$^{190}_{80}$Hg

Δ: (–31410) **S_n:** (9800) **S_p:** (5070)
Q_{EC}: (1470) **Q_α:** (3950)

Nuclear Bands

- *A* GS band (86Hu02)
- *B* S=0 (86Hu02)
- *C* S=0 (86Hu02)
- *D* S=1 (86Hu02)
- *E* S=1 (86Hu02)
- *F* S=0 (86Hu02)
- *G* S=0 (86Hu02)
- *H* Band Structure
- *I* SD-1 band (91Dr04,94Cr08)(95Cr02,96Wi08)
- *J* SD-2 band (94Cr08,95Cr02,96Wi08)
- *K* SD-3 band (96Wi08)
- *L* SD-4 band (96Wi08)

Levels and γ-ray branchings:

A **0**, 0^+, 20.0 *5* m, %EC+%β^+=100, %α<5×10^{-5}

A **416.4** *2*, 2^+ γ_0***416.4*** *2* ($\dagger_\gamma$100) E2

A **1041.8** *2*, 4^+ γ_{416}***625.4*** *2* ($\dagger_\gamma$100) E2

1099.9 *2*, 2^+ γ_{416}***683.5*** *2* ($\dagger_\gamma$100 *10*) E2+M1: δ=2.0$^{+10}_{-5}$ γ_0***1099.9*** *2* ($\dagger_\gamma$62 *6*) E2

H **1279.4** *3*, 0^+ γ_{416}***863.0*** *2* ($\dagger_\gamma$100) γ_0***1279*** ($\dagger_e$3.2) E0

1558.8 *2*, $(2)^+$ γ_{1100}***458.7*** *3* ($\dagger_\gamma$26 *3*) γ_{1042}***515.4*** *12* (?) ($\dagger_\gamma$39 *16*) γ_{416}***1142.5*** *3* ($\dagger_\gamma$100 *4*) E2(+M1): δ>2 γ_0***1558.9*** *3* ($\dagger_\gamma$26 *3*)

H **1571.1** *3*, 2^+ γ_{1279}***292.0*** *2* (?) ($\dagger_\gamma$4 *3*) γ_{1042}***529.0*** *2* ($\dagger_\gamma$26 *10*) γ_{416}***1155.0*** *2* ($\dagger_\gamma$100 *9*) E0+M1+E2 γ_0***1571.0*** *2* (?) ($\dagger_\gamma$30 *17*)

1657.0 *2*, $(3)^+$ γ_{1100}***557.0*** *2* ($\dagger_\gamma$100 *10*) E2(+M1): δ>3 γ_{1042}***615.4*** *3* ($\dagger_\gamma$67 *7*) E2+M1: δ=1.4 *3* γ_{416}***1240.7*** *3* ($\dagger_\gamma$21 *2*) (E2)

A **1772.9** *2*, 6^+ γ_{1042}***731.1*** *2* ($\dagger_\gamma$100) E2

D **1881.4** *2*, 5^- γ_{1042}***839.7*** *2* ($\dagger_\gamma$100) E1

H **1975.2** *3*, 4^+ γ_{1571}***404.0*** *2* ($\dagger_\gamma$23 *7*) γ_{1042}***933.0*** *2* ($\dagger_\gamma$39 *12*) E0+M1+E2 γ_{416}***1559.0*** *2* ($\dagger_\gamma$100 *7*)

2072.8 *2*, $(4,5,6)^+$ γ_{1042}***1031.0*** *2* ($\dagger_\gamma$100) M1+E2: δ=0.9 *3*

D **2078.2** *2*, 7^- γ_{1881}***196.8*** *2* ($\dagger_\gamma$29 *3*) E2 γ_{1773}***305.3*** *2* ($\dagger_\gamma$100 *10*) E1

2200.9 *2* (?), $(5)^+$ γ_{1657}***543.9*** *2* (?) E2

2251.7 *2*, $(6,7)^-$ γ_{1881}***370.3*** *2* ($\dagger_\gamma$100 *10*) E2(+M1): δ>7 γ_{1773}***478.3*** *3* ($\dagger_\gamma$27 *3*)

F **2318.4** *3*, $(8)^-$ γ_{2078}***240.2*** *2* ($\dagger_\gamma$100 *10*) M1+E2: δ=1.5$^{+5}_{-3}$

2318.7 *2*, $(4^-,5,6^+)$ γ_{2078}***240.2*** (?) γ_{1881}***437.6*** *3* ($\dagger_\gamma$70 *7*) γ_{1042}***1276.7*** *3* ($\dagger_\gamma$100 *10*)

D **2335.3** *2*, (9^-) γ_{2078}***257.1*** *2* ($\dagger_\gamma$100) (E2)

2391.9 *4* (?), (5 to 9) γ_{2078}***313.7*** *3*

2424.7 *4* (?), (5 to 9) γ_{2078}***346.5*** *3*

B **2464.9** *3*, $(8)^+$ γ_{1773}***692.0*** *2* ($\dagger_\gamma$100) E2

H **2510.0** *3*, 6^+ γ_{1975}***535.0*** *2* ($\dagger_\gamma$100 *8*) γ_{1773}***737.0*** *2* ($\dagger_\gamma$45 *15*) E0+M1+E2 γ_{1042}***1468.0*** *2* ($\dagger_\gamma$51 *4*)

2572.9 *3*, $(4\text{ to }8)^+$ γ_{1773}***800.0*** *2* ($\dagger_\gamma$100) E2

B **2596.9** *3*, (10^+) γ_{2465}***132.0*** *3* ($\dagger_\gamma$100 *10*) E2 γ_{2335}***261.5*** *3* ($\dagger_\gamma$6 *2*) D

B **2620.8** *6*, (12^+), 23 *1* ns, g=–0.21 *2*, Q=1.17 *14* γ_{2597}***23.9***

F **2724.0** *3*, (10^-) γ_{2335}***388.6*** *3* ($\dagger_\gamma$53 *16*) γ_{2318}***405.3*** *3* ($\dagger_\gamma$100 *10*) Q

D **2865.3** *4*, (11^-) γ_{2335}***530.0*** *3* ($\dagger_\gamma$100) Q

2930.9 *4* (?), (10^+) γ_{2465}***466.0*** *3* (Q)

B **3040.7** *6*, (14^+) γ_{2621}***419.9*** *2* ($\dagger_\gamma$100) Q

F **3357.9** *4*, (12^-) γ_{2724}***633.9*** *3* ($\dagger_\gamma$100) Q

D **3548.5** *5*, (13^-) γ_{2865}***683.2*** *3* ($\dagger_\gamma$100) Q

3611.3 *5* (?), (12^+) γ_{2931}***680.4*** *3*

B **3703.4** *6*, (16^+) γ_{3041}***662.7*** *2* ($\dagger_\gamma$100) Q

G **3979.5** *5*, (14^-) γ_{3358}***621.6*** *3* ($\dagger_\gamma$100) (Q)

E **4087.1** *6*, (15^-) γ_{3549}***538.6*** *3* ($\dagger_\gamma$100) Q

G **4242.8** *6*, (16^-) γ_{3980}***263.4*** *3* ($\dagger_\gamma$100 *10*) Q γ_{3703}***539.4*** *3* ($\dagger_\gamma$24 *7*)

E **4326.1** *7*, (17^-) γ_{4087}***239.0*** *3* ($\dagger_\gamma$100)

B **4492.4** *7*, (18^+) γ_{3703}***789.0*** *3* ($\dagger_\gamma$100) Q

G **4551.5** *7*, (18^-) γ_{4243}***308.7*** *3* ($\dagger_\gamma$100) Q

E **4709.3** *7*, (19^-) γ_{4326}***383.2*** *3* ($\dagger_\gamma$100) Q

G **5105.6** *7*, (20^-) γ_{4552}***554.1*** *3* ($\dagger_\gamma$100) Q

C **5228.7** *8*, (20^+) γ_{4492}***736.3*** *3* ($\dagger_\gamma$100) Q

E **5334.3** *13*, (21^-) γ_{4709}***625*** *1* ($\dagger_\gamma$100)

B **5351.6** *8*, (20^+) γ_{4492}***859.2*** *3* ($\dagger_\gamma$100)

C **5794.7** *8*, (22^+) γ_{5229}***566.0*** *3* ($\dagger_\gamma$100)

E **6142.2** *13*, (23^-) γ_{5334}***807.8*** *3* ($\dagger_\gamma$100) Q

6335.1 *9*, (24^+) γ_{5795}***540.4*** *3* ($\dagger_\gamma$100)

C **6576.1** *9*, (24^+) γ_{5795}***781.4*** *3* ($\dagger_\gamma$100)

I **x**, J≈(12)

I **316.9+x**, J+2 γ_x***316.9*** *4* ($\dagger_\gamma$0.059 *11*) (E2) $I^{(2)}$*=92.8,* $\hbar\omega$*=0.169*

I **676.9+x**, J+4 γ_{317+x}***360*** *1* ($\dagger_\gamma$0.64 *3*) (E2) $I^{(2)}$*=94.5,* $\hbar\omega$*=0.191*

I **1079.2+x**, J+6 γ_{677+x}***402.34*** *4* ($\dagger_\gamma$1.00 *17*) (E2) $I^{(2)}$*=98.4,* $\hbar\omega$*=0.211*

I **1522.2+x**, J+8 γ_{1079+x}***442.98*** *6* ($\dagger_\gamma$1.00 *8*) (E2) $I^{(2)}$*=100.7,* $\hbar\omega$*=0.231*

I **2004.9+x**, J+10 γ_{1522+x}***482.71*** *6* ($\dagger_\gamma$1.00 *9*) (E2) $I^{(2)}$*=103.7,* $\hbar\omega$*=0.251*

I **2526.2+x**, J+12 γ_{2005+x}***521.30*** *6*

(†$_\gamma$1.00 *9*) (E2) *I$^{(2)}$=54.3, ħω=0.279*

J **2956.0+x**, J+11 γ_{2005+x}***950.8*** *3* (?) (†$_\gamma$0.03 *1*)

I **3084.8+x**, J+14 γ_{2526+x}***558.6*** *1* (†$_\gamma$0.81 *8*) (E2)

J **3437.1+x**, J+13 γ_{2956+x}***481.1*** *6* (†$_\gamma$0.031 *10*) γ_{2526+x}***910.9*** *3* (†$_\gamma$0.06 *2*) (E1)

I **3679.7+x**, J+16 γ_{3085+x}***594.9*** *1* (†$_\gamma$0.70 *12*) (E2) *I$^{(2)}$=113.6, ħω=0.306*

J **3948.5+x**, J+15 γ_{3437+x}***511.4*** *4* (†$_\gamma$0.08 *2*) *I$^{(1)}$=56.9, I$^{(2)}$=125.8, ħω=0.264* γ_{3085+x}***864*** *1* (†$_\gamma$0.08 *2*) (E1)

I **4309.8+x**, J+18 γ_{3680+x}***630.1*** *1* (†$_\gamma$0.50 *14*) (E2) *I$^{(2)}$=117.6, ħω=0.324*

J **4491.7+x**, J+17 γ_{3949+x}***543.2*** *3* (†$_\gamma$0.17 *3*) *I$^{(1)}$=60.8, I$^{(2)}$=123.5, ħω=0.280* γ_{3680+x}***812*** *1* (†$_\gamma$0.07 *2*) (E1)

I **4973.9+x**, J+20 γ_{4310+x}***664.1*** *1* (†$_\gamma$0.40 *5*) (E2) *I$^{(2)}$=122.0, ħω=0.340*

J **5067.3+x**, J+19 γ_{4492+x}***575.6*** *2* (†$_\gamma$0.20 *4*) *I$^{(1)}$=64.2, I$^{(2)}$=123.1, ħω=0.296* γ_{4310+x}***757*** *1* (?) (†$_\gamma$0.06 *2*)

I **5670.8+x**, J+22 γ_{4974+x}***696.9*** *1* (†$_\gamma$0.25 *4*) *I$^{(2)}$=126.6, ħω=0.356*

J **5675.4+x**, J+21 γ_{5067+x}***608.1*** *3* (†$_\gamma$0.22 *4*) *I$^{(1)}$=67.2, I$^{(2)}$=119.4, ħω=0.312* γ_{4974+x}***702*** *1* (?) (†$_\gamma$0.03 *2*)

J **6317.0+x**, J+23 γ_{5675+x}***641.6*** *3* (†$_\gamma$0.19 *4*) *I$^{(1)}$=69.9, I$^{(2)}$=121.6, ħω=0.329*

I **6399.3+x**, J+24 γ_{5671+x}***728.5*** *4* (†$_\gamma$0.14 *4*) (E2) *I$^{(2)}$=138.4, ħω=0.371*

J **6991.5+x**, J+25 γ_{6317+x}***674.5*** *5* (†$_\gamma$0.10 *3*) *I$^{(1)}$=72.4, I$^{(2)}$=122.7, ħω=0.345*

I **7156.7+x**, J+26 γ_{6399+x}***757.4*** *4* (†$_\gamma$0.06 *2*) *I$^{(2)}$=153.3, ħω=0.385*

J **7698.6+x**, J+27 γ_{6992+x}***707.1*** *6* (†$_\gamma$0.04 *1*)

I **7940.2+x**, J+28 γ_{7157+x}***783.5*** *6* (†$_\gamma$0.021 *12*) *I$^{(2)}$=218.6, ħω=0.396*

I **8742.0+x** (?), J+30 γ_{7940+x}***801.8*** *8* (?) (†$_\gamma$<0.01)

K **y**, J≈(14)

K **279+y** (?), J+2 γ_y***279*** (?) (†$_\gamma$<0.01) *I$^{(2)}$=102.6, ħω=0.149*

K **597.0+y**, J+4 γ_{279+y}***318.0*** *3* (†$_\gamma$0.022 *12*) *I$^{(2)}$=99.3, ħω=0.169*

K **955.3+y**, J+6 γ_{597+y}***358.3*** *4* (†$_\gamma$0.030 *13*) *I$^{(2)}$=102.3, ħω=0.189*

K **1352.7+y**, J+8 γ_{955+y}***397.4*** *4* (†$_\gamma$0.039 *10*) *I$^{(2)}$=103.9, ħω=0.208*

K **1788.6+y**, J+10 γ_{1353+y}***435.9*** *4* (†$_\gamma$0.041 *10*) *I$^{(2)}$=105.0, ħω=0.227*

K **2262.6+y**, J+12 γ_{1789+y}***474.0*** *5* (†$_\gamma$0.041 *11*) *I$^{(2)}$=109.3, ħω=0.246*

K **2773.2+y**, J+14 γ_{2263+y}***510.6*** *4* (†$_\gamma$0.040 *10*) *I$^{(2)}$=107.8, ħω=0.265*

K **3320.9+y**, J+16 γ_{2773+y}***547.7*** *8* (†$_\gamma$0.032 *11*) *I$^{(2)}$=113.6, ħω=0.283*

K **3903.8+y**, J+18 γ_{3321+y}***582.9*** *7* (†$_\gamma$0.021 *12*) *I$^{(2)}$=114.3, ħω=0.300*

K **4521.7+y**, J+20 γ_{3904+y}***617.9*** *7* (†$_\gamma$0.011 *9*) *I$^{(2)}$=119.0, ħω=0.317*

K **5173.2+y**, J+22 γ_{4522+y}***651.5*** *7* (†$_\gamma$<0.005)

L **z**, J

L **446.3+z**, J+2 γ_z***446.3*** *4* (†$_\gamma$0.09 *2*) *I$^{(2)}$=198.0, ħω=0.228*

L **912.8+z**, J+4 γ_{446+z}***466.5*** *4* (†$_\gamma$0.14 *4*) *I$^{(2)}$=198.0, ħω=0.238*

L **1399.5+z**, J+6 γ_{913+z}***486.7*** *4* (†$_\gamma$0.14 *4*) *I$^{(2)}$=141.3, ħω=0.250*

L **1914.5+z**, J+8 γ_{1400+z}***515.0*** *4* (†$_\gamma$0.14 *3*) *I$^{(2)}$=122.3, ħω=0.266*

L **2462.2+z**, J+10 γ_{1915+z}***547.7*** *4* (†$_\gamma$0.14 *3*) *I$^{(2)}$=113.6, ħω=0.283*

L **3044.9+z**, J+12 γ_{2462+z}***582.7*** *5* (†$_\gamma$0.14 *4*) *I$^{(2)}$=114.3, ħω=0.300*

L **3662.6+z**, J+14 γ_{3045+z}***617.7*** *4* (†$_\gamma$0.14 *4*) *I$^{(2)}$=111.4, ħω=0.318*

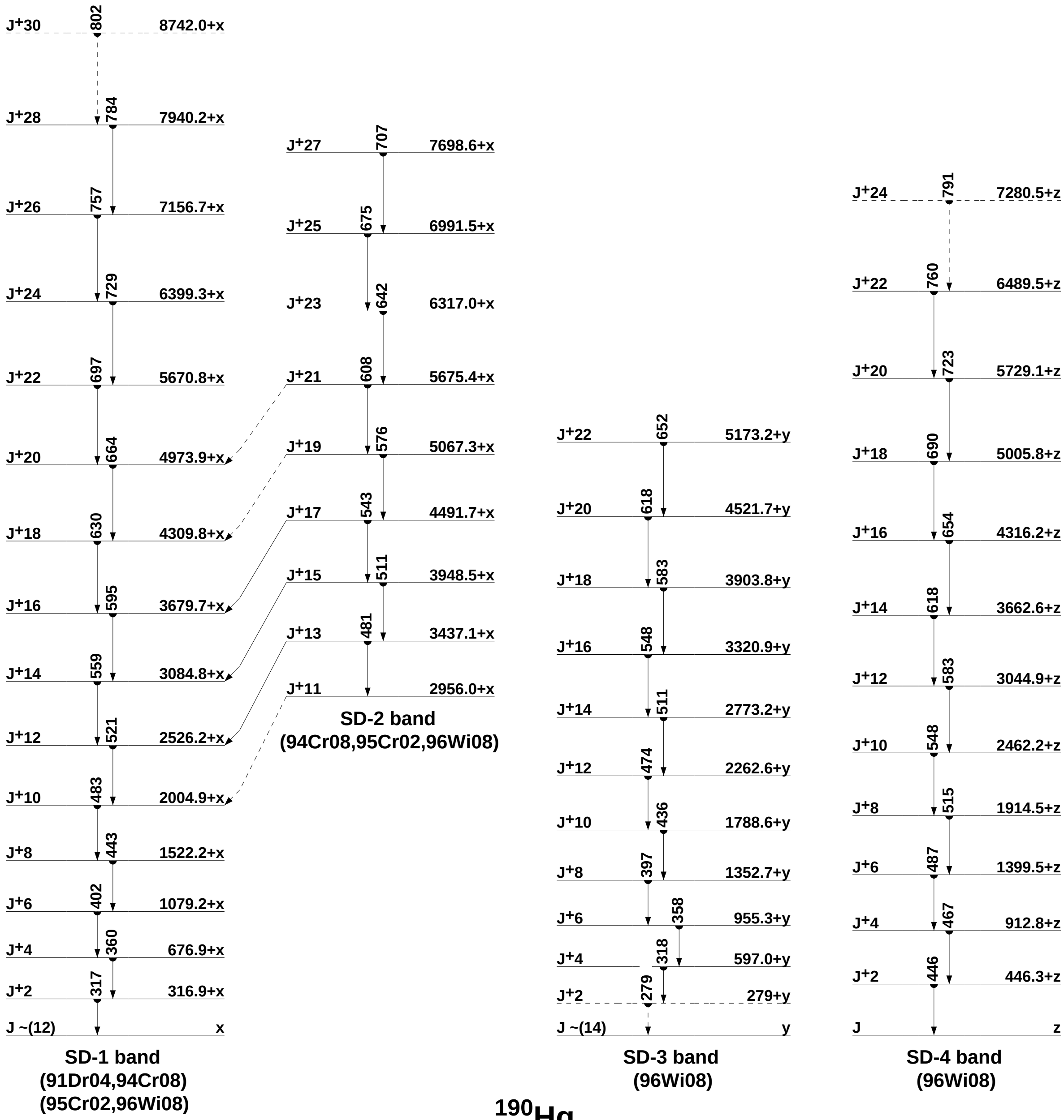
L **4316.2+z**, J+16 γ_{3663+z}***653.6*** *4* (†$_\gamma$0.11 *3*) *I$^{(2)}$=111.1, ħω=0.336*

L **5005.8+z**, J+18 γ_{4316+z}***689.6*** *6* (†$_\gamma$0.06 *2*) *I$^{(2)}$=118.7, ħω=0.353*

L **5729.1+z**, J+20 γ_{5006+z}***723.3*** *6* (†$_\gamma$0.039 *12*) *I$^{(2)}$=107.8, ħω=0.371*

L **6489.5+z**, J+22 γ_{5729+z}***760.4*** *6* (†$_\gamma$0.011 *10*) *I$^{(2)}$=130.7, ħω=0.388*

L **7280.5+z** (?), J+24 γ_{6490+z}***791*** (?) (†$_\gamma$<0.01)


J+30 8742.0+x 802
J+28 7940.2+x 784
J+26 7156.7+x 757
J+24 6399.3+x 729
J+22 5670.8+x 697
J+20 4973.9+x 664
J+18 4309.8+x 630
J+16 3679.7+x 595
J+14 3084.8+x 559
J+12 2526.2+x 521
J+10 2004.9+x 483
J+8 1522.2+x 443
J+6 1079.2+x 402
J+4 676.9+x 360
J+2 316.9+x 317
J ~(12) x
SD-1 band
(91Dr04,94Cr08)
(95Cr02,96Wi08)
J+27 7698.6+x 707
J+25 6991.5+x 675
J+23 6317.0+x 642
J+21 5675.4+x 608
J+19 5067.3+x 576
J+17 4491.7+x 543
J+15 3948.5+x 511
J+13 3437.1+x 481
J+11 2956.0+x
SD-2 band
(94Cr08,95Cr02,96Wi08)
J+22 5173.2+y 652
J+20 4521.7+y 618
J+18 3903.8+y 583
J+16 3320.9+y 548
J+14 2773.2+y 511
J+12 2262.6+y 474
J+10 1788.6+y 436
J+8 1352.7+y 397
J+6 955.3+y 358
J+4 597.0+y 318
J+2 279+y 279
J ~(14) y
SD-3 band
(96Wi08)
J+24 7280.5+z 791
J+22 6489.5+z 760
J+20 5729.1+z 723
J+18 5005.8+z 690
J+16 4316.2+z 654
J+14 3662.6+z 618
J+12 3044.9+z 583
J+10 2462.2+z 548
J+8 1914.5+z 515
J+6 1399.5+z 487
J+4 912.8+z 467
J+2 446.3+z 446
J z
SD-4 band
(96Wi08)

$^{190}_{80}$Hg