Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 134, 149 (2016)	15-Apr-2015

Q(β^-)=−7217 *12*; S(n)=8299 *12*; S(p)=2793 *21*; Q(α)=6038 *4* 2012Wa38

Q(εp)=5075 *15* (2012Wa38).

Production: ^{155}Gd(^{32}S,4nγ), E=159, 160 MeV (1995La10,1995Sh04 ,1993Bi17); ^{168}Yb(^{22}Ne,^{7}nγ), E=129 MeV (2002Du22); ^{187}Pb α decay.

For calculation of α-cluster preformation probability, see 2015Se01. For calculation of $T_{1/2}$ for α decay, see 2014Is09 (angle-dependent potential), 2013Ja16.

For isotope shift data see, e.g., 1972Bo09, 1976Bo09.

Band structure is adopted from ^{155}Gd(^{32}S,4nγ) E=159 MeV (1995La10), with the addition of 422γ, 362γ and 729γ In 9/2[624] band seen only by 1995Sh04. For the 1/2[521] band, however, the structure differs significantly from that deduced in ^{155}Gd(^{32}S,4nγ) E=160 MeV by 1995Sh04: the 67γ of 1995La10 is not seen by 1995Sh04 (possibly below their spectrum cutoff); an 89γ in 1995Sh04 is absent in 1995La10 (an 89γ from Coulomb excitation of ^{156}Gd could have appeared in sum-gate spectrum of 1995Sh04 if their target included ^{156}Gd); 1995La10 and 1995Sh04 each report three signature-partner linking transitions, none of which is seen by the other authors; structure above J=27/2 in the α=−1/2 partner differs in the two studies. Further measurements will be required to resolve these inconsistencies.

For discussion of level-energy systematics for N=103 isotones, see 2013Sa43.

^{183}Hg Levels

Cross Reference (XREF) Flags

A	^{183}Tl ε decay	D	^{155}Gd(^{32}S,4nγ) E=159 MeV
B	^{187}Pb α decay (15.2 s)	E	^{155}Gd(^{32}S,4nγ) E=160 MeV
C	^{187}Pb α decay (18.3 s)		

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	XREF	Comments
0.0[#]	1/2$^-$[@ f]	9.4 s *7*	AB DE	%ε+%β^+=88.3 *20*; %α=11.7 *20*; %εp=0.00026 *6* μ=+0.524 *5* (1976Bo09) <r^2>$^{1/2}$(charge)=5.442 fm *3* (2004An14). %α: From %I(5904α)=10.6 *20* (1970Ha18) and %α=1.07 *14* for all other α branches (1979Ha10); from Iα/I(K x ray). Evaluator adopts this value in preference to %I(5904α)=23.2 *14* (1980Sc09, from parent-daughter Iα comparison) because it leads to a more reasonable hindrance factor for the 5904α transition (note that 1980Sc09 had to apply a significant correction to the daughter Iα data because the range of the recoils exceeded their implantation depth). %εp: From I(p)/I(α)=2.2x10^{-5} 3 (1971Ho07), assuming %α=11.7 *20*. %εp would rise to 0.00056 *8* were the %α=25.5 *15* datum of 1980Sc09 correct. %ε+%β^+: 100 − (adopted %α=11.7 *20*). μ: NMR of nuclei polarized by optical pumping with β-asymmetry detection. $T_{1/2}$: weighted average of 8.8 s *5* (1970Ha18), 12 s *2* (1984Ma41) and 10.7 s *8* (1992BoZO) (the unweighted average is 10.5 s *9*).
0.0+x[b]	7/2$^-$		DE	E(level): from systematics of N=103 isotones, 2013Sa43 estimate x=120 *10*.
67.16[&] *23*	3/2$^-$[@]	≤16 ns	B DE	XREF: E(87). J$^\pi$: 3/2$^-$, 5/2$^-$ from E2 67γ to 1/2$^-$ g.s.; member of g.s. band; it is (assumed that the 67γ seen in ^{187}Pb α decay is the same as that seen in (^{32}S,4nγ) E=159 MeV). $T_{1/2}$: based on observation of prompt $\alpha\gamma$ coin in ^{187}Pb α decay (15.2 s).
86.8[#] *4*	5/2$^-$[@]		DE	XREF: E(89).
104.93+x[a] *16*	9/2$^-$		DE	

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Adopted Levels, Gammas (continued)

^{183}Hg Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$	XREF	Comments
183[c] *9*	(13/2$^+$)		CDE	J$^{\pi}$: suggested configuration=(ν i$_{13/2}$)⊗(slightly oblate 0p-2h Hg core) (1999An10). unhindered α decay from (13/2$^+$) ^{187}Pb. $T_{1/2}$: possibly exceeds 8 μs, based on absence of $\alpha\gamma$ coin in ^{187}Pb α decay (18.3 s). E(level): from α decay (18.3 s).
251.57+x[b] *16*	(11/2$^-$)		DE	
261.6[&] *3*	7/2$^-$[@]		DE	XREF: E(281).
275.33 *24*	(3/2$^-$)	≤16 ns	B	J$^{\pi}$: possible configuration=(ν 2p$_{3/2}$)⊗(slightly oblate 0p-2h Hg core) (1999An10); (M1) 276γ to 1/2$^-$ g.s.. consistent with apparently unhindered α decay from (3/2$^-$) ^{187}Pb. $T_{1/2}$: based on observation of prompt $\alpha\gamma$ coin in ^{187}Pb α decay (15.2 s).
284.6[e] *4*	(11/2$^+$)		D	
285.9[#] *4*	9/2$^-$[@]		DE	
406.93+x[a] *21*	13/2$^-$		DE	
537.27[e] *17*	15/2$^+$		DE	
542.5[&] *4*	11/2$^-$[@]		DE	XREF: E(561). placement of Eγ=273.2 *5* line from this level In (^{32}S,4nγ) E=160 MeV not ADOPTED.
577.3[#] *5*	13/2$^-$[@]		DE	
585.79+x[b] *22*	15/2$^-$		DE	
612.33[d] *17*	17/2$^+$		DE	
779.48+x[a] *25*	17/2$^-$		DE	
883.94[e] *19*	19/2$^+$		DE	
906.5[&] *4*	15/2$^-$[@]		DE	XREF: E(925).
953.3[#] *5*	17/2$^-$[@]		DE	
993.0+x[b] *3*	19/2$^-$		DE	
1016.05[d] *22*	21/2$^+$		DE	
1219.5+x[a] *3*	21/2$^-$		DE	
1319.53[e] *24*	23/2$^+$		DE	
1345.3[&] *5*	19/2$^-$[@]		DE	XREF: E(1363).
1404.7[#] *6*	21/2$^-$[@]		DE	
1465.8+x[b] *4*	23/2$^-$		DE	
1470.4[d] *3*	25/2$^+$		DE	
1720.9+x[a] *4*	25/2$^-$		DE	
1832.6[e] *3*	27/2$^+$		DE	
1849.2[&] *6*	23/2$^-$[@]		DE	XREF: E(1867).
1921.5[#] *6*	25/2$^-$[@]		DE	
1991.7[d] *4*	29/2$^+$		DE	
1997.7+x[b] *4*	27/2$^-$		DE	
2276.7+x[a] *4*	29/2$^-$		DE	
2408.9[&] *7*	27/2$^-$[@]		DE	XREF: E(2426).
2414.5[e] *4*	31/2$^+$		DE	
2492.0[#] *7*	29/2$^-$[@]		DE	
2574.7[d] *4*	33/2$^+$		DE	
2582.8+x[b] *5*	31/2$^-$		DE	
2879.5+x[a] *5*	33/2$^-$		DE	
3010.7? *9*	(31/2$^-$)		E	XREF: E(3027).
3022.5[&] *8*	31/2$^-$[@]		D	

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Adopted Levels, Gammas (continued)

^{183}Hg Levels (continued)

E(level)[†]	J$^\pi$[‡]	XREF	Comments
3055.8[e] *6*	(35/2$^+$)	DE	
3102.1[#] *7*	33/2$^-$[@]	DE	
3212.3[d] *5*	(37/2$^+$)	DE	
3214.0+x[b] *6*	(35/2$^-$)	DE	
3520.0+x[a] *7*	(37/2$^-$)	DE	
3632.6[&] *10*	35/2$^-$[@]	E	XREF: E(3649).
3725.9[#] *10*	37/2$^-$[@]	DE	
3748.0[e] *9*	(39/2$^+$)	DE	
3882.4+x[b] *7*	(39/2$^-$)	DE	
3895.4[d] *6*	(41/2$^+$)	DE	
4269.2?[&] *11*	39/2$^-$[@]	E	
4365.8?[#] *11*	41/2$^-$[@]	E	
4474.0[e] *10*	(43/2$^+$)	E	
4618.5[d] *8*	(45/2$^+$)	DE	

[†] From least-squares fit to adopted Eγ. Energies for 9/2[624] band members are given assuming E=183 for the 13/2$^+$ state fed in α decay; the 9 keV uncertainty In that energy has not been included In the energies shown here.

[‡] Values given without comment are from ^{155}Gd(^{32}S,4nγ) E=159 MeV; they are based on γ multipolarity information and deduced band structure.

[#] Band(A): 1/2[521], α=+1/2 band (1995La10). Differs from that deduced in ^{155}Gd(^{32}S,4nγ) E=160 MeV; see comments for this band in that dataset.

[@] Definite J$^\pi$ is assigned to members of the g.s. band based on smooth progression of level energies and independently-established J$^\pi$(g.s.)=1/2$^-$ and E2 multipolarity for intraband 67γ.

[&] Band(a): 1/2[521], α=−1/2 band (1995La10). Differs from that deduced in ^{155}Gd(^{32}S,4nγ) E=160 MeV; see comments on this band in that dataset. Band parameters: E$_0$=2.7, α=13.2, a=+0.70 (J=1/2,3/2,5/2).

[a] Band(B): 7/2[514], α=+1/2 band (1995La10). Band parameters: E$_0$=−60, α=13.4, B$_0$=−13.8 (J=9/2,13/2,17/2). Energy offset x estimated from systematics to be 120 *10* (2013Sa43).

[b] Band(b): 7/2[514], α=−1/2 band (1995La10). Band parameters: E$_0$=−45, α=12.9, B$_0$=−13.4 (J=7/2,11/2,15/2). Energy offset x estimated from systematics to be 120 *10* (2013Sa43).

[c] Band(C): ν i$_{13/2}$ band. Oblate, possibly isomeric bandhead is the only state observed.

[d] Band(D): 9/2[624], α=+1/2 band (1995La10,1995Sh04). Large signature splitting may indicate hexadecapole deformation or mixing of this prolate band with oblate structure from same (ν i$_{13/2}$) subshell (1995Sh04). So far, J=(9/2,13/2) members have not been identified. Band parameters: E$_0$=85, α=10.1 (J=17/2,21/2).

[e] Band(d): 9/2[624], α=−1/2 band (1995La10,1995Sh04). Large signature splitting may indicate hexadecapole deformation or mixing of this prolate band with oblate structure from same (ν i$_{13/2}$) subshell (1995Sh04). Band parameters: E$_0$=234, α=8.5, B$_0$=9.5 (J=11/2,15/2,19/2).

[f] The spin was measured by optical pumping (1972Bo09); π is based on the agreement of μ with the Nilsson model prediction for the 1/2[521] orbital.

γ(^{183}Hg)

E$_i$(level)	J$_i^\pi$	E$_\gamma$[‡]	I$_\gamma$[‡]	E$_f$	J$_f^\pi$	Mult.[#]	α[†]	Comments
67.16	3/2$^-$	67.1 *3*	100	0.0	1/2$^-$	E2[@]	32.7 *9*	B(E2)(W.u.)>12 Eγ: average of 67.4 *3* from α decay (15.2 s) and 66.8 *3* from ^{155}Gd(^{32}S,4nγ) E=159 MeV. Mult.: from α(exp) In α decay (15.2 s).

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Adopted Levels, Gammas (continued)

γ(^{183}Hg) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
86.8	5/2⁻	86.5[&] *5*	100	0.0	1/2⁻	(E2)	10.3 *3*	Placement of this γ from J=3/2 *67*-kev member of 1/2[521] band suggested in (^{32}S,4nγ) E=160 MeV is not adopted. Other Eγ: 88.9 *5* from (^{32}S,4nγ) E=160 MeV. Mult.: Q intraband γ from (^{32}S,4nγ) E=160 MeV.
104.93+x	9/2⁻	104.9 *2*	100	0.0+x	7/2⁻			
251.57+x	(11/2⁻)	146.6 *2*	29 *6*	104.93+x	9/2⁻	(M1)	2.65	I_γ: weighted average of 25 *5* from (^{32}S,4nγ) E=160 MeV and 39 *8* from (^{32}S,4nγ) E=159 MeV; note, however, that the former study does not report a known 253γ in the 9/2[624] band which may, conceivably, have been unresolved from the 252γ.
		251.6 *2*	100 *11*	0.0+x	7/2⁻			I_γ: weighted average from (^{32}S,4nγ) E=160 MeV and (^{32}S,4nγ) E=159 MeV.
261.6	7/2⁻	174.7 *3*	27 *13*	86.8	5/2⁻			placement of Eγ (Iγ)=191.4 *5* (40 *20*) from this level in (^{32}S,4nγ) E=160 MeV is rejected by evaluator.
		194.5 *2*	100 *20*	67.16	3/2⁻			
275.33	(3/2⁻)	208.0[@] *3*		67.16	3/2⁻	(M1)[@]	0.991	
		275.5[@] *3*		0.0	1/2⁻	(M1)[@]	0.455	
285.9	9/2⁻	199.1 *2*	100	86.8	5/2⁻	(E2)	0.397	
406.93+x	13/2⁻	155.2 *3*	7.9 *11*	251.57+x	(11/2⁻)			I_γ: from (^{32}S,4nγ) E=160 MeV; 12 *5* in (^{32}S,4nγ) E=159 MeV.
		302.0 *2*	100 *9*	104.93+x	9/2⁻	(E2)	0.1044	other Eγ: 301.5 *2* from (^{32}S,4nγ) E=160 MeV.
537.27	15/2⁺	252.7 *3*	80 *20*	284.6	(11/2⁺)			
		354.4 *2*	100 *30*	183	(13/2⁺)	D+Q		other Eγ: 353.8 *2* from (^{32}S,4nγ) E=160 MeV.
542.5	11/2⁻	257[a]	<7.7	285.9	9/2⁻			
		280.9 *2*	100 *23*	261.6	7/2⁻	(E2)[&]	0.1298	E_γ: 280.4 *2* in (^{32}S,4nγ) E=160 MeV.
577.3	13/2⁻	291.4 *2*	100	285.9	9/2⁻	(E2)	0.1161	E_γ: 290.8 *2* in (^{32}S,4nγ) E=160 MeV.
585.79+x	15/2⁻	178.8 *3*	5.9 *6*	406.93+x	13/2⁻	(M1+E2)	1.0 *5*	I_γ: from (^{32}S,4nγ) E=160 MeV; 9 *4* in (^{32}S,4nγ) E=159 MeV.
		334.3 *2*	100 *6*	251.57+x	(11/2⁻)	(E2)	0.0777	E_γ: 333.8 *2* in (^{32}S,4nγ) E=160 MeV.
612.33	17/2⁺	75		537.27	15/2⁺			
		429.2 *2*	100 *8*	183	(13/2⁺)	Q		
779.48+x	17/2⁻	193.7 *3*	9.2 *15*	585.79+x	15/2⁻			I_γ: from (^{32}S,4nγ) E=160 MeV; 9 *5* in (^{32}S,4nγ) E=159 MeV.
		372.5 *2*	100 *4*	406.93+x	13/2⁻	(E2)	0.0574	I_γ: from (^{32}S,4nγ) E=160 MeV. E_γ: 372.0 *2* in (^{32}S,4nγ) E=160 MeV.
883.94	19/2⁺	271.5 *2*	44 *8*	612.33	17/2⁺	(M1+E2)	0.31 *17*	E_γ: 271.0 *2* in (^{32}S,4nγ) E=160 MeV.
		346.8 *2*	100 *25*	537.27	15/2⁺	(E2)	0.0700	E_γ: 346.3 *2* in (^{32}S,4nγ) E=160 MeV.
906.5	15/2⁻	329[a]	<8.3	577.3	13/2⁻			
		364.0 *2*	100 *25*	542.5	11/2⁻	(E2)[&]	0.0612	
953.3	17/2⁻	376.0 *2*	100	577.3	13/2⁻	(E2)	0.0560	E_γ: 375.4 *2* in (^{32}S,4nγ) E=160 MeV.
993.0+x	19/2⁻	213.2 *4*	6 *3*	779.48+x	17/2⁻			
		407.2 *2*	100 *19*	585.79+x	15/2⁻	(E2)	0.0452	E_γ: 406.7 *2* in (^{32}S,4nγ) E=160 MeV.
1016.05	21/2⁺	131.9 *3*	3.8 *13*	883.94	19/2⁺			
		403.7 *2*	100 *9*	612.33	17/2⁺	(E2)[&]	0.0463	

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Adopted Levels, Gammas (continued)

γ(^{183}Hg) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
1219.5+x	21/2$^-$	226.4 *4*	3 *3*	993.0+x	19/2$^-$			
		440.0 *2*	100 *12*	779.48+x	17/2$^-$	(E2)	0.0370	E_γ: 439.5 *2* in (^{32}S,4nγ) E=160 MeV.
1319.53	23/2$^+$	303.4 *2*	33 *13*	1016.05	21/2$^+$	(M1+E2)	0.23 *13*	E_γ: 303.0 *2* in (^{32}S,4nγ) E=160 MeV. I_γ: I(303γ):I(436γ)=78 *8*:100 *30* in (^{32}S,4nγ) E=160 MeV.
		435.7 *2*	100 *13*	883.94	19/2$^+$	(E2)	0.0379	E_γ: 435.3 *2* in (^{32}S,4nγ) E=160 MeV.
1345.3	19/2$^-$	438.8 *3*	100	906.5	15/2$^-$			
1404.7	21/2$^-$	451.4 *2*	100	953.3	17/2$^-$	(E2)	0.0347	E_γ: 450.9 *2* in (^{32}S,4nγ) E=160 MeV.
1465.8+x	23/2$^-$	472.8 *2*	100	993.0+x	19/2$^-$	(E2)	0.0309	E_γ: 472.2 *2* in (^{32}S,4nγ) E=160 MeV.
1470.4	25/2$^+$	150.7 *4*	3.1 *15*	1319.53	23/2$^+$	(M1+E2)	1.8 *7*	
		454.3 *2*	100 *8*	1016.05	21/2$^+$	(E2)	0.0341	
1720.9+x	25/2$^-$	501.4 *2*	100	1219.5+x	21/2$^-$	(E2)	0.0268	E_γ: 500.8 *2* in (^{32}S,4nγ) E=160 MeV.
1832.6	27/2$^+$	361.9[&] *5*	65 *11*	1470.4	25/2$^+$	(M1)	0.217	I_γ: from (^{32}S,4nγ) E=160 MeV; absent in E=159 MeV experiment.
		513.2 *2*	100 *9*	1319.53	23/2$^+$			E_γ: 512.8 *2* in (^{32}S,4nγ) E=160 MeV. I_γ: from (^{32}S,4nγ) E=160 MeV.
1849.2	23/2$^-$	503.9 *3*	100	1345.3	19/2$^-$			E_γ: 503.4 *5* in (^{32}S,4nγ) E=160 MeV.
1921.5	25/2$^-$	516.8 *2*	100	1404.7	21/2$^-$			E_γ: 516.3 *2* in (^{32}S,4nγ) E=160 MeV.
1991.7	29/2$^+$	521.3 *2*	100	1470.4	25/2$^+$	(E2)	0.0244	
1997.7+x	27/2$^-$	531.9 *2*	100	1465.8+x	23/2$^-$			E_γ: 531.4 *2* in (^{32}S,4nγ) E=160 MeV.
2276.7+x	29/2$^-$	555.8 *2*	100	1720.9+x	25/2$^-$	(E2)	0.0210	E_γ: 555.3 *2* in (^{32}S,4nγ) E=160 MeV.
2408.9	27/2$^-$	559.7 *3*	100	1849.2	23/2$^-$			E_γ: 558.9 *5* in (^{32}S,4nγ) E=160 MeV.
2414.5	31/2$^+$	422.6[&] *5*	100 *66*	1991.7	29/2$^+$	(M1)	0.1432	I_γ,E_γ: from (^{32}S,4nγ) E=160 MeV; absent in E=159 MeV experiment.
		581.9 *3*	93 *13*	1832.6	27/2$^+$			E_γ: 581.1 *5* in (^{32}S,4nγ) E=160 MeV.
2492.0	29/2$^-$	570.5 *3*	100	1921.5	25/2$^-$			
2574.7	33/2$^+$	583.0 *2*	100	1991.7	29/2$^+$			other Eγ: 582.7 *2* from (^{32}S,4nγ) E=160 MeV.
2582.8+x	31/2$^-$	585.1 *2*	100	1997.7+x	27/2$^-$			
2879.5+x	33/2$^-$	602.8 *3*	100	2276.7+x	29/2$^-$	(E2)	0.01740	E_γ: 602.2 *5* in (^{32}S,4nγ) E=160 MeV.
3010.7?	(31/2$^-$)	601.8[&a] *5*	100	2408.9	27/2$^-$			E_γ: Placed as J=31/2 to 27/2 transition in 1/2[521] band in (^{32}S,4nγ) E=160 MeV but γ is absent in (^{32}S,4nγ) E=159 MeV, so evaluator considers level and placement to be uncertain.
3022.5	31/2$^-$	613.6 *4*	100	2408.9	27/2$^-$			Band assignment from (^{32}S,4nγ) E=159 MeV. also, see comment on 601.8γ.
3055.8	(35/2$^+$)	641.3 *4*	100	2414.5	31/2$^+$			
3102.1	33/2$^-$	610.1 *3*	100	2492.0	29/2$^-$	(E2)	0.01693	E_γ: 609.6 *5* in (^{32}S,4nγ) E=160 MeV.
3212.3	(37/2$^+$)	637.6 *3*	100	2574.7	33/2$^+$			E_γ: 637.0 *2* in (^{32}S,4nγ) E=160 MeV.
3214.0+x	(35/2$^-$)	631.2 *3*	100	2582.8+x	31/2$^-$			
3520.0+x	(37/2$^-$)	640.5 *4*	100	2879.5+x	33/2$^-$			E_γ: 638.0 *5* in (^{32}S,4nγ) E=160 MeV.
3632.6	35/2$^-$	621.9[&] *5*	100	3010.7?	(31/2$^-$)			not observed In (^{32}S,4nγ) E=159 MeV.
3725.9	37/2$^-$	623.8 *6*	100	3102.1	33/2$^-$			E_γ: 626.3 *5* in (^{32}S,4nγ) E=160 MeV for weak γ; possibly γ is

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Adopted Levels, Gammas (continued)

$\gamma(^{183}Hg)$ (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Comments
						contaminated or misplaced in one or both studies.
3748.0	$(39/2^+)$	692.2 *6*	100	3055.8	$(35/2^+)$	E_γ: 692.9 *5* in (^{32}S,4nγ) E=160 MeV.
3882.4+x	$(39/2^-)$	668.4 *4*	100	3214.0+x	$(35/2^-)$	
3895.4	$(41/2^+)$	683.1 *2*	100	3212.3	$(37/2^+)$	E_γ: from (^{32}S,4nγ) E=160 MeV.
4269.2?	$39/2^-$	636.6[&] *5*	100	3632.6	$35/2^-$	γ absent In (^{32}S,4nγ) E=159 MeV.
4365.8?	$41/2^-$	639.9[&] *5*	100	3725.9	$37/2^-$	γ absent In (^{32}S,4nγ) E=159 MeV.
4474.0	$(43/2^+)$	729.0[&] *5*	100	3748.0	$(39/2^+)$	
4618.5	$(45/2^+)$	723.1 *6*	100	3895.4	$(41/2^+)$	

† Additional information 1.
‡ From ^{155}Gd(^{32}S,4nγ) E=159 MeV, except as noted.
# ΔJ from $\gamma(\theta)$ and/or DCO ratio data in (^{32}S,4nγ) E=159 MeV, except as noted. apart from the 429γ, all the transitions assigned As Q are intraband transitions so mult=(E2); similarly, except for the 354γ, transitions assigned In (^{32}S,4nγ) As D or D+Q are intraband transitions, so $\Delta\pi$=(No) has been assigned for those also.
@ From α decay (15.2 s).
& From ^{155}Gd(^{32}S,4nγ) E=160 MeV.
a Placement of transition in the level scheme is uncertain.

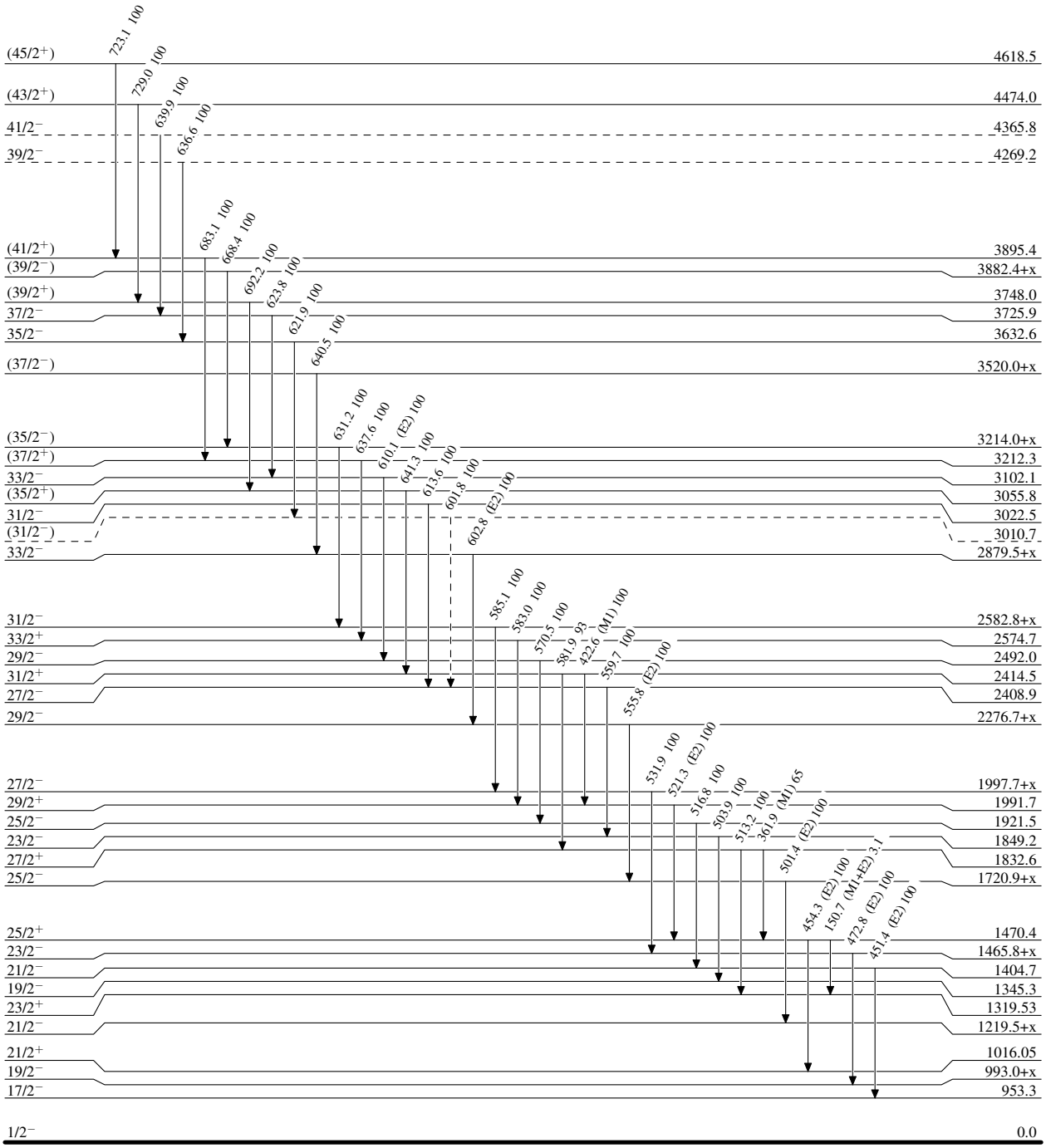
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



$^{183}_{80}Hg_{103}$

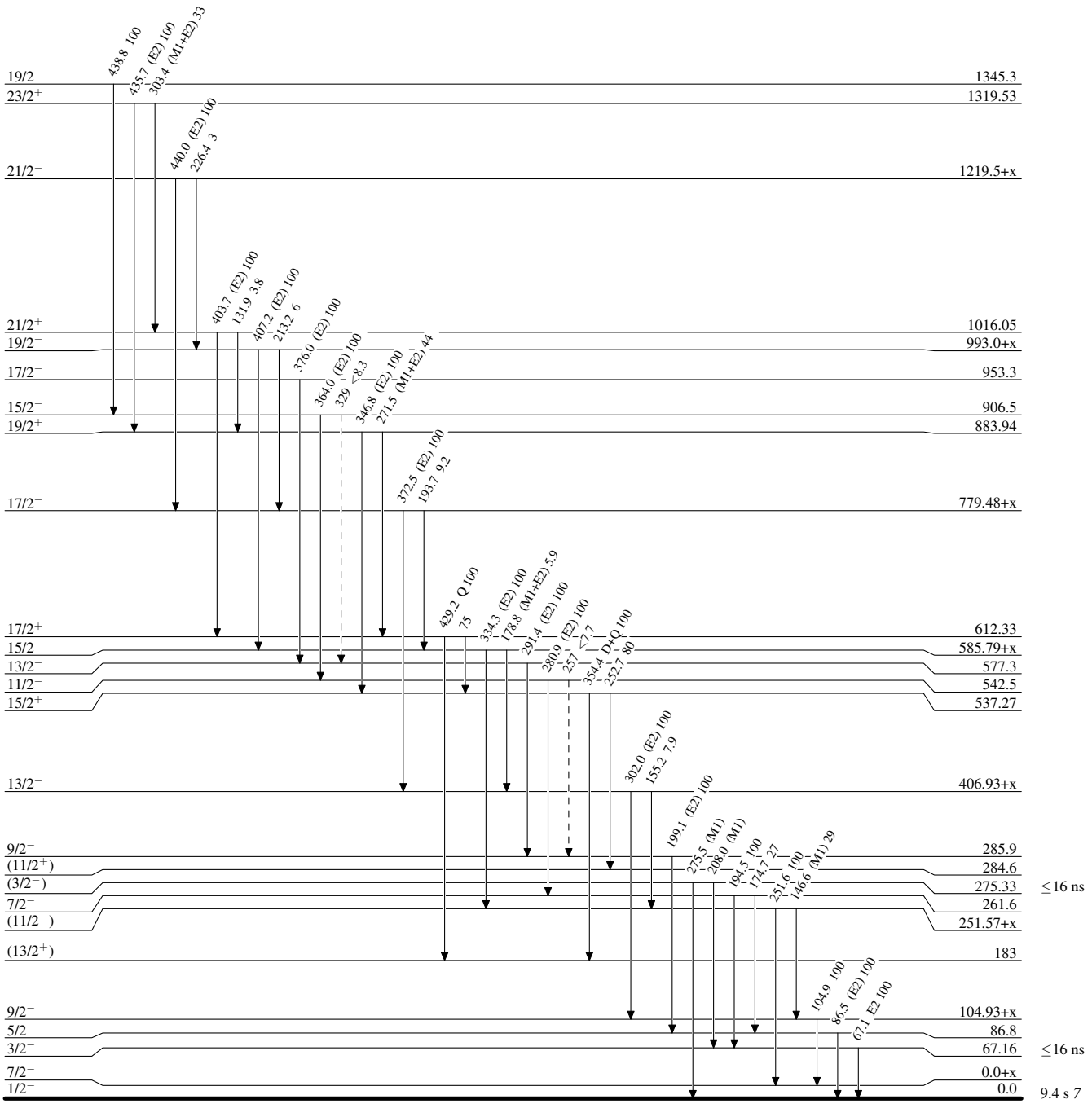
Adopted Levels, Gammas

Legend

Level Scheme (continued)

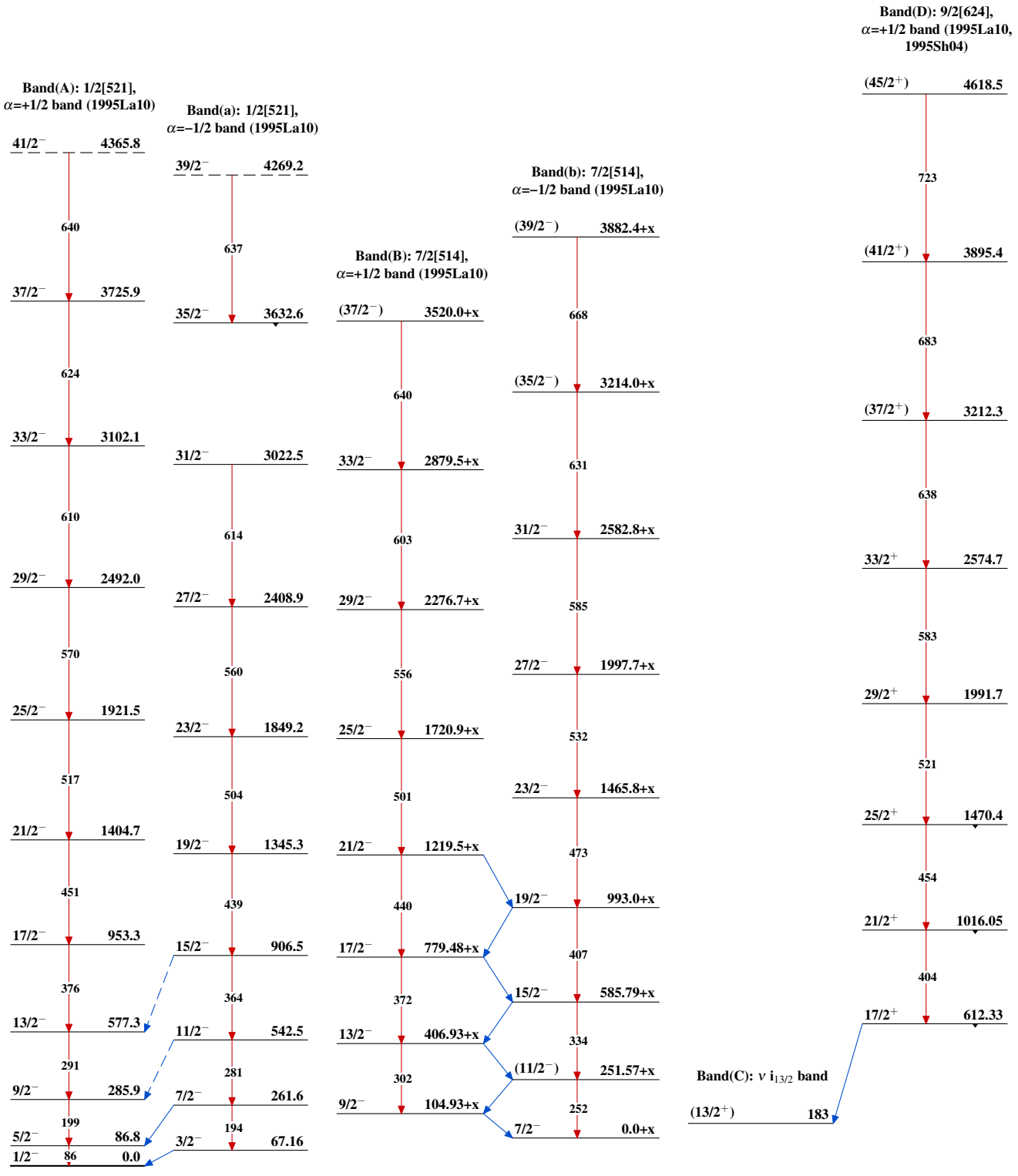
Intensities: Relative photon branching from each level

γ Decay (Uncertain)



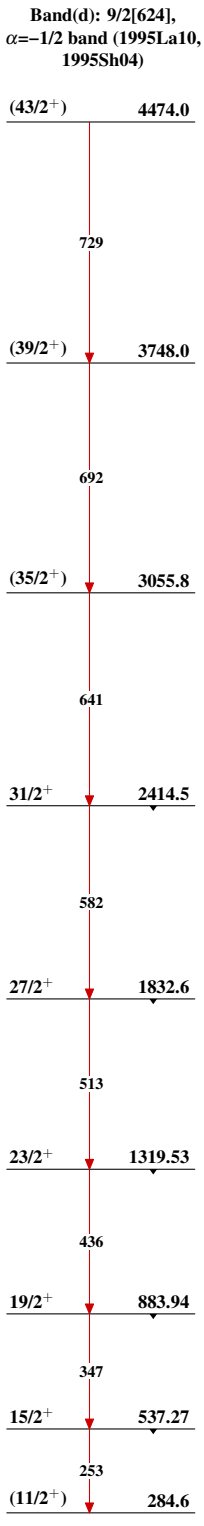
$^{183}_{80}Hg_{103}$

Adopted Levels, Gammas



$^{183}_{80}Hg_{103}$

Adopted Levels, Gammas (continued)



$^{183}_{80}Hg_{103}$