^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

For SD band information from the ^{160}Gd(^{36}S,4nγ) reaction, please see the (HI,xnγ):SD data set.

1996Wi09: E(^{36}S)=159 MeV, 98% ^{160}Gd self-supporting target, Au stopper foil, same γ detectors as 1995Le33; measured $T_{1/2}$ using Doppler-shift recoil distance method.

1995Le33,1994Le08: E(^{36}S)=159 MeV, Au-backed target enriched in ^{160}Gd, 43 Compton-suppressed Ge detectors (EUROGAM phase-1 array), θ=158°, 134°, 108°, 94°, 86°, 72°; measured Eγ, $\gamma(\theta)$, five-fold γ coin.

^{192}Hg Levels

The level scheme is that of 1995Le33. It differs from that of 1994Le08 primarily due to the addition of the 4234 level and the removal of an 823γ from the γ cascade within band ABCD.

E(level)[†]	J$^\pi$[‡]	E(level)[†]	J$^\pi$[‡]	$T_{1/2}$[#]
0[&]	0$^+$	4951.5[e] *24*	20$^-$	
422.9[&] *10*	2$^+$	5022.4[h] *24*	19$^-$	
1057.9[&] *15*	4$^+$	5131[g] *3*	20$^+$	
1803.6[&] *17*	6$^+$	5217.0[f] *24*	21$^-$	
1844.2[a] *17*	5$^-$	5272[c] *3*	20$^+$	
1977.4[a] *17*	7$^-$	5316.6[d] *25*	20$^+$	
1987?[b]	(6$^-$)	5544.5[h] *24*	21$^-$	
2216.8[b] *19*	8$^-$	5587 *3*	(20$^+$)	
2224.1[a] *19*	9$^-$	5656.8[e] *25*	22$^-$	
2447.5[&] *18*	8$^+$	5701[g] *3*	22$^+$	
2507.9[d] *21*	10$^+$	5788[d] *3*	22$^+$	
2535.8[c] *23*	12$^+$	6013.0[f] *25*	23$^-$	
2633.1[b] *20*	10$^-$	6113[c] *3*	(22$^+$)	
2757.1[a] *21*	11$^-$	6126.6[h] *25*	23$^-$	
2903.2 *23*	10$^+$	6234 *3*	22$^+$	
2951.5[c] *22*	14$^+$	6295 *3*	(22$^+$)	
3047.5[d] *22*	12$^+$	6303[i] *3*	(22$^+$)	
3262.3[b] *21*	12$^-$	6428[g] *3*	24$^+$	
3450.0[a] *22*	13$^-$	6433[i] *3*	(23$^+$)	10.3 ps *+35−27*
3608.6[c] *23*	16$^+$	6439[e] *3*	24$^-$	
3670.1[d] *23*	14$^+$	6709[i] *3*	(24$^+$)	14 ps *+3−4*
3726.3 *23*	14$^+$	6857[f] *3*	25$^-$	
3895.6[e] *22*	14$^-$	6880[j] *3*	23$^{(-)}$	
3985.3[b] *22*	14$^-$	6950[h] *3*	25$^-$	
4011.3[f] *22*	15$^-$	7036[j] *3*	24$^{(-)}$	
4090.4[e] *22*	16$^-$	7043[i] *3*	(25$^+$)	0.7[@] ps *+7−11*
4130.6[d] *23*	16$^+$	7269[e] *3*	26$^-$	
4217.3[f] *22*	17$^-$	7273.6[j] *25*	25$^{(-)}$	
4388.4[e] *23*	18$^-$	7320[g] *3*	26$^+$	
4389.8[c] *25*	18$^+$	7435[i] *3*	(26$^+$)	2.5 ps *+13−7*
4520.4[h] *24*	17$^-$	7517[j] *3*	26$^{(-)}$	
4589.3[f] *23*	19$^-$	7686 *3*		
4741.4[d] *25*	18$^+$	7724[f] *3*	27$^-$	

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^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)

^{192}Hg Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$#	E(level)†	Jπ‡	$T_{1/2}$#
7789.0[j] 25	27(−)		8633[f] 3	29−	
7821[h] 3	27−		8695 3	29−	
7840 3			8713[i] 3	(29+)	0.14 ps +49−14
7928[j] 3	28(−)		8961[i] 3	(30+)	0.9 ps 4
7959[i] 3	(27+)	1.2 ps 10	8991[j] 3	31(−)	
8181 3	(28+)		9196[i] 3	(31+)	2.4 ps +4−3
8196[e] 3	28−		9376[i] 3	(32+)	1.5 ps 3
8209 3	28−		9445[j] 3	32(−)	
8226 3	28−		9666[i] 3	(33+)	
8265[j] 3	29(−)		9934[j] 3	33(−)	
8303[i] 3	(28+)	0.5 ps 5	10038[i] 4	(34+)	
8331[g] 3	28+		10466[j] 3	34(−)	
8544[j] 3	30(−)				

† From least-squares fit to Eγ allowing 1 keV uncertainty In all Eγ data.
‡ From 1995Le33, based on authors′ measured (but untabulated) γ(θ) data and on deduced band structure.
# From Doppler-shift recoil distance (1996Wi09).
@ This value appears to have been misprinted.
& Band(A): g.s. band.
[a] Band(B): band AE. Configuration=((ν $i_{13/2}$)(ν $p_{3/2}$)).
[b] Band(C): band AF. Configuration=((ν $i_{13/2}$)(ν $p_{3/2}$)).
[c] Band(D): band AB. Configuration=(ν $i_{13/2}$)^2.
[d] Band(E): π=+, α=0 band.
[e] Band(F): band ABCF. Configuration=((ν $i_{13/2}$)^3(ν $p_{3/2}$)).
[f] Band(G): band ABCE. Configuration=((ν $i_{13/2}$)^3(ν $p_{3/2}$)).
[g] Band(H): band ABCD. Configuration=(ν $i_{13/2}$)^4.
[h] Band(I): band ABDE. Possibly ((ν $i_{13/2}$)^3(ν $p_{3/2}$)).
[i] Band(J): π=(+) dipole band. Possibly ((π $h_{9/2}$)^2)K=8 coupled with ((ν $i_{13/2}$)^4) or with (((ν $i_{13/2}$)^2)((π $h_{11/2}$)^2)).
[j] Band(K): π=(−) dipole band. Possibly ((π $h_{11/2}$)(π $i_{13/2}$))K=11 coupled with ((ν $i_{13/2}$)^4) or with (((ν $i_{13/2}$)^2)((π $h_{11/2}$)^2)).

γ(^{192}Hg)

γ(θ) was measured by 1995Le33 and 1994Le08; the results of these measurements are not enumerated by the authors, but fig. 1 of 1994Le08 shows a plot of Iγ(158°)/Iγ(86°) for many transitions.

E_γ†	E_i(level)	J^π_i	E_f	J^π_f	Mult.#	α[a]	$I_{(\gamma+ce)}$‡	Comments
88	7928	28(−)	7840					
103	7789.0	27(−)	7686					Mult.: Iγ(158°)/Iγ(86°)=0.9 3 (1994Le08).
105	4090.4	16−	3985.3	14−				
107	7928	28(−)	7821	27−	D			Mult.: Iγ(158°)/Iγ(86°)=0.57 16 (1994Le08).
127	4217.3	17−	4090.4	16−	D			Mult.: Iγ(158°)/Iγ(86°)=0.58 15 (1994Le08) for 127γ and/or 129.8γ.
129.8&	6433	(23+)	6303	(22+)	(M1)	3.75	18.9	Mult.: Iγ(158°)/Iγ(86°)=0.58 15 (1994Le08) for 127γ and/or 129.8γ.
133	1977.4	7−	1844.2	5−				
138	6433	(23+)	6295	(22+)				Mult.: Iγ(158°)/Iγ(86°)=0.82 20 (1994Le08) for 138γ and/or 139γ.

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^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)

$\gamma(^{192}Hg)$ (continued)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[a]	$I_{(\gamma+ce)}$[‡]	Comments
139	7928	$28^{(-)}$	7789.0	$27^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=0.82 *20* (1994Le08) for 138γ and/or 139γ.
143[b]	1987?	(6^-)	1844.2	5^-	(M1)	2.84		E$_\gamma$: erroneously shown as Eγ=343 in both 1994Le08 and 1995Le33; level energy difference is 143 keV. Mult.: Iγ(158°)/Iγ(86°)=0.66 *14* (1994Le08).
144	3047.5	12^+	2903.2	10^+				Mult.: Iγ(158°)/Iγ(86°)=1.85 *23* (1994Le08).
157	7036	$24^{(-)}$	6880	$23^{(-)}$	(M1)	2.18		Mult.: Iγ(158°)/Iγ(86°)=0.90 *17* (1994Le08).
174	1977.4	7^-	1803.6	6^+				
179.8[&]	9376	(32^+)	9196	(31^+)	(M1)	1.489	13.3	Mult.: Iγ(158°)/Iγ(86°)=0.64 *14* (1994Le08).
195	4090.4	16^-	3895.6	14^-				
201	4589.3	19^-	4388.4	18^-				
206	4217.3	17^-	4011.3	15^-				
222	8181	(28^+)	7959	(27^+)				
234.8[&]	9196	(31^+)	8961	(30^+)	(M1)	0.707	14.8	Mult.: Iγ(158°)/Iγ(86°)=0.58 *14* (1994Le08).
237	7273.6	$25^{(-)}$	7036	$24^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=0.50 *14* (1994Le08) for 237γ and/or 239γ.
239	2216.8	8^-	1977.4	7^-				Mult.: Iγ(158°)/Iγ(86°)=0.66 *14* (1994Le08).
244	7517	$26^{(-)}$	7273.6	$25^{(-)}$	(M1)	0.636		Mult.: Iγ(158°)/Iγ(86°)=0.56 *14* (1994Le08).
247	2224.1	9^-	1977.4	7^-				
248.1[&]	8961	(30^+)	8713	(29^+)	[M1]	0.607	8.6	
270	5587	(20^+)	5316.6	20^+				
272	7789.0	$27^{(-)}$	7517	$26^{(-)}$	(M1)	0.472		Mult.: Iγ(158°)/Iγ(86°)=0.47 *14* (1994Le08).
276.3[&]	6709	(24^+)	6433	(23^+)	(M1)	0.452	17.5	Mult.: Iγ(158°)/Iγ(86°)=0.27 *10* (1994Le08).
280	8544	$30^{(-)}$	8265	$29^{(-)}$	(M1)	0.436		Mult.: Iγ(158°)/Iγ(86°)=0.53 *14* (1994Le08).
284	2507.9	10^+	2224.1	9^-	D			Mult.: Iγ(158°)/Iγ(86°)=0.71 *11* (1994Le08).
290	9666	(33^+)	9376	(32^+)	(M1)	0.396		Mult.: Iγ(158°)/Iγ(86°)=0.59 *14* (1994Le08).
298	4388.4	18^-	4090.4	16^-				
303	4520.4	17^-	4217.3	17^-				Mult.: Iγ(158°)/Iγ(86°)=0.81 *26* (1994Le08) for 303γ and/or 304γ.
304	7821	27^-	7517	$26^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=0.81 *26* (1994Le08) for 303γ and/or 304γ.
333.6[&]	7043	(25^+)	6709	(24^+)	(M1)	0.270	11.5	Mult.: Iγ(158°)/Iγ(86°)=0.18 *15* (1994Le08).
337	8265	$29^{(-)}$	7928	$28^{(-)}$				
343.4[&]	8303	(28^+)	7959	(27^+)	(M1)	0.250	3.7	Mult.: Iγ(158°)/Iγ(86°)=0.53 *15* (1994Le08).
372	4589.3	19^-	4217.3	17^-				Mult.: Iγ(158°)/Iγ(86°)=0.57 *14* (1994Le08) for doublet.
372	10038	(34^+)	9666	(33^+)				Mult.: Iγ(158°)/Iγ(86°)=0.57 *14* (1994Le08) for doublet.
386	8226	28^-	7840					
391.9[&]	7435	(26^+)	7043	(25^+)	(M1)	0.1752	5.1	
394	7273.6	$25^{(-)}$	6880	$23^{(-)}$				
395	2903.2	10^+	2507.9	10^+				
404	4130.6	16^+	3726.3	14^+	(E2)	0.0462		Mult.: Iγ(158°)/Iγ(86°)=1.74 *20* (1994Le08).
405	8226	28^-	7821	27^-	D			Mult.: Iγ(158°)/Iγ(86°)=0.72 *18* (1994Le08).
405.9[&]	6709	(24^+)	6303	(22^+)	(E2)	0.0456	3.6	Mult.: Iγ(158°)/Iγ(86°)=1.8 *4* (1994Le08).
409	2633.1	10^-	2224.1	9^-	D			Mult.: Iγ(158°)/Iγ(86°)=0.82 *24* (1994Le08).
409.1[&]	8713	(29^+)	8303	(28^+)	(M1)	0.1562	2.8	Mult.: Iγ(158°)/Iγ(86°)=0.82 *24* (1994Le08) for 409γ+410γ doublet.
410[b]	7928	$28^{(-)}$	7517	$26^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=0.82 *24* (1994Le08) for 409γ and/or 410γ.
413	7686		7273.6	$25^{(-)}$				
414.6[&]	9376	(32^+)	8961	(30^+)	[E2]	0.0431	1.0	

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^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)

$\gamma(^{192}Hg)$ (continued)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[a]	$I_{(\gamma+ce)}$[‡]	Comments
416	2633.1	10^-	2216.8	8^-				
416	2951.5	14^+	2535.8	12^+				
422.9[&]	422.9	2^+	0	0^+	(E2)	0.0410	100	Mult.: Iγ(158°)/Iγ(86°)=1.63 *15* (1994Le08).
446	3895.6	14^-	3450.0	13^-	D			Mult.: Iγ(158°)/Iγ(86°)=0.42 *15* (1994Le08).
447	8991	$31^{(-)}$	8544	$30^{(-)}$	(M1)	0.1234		Mult.: Iγ(158°)/Iγ(86°)=0.42 *15* (1994Le08).
454	9445	$32^{(-)}$	8991	$31^{(-)}$	(M1)	0.1184		Mult.: Iγ(158°)/Iγ(86°)=0.43 *14* (1994Le08).
461	4130.6	16^+	3670.1	14^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.80 *23* (1994Le08).
470	2447.5	8^+	1977.4	7^-				
470	9666	(33^+)	9196	(31^+)				
472	5788	22^+	5316.6	20^+	(E2)	0.0310		Mult.: Iγ(158°)/Iγ(86°)=1.47 *19* (1994Le08).
476	8265	$29^{(-)}$	7789.0	$27^{(-)}$	(E2)	0.0304		Mult.: Iγ(158°)/Iγ(86°)=2.1 *4* (1994Le08).
481	7517	$26^{(-)}$	7036	$24^{(-)}$	(E2)	0.0296		Mult.: Iγ(158°)/Iγ(86°)=2.0 *3* (1994Le08).
483.2[&]	9196	(31^+)	8713	(29^+)	(E2)	0.0293	1.4	Mult.: Iγ(158°)/Iγ(86°)=1.3 *3* (1994Le08).
490	9934	$33^{(-)}$	9445	$32^{(-)}$	(M1)	0.0967		Mult.: Iγ(158°)/Iγ(86°)=0.43 *15* (1994Le08).
502	5022.4	19^-	4520.4	17^-	(E2)	0.0267		Mult.: Iγ(158°)/Iγ(86°)=1.37 *19* (1994Le08).
505	3262.3	12^-	2757.1	11^-				
512	3047.5	12^+	2535.8	12^+				
515	7789.0	$27^{(-)}$	7273.6	$25^{(-)}$				
522	4130.6	16^+	3608.6	16^+	[E2]	0.0243		Mult.: Iγ(158°)/Iγ(86°)=1.57 *25* (1994Le08) for doublet.
522	5544.5	21^-	5022.4	19^-	[E2]	0.0243		Mult.: Iγ(158°)/Iγ(86°)=1.57 *25* (1994Le08) for doublet.
524.4[&]	7959	(27^+)	7435	(26^+)	(M1)	0.0809	6.5	Mult.: Iγ(158°)/Iγ(86°)=0.57 *17* (1994Le08).
532[b]	10466	$34^{(-)}$	9934	$33^{(-)}$				
533	2757.1	11^-	2224.1	9^-	(E2)	0.0231		Mult.: Iγ(158°)/Iγ(86°)=1.54 *20* (1994Le08).
540	3047.5	12^+	2507.9	10^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.61 *20* (1994Le08).
561	4011.3	15^-	3450.0	13^-				
563	4951.5	20^-	4388.4	18^-				
570	5701	22^+	5131	20^+	(E2)	0.0198		Mult.: Iγ(158°)/Iγ(86°)=1.72 *21* (1994Le08).
575	5316.6	20^+	4741.4	18^+				
582	6126.6	23^-	5544.5	21^-	(E2)	0.0188		Mult.: Iγ(158°)/Iγ(86°)=1.41 *24* (1994Le08).
593	5544.5	21^-	4951.5	20^-				
611	4741.4	18^+	4130.6	16^+				Mult.: Iγ(158°)/Iγ(86°)=1.75 *22* (1994Le08) for doublet.
611.0[&]	7043	(25^+)	6433	(23^+)	(E2)	0.01688	26.1	Mult.: Iγ(158°)/Iγ(86°)=1.75 *22* (1994Le08) for doublet.
616	8544	$30^{(-)}$	7928	$28^{(-)}$	(E2)	0.01657		Mult.: Iγ(158°)/Iγ(86°)=1.9 *3* (1994Le08).
623	3670.1	14^+	3047.5	12^+	(E2)	0.01616		Mult.: Iγ(158°)/Iγ(86°)=1.77 *21* (1994Le08).
628	5217.0	21^-	4589.3	19^-				
629	3262.3	12^-	2633.1	10^-				
633	3895.6	14^-	3262.3	12^-				
635	1057.9	4^+	422.9	2^+				
640	6428	24^+	5788	22^+				Mult.: Iγ(158°)/Iγ(86°)=1.37 *19* (1994Le08) for 640γ and/or 644γ.
644	2447.5	8^+	1803.6	6^+				Mult.: Iγ(158°)/Iγ(86°)=1.37 *19* (1994Le08) for 640γ and/or 644γ.
657	3608.6	16^+	2951.5	14^+				Mult.: Iγ(158°)/Iγ(86°)=1.9 *4* (1994Le08) for 657γ and/or 659.2γ.
659.2[&]	8961	(30^+)	8303	(28^+)	[E2]	0.01426	4.8	Mult.: Iγ(158°)/Iγ(86°)=1.9 *4* (1994Le08) for 657γ and/or 659.2γ.
679	3726.3	14^+	3047.5	12^+	(E2)	0.01337		Mult.: Iγ(158°)/Iγ(86°)=1.47 *20* (1994Le08).
693	3450.0	13^-	2757.1	11^-				
705	5656.8	22^-	4951.5	20^-				Mult.: Iγ(158°)/Iγ(86°)=2.1 *4* (1994Le08) for 705γ and/or 708γ.

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^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)

$\gamma(^{192}Hg)$ (continued)

E_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	α[a]	$I_{(\gamma+ce)}$ ‡	Comments
708	8226	28^-	7517	$26^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=2.1 *4* (1994Le08) for 705γ and/or 708γ.
716	6303	(22^+)	5587	(20^+)				
719	3670.1	14^+	2951.5	14^+				
723	3985.3	14^-	3262.3	12^-	(E2)	0.01169		Mult.: Iγ(158°)/Iγ(86°)=1.77 *23* (1994Le08).
725.3&	7435	(26^+)	6709	(24^+)	[E2]	0.01161	4.9	Mult.: Iγ(158°)/Iγ(86°)=1.68 *17* (1994Le08) for 725γ and/or 727γ.
727	6428	24^+	5701	22^+				
727	8991	$31^{(-)}$	8265	$29^{(-)}$				Mult.: Iγ(158°)/Iγ(86°)=1.68 *17* (1994Le08) for 725γ and/or 727γ.
741	5131	20^+	4389.8	18^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.56 *21* (1994Le08).
746	1803.6	6^+	1057.9	4^+	(E2)	0.01094		Mult.: Iγ(158°)/Iγ(86°)=1.63 *14* (1994Le08).
753.7&	8713	(29^+)	7959	(27^+)	(E2)	0.01070	1.6	Mult.: Iγ(158°)/Iγ(86°)=1.96 *24* or 1.89 *23* (1994Le08); two data points are shown At this energy In fig. 1 but only one transition is known.
781	4389.8	18^+	3608.6	16^+				
781	8961	(30^+)	8181	(28^+)				
782	6439	24^-	5656.8	22^-				
786	1844.2	5^-	1057.9	4^+	D			Mult.: Iγ(158°)/Iγ(86°)=0.73 *9* (1994Le08).
796	6013.0	23^-	5217.0	21^-				
x823@								
823	6950	25^-	6126.6	23^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.89 *16* (1994Le08).
830	7269	26^-	6439	24^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.61 *16* (1994Le08).
841	6113	(22^+)	5272	20^+	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.93 *24* (1994Le08).
844	6857	25^-	6013.0	23^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.84 *22* (1994Le08).
846	5587	(20^+)	4741.4	18^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.57 *17* (1994Le08).
867	7724	27^-	6857	25^-				Mult.: Iγ(158°)/Iγ(86°)=1.61 *16* (1994Le08) for 867γ doublet.
867.6&	8303	(28^+)	7435	(26^+)	[E2]		5.0	Mult.: Iγ(158°)/Iγ(86°)=1.61 *16* (1994Le08) for doublet.
870	7821	27^-	6950	25^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.80 *15* (1994Le08).
882	5272	20^+	4389.8	18^+	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.73 *21* (1994Le08).
889	7840		6950	25^-	Q			Mult.: Iγ(158°)/Iγ(86°)=1.85 *23* (1994Le08).
892	7320	26^+	6428	24^+	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.62 *16* (1994Le08).
900	9445	$32^{(-)}$	8544	$30^{(-)}$	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.6 *3* (1994Le08).
909	8633	29^-	7724	27^-				Mult.: Iγ(158°)/Iγ(86°)=1.9 *3* (1994Le08) for 909γ and/or 910γ.
910	6126.6	23^-	5217.0	21^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.9 *3* (1994Le08) for 909γ and/or 910γ.
915.6&	7959	(27^+)	7043	(25^+)	(E2)		3.6	Mult.: Iγ(158°)/Iγ(86°)=1.93 *23* (1994Le08).
927	8196	28^-	7269	26^-	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.83 *23* (1994Le08).
933	7789.0	$27^{(-)}$	6857	25^-	Q			Mult.: Iγ(158°)/Iγ(86°)=1.9 *3* (1994Le08).
940	8209	28^-	7269	26^-	Q			Mult.: Iγ(158°)/Iγ(86°)=1.9 *3* (1994Le08).
942	9934	$33^{(-)}$	8991	$31^{(-)}$	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.48 *27* (1994Le08).
955	5544.5	21^-	4589.3	19^-				
962	6234	22^+	5272	20^+	(Q)			Mult.: Iγ(158°)/Iγ(86°)=1.2 *3* (1994Le08).
971	8695	29^-	7724	27^-	(Q)			Mult.: Iγ(158°)/Iγ(86°)=1.2 *3* (1994Le08).
978	6295	(22^+)	5316.6	20^+	(E2)			Mult.: Iγ(158°)/Iγ(86°)=2.1 *3* (1994Le08).
982	6113	(22^+)	5131	20^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.3 *3* (1994Le08).
987	6303	(22^+)	5316.6	20^+	Q			Mult.: Iγ(158°)/Iγ(86°)=1.71 *25* (1994Le08).
1011	8331	28^+	7320	26^+	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.3 *3* (1994Le08).
1021	10466	$34^{(-)}$	9445	$32^{(-)}$	(E2)			Mult.: Iγ(158°)/Iγ(86°)=1.33 *23* (1994Le08).
1060	4011.3	15^-	2951.5	14^+				

Continued on next page (footnotes at end of table)

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)

$\gamma(^{192}Hg)$ (continued)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
1134	3670.1	14^+	2535.8	12^+	Q	Mult.: Iγ(158°)/Iγ(86°)=1.55 *20* (1994Le08).
1148	7273.6	$25^{(-)}$	6126.6	23^-		
1179	4130.6	16^+	2951.5	14^+	Q	Mult.: Iγ(158°)/Iγ(86°)=1.5 *3* (1994Le08).
1190	3726.3	14^+	2535.8	12^+	Q	Mult.: Iγ(158°)/Iγ(86°)=1.3 *4* (1994Le08).
1247	7686		6439	24^-	Q	Mult.: Iγ(158°)/Iγ(86°)=1.52 *25* (1994Le08).
1260	7273.6	$25^{(-)}$	6013.0	23^-	(E2)	Mult.: Iγ(158°)/Iγ(86°)=1.8 *3* (1994Le08).

† From 1995Le33, except as noted. Eγ from 1994Le08 differs by at most 1 keV. Neither 1995Le33 nor 1994Le08 state uncertainties.

‡ Intensity from 1996Wi09 relative to Ti(422.9)=100; authors do not state uncertainties.

From Iγ(158°)/Iγ(86°) read by evaluator from fig. 1 of 1994Le08, assigning $\Delta\pi$=(No) for intraband transitions, except As noted. expected values are 1.63 for stretched Q and 0.70 for pure ΔJ=1 transitions near J=30.

@ From 1994Le08; uncertainty unstated by authors.

& From 1996Wi09; authors do not state uncertainty.

a 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.

b Placement of transition in the level scheme is uncertain.

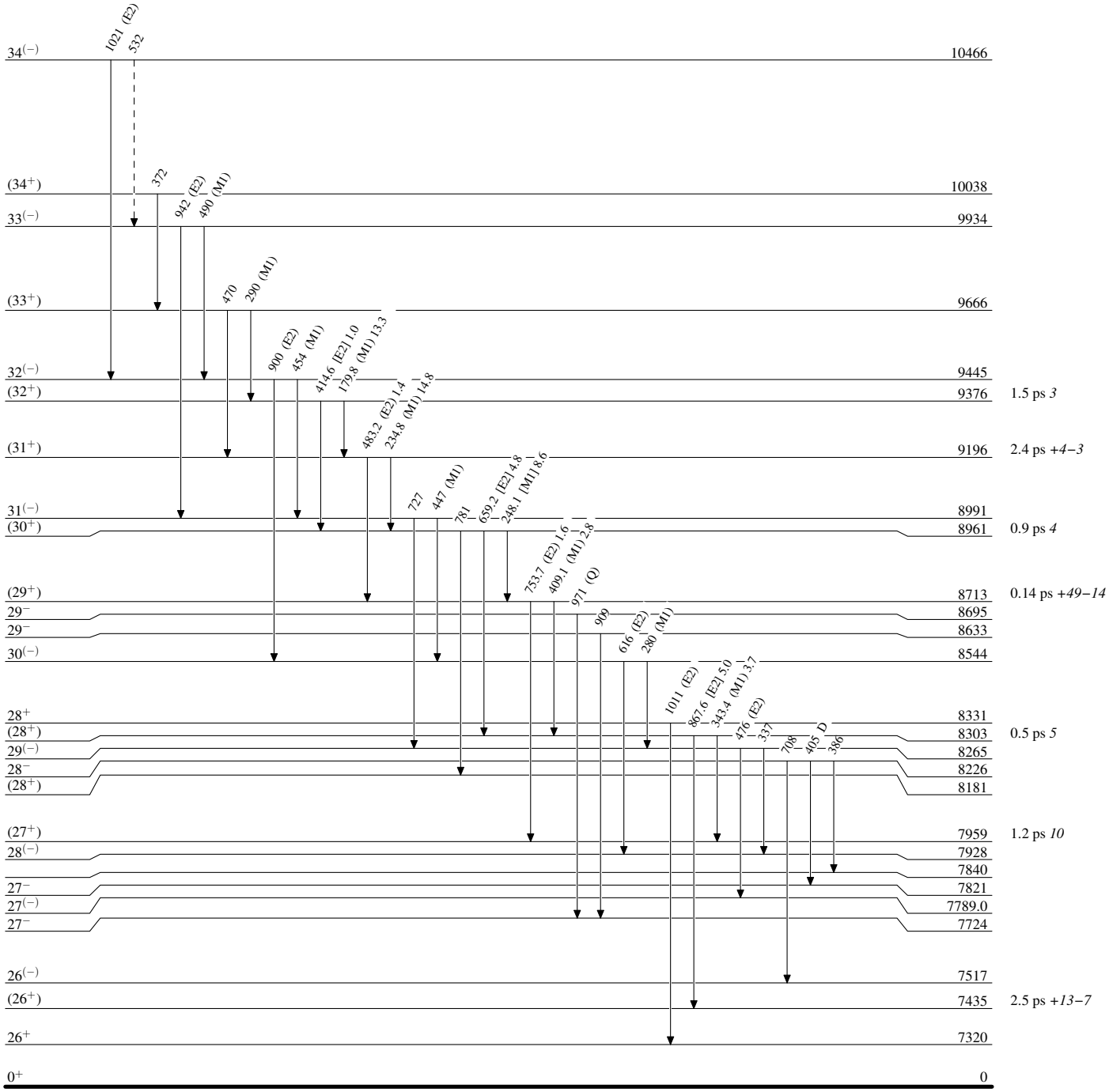
x γ ray not placed in level scheme.

Legend

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

Level Scheme

- - - - - - ► γ Decay (Uncertain)

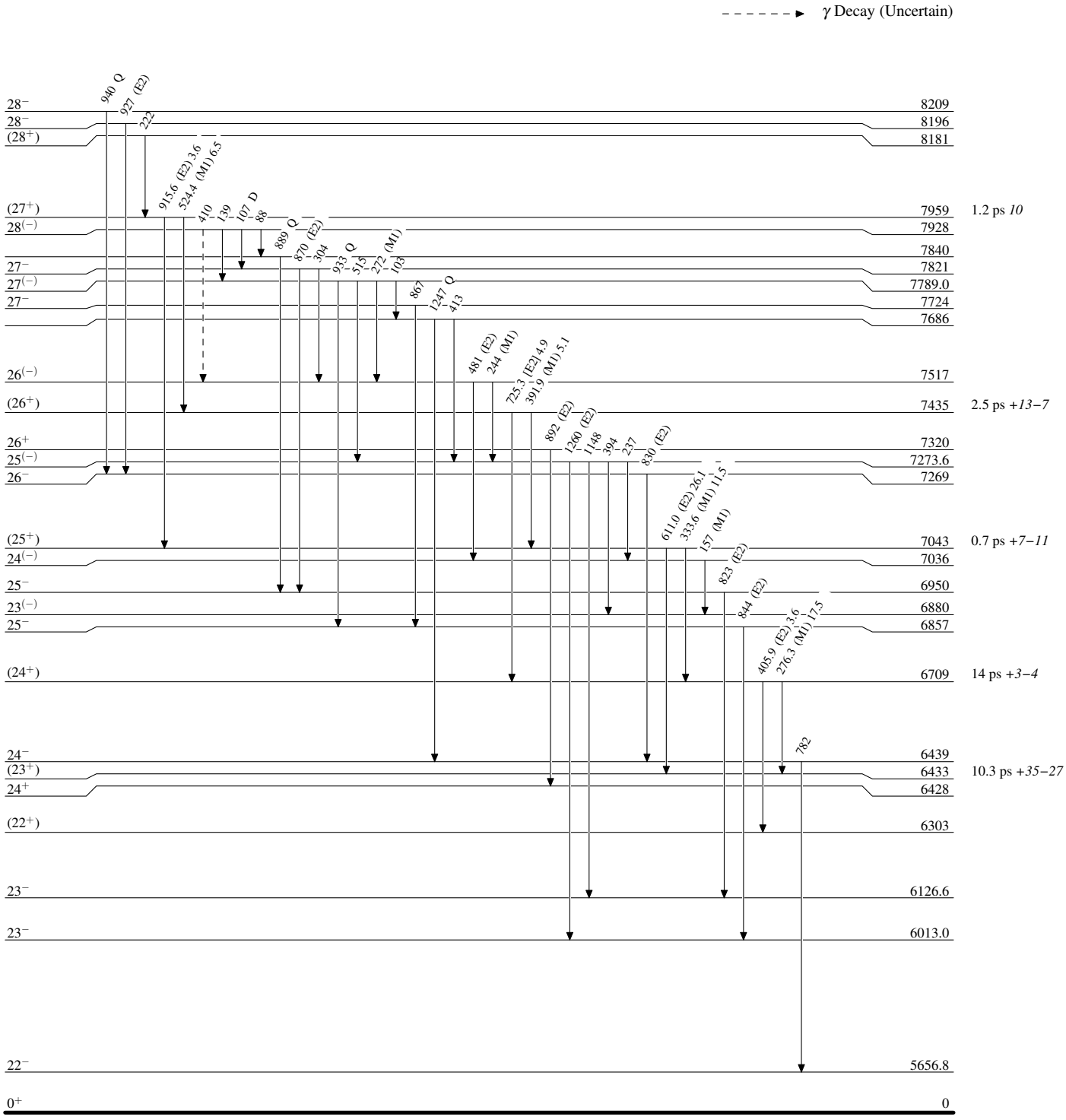


$^{192}_{80}Hg_{112}$

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

Legend

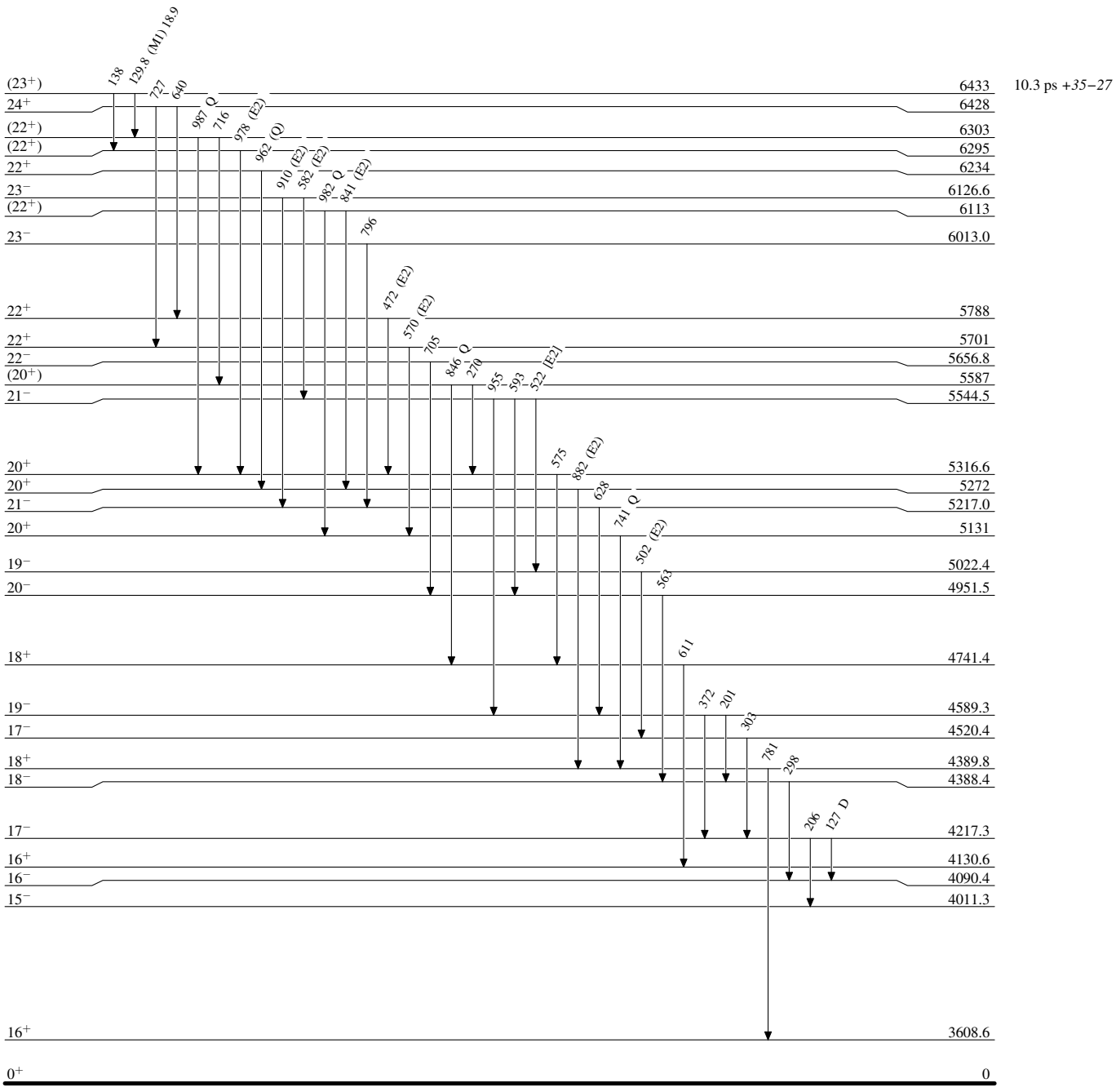
Level Scheme (continued)



$^{192}_{80}Hg_{112}$

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

Level Scheme (continued)



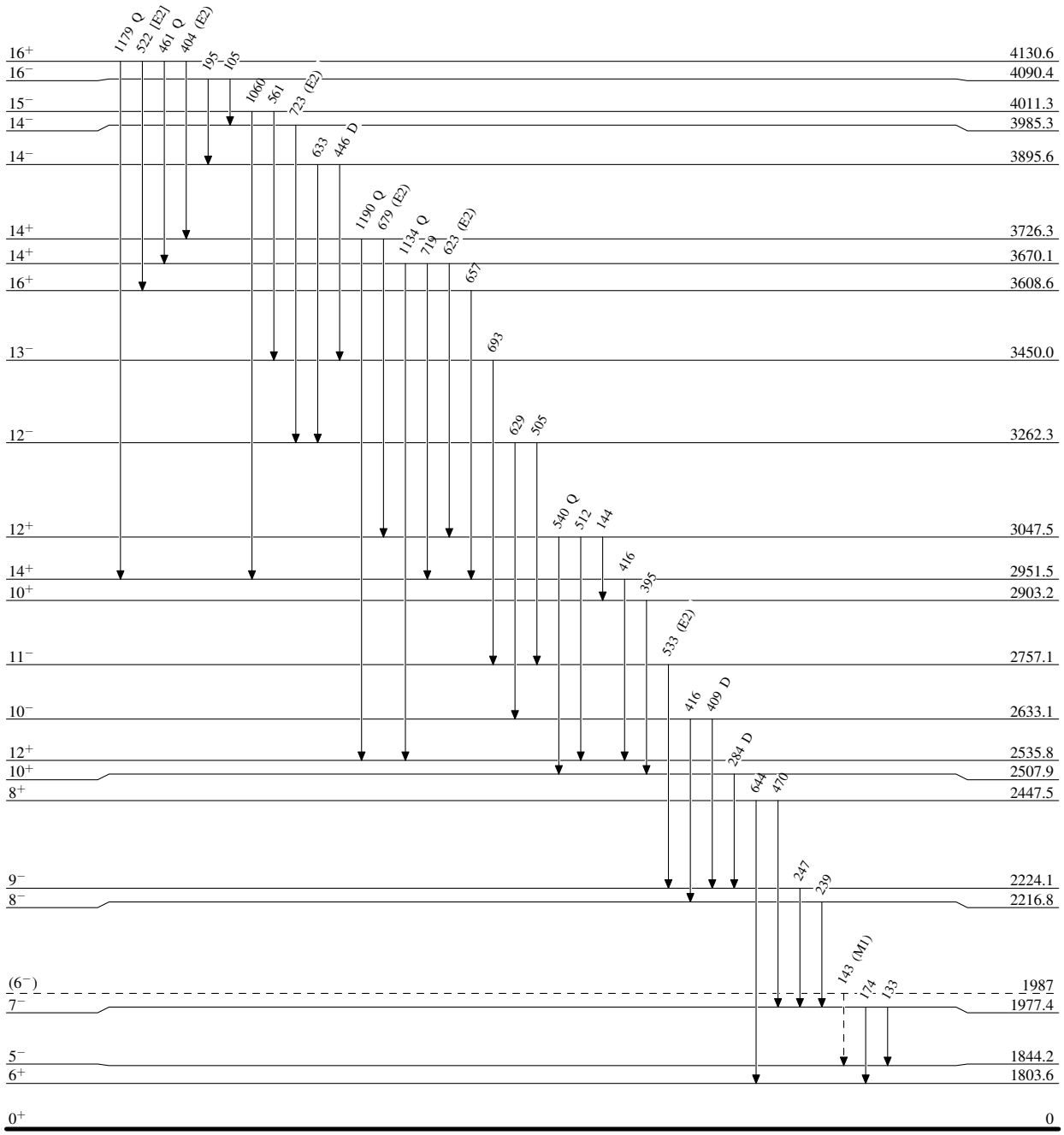
$^{192}_{80}Hg_{112}$

Legend

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

Level Scheme (continued)

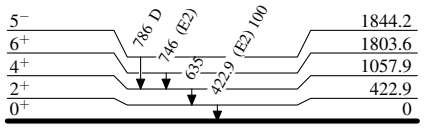
γ Decay (Uncertain)



$^{192}_{80}Hg_{112}$

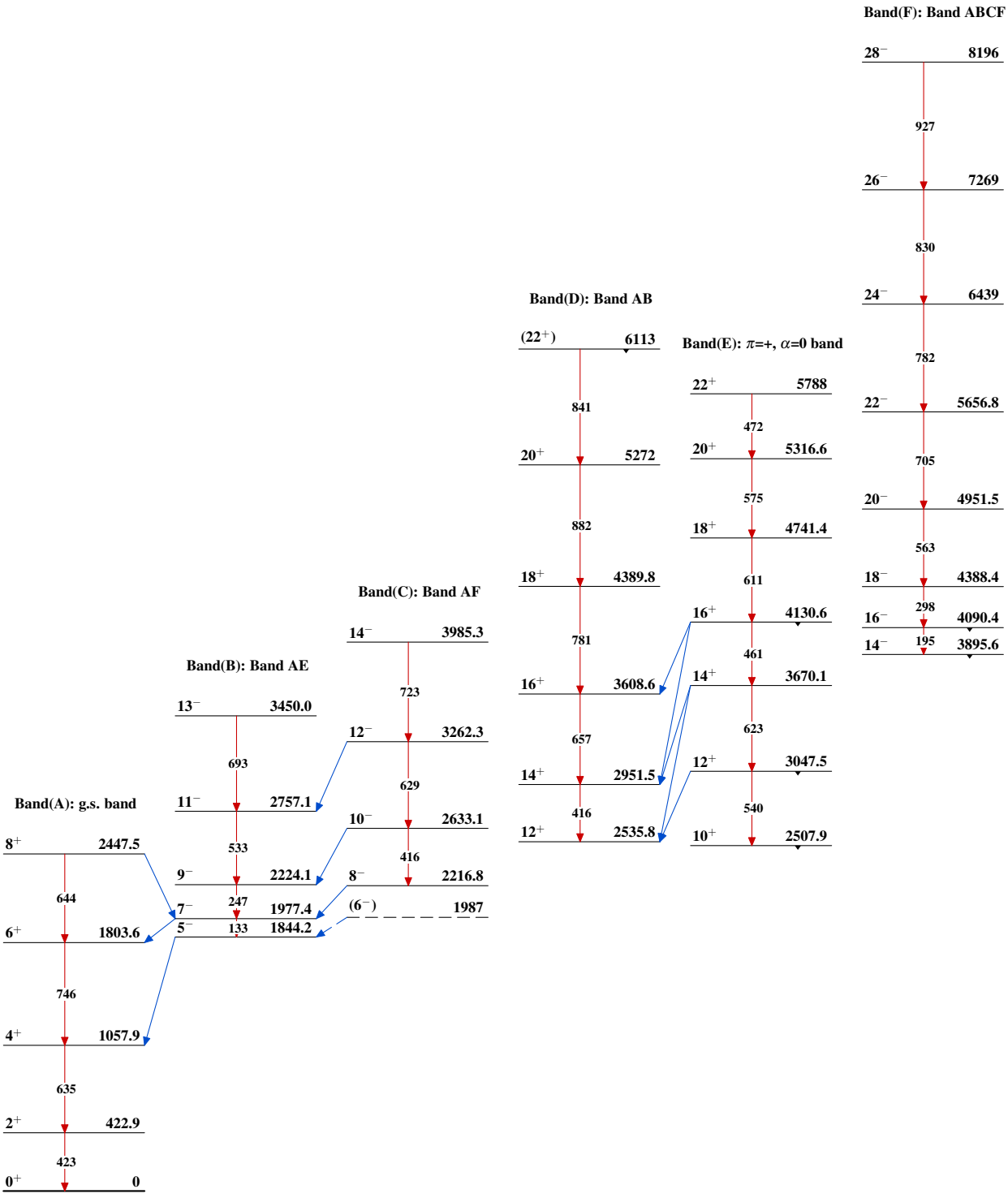
^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08

Level Scheme (continued)



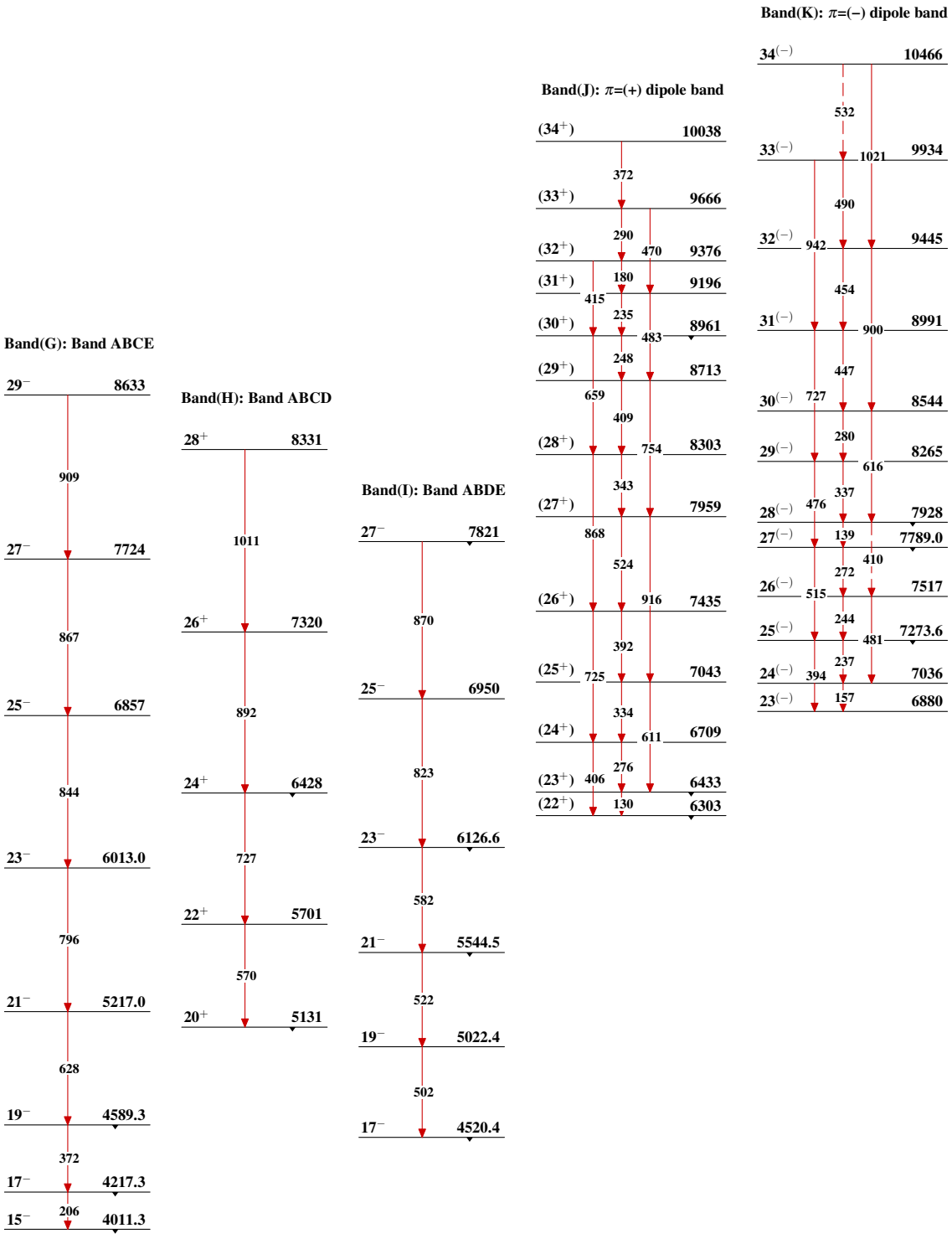
$^{192}_{80}Hg_{112}$

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08



$^{192}_{80}Hg_{112}$

^{160}Gd(^{36}S,4nγ) 1996Wi09,1995Le33,1994Le08 (continued)



$^{192}_{80}Hg_{112}$