$)		
277.175 *5*		1088.6	(7/2$^-$)	811.4	9/2$^-$		E_γ: From adopted gammas.
281.3[‡] *5*		1605.6	27/2$^+$	1324.2	25/2$^+$		
283.4 *5*	<10	1872.3	25/2$^-$	1588.9	23/2$^-$		
283.6 *5*	<10	552.13	7/2$^+$	268.70	11/2$^+$		
293.5[‡] *5*	50.3[#] *15*	1536.4	27/2$^-$	1242.9	25/2$^-$		E_γ,I_γ: Other: 294.0 keV and Iγ=30 *15* in 2002McZY.
301.1 *5*	96 *12*	451.4	13/2$^-$	150.3	9/2$^-$		
301.4[‡] *5*	100[#]	1907.1	29/2$^+$	1605.6	27/2$^+$		
303.5 *5*	<10	761.7	5/2$^-$	458.04	5/2$^+$		
313.3 *5*	29 *7*	985.2	13/2$^+$	671.92	9/2$^+$		
314.1[‡] *5*	58[#] *4*	1850.5	29/2$^-$	1536.4	27/2$^-$		
319.1 *5*	320 *14*	440.5	13/2$^+$	121.53	9/2$^+$		
321.4[‡] *5*	100[#]	2228.7	31/2$^+$	1907.1	29/2$^+$		
323.0 *5*	32 *5*	1302.9	13/2$^+$	980.1	11/2$^+$		
326.890 *13*		1088.6	(7/2$^-$)	761.7	5/2$^-$		E_γ: From adopted gammas.
330.0 *5*	<10	1287.2	(11/2$^-$)	957.2	13/2$^-$		
333.1 *2*		970.0	23/2$^-$	637.0	15/2$^-$		E_γ: From adopted gammas.
334[@]		970.0	23/2$^-$	636.2	15/2$^+$		E_γ: From adopted gammas.
334.4[‡] *5*	35.2[#] *20*	2184.8	31/2$^-$	1850.5	29/2$^-$		

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(HI,xnγ) 2002McZY,2004Dr06 (continued)

γ(^{177}Lu) (continued)

E_γ[†]	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π
336.4 *5*	25 *9*	458.04	5/2$^+$	121.53	9/2$^+$
341.3 *5*	95 *17*	1542.9	(21/2$^-$)	1201.6	17/2$^-$
346.0 *5*	13 *5*	1302.9	13/2$^+$	956.8	9/2$^+$
348.2 *5*	119 *11*	637.0	15/2$^-$	289.0	11/2$^-$
353.8[‡] *5*	23.5[#] *19*	2538.8	33/2$^-$	2184.8	31/2$^-$
354.3[‡] *5*	81.9[#] *39*	1324.2	25/2$^+$	970.0	23/2$^-$
356.1[‡] *5*		3127.7	35/2$^+$	2771.4	33/2$^+$
360.0 *5*	49 *8*	1176.7	15/2$^+$	816.6	11/2$^+$
362.9 *5*	6 *4*	1564.5	(15/2$^-$)	1201.6	17/2$^-$
364.6 *5*	54 *10*	1344.7	15/2$^+$	980.1	11/2$^+$
367.4 *5*	269 *12*	636.2	15/2$^+$	268.70	11/2$^+$
372.8[‡] *5*	21[#] *3*	2911.5	35/2$^-$	2538.8	33/2$^-$
377.4[‡] *5*		3505.1	37/2$^+$	3127.7	35/2$^+$
382.9 *5*	<10	671.92	9/2$^+$	289.0	11/2$^-$
392.2[‡] *5*	11.5[#] *20*	3303.5	37/2$^-$	2911.5	35/2$^-$
393.5 *5*	137 *18*	844.7	17/2$^-$	451.4	13/2$^-$
401.7 *5*	<10	552.13	7/2$^+$	150.3	9/2$^-$
402.2[‡] *5*	7.7[#] *16*	3530.1	39/2$^-$	3127.7	35/2$^+$
403.1 *5*	<10	671.92	9/2$^+$	268.70	11/2$^+$
404.0 *5*	38 *10*	1389.4	17/2$^+$	985.2	13/2$^+$
413.6 *5*	179 *9*	854.1	17/2$^+$	440.5	13/2$^+$
430.5 *5*	<10	552.13	7/2$^+$	121.53	9/2$^+$
434.0 *5*	10 *3*	1976.9	(25/2$^-$)	1542.9	(21/2$^-$)
436.0[@] *5*		1678.8?		1242.9	25/2$^-$
436.5 *5*	44 *6*	1073.7	19/2$^-$	637.0	15/2$^-$
446.4 *5*	23 *7*	1623.1	19/2$^+$	1176.7	15/2$^+$
457.5 *5*	131 *13*	1093.6	19/2$^+$	636.2	15/2$^+$
458.0 *5*	975 *42*	458.04	5/2$^+$	0.0	7/2$^+$
459.5 *5*	14 *7*	1804.2	19/2$^+$	1344.7	15/2$^+$
478.1 *5*	31 *6*	1322.4	21/2$^-$	844.7	17/2$^-$
487.0 *5*	<5	1925.3	(21/2$^-$)	1437.9	(17/2$^-$)
498.4 *5*	84 *5*	1352.4	21/2$^+$	854.1	17/2$^+$
502.5 *5*	<8	1356.5	(15/2$^+$)	854.1	17/2$^+$
515.0 *5*	10 *5*	1588.9	23/2$^-$	1073.7	19/2$^-$
521.0 *5*	<10	2497.9	(29/2$^-$)	1976.9	(25/2$^-$)
527.7 *5*	<10	816.6	11/2$^+$	289.0	11/2$^-$
530.0 *5*	<5	2200.1	(23/2$^-$)	1670.9	(19/2$^-$)
530.1[@] *5*		1772.9		1242.9	25/2$^-$
535.3 *5*	<10	1389.4	17/2$^+$	854.1	17/2$^+$
536.0 *5*	60 *30*	1629.6	23/2$^+$	1093.6	19/2$^+$
540.5 *5*	<10	1176.7	15/2$^+$	636.2	15/2$^+$
541 *1*		2345.2	23/2$^+$	1804.2	19/2$^+$
542.6[‡] *5*	34.5[#] *32*	2771.4	33/2$^+$	2228.7	31/2$^+$
544.7 *5*	<10	985.2	13/2$^+$	440.5	13/2$^+$
547.9 *5*	59 *13*	816.6	11/2$^+$	268.70	11/2$^+$
550.0 *5*	22 *5*	1872.3	25/2$^-$	1322.4	21/2$^-$
550.3 *5*	35 *8*	671.92	9/2$^+$	121.53	9/2$^+$
552.1 *5*	71 *13*	552.13	7/2$^+$	0.0	7/2$^+$
566.4[‡] *5*	100[#]	1536.4	27/2$^-$	970.0	23/2$^-$
569.5 *5*	11 *5*	1921.9	25/2$^+$	1352.4	21/2$^+$
569.7 *5*		569.7	1/2$^+$	0.0	7/2$^+$
582.9[‡] *5*	83[#] *9*	1907.1	29/2$^+$	1324.2	25/2$^+$
585.0 *5*	11 *6*	2173.9	27/2$^-$	1588.9	23/2$^-$

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(HI,xnγ) 2002McZY,2004Dr06 (continued)

γ(^{177}Lu) (continued)

E_γ[†]	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Comments
586.5[‡] *5*	21.4[#] *22*	2771.4	$33/2^+$	2184.8	$31/2^-$	
607.8[‡] *5*	100[#]	1850.5	$29/2^-$	1242.9	$25/2^-$	E_γ,I_γ: 609.0 keV and Iγ=14 *7* in 2002McZY.
618.7[‡] *5*	49.2[#] *46*	3530.1	$39/2^-$	2911.5	$35/2^-$	
623.1[‡] *5*	42[#] *4*	2228.7	$31/2^+$	1605.6	$27/2^+$	
648.3[‡] *5*	100[#]	2184.8	$31/2^-$	1536.4	$27/2^-$	
671.9 *5*	16 *3*	671.92	$9/2^+$	0.0	$7/2^+$	
688.4[‡] *5*	100[#]	2538.8	$33/2^-$	1850.5	$29/2^-$	
690[@] *1*		1545.4	$(17/2^+)$	854.1	$17/2^+$	
695.1 *5*	<10	816.6	$11/2^+$	121.53	$9/2^+$	
716.5 *5*	<10	985.2	$13/2^+$	268.70	$11/2^+$	
720.1 *5*	25 *7*	1356.5	$(15/2^+)$	636.2	$15/2^+$	
726.8[‡] *5*	100[#]	2911.5	$35/2^-$	2184.8	$31/2^-$	
736.2 *5*	<10	1176.7	$15/2^+$	440.5	$13/2^+$	
753.4 *5*	<10	1389.4	$17/2^+$	636.2	$15/2^+$	
758.8[‡] *5*	13.3[#] *35*	3530.1	$39/2^-$	2771.4	$33/2^+$	
761.9 *5*	396 *20*	761.7	$5/2^-$	0.0	$7/2^+$	
764.6[‡] *5*	100[#]	3303.5	$37/2^-$	2538.8	$33/2^-$	
778[@] *1*		1230.3	$11/2^+$	451.4	$13/2^-$	
864.4[‡] *5*	44.1[#] *43*	2771.4	$33/2^+$	1907.1	$29/2^+$	
865 *1*		1305.4	$11/2^+$	440.5	$13/2^+$	
895[@] *1*		1749.0	$(19/2^+)$	854.1	$17/2^+$	
907.9 *5*	<10	1176.7	$15/2^+$	268.70	$11/2^+$	
908[@] *1*		1545.4	$(17/2^+)$	636.2	$15/2^+$	
908.4 *5*		1545.4	$(17/2^+)$	637.0	$15/2^-$	
916.2 *5*	79 *9*	1356.5	$(15/2^+)$	440.5	$13/2^+$	
941.0 *5*	88 *10*	1230.3	$11/2^+$	289.0	$11/2^-$	
962.0[@] *5*		1230.3	$11/2^+$	268.70	$11/2^+$	
1036 *1*		1305.4	$11/2^+$	268.70	$11/2^+$	
1055.2 *5*	<10	1176.7	$15/2^+$	121.53	$9/2^+$	
1062 *1*		1502.6	$13/2^+$	440.5	$13/2^+$	
1067.0 *5*	20 *7*	1356.5	$(15/2^+)$	289.0	$11/2^-$	
1080.3 *5*	20 *7*	1230.3	$11/2^+$	150.3	$9/2^-$	
1088.1 *5*	175 *15*	1356.5	$(15/2^+)$	268.70	$11/2^+$	
1109.0[@] *5*		1230.3	$11/2^+$	121.53	$9/2^+$	
1113.0[@] *5*		1749.0	$(19/2^+)$	636.2	$15/2^+$	
1185 *1*		1305.4	$11/2^+$	121.53	$9/2^+$	
1206.0[@] *5*	<10	1356.5	$(15/2^+)$	150.3	$9/2^-$	
1234 *1*		1502.6	$13/2^+$	268.70	$11/2^+$	
1305 *1*		1305.4	$11/2^+$	0.0	$7/2^+$	
1381 *1*		1502.6	$13/2^+$	121.53	$9/2^+$	

[†] From 2002McZY, unless otherwise stated.
[‡] From 2004Dr06.
[#] Branching intensities from 2004Dr06.
[@] Placement of transition in the level scheme is uncertain.

(HI,xnγ) 2002McZY,2004Dr06

Level Scheme

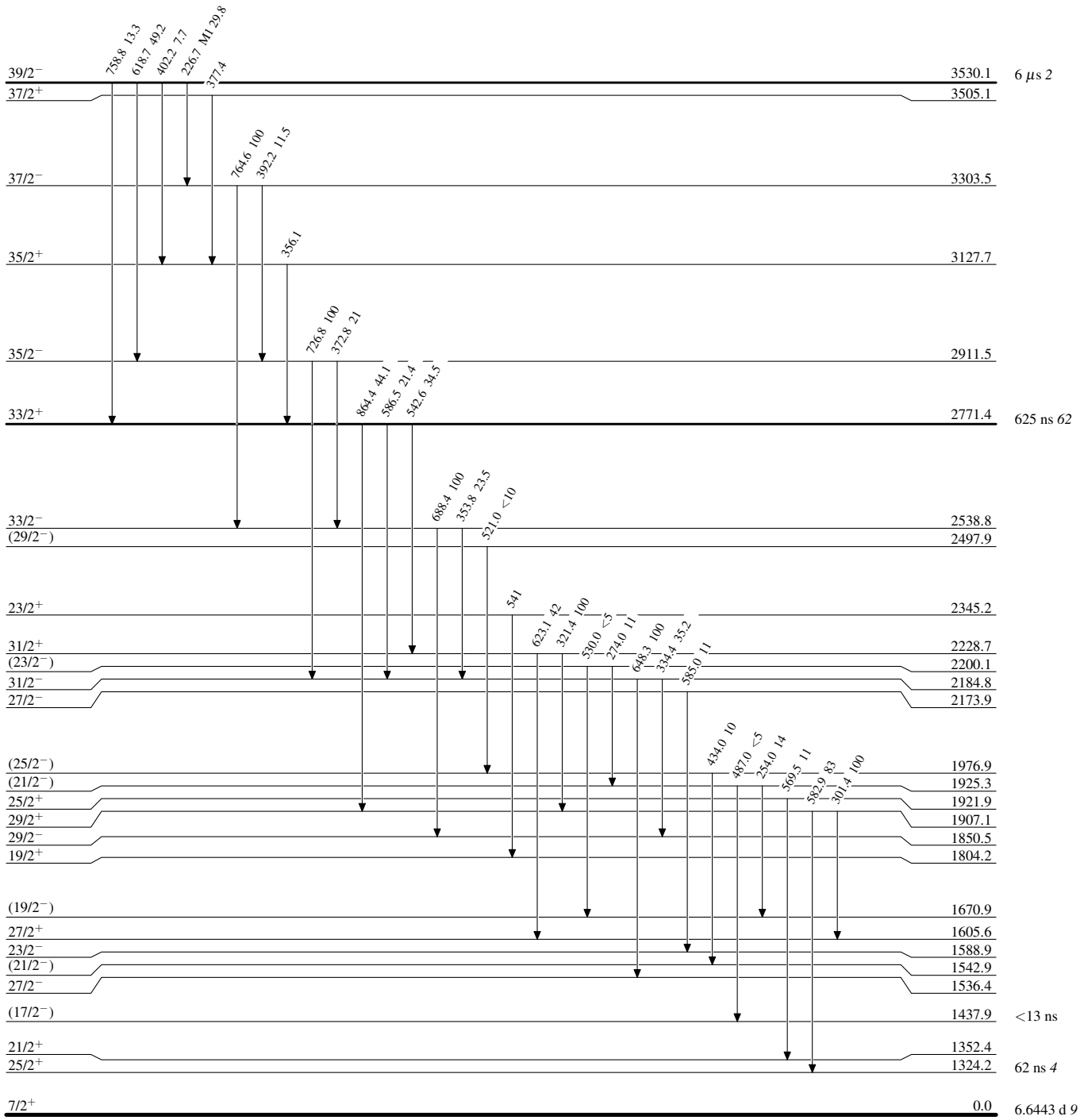
Intensities: Type not specified

Legend

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

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

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



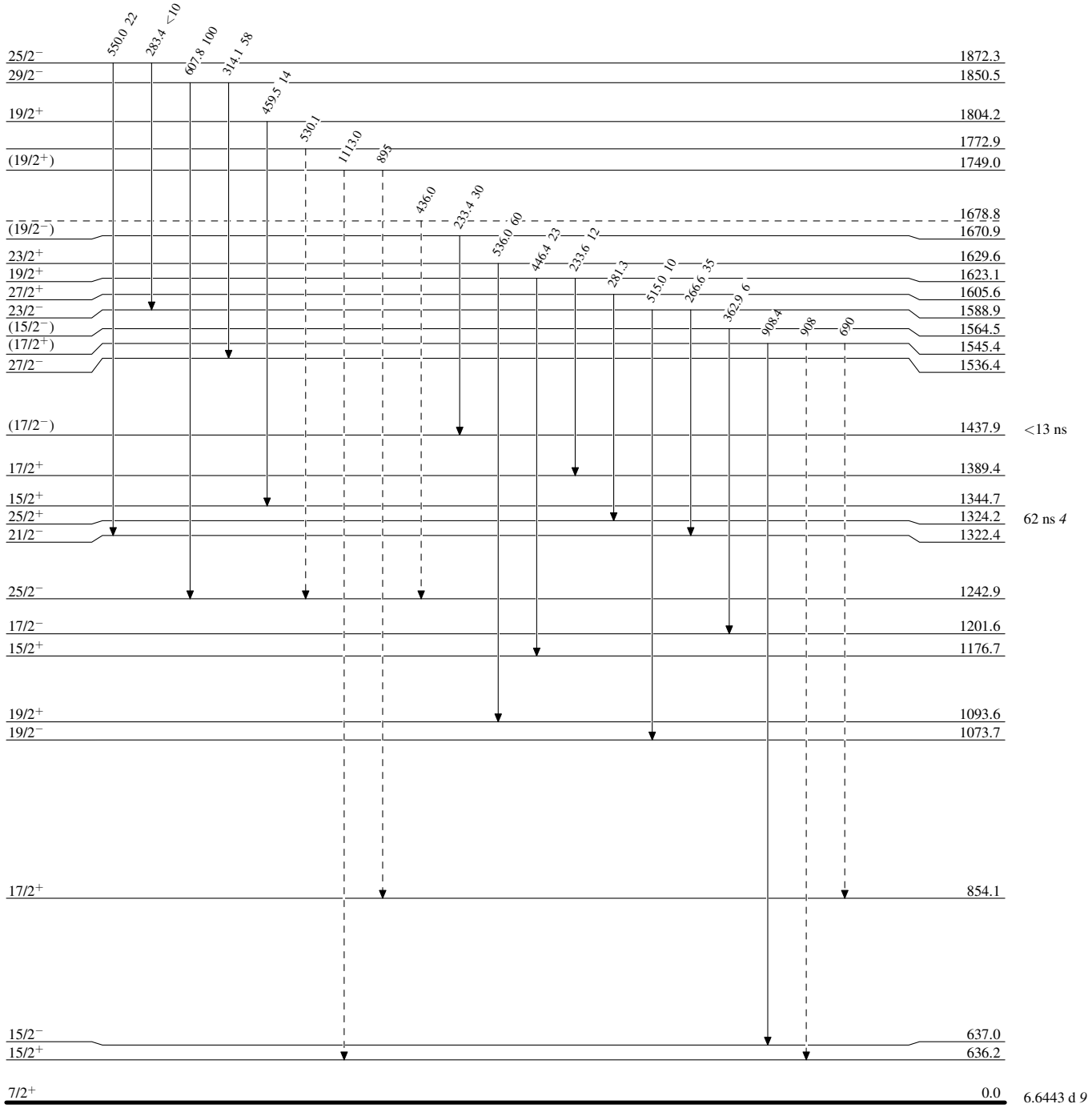
$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06

Level Scheme (continued)

Intensities: Type not specified

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



$^{177}_{71}Lu_{106}$

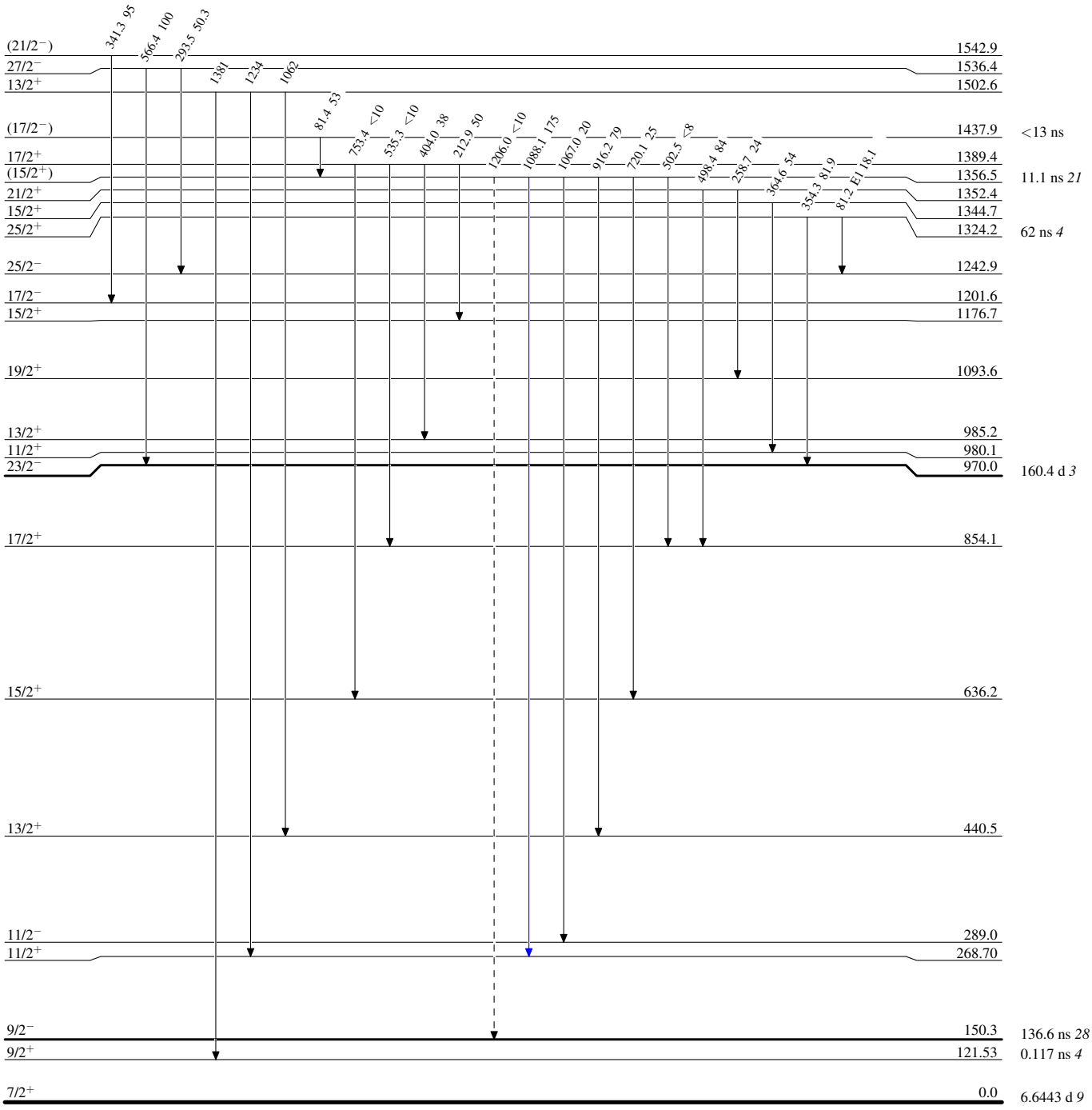
(HI,xnγ) 2002McZY,2004Dr06

Level Scheme (continued)

Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06

Level Scheme (continued)

Intensities: Type not specified

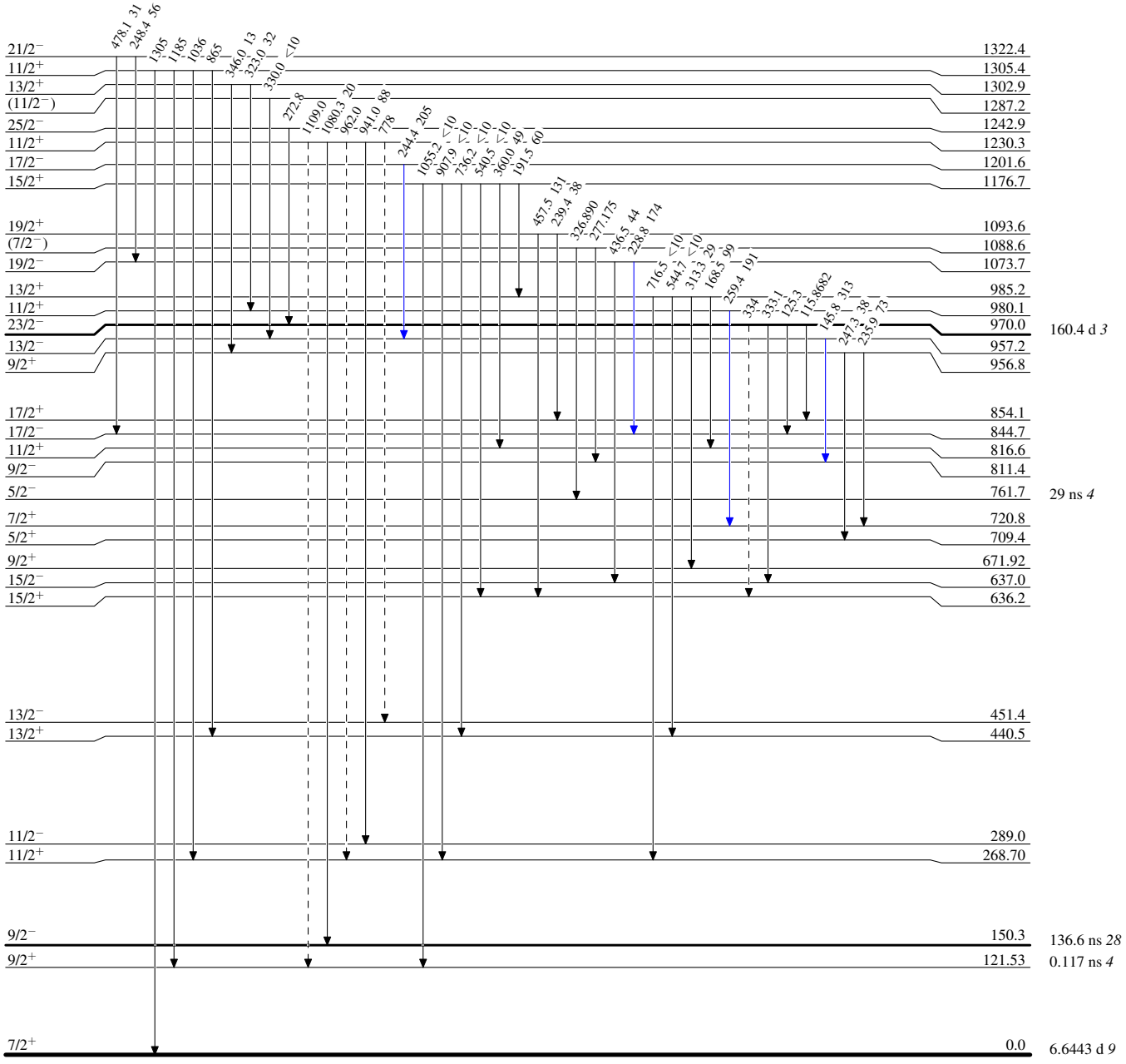
Legend

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

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

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

γ Decay (Uncertain)

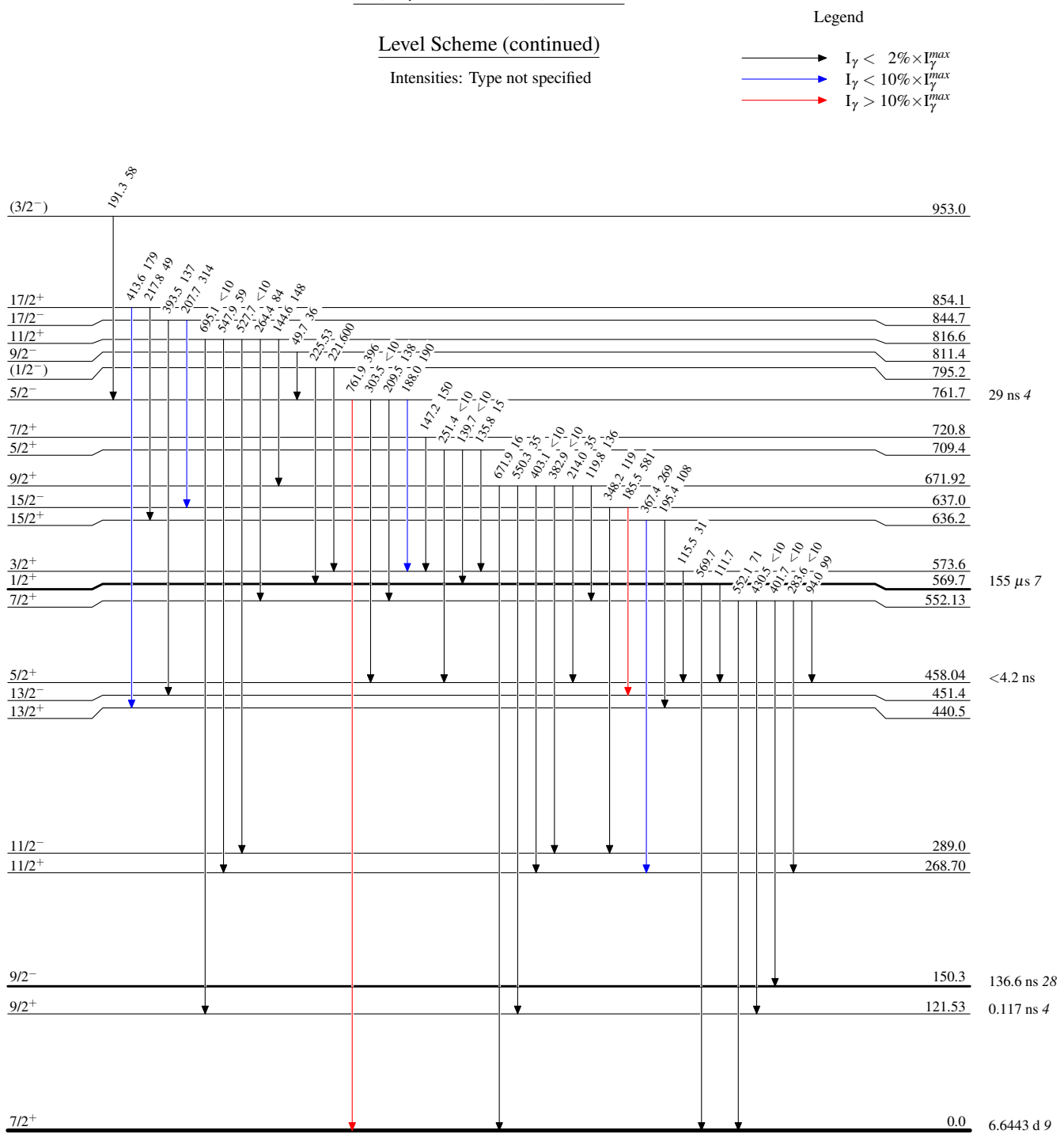


$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06

Level Scheme (continued)

Intensities: Type not specified



$^{177}_{71}Lu_{106}$

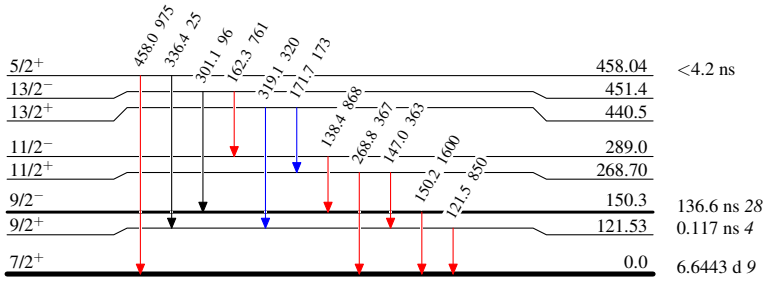
(HI,xnγ) 2002McZY,2004Dr06

Level Scheme (continued)

Intensities: Type not specified

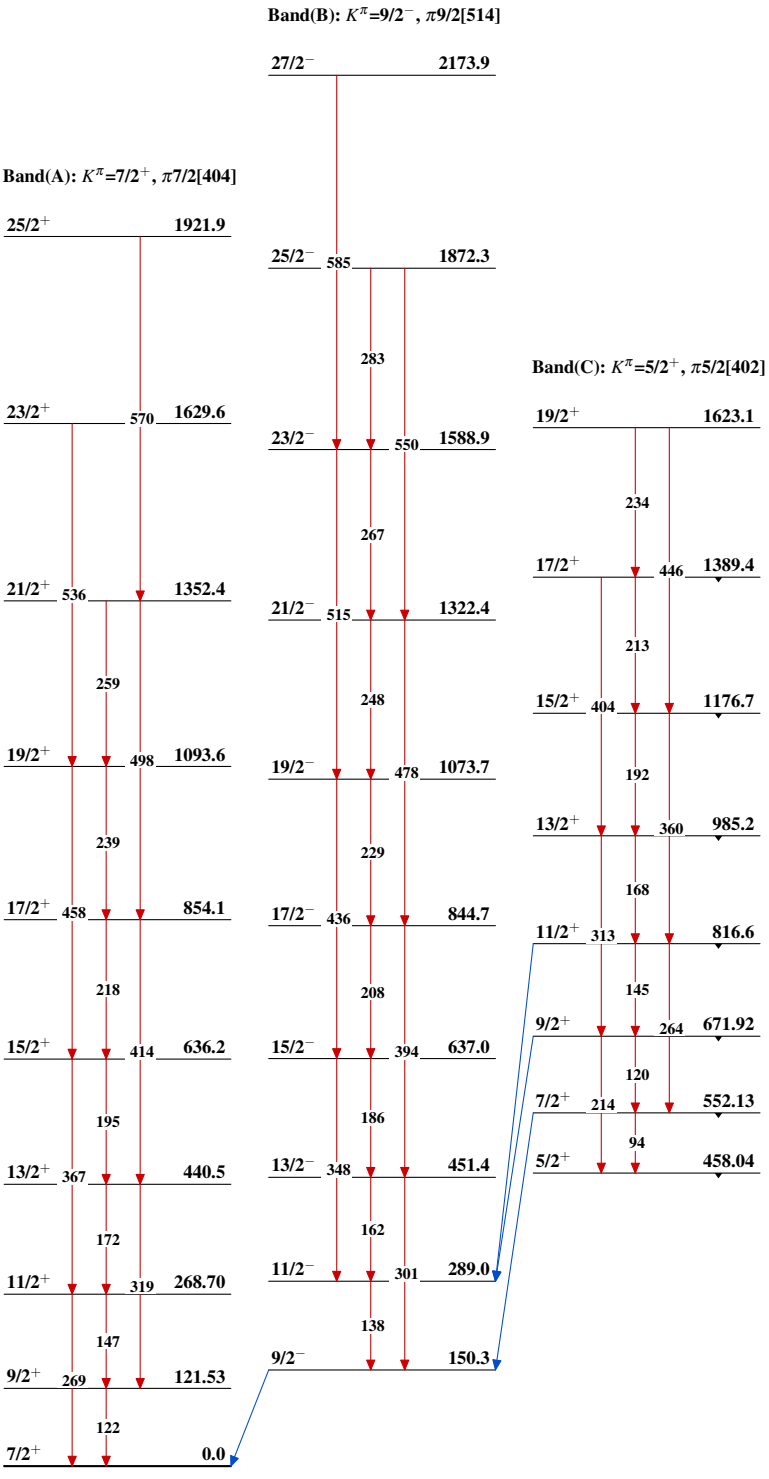
Legend

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



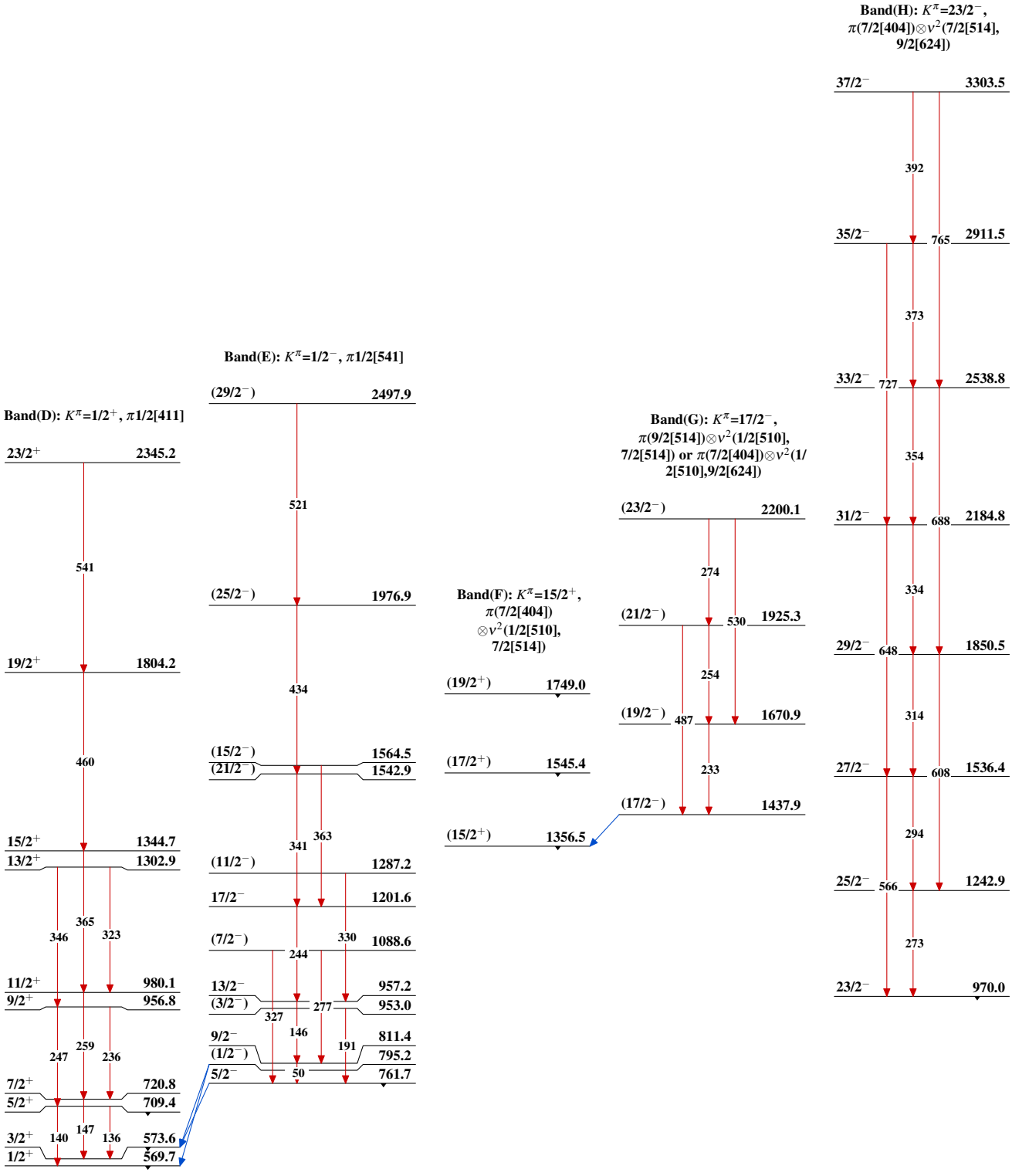
$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06



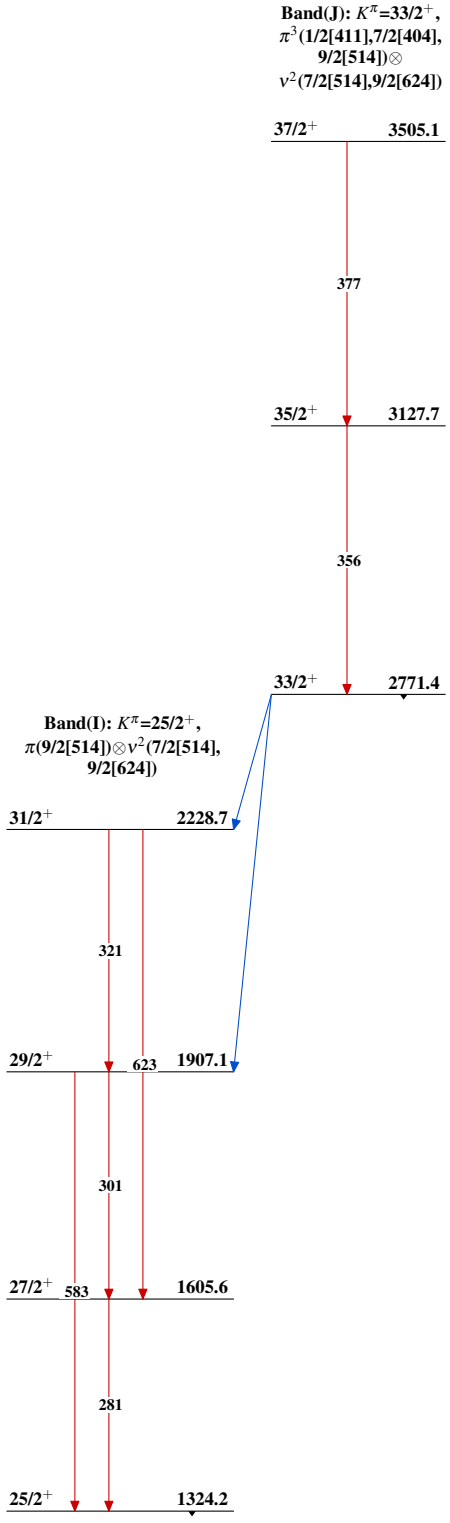
$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06 (continued)



$^{177}_{71}Lu_{106}$

(HI,xnγ) 2002McZY,2004Dr06 (continued)



$^{177}_{71}Lu_{106}$