(HI,xnγ):SD 1995Fa03,1994Wi06

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

Additional information 1.

Others: 1998Bu03, 1997Mo12, 1997Mo22, 1996Lo15, 1995De65, 1995Ko17, 1994He30, 1994Du12, 1994Ga07, 1994He30, 1994Le24, 1993De35, 1993Ha20, 1992La07, 1991Mo11, 1990Be01, 1990Dr08, 1990Kh06, 1990Mo16, 1990St12, 1990Ye01.

This data set includes SD-band information from ^{148}Nd(^{48}Ca,4nγ), ^{160}Gd(^{36}S,4nγ), ^{176}Yb(^{22}Ne,6nγ), ^{184}W(^{16}O,α4nγ). For (HI,xnγ) studies involving normally deformed states only, please see the ^{160}Gd(^{36}S,4nγ) data set and the (HI,xnγ) data set (which includes ^{170}Er(Mg,xnγ), ^{184}W(^{16}O,α4nγ), W(C,xnγ) reaction data).

1990Be01 (also 1990St12): ^{176}Yb(^{22}Ne,6nγ) E=122 MeV. Measured Eγ, Iγ (HERA array; 21 Ge, 40 bismuth germanate detectors), $\gamma\gamma$ coin, $\gamma\gamma(\theta)$. Report observation of 17-transition superdeformed band.

1990Ye01: ^{160}Gd(^{36}S,4nγ) E=162 MeV; >97% ^{160}Gd target. Measured Eγ, Iγ, $\gamma\gamma$ coin; observed 15-member SD band.

1992La07: ^{160}Gd(^{36}S,4nγ) E=154-167 MeV; Gd targets enriched to >97% in ^{160}Gd. Measured Eγ, Iγ (12 Compton-suppressed germanium, 50 bismuth germanate detector array), $\gamma\gamma$ coin; report observation of 19-transition superdeformed band. See also 1991Mo11 (K x ray yields), 1990Mo16 ($T_{1/2}$, DSAM), 1990Dr08, 1990Kh06 (authors from same research group) for further information about various aspects of the SD-1 band.

1993De35: ^{160}Gd(^{36}S,4nγ) E=168 MeV. Measured $T_{1/2}$ by RDDS for two SD-1 band levels. GASP array (40 detectors); 98.5% ^{160}Gd target.

1993Ha20, 1994Ga07: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Eurogam 43-detector array. Measured Eγ for SD-1 band.

1994Du12: ^{184}W(^{16}O,α4nγ) E=113 MeV. SD-1 band observed in the (α+4n) channel using EUROGAM array (45 detectors).

1994He30: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured quasi-continuum spectrum of γ rays deexciting SD states. Eurogam array (43 detectors).

1994Le24: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured $T_{1/2}$ by RDDS for two SD-1 band members using a 20 detector array.

1994Wi06: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured Eγ, $\gamma\gamma\gamma$ coin, $T_{1/2}$ using RDDS and DSAM methods, SD bands. Eurogam array (43 or 45 detectors); 98.7% and 98.2% ^{160}Gd targets. Deduced Q(transition).

1995De65: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured Eγ, Iγ for SD-1 and SD-2 band transitions.

1995Fa03: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured Eγ, Iγ, $\gamma\gamma\gamma$ coin, SD bands using GAMMASPHERE array (30 detectors).

1995Ko17: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured Eγ, $\gamma\gamma\gamma$ coin, $T_{1/2}$ using DSAM for SD band members. Eurogam array (43 detectors); 98.7% ^{160}Gd target.

1996Lo15: ^{160}Gd(^{36}S,4nγ) E=159 MeV. Measured quasicontinuum spectra and discrete transitions from the decay of SD band.

1997Mo12,1997Mo22: ^{148}Nd(^{48}Ca,4nγ) E=205 MeV. Measured $T_{1/2}$ by DSAM (centroid shift analysis); deduced Q for SD-1 band. GAMMASPHERE array (55 or 85 detectors). (1997Mo12 is a more recent report than 1997Mo22).

1998Bu03: ^{176}Yb(^{22}Ne,xng) E=118 MeV. ^{197}Au-backed target; GAMMASPHERE array (90 escape-suppressed Ge detectors); measured $T_{1/2}$ by DSAM for SD-1 band members; deduced Q(transition) for band and for side-feeding states affecting two band members.

2000La31: ^{160}Gd(^{36}S,4nγ) E=157 MeV mid-target; GAMMASPHERE array (96 Compton-suppressed Ge detectors); excitation energy and spin of the second-lowest member of SD-1 band is estimated from study of quasi- continuum spectra by using ^{194}Hg yrast band As a reference where the excitation energy and spin had been established through discrete linking transitions.

^{192}Hg Levels

E(level)†	J$^{\pi}$
0$^{\#}$	0$^{+\#}$
422.79$^{\#}$	2$^{+\#}$
1057.58$^{\#}$	4$^{+\#}$
1803.05$^{\#}$	6$^{+\#}$
1843.90$^{\#}$	(5)$^{-\#}$
1977.03$^{\#}$	(7)$^{-\#}$
2216.20$^{\#}$	(8)$^{-\#}$
2223.85$^{\#}$	(9)$^{-\#}$

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(HI,xnγ):SD 1995Fa03,1994Wi06 (continued)

^{192}Hg Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[‡]	Comments
2447.2[#]	8^+[#]		
2507.3[#]	$(10)^+$[#]		
x[a]	J≈(8)[@]		E(level): x=5586 *500* (see comment for 214.4+x level).
214.4+x[a] *3*	J+2[@]	<77 ps	$T_{1/2}$: RDDS (1994Wi06). Q(transition)>6 (1994Wi06). E(level),Jπ: From the study of quasi-continuum γ-ray spectra, 2000La31 estimate level energy as 5800 *500* and J=9.7 *10* using data for ^{194}Hg SD-1 band as a reference.
472.2+x[a] *4*	J+4[@]	3.7 ps *+8−6*	$T_{1/2}$: RDDS (1994Wi06). Others: 3.1 ps *+10−6* (RDDS, 1994Le24); 3.1 ps *10* (RDDS, 1993De35). Q(transition)=18.3 *16* (1994Wi06), 19.3 *+50−25* (1993De35).
772.3+x[a] *4*	J+6[@]	1.74 ps *+22−17*	$T_{1/2}$: RDDS (1994Wi06). Others: 2.0 ps *+8−6* (RDDS, 1994Le24); 2.1 ps *12* (RDDS, 1993De35). Q(transition)=18.5 *10* (1994Wi06), 17.5 *+35−25* (1994Le24), 17 *+11−3* (1993De35).
1113.7+x[a] *4*	J+8[@]	0.84 ps *+22−20*	$T_{1/2}$: RDDS (1994Wi06). Q(transition)=19.2 *+24−21* (1994Wi06).
1495.3+x[a] *4*	J+10[@]	0.48 ps *+62−13*	$T_{1/2}$: RDDS (1994Wi06). Q(transition)=20 *+4−7* (1994Wi06).
1916.4+x[a] *5*	J+12[@]		
2375.2+x[a] *5*	J+14[@]	0.18 ps *+5−4*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.16 ps *5* (1990Mo16). Q(transition)=20.7 *+31−25* (1994Wi06).
2871.2+x[a] *5*	J+16[@]	0.137 ps *+17−21*	$T_{1/2}$: DSAM (1994Wi06). Others: 0.13 ps *3* (1990Mo16), 0.132 ps *21* (1998Bu03). Q(transition)=19.3 *+17−11* (1994Wi06), 19.9 *+31−25* (1998Bu03).
3403.3+x[a] *6*	J+18[@]	0.093 ps *+10−14*	$T_{1/2}$: DSAM (1994Wi06). Others: 0.089 ps *31* (1990Mo16); 0.090 ps *+14−21* (1998Bu03). Q(transition)=19.6 *+17−11* (1994Wi06), 20.3 *+31−21* (1998Bu03).
3970.7+x[a] *6*	J+20[@]	0.068 ps *+10−11*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.058 ps *17* (1990Mo16). Q(transition)=19.6 *+19−13* (1994Wi06).
4572.4+x[a] *6*	J+22[@]	0.062 ps *+10−7*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.055 ps *14* (1990Mo16). Q(transition)=17.7 *12* (1994Wi06).
5207.3+x[a] *7*	J+24[@]	0.050 ps *+10−12*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.042 ps *17* (1990Mo16). Q(transition)=17.4 *+24−15* (1994Wi06).
5875.4+x[a] *7*	J+26[@]	0.031 ps *+9−8*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.034 ps *9* (1990Mo16). Q(transition)=19.3 *+29−23* (1994Wi06).
6575.5+x[a] *7*	J+28[@]	0.032 ps *+9−8*	$T_{1/2}$: DSAM (1994Wi06). Other: 0.032 ps *14* (1990Mo16). Q(transition)=16.9 *+15−20* (1994Wi06).
7307.0+x[a] *8*	J+30[@]	0.021 ps *+11−21*	$T_{1/2}$: DSAM (1994Wi06). Q(transition)=19 +∞−4 (1994Wi06).
8069.3+x[a] *8*	J+32[@]	0.019 ps *+18−19*	$T_{1/2}$: DSAM (1994Wi06). Other: <0.03 ps (1990Mo16). Q(transition)=18 +∞−6 (1994Wi06).
8862.0+x[a] *9*	J+34[@]		
9684.9+x[a] *10*	J+36[@]		
10538.0+x[a] *11*	J+38[@]		
11426.7+x?[a] *13*	J+40[@]		
y[b]	J1≈(10)[&]		
241.2+y[b] *10*	J1+2[&]		
523.6+y[b] *11*	J1+4[&]		
845.7+y[b] *11*	J1+6[&]		

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(HI,xnγ):SD 1995Fa03,1994Wi06 (continued)

^{192}Hg Levels (continued)

E(level)[†]	J^{π}	$T_{1/2}$[‡]	Comments
1207.0+y[b] *11*	J1+8[&]		
1607.2+y[b] *11*	J1+10[&]		
2045.2+y[b] *11*	J1+12[&]		
2520.4+y[b] *12*	J1+14[&]	0.14 ps *4*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=22.1 *+29−30* (1995Ko17).
3031.4+y[b] *12*	J1+16[&]	0.15 ps *+5−3*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=17.8 *+28−20* (1995Ko17).
3578.1+y[b] *12*	J1+18[&]	0.100 ps *14*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=18.2 *13* (1995Ko17).
4156.9+y[b] *12*	J1+20[&]	0.064 ps *8*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=19.4 *13* (1995Ko17).
4761.3+y[b] *12*	J1+22[&]	0.052 ps *+6−7*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=19.4 *13* (1995Ko17).
5385.5+y[b] *12*	J1+24[&]	0.044 ps *6*	$T_{1/2}$: DSAM (1995Ko17). Q(transition)=19.5 *13* (1995Ko17).
6037.7+y[b] *13*	J1+26[&]		
6722.0+y[b] *13*	J1+28[&]		
7439.7+y[b] *14*	J1+30[&]		
8189.5+y[b] *14*	J1+32[&]		
8972.6+y[b] *15*	J1+34[&]		
9791.6+y?[b] *18*	J1+36[&]		
z[c]	J2		
333.1+z[c] *3*	J2+2		
705.9+z[c] *4*	J2+4		
1118.0+z[c] *5*	J2+6		
1568.6+z[c] *5*	J2+8		
2056.9+z[c] *6*	J2+10		
2582.4+z[c] *8*	J2+12		
3144.1+z[c] *9*	J2+14		
3741.4+z[c] *10*	J2+16		
4371.5+z[c] *11*	J2+18		
5030.5+z[c] *14*	J2+20		
5711.5+z[c] *20*	J2+22		

[†] From least-squares fit to Eγ. For each SD-band, energies are relative to the unknown energy of the lowest known band member.
[‡] From 1990Mo16, 1993De35, 1994Le24, 1994Wi06, 1995Ko17, 1998Bu03, as indicated in comments.
[#] From Adopted Levels.
[@] From fit to expansions relating second moment of inertia and angular frequency (1990Be01), J≈(8) for E(level)=x.
[&] From fit to expansions relating second moment of inertia and angular frequency (1995Ko17), J≈(10) for E(level)=y.
[a] Band(A): SD-1 band (1992La07,1994Ga07,1995Fa03,1997Mo12,1998Bu03). Percent population ≈2.0 (1992La07,1995Fa03), ≈1.6 (1995Ko17). Average Q(transition)=20 *2* (DSAM data, 1990Mo16), 18.6 *14* (1994Wi06, low-J states), 17.6 *10* (1997Mo12 text; 10%−15% uncertainty in stopping power not included), 20.2 *12* (1998Bu03). From experimental data, the bandhead (J=0 state) is estimated to lie at 5.2-6.2 MeV (1992La19); 1997Mo22 estimate that band lies 4.3 MeV *9* above yrast line at point of decay and that the average number of steps from SD states to yrast line is 3.2 *6*. Band exhibits integer alignment relative to SD-1 and SD-3 bands of ^{194}Hg for $\hbar\omega \geq$ ≈0.2 MeV (1990St12) (identical bands). From the study of quasi-continuum γ-ray spectra, 2000La31 estimate level energy of 5800 *500* for the second member and J=9.7 *10*.
[b] Band(B): SD-2 band (1995Fa03,1995Ko17). Percent population=0.11 (1995Ko17), 0.2 (1995Fa03). Average Q(transition)=19.5 *15*

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(HI,xnγ):SD 1995Fa03,1994Wi06 (continued)

^{192}Hg Levels (continued)

(1995Ko17). Transition energies in this band are within 3 keV of those for the SD-2 band of ^{194}Hg for Eγ<550; a band crossing occurs near $\hbar\omega$=0.3.

[c] Band(C): SD-3 band (1995Fa03). Percent population=0.1 (1995Fa03). Note that transition energies in this band lie within 0.3 keV of those for transitions in the SD-2 band of ^{191}Hg for $\hbar\omega\leq$0.31.

γ(^{192}Hg)

E$_\gamma$[†]	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.[#]	α[a]	I$_{(\gamma+ce)}$[‡]	Comments
133.1[@]	1977.03	(7)$^-$	1843.90	(5)$^-$				I$_{(\gamma+ce)}$: 0.31 *5* (1990Ye01).
174.0[@]	1977.03	(7)$^-$	1803.05	6$^+$				I$_{(\gamma+ce)}$: 0.17 *4* (1990Be01), 0.22 *3* (1990Ye01).
214.4 *3*	214.4+x	J+2	x	J≈(8)	(E2)	0.309	0.08 *2*	other Eγ: 214.9 *2* (1994Ga07). I$_{(\gamma+ce)}$: 0.07 *2* (1995De65), 0.06 *1* (2000La31).
239.2[@]	2216.20	(8)$^-$	1977.03	(7)$^-$				I$_{(\gamma+ce)}$: 0.10 *2* (1990Ye01).
241.2	241.2+y	J1+2	y	J1≈(10)				E$_\gamma$: from 1995Ko17 only. I$_{(\gamma+ce)}$: 0.10 *4* (1995De65).
246.8[@]	2223.85	(9)$^-$	1977.03	(7)$^-$				I$_{(\gamma+ce)}$: 0.18 *5* (1990Be01), 0.20 *3* (1990Ye01).
257.8 *1*	472.2+x	J+4	214.4+x	J+2	(E2)	0.1693	0.88 *5*	other Eγ: 258.2 *1* (1994Ga07). I$_{(\gamma+ce)}$: 0.72 *7* (1995De65), 0.67 *4* (2000La31).
282.4 *2*	523.6+y	J1+4	241.2+y	J1+2			0.71 *8*	I$_{(\gamma+ce)}$: 0.34 *5* (1995De65).
283.4[@]	2507.3	(10)$^+$	2223.85	(9)$^-$				I$_{(\gamma+ce)}$: 0.09 *4* (1990Be01).
300.1 *1*	772.3+x	J+6	472.2+x	J+4	(E2)	0.1063	1.01 *5*	other Eγ: 300.4 *1* (1994Ga07). I$_{(\gamma+ce)}$: 0.97 *10* (1995De65), 0.91 *5* (2000La31).
322.1 *2*	845.7+y	J1+6	523.6+y	J1+4			1.03 *8*	I$_{(\gamma+ce)}$: 0.91 *9* (1995De65).
333.1 *3*	333.1+z	J2+2	z	J2			0.66 *7*	
341.4 *1*	1113.7+x	J+8	772.3+x	J+6	(E2)	0.0732	1.07 *6*	other Eγ: 341.7 *1* (1994Ga07). I$_{(\gamma+ce)}$: 0.96 *10* (1995De65), 1.0 (2000La31).
361.3 *2*	1207.0+y	J1+8	845.7+y	J1+6			1.00 *7*	I$_{(\gamma+ce)}$: 0.98 *10* (1995De65).
372.8 *2*	705.9+z	J2+4	333.1+z	J2+2			1.13 *8*	
381.6 *1*	1495.3+x	J+10	1113.7+x	J+8	(E2)	0.0538	1.04 *5*	other Eγ: 382.0 *1* (1994Ga07). I$_{(\gamma+ce)}$: 1.00 *10* (1995De65).
400.2 *2*	1607.2+y	J1+10	1207.0+y	J1+8			0.99 *6*	I$_{(\gamma+ce)}$: 1.00 *6* (1995De65).
412.1 *2*	1118.0+z	J2+6	705.9+z	J2+4			0.90 *9* [&]	
421.1 *2*	1916.4+x	J+12	1495.3+x	J+10	(E2)	0.0414		other Eγ: 421.2 *1* (1994Ga07). I$_{(\gamma+ce)}$: 1.00 *10* (1995De65).
422.8[@]	422.79	2$^+$	0	0$^+$				I$_{(\gamma+ce)}$: 0.87 *13* (1990Be01), 0.86 *11* (1990Ye01).
438.0 *2*	2045.2+y	J1+12	1607.2+y	J1+10			0.96 *6*	I$_{(\gamma+ce)}$: 1.00 *10* (1995De65).
450.6 *3*	1568.6+z	J2+8	1118.0+z	J2+6			0.95 *8*	
458.8 *2*	2375.2+x	J+14	1916.4+x	J+12	(E2)	0.0333	1.08 *6*	other Eγ: 459.5 *1* (1994Ga07). I$_{(\gamma+ce)}$: 0.93 *8* (1995De65).
475.2 *2*	2520.4+y	J1+14	2045.2+y	J1+12			0.97 *7*	I$_{(\gamma+ce)}$: 1.03 *10* (1995De65).
488.3 *3*	2056.9+z	J2+10	1568.6+z	J2+8			0.97 *8*	
496.0 *2*	2871.2+x	J+16	2375.2+x	J+14	(E2)	0.0275	0.94 *6*	other Eγ: 496.8 *1* (1994Ga07). I$_{(\gamma+ce)}$: 1.09 *11* (1995De65).
511.0 *2*	3031.4+y	J1+16	2520.4+y	J1+14			1.08 *7*	I$_{(\gamma+ce)}$: 1.01 *10* (1995De65).
525.5 *4*	2582.4+z	J2+12	2056.9+z	J2+10			0.80 *8*	
532.1 *2*	3403.3+x	J+18	2871.2+x	J+16	(E2)	0.0232	0.88 *5*	other Eγ: 532.8 *1* (1994Ga07). I$_{(\gamma+ce)}$: 1.00 *11* (1995De65).
546.7 *2*	3578.1+y	J1+18	3031.4+y	J1+16			1.03 *6*	other Eγ: 547.5 (fig. 1, 1995Ko17), 547.1

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(HI,xnγ):SD 1995Fa03,1994Wi06 (continued)

γ(^{192}Hg) (continued)

Eγ[†]	Ei(level)	J^π_i	E_f	J^π_f	Mult.[#]	α[a]	I(γ+ce)[‡]	Comments
								(table 1, 1995Ko17). I(γ+ce): 0.95 *11* (1995De65).
561.7 *4*	3144.1+z	J2+14	2582.4+z	J2+12			0.44 *7*	
567.4 *2*	3970.7+x	J+20	3403.3+x	J+18	(E2)	0.0200	0.69 *4*	other Eγ: 568.0 *1* (1994Ga07). I(γ+ce): 0.97 *12* (1995De65).
578.8 *2*	4156.9+y	J1+20	3578.1+y	J1+18			0.91 *7*	other Eγ: 579.9 (1995Ko17). I(γ+ce): 0.98 *10* (1995De65).
597.3 *4*	3741.4+z	J2+16	3144.1+z	J2+14			0.50 *7*	
601.7 *2*	4572.4+x	J+22	3970.7+x	J+20	(E2)	0.01747	0.71 *4*	other Eγ: 602.5 *1* (1994Ga07). I(γ+ce): 1.09 *11* (1995De65).
604.4 *2*	4761.3+y	J1+22	4156.9+y	J1+20			0.82 *7*	I(γ+ce): 0.98 *10* (1995De65).
624.2 *3*	5385.5+y	J1+24	4761.3+y	J1+22			0.55 *8*	I(γ+ce): 0.97 *13* (1995De65).
630.1 *5*	4371.5+z	J2+18	3741.4+z	J2+16			&	
634.8[@]	1057.58	4⁺	422.79	2⁺				I(γ+ce): 0.82 *14* (1990Be01), 0.86 *7* (1990Ye01).
634.9 *2*	5207.3+x	J+24	4572.4+x	J+22	(E2)	0.01549	&	other Eγ: 636.1 *1* (1994Ga07). I(γ+ce): 0.90 *10* (1995De65).
644.1[@]	2447.2	8⁺	1803.05	6⁺				I(γ+ce): 0.22 *6* (1990Be01), 0.34 *4* (1990Ye01).
652.2 *3*	6037.7+y	J1+26	5385.5+y	J1+24			0.65 *8*	I(γ+ce): 0.77 *12* (1995De65).
659.0 *8*	5030.5+z	J2+20	4371.5+z	J2+18			0.20 *4*	
668.1 *2*	5875.4+x	J+26	5207.3+x	J+24	(E2)	0.01385	0.55 *5*	other Eγ: 669.0 *2* (1994Ga07). I(γ+ce): 0.75 *8* (1995De65).
681.0 *15*	5711.5+z	J2+22	5030.5+z	J2+20			0.15 *6*	
684.3 *3*	6722.0+y	J1+28	6037.7+y	J1+26			0.50 *8*	other Eγ: 685.5 (1995Ko17). I(γ+ce): 0.61 *14* (1995De65).
700.1 *2*	6575.5+x	J+28	5875.4+x	J+26	(E2)	0.01252	0.49 *6*	other Eγ: 700.9 *2* (1994Ga07). I(γ+ce): 0.77 *8* (1995De65).
717.7 *3*	7439.7+y	J1+30	6722.0+y	J1+28			0.30 *7*	I(γ+ce): 0.53 *20* (1995De65).
731.5 *2*	7307.0+x	J+30	6575.5+x	J+28	(E2)	0.01140	0.42 *6*	other Eγ: 732.2 *1* (1994Ga07). I(γ+ce): 0.67 *7* (1995De65).
745.5[@]	1803.05	6⁺	1057.58	4⁺				I(γ+ce): 0.39 *8* (1990Be01), 0.63 *6* (1990Ye01).
749.8 *4*	8189.5+y	J1+32	7439.7+y	J1+30			0.19 *4*	other Eγ: 750.7 (1995Ko17). I(γ+ce): 0.45 *15* (1995De65).
762.3 *3*	8069.3+x	J+32	7307.0+x	J+30	(E2)	0.01045	0.31 *5*	other Eγ: 762.8 *4* (1994Ga07). I(γ+ce): 0.55 *5* (1995De65).
783.1 *5*	8972.6+y	J1+34	8189.5+y	J1+32			0.12 *3*	other Eγ: 782 (1995Ko17).
786.3[@]	1843.90	(5)⁻	1057.58	4⁺				I(γ+ce): 0.17 *7* (1990Be01), 0.23 *3* (1990Ye01).
792.7 *4*	8862.0+x	J+34	8069.3+x	J+32	(E2)		0.29 *4*	other Eγ: 793.0 *3* (1994Ga07). I(γ+ce): 0.44 *6* (1995De65).
819[b] *1*	9791.6+y?	J1+36	8972.6+y	J1+34				Eγ: not reported by 1995Ko17.
822.9 *4*	9684.9+x	J+36	8862.0+x	J+34	(E2)		0.06 *2*	other Eγ: 822.5 *4* (1994Ga07). I(γ+ce): 0.36 *8* (1995De65).
853.1 *5*	10538.0+x	J+38	9684.9+x	J+36			0.03 *1*	other Eγ: 852.1 *6* (1994Ga07). I(γ+ce): 0.23 *7* (1995De65).
888.7[b] *7*	11426.7+x?	J+40	10538.0+x	J+38			≤0.05	other Eγ: 882 (1994Ga07). I(γ+ce): 0.18 *6* (1995De65).

† From 1995Fa03, except as noted. Other Eγ data for SD bands: 1994Ga07, 1992La07, 1993Ha20, 1990Mo16.
‡ For SD bands, I(γ+ce) values within a given band are quoted; intensities are from 1995Fa03, and are presumed by the evaluator

Continued on next page (footnotes at end of table)

(HI,xnγ):SD 1995Fa03,1994Wi06 (continued)

γ(^{192}Hg) (continued)

to have been corrected for internal conversion since, otherwise, the second lowest transition in the band would have I(γ+ce) comparable to that of the strongest transition in the entire band (which would be atypical). Data read from fig. 2 of 1995De65, for the same reaction and beam energy as 1995Fa03 (but different gating) are given in comments. Other Ti(SD-1 band): 1990Be01, 1990Kh06, 1990Ye01, 1992La07. 1990Be01 and 1990Ye01 report also I(γ+ce) in coincidence with SD-1 band gammas for transitions connecting low-lying normal-deformation levels. These data are given in comments on the relevant transitions; data from 1990Be01 are for (^{22}Ne,6nγ) at E=122 MeV, and those from 1990Ye01 are for (^{36}S,4nγ) at E=162 MeV.

[#] Based on correlation ratios (Iγ(0°)/(Iγ(90°)+Iγ(180°)) in gated spectra) (1990Be01). The mean ratio for Eγ=258, 300, 341, 421, 459, 568 and 602 is 1.00 *5*, compared with 0.99 *2* and 0.54 *3*, respectively, for known E2 and E1 transitions. 1990Be01 conclude that the measured transitions are stretched Q, and assume this is also true for the other band members.

[@] From Adopted Gammas. Transition observed in coincidence with SD-1 band gammas (1990Be01 and/or 1990Ye01).

[&] Intensity could not be obtained by 1995Fa03 due to proximity of SD-band transition to known yrast transition in ^{192}Hg.

[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.

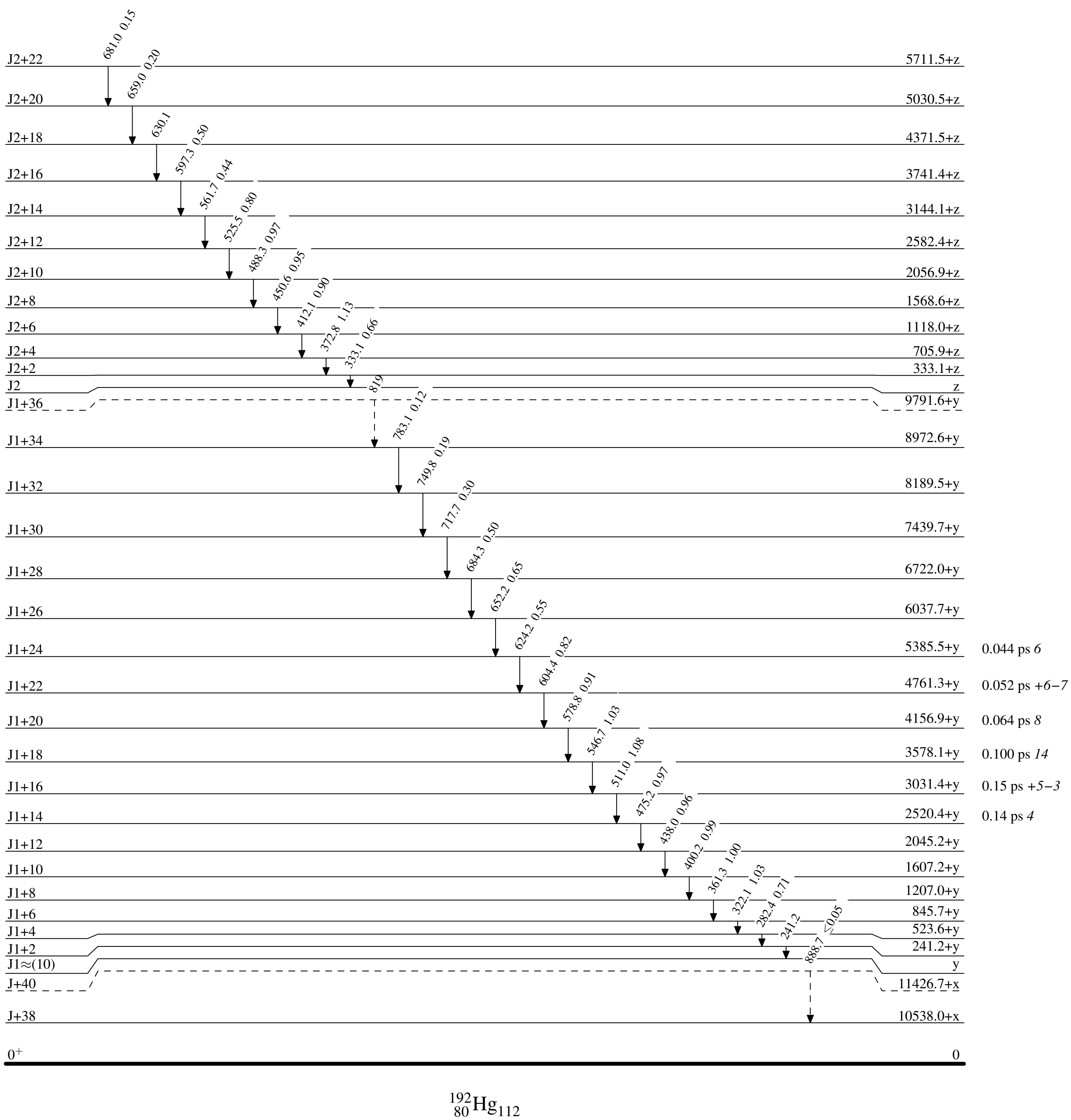
[b] Placement of transition in the level scheme is uncertain.

Legend

(HI,xnγ):SD 1995Fa03,1994Wi06

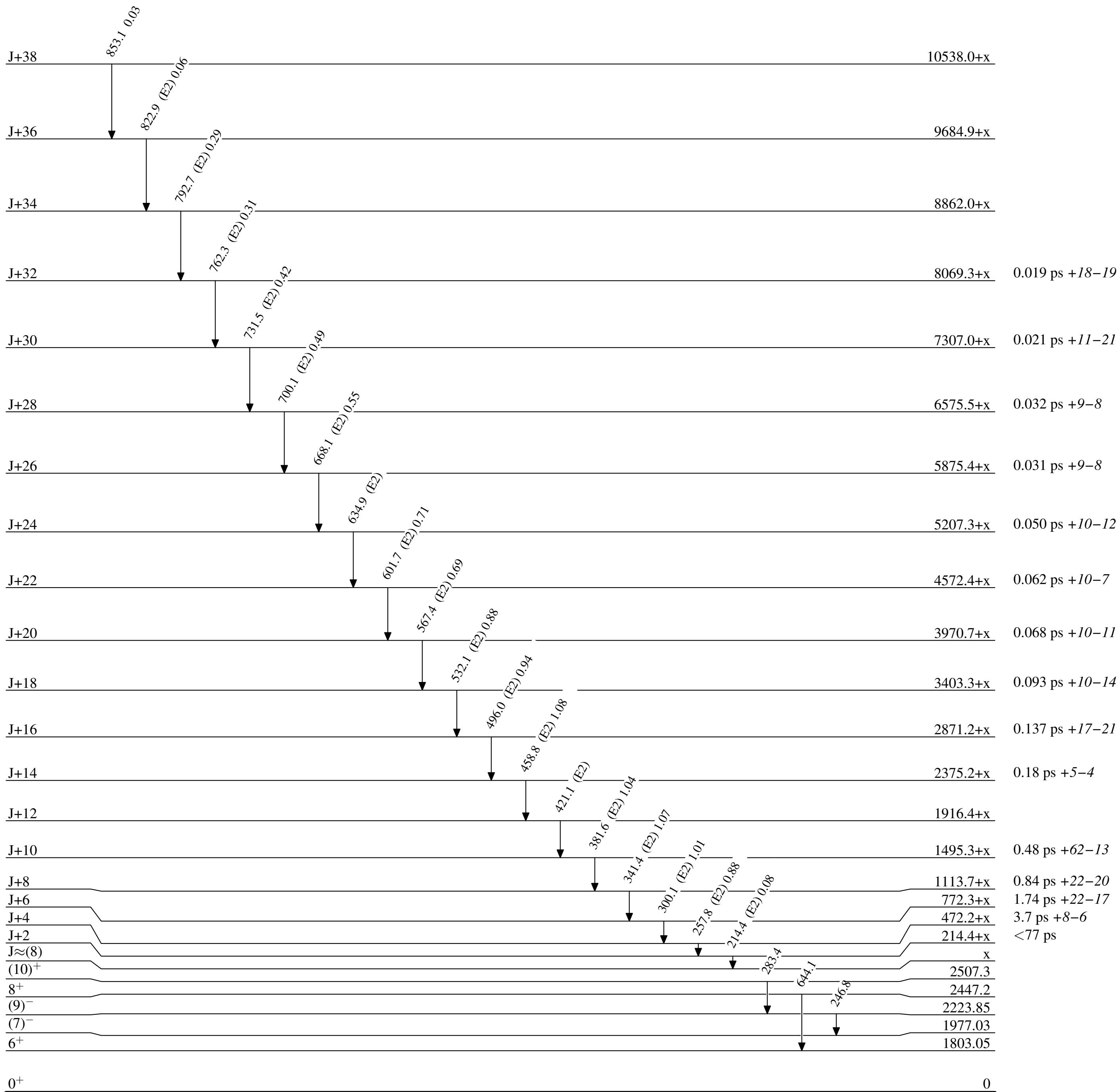
Level Scheme

- - - - - -► γ Decay (Uncertain)



(HI,xnγ):SD 1995Fa03,1994Wi06

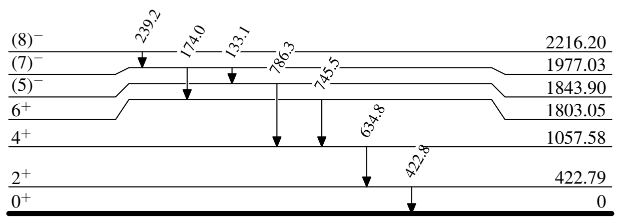
Level Scheme (continued)



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

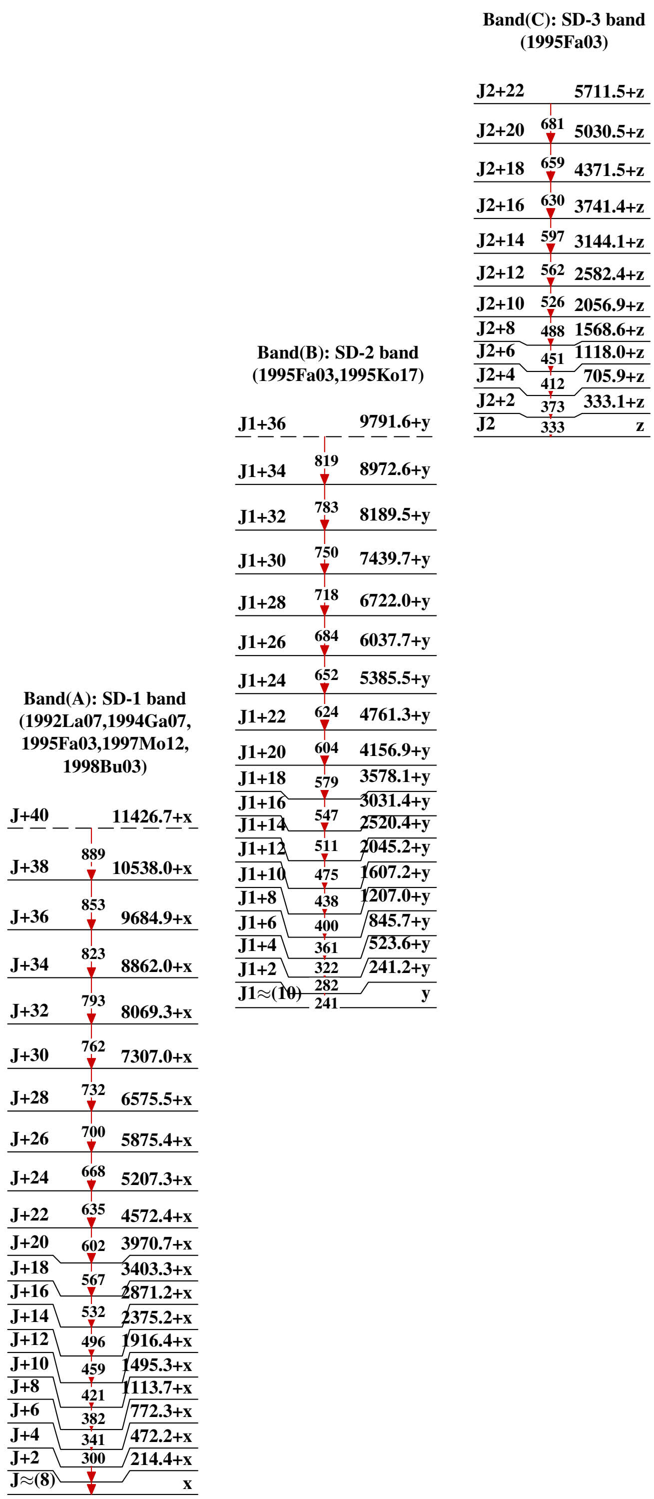
(HI,xnγ):SD 1995Fa03,1994Wi06

Level Scheme (continued)



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

(HI,xnγ):SD 1995Fa03,1994Wi06



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