

194Pb

Δ : (-24250) S_n : (10040) S_p : (4100)
 Q_{EC} : (2700) Q_α : 4738.20

Nuclear Bands

- A Band Structure
- B Band Structure
- C Band Structure
- D Band Structure
- E Band Structure
- F Oblate band
- G Oblate band
- H Levels Populated by SD-1
- I SD-1 band (96Br07,95Ga10)(90Br10,90Hu10).
- J Oblate band
- K SD-2 band (94Hu10)
- L SD-3 band? (94Hu10)

Levels and γ -ray branchings:

0, 0⁺, 12.0 s m, %EC+% β^+ =100,
 % α =7.3 $\times 10^{-6}$ 29

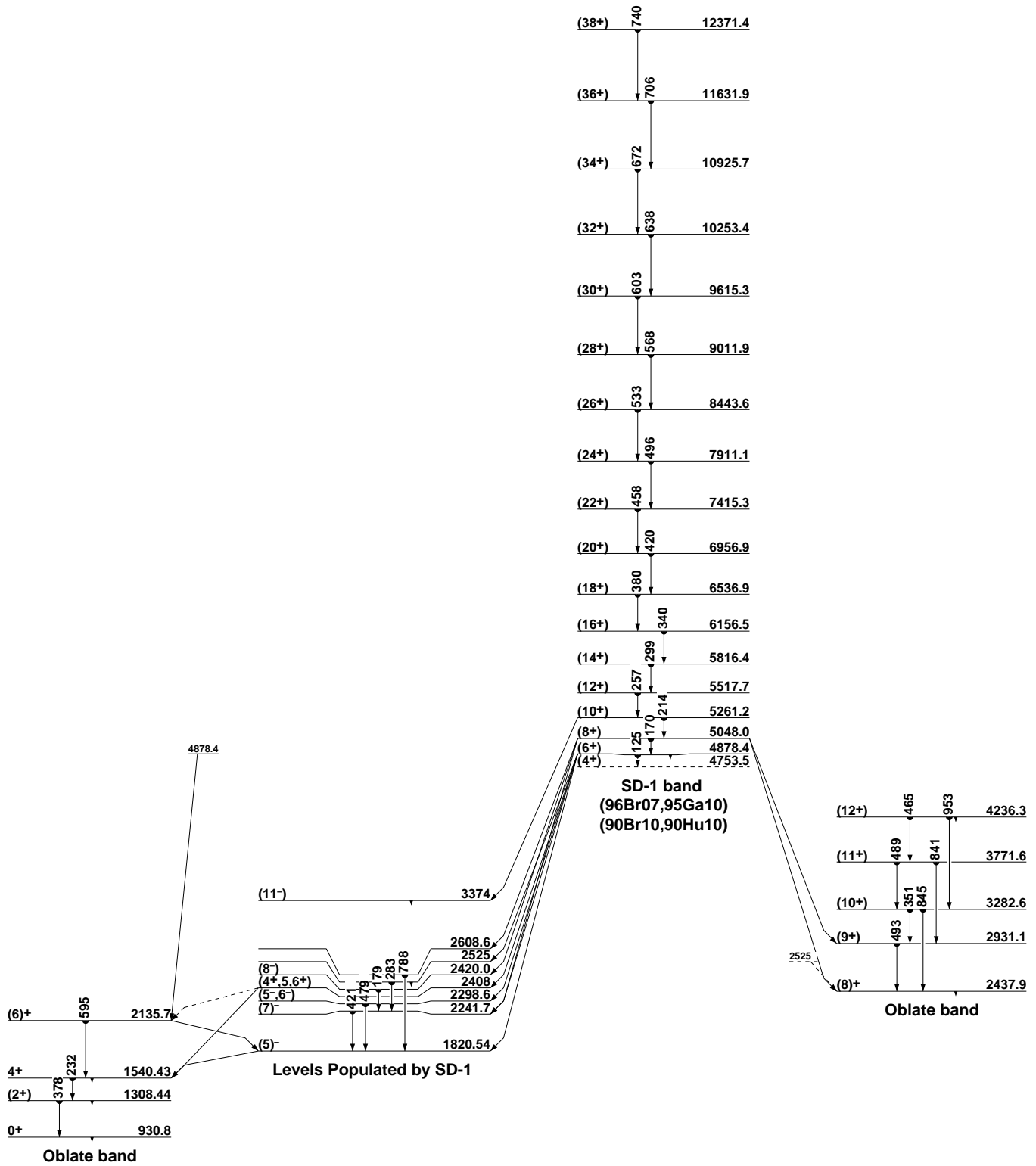
- G 930.8 2, 0⁺, 1.1 2 ns γ_0 930.6 4 E0
 965.35 10, 2⁺ γ_0 965.4 1 (\dagger_{γ} 100) E2
- G 1308.44 13, (2⁺) γ_{965} 343.2 2 (\dagger_{γ} 16 5)
 (E0+M1+E2) γ_{931} 377.5 3 (\dagger_{γ} 6 3)
 γ_0 1308.3 2 (\dagger_{γ} 100 5) (E2)
- G 1540.43 13, 4⁺ γ_{1308} 231.9 2 (\dagger_{γ} 0.4 2)
 γ_{965} 575.1 1 (\dagger_{γ} 100 2) E2
 1637.2 2, (≤ 4) γ_{965} 671.8 2 (\dagger_{γ} 100)
 1738.9 2, (1, 2⁺) γ_{965} 773.5 3 (\dagger_{γ} 100 50)
 γ_{931} 808.1 3 (\dagger_{γ} 20 15) γ_0 1738.9 3
 (\dagger_{γ} 30 10)
- H 1820.54 16, (5)⁻, 1.1 2 ns γ_{1540} 280.1 1
 (\dagger_{γ} 100) E1
 2019.3 3, (≤ 4) γ_{1308} 710.9 2 (\dagger_{γ} 100)
- G 2135.7 3, (6)⁺ γ_{1821} 315 γ_{1540} 595.4 3
 (\dagger_{γ} 100) E2

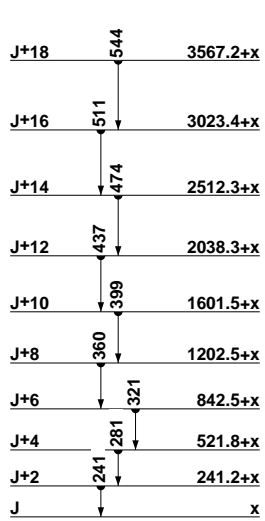
- H 2241.7 3, (7)⁻ γ_{1821} 421.1 2 (\dagger_{γ} 100) E2
- H 2298.6, (5⁻, 6⁻) γ_{1821} 479
 2407.7 3, (9)⁻, 18 3 ns, $\mu=-0.63$ 36
 γ_{2242} 166.0 1 (\dagger_{γ} 100) E2
- H 2408, (4⁺, 5, 6⁺) γ_{2136} 272(?) γ_{1540} 867
- H 2420.0 3, (8)⁻ γ_{2242} 178.5 2 (\dagger_{γ} 100)
 (M1+E2): $\delta<0.7$
- J 2437.9 3, (8)⁺, 17 4 ns γ_{2242} 196.1 2
 (\dagger_{γ} 24 2) (E1) γ_{2136} 302.4 3 (\dagger_{γ} 100 4)
 E2
- 2502.8 3, (8)⁻ γ_{2242} 261.1 2 (\dagger_{γ} 100) (M1)
- H 2525 γ_{2438} 86(?) γ_{2242} 283
 2581.4 3, (10)⁺, 17.2 5 ns $\gamma_{2407.7}$ 173.7 1
 (\dagger_{γ} 100) E1
- H 2608.6 γ_{1821} 788
 2628.6 4, (12⁺), 350 10 ns, $\mu=-2.076$ 12,
 $Q=0.49$ 3 γ_{2581} 47.0 3 (\dagger_{γ} 100)
- 2646.2 4, (11) γ_{2581} 64.8 3(?) (\dagger_{γ} 100) D
 2701.1 4(?) (9) γ_{2242} 459.4 3(?) (\dagger_{γ} 100)
 (Q)
 2799.9 4, (4 to 8) γ_{2136} 664.2 2 (\dagger_{γ} 100)
 2914.5 4(?) (9⁻) γ_{2242} 672.8 3(?)
 (\dagger_{γ} 100) (Q)
- J 2931.1 4, (9⁺) γ_{2438} 493.2 2 (\dagger_{γ} 100)
- F 2933.6 3, (11)⁻, 124 10 ns γ_{2629} 305.0 1
 (\dagger_{γ} 61 11) E1 γ_{2581} 352.2 1 (\dagger_{γ} 100 12)
 E1 γ_{2438} 496 (O)
 3180.0 5 γ_{2646} 534
- E 3208.2 4, (10)⁻ γ_{2420} 788.6 3 (\dagger_{γ} 100) (Q)
 $\gamma_{2408.0}$ 800.0
- E 3272.1 5, (11)⁻ γ_{2915} 358 $\gamma_{2408.0}$ 863.7
- J 3282.6 5, (10⁺) γ_{2931} 351 γ_{2438} 844.5
- H 3374, (11)⁻ γ_{2915} 460
 3471 γ_{2800} 671
- F 3475.9 3, (12)⁻ γ_{2934} 542.2 1 (\dagger_{γ} 100) M1
 3522 γ_{2800} 722

- 3561.9 4, (14⁺) γ_{2629} 933.3 1 (\dagger_{γ} 100) E2
 3610.0 4, (10⁺, 11, 12⁺) γ_{2646} 963(?)
 γ_{2629} 982 γ_{2581} 1028
- E 3727.8 5, (12)⁻ γ_{3272} 455.0 γ_{3208} 519.8 3
 (\dagger_{γ} 100 9) (Q)
- J 3771.6 5, (11⁺) γ_{3283} 489 γ_{2931} 841
- F 3840.5 3, (13)⁻ γ_{3476} 364.6 1 (\dagger_{γ} 100 4)
 M1 γ_{2934} 907.1 1 (\dagger_{γ} 85 2) E2
- E 3849.9 6, (13)⁻ γ_{3374} 477 γ_{3272} 577.8
 4003.7 4, (15)⁻ γ_{3562} 441.8 1 (\dagger_{γ} 100) E1
- D 4136.9 4, (16⁺) γ_{3562} 575.0 1 (\dagger_{γ} 100) (Q)
- J 4236.3 4, (12⁺) γ_{3772} 465 γ_{3283} 953.0
 γ_{2934} 1302.4
- E 4265.8 6, (14)⁻ γ_{3850} 416.0 γ_{3728} 538.0
- D 4299.3 5(?), (17⁺) γ_{4137} 162.4 3(?)
 (\dagger_{γ} 100) D
- B 4333.8 4, (12) γ_{4236} 98 γ_{3610} 723
 γ_{3476} 858.5 γ_{3180} 1154 γ_{2934} 1400.1
 γ_{2646} 1688.1 γ_{2629} 1704.0
- F 4367.1 4, (14)⁻ γ_{3841} 526.6 3 (\dagger_{γ} 100) D
 γ_{3476} 891
 4376.3 4, (12, 13, 14⁺) γ_{4236} 139 γ_{3841} 537
- 4376.4 5, (16)⁻ γ_{4004} 372.7 3 (\dagger_{γ} 100) M1
- E 4409.2 6, (15)⁻ γ_{4266} 143.5 3 (\dagger_{γ} 100)
 γ_{3850} 559.2
- F 4450.3 3, (15)⁻ γ_{3841} 609.7 1 (\dagger_{γ} 100) E2
 4454.4 5(?), (15) γ_{3562} 892.5 3(?)
 (\dagger_{γ} 100) D
 4478.3 8, (15)⁻ γ_{3850} 628.4
- D 4532.2 6, (18⁺) γ_{4299} 232.9 3 (\dagger_{γ} 100) D
 4601.3 5, (17)⁻ γ_{4004} 597.6 3 (\dagger_{γ} 100) (Q)
- B 4637.0 5, (13) $\gamma_{4376.3}$ 261 γ_{4334} 303.1 3
 (\dagger_{γ} 100 3) D
- E 4693.5 7, (16)⁻ γ_{4409} 284.3 3 (\dagger_{γ} 100) (D)
 4702.6 6, (18)⁻ $\gamma_{4376.4}$ 326.1 3 (\dagger_{γ} 100)

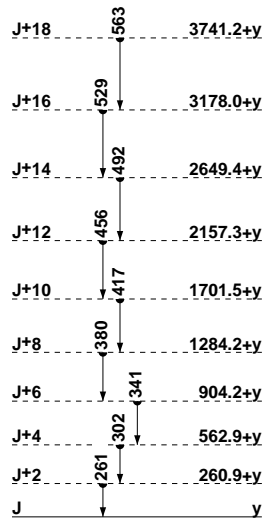
- (Q)
4750.8 5(?), (17) γ_{4137} **613.9** 3(?)
 $(\dagger_{\gamma}100)$ D
- I **4753.5** (?), (4*)
4796.6 5, (18*) γ_{4137} **659.7** 3 $(\dagger_{\gamma}100)$ E2
- B **4800.1** 6, (14) γ_{4637} **163.1** 3 $(\dagger_{\gamma}100)$ D
- D **4820.4** 7, (19*) γ_{4532} **288.2** 3 $(\dagger_{\gamma}100)$ (D)
- I **4878.4** 3, (6*) γ_{4754} **124.9** (?) $(\dagger_{\gamma}=0.05)$
 $I^{(1)}=81.5, I^{(2)}=89.5, \hbar\omega=0.074$
 γ_{2525} **2353.4** 3 $(\dagger_{\gamma}0.0286)$
 $\gamma_{2408.0}$ **2469.7** 4 $(\dagger_{\gamma}0.0156)$
 γ_{2299} **2579.1** 2 $(\dagger_{\gamma}0.0306)$
 γ_{2242} **2636.6** 2 $(\dagger_{\gamma}0.0186)$
 γ_{2136} **2742.5** 2 $(\dagger_{\gamma}0.0336)$ γ_{1821} **3056** 1
 $(\dagger_{\gamma}0.0085)$
- A **4965.7** 4, (16*) γ_{4450} **515.4** 1 $(\dagger_{\gamma}100)$ D
- I **5048.0** 4, (8*), 14.5 ps γ_{4878} **169.6** 2
 $(\dagger_{\gamma}0.577)$ $I^{(1)}=83.5, I^{(2)}=91.1,$
 $\hbar\omega=0.096$ γ_{2931} **2116.5** 4 $(\dagger_{\gamma}0.0095)$
 γ_{2609} **2438.5** 4 $(\dagger_{\gamma}0.0094)$
 γ_{2438} **2609.6** 4 $(\dagger_{\gamma}0.0176)$
 γ_{2420} **2627.9** 4 $(\dagger_{\gamma}0.0136)$
 γ_{2242} **2806.1** 3 $(\dagger_{\gamma}0.0175)$
- E **5055.0** 8, (17*) γ_{4694} **361.5** 3 $(\dagger_{\gamma}100)$ (D)
5061.8 5(?), (17*) γ_{4004} **1058.1** 3(?)
 $(\dagger_{\gamma}100)$
- A **5085.4** 5, (17*) γ_{4966} **119.7** 3 $(\dagger_{\gamma}100)$ (D)
5091.4 6, (17*) $\gamma_{4376.4}$ **715.0** 3 $(\dagger_{\gamma}100)$
(D)
5109.7 9, (17*) γ_{4478} **631.4**
- D **5168.4** 7, (20*) γ_{4820} **348.0** 3 $(\dagger_{\gamma}100)$ D
- B **5197.4** 6, (15) γ_{4800} **397.4** 3 $(\dagger_{\gamma}100)$ D
- A **5230.5** 6, (18*) γ_{5085} **145.1** 3 $(\dagger_{\gamma}100)$ (D)
5258.8 6, (20*) γ_{4797} **462.2** 3 $(\dagger_{\gamma}100)$
- I **5261.2** 7, (10*), 5.8₁₂ ps γ_{5048} **213.5** 1
 $(\dagger_{\gamma}1.0210)$ $I^{(1)}=85.1, I^{(2)}=93.0,$
 $\hbar\omega=0.118$ γ_{3374} **1887.9** 3 $(\dagger_{\gamma}0.0104)$
5329.9 6, (18) γ_{4601} **728.6** 3 $(\dagger_{\gamma}100)$ (D)
- A **5427.6** 7, (19*) γ_{5231} **197.1** 3 $(\dagger_{\gamma}100)$ D
5465.2 5(?), (17) γ_{4966} **499.5** 3(?)
 $(\dagger_{\gamma}100)$ D
- I **5517.7** 7, (12*), 3.87 ps γ_{5261} **256.5** 1
 $(\dagger_{\gamma}0.9810)$ $I^{(1)}=86.5, I^{(2)}=94.8,$
 $\hbar\omega=0.139$
- D **5542.7** 9, (21*) γ_{5168} **374.3**
5551.7 6, (19*) γ_{5091} **460.4** 3 $(\dagger_{\gamma}9527)$
(Q) γ_{4703} **849.1** 3 $(\dagger_{\gamma}100)$ 7)
5553.1 6, (20*) γ_{4797} **756.5** 3 $(\dagger_{\gamma}100)$ 19)
(Q)
- B **5573.9** 6, (16) γ_{5197} **376.7** 3 $(\dagger_{\gamma}100)$ D
 γ_{4800} **773.4**
- A **5687.9** 7, (20*) γ_{5428} **260.3** 3 $(\dagger_{\gamma}100)$ (D)
5732.4 6, (20*) γ_{4703} **1029.8** 3 $(\dagger_{\gamma}100)$
(E2)
5735.9 6(?), (18) γ_{5465} **270.7** 3(?)
 $(\dagger_{\gamma}100)$ (D)
- I **5816.4** 7, (14*), 1.85 ps γ_{5518} **298.7** 1
 $(\dagger_{\gamma}1.0810)$ $I^{(1)}=87.7, I^{(2)}=96.6,$
 $\hbar\omega=0.160$
5930.5 7(?), (20) γ_{5736} **194.6** 3(?)
 $(\dagger_{\gamma}100)$ (Q)
- B **5937.5** 7, (17) γ_{5574} **363.7** 3 $(\dagger_{\gamma}100)$ 7) (D)
 γ_{5197} **740.0**
- D **5939.5** 9, (22) γ_{5543} **396.8** 3 $(\dagger_{\gamma}100)$ D
5983.1 7, (18) γ_{5574} **409.3** 3 $(\dagger_{\gamma}100)$ (Q)
- A **6024.5** 8, (21*) γ_{5688} **336.6** 3 $(\dagger_{\gamma}100)$ D
6139.2 7(?), (21) γ_{5931} **208.7** 3(?)
 $(\dagger_{\gamma}100)$ D
- I **6156.5** 8, (16*) γ_{5816} **340.1** 1 $(\dagger_{\gamma}0.9510)$
 $I^{(1)}=88.8, I^{(2)}=99.3, \hbar\omega=0.180$
- C **6198.3** 7(?), (18) γ_{5938} **260.8** 3(?)
 $(\dagger_{\gamma}100)$ (D)
6206.5 7, (21*) γ_{5552} **654.8** 3 $(\dagger_{\gamma}100)$
- C **6328.7** 8(?), (19) γ_{6198} **130.4** 3(?)
 $(\dagger_{\gamma}100)$ (D)
6331.1 8 γ_{5983} **348.3** γ_{5574} **757** (?)
6379.4 7, (22*) γ_{5553} **826.3** 3 $(\dagger_{\gamma}100)$ (Q)
- A **6400.5** 8, (22*) γ_{6029} **376.0** 3 $(\dagger_{\gamma}100)$ D
C **6465.7** 9, (20) γ_{6329} **137.0** 3 $(\dagger_{\gamma}100)$ D
- I **6536.9** 8, (18*), >0.5 ps γ_{6157} **380.4** 1
 $(\dagger_{\gamma}0.9510)$ $I^{(1)}=90.0, I^{(2)}=101.0,$
 $\hbar\omega=0.200$
- C **6677.9** 9, (21) γ_{6466} **212.2** 3 $(\dagger_{\gamma}100)$ D
A **6817.2** 9, (23) γ_{6401} **416.7** 3 $(\dagger_{\gamma}100)$ D
C **6905.9** 10, (22) γ_{6678} **228.0** 3 $(\dagger_{\gamma}100)$ (Q)
- I **6956.9** 8, (20*), 0.24⁺⁴³₋₁₄ ps γ_{6537} **420.0** 2
 $(\dagger_{\gamma}0.9610)$ $I^{(1)}=91.1, I^{(2)}=104.2,$
 $\hbar\omega=0.220$
- C **7173.8** 10, (23) γ_{6906} **267.9** 3 $(\dagger_{\gamma}100)$ (D)
A **7241.3** 10, (24) γ_{6817} **424.1**
- I **7415.3** 8, (22*), 0.14⁺¹⁰₋₇ ps γ_{6957} **458.4** 1
 $(\dagger_{\gamma}0.8510)$ $I^{(1)}=92.2, I^{(2)}=107.0,$
 $\hbar\omega=0.239$
- C **7481.4** 11, (24) γ_{7174} **307.8** 3 $(\dagger_{\gamma}100)$ D
C **7842.3** 11, (25) γ_{7481} **361.6** γ_{7174} **668** (?)
- I **7911.1** 8, (24*), 0.135 ps γ_{7415} **495.8** 1
 $(\dagger_{\gamma}0.8310)$ $I^{(1)}=93.4, I^{(2)}=109.0,$
 $\hbar\omega=0.257$
- C **8235.7** 11, (26) γ_{7842} **393.6** γ_{7481} **754** (?)
- I **8443.6** 8, (26*), 0.085 ps γ_{7911} **532.5** 2
 $(\dagger_{\gamma}0.6510)$ $I^{(1)}=94.5, I^{(2)}=111.7,$
 $\hbar\omega=0.275$

- I 9011.9 9, (28⁺), 0.07 2 ps γ_{8444} **568.3 2**
 $(\dagger_{\gamma} 0.50 7)$ $I^{(1)}=95.6$, $I^{(2)}=114.0$,
 $\bar{h}\omega=0.293$
- I 9615.3 9, (30⁺) γ_{9012} **603.4 2** ($\dagger_{\gamma} 0.42 5$)
 $I^{(1)}=96.7$, $I^{(2)}=115.3$, $\bar{h}\omega=0.310$
- I 10253.4 10, (32⁺) γ_{9615} **638.1 4** ($\dagger_{\gamma} 0.32 5$)
 $I^{(1)}=97.7$, $I^{(2)}=117.0$, $\bar{h}\omega=0.328$
- I 10925.7 11, (34⁺) γ_{10253} **672.3 4**
 $(\dagger_{\gamma} 0.20 5)$ $I^{(1)}=98.7$, $I^{(2)}=118.0$,
 $\bar{h}\omega=0.345$
- I 11631.9 11, (36⁺) γ_{10926} **706.2 2**
 $(\dagger_{\gamma} 0.12 5)$ $I^{(1)}=99.6$, $I^{(2)}=120.1$,
 $\bar{h}\omega=0.361$
- I 12371.4 11, (38⁺) γ_{11632} **739.5 4**
 $(\dagger_{\gamma} 0.10 5)$
- K x, J
K 241.2+x 3, J+2 γ_x **241.2 3** ($\dagger_{\gamma} 0.036 4$)
 $I^{(2)}=101.5$, $\bar{h}\omega=0.130$
- K 521.8+x 5, J+4 γ_{241+x} **280.6 4**
 $(\dagger_{\gamma} 0.096 10)$ $I^{(2)}=99.8$, $\bar{h}\omega=0.150$
- K 842.5+x 6, J+6 γ_{522+x} **320.7 2** ($\dagger_{\gamma} 0.052 5$)
 $I^{(2)}=101.8$, $\bar{h}\omega=0.170$
- K 1202.5+x 6, J+8 γ_{843+x} **360.0 2**
 $(\dagger_{\gamma} 0.060 6)$ $I^{(2)}=102.6$, $\bar{h}\omega=0.190$
- K 1601.5+x 7, J+10 γ_{1203+x} **399.0 2**
 $(\dagger_{\gamma} 0.071 7)$ $I^{(2)}=105.8$, $\bar{h}\omega=0.209$
- K 2038.3+x 7, J+12 γ_{1602+x} **436.8 3**
 $(\dagger_{\gamma} 0.064 7)$ $I^{(2)}=107.5$, $\bar{h}\omega=0.228$
- K 2512.3+x 8, J+14 γ_{2038+x} **474.0 3**
 $(\dagger_{\gamma} 0.072 8)$ $I^{(2)}=107.8$, $\bar{h}\omega=0.246$
- K 3023.4+x 9, J+16 γ_{2512+x} **511.1 5**
 $(\dagger_{\gamma} 0.051 6)$ $I^{(2)}=122.3$, $\bar{h}\omega=0.264$
- K 3567.2+x 10, J+18 γ_{3023+x} **543.8 5**
 $(\dagger_{\gamma} 0.031 4)$
- L y, J
L 260.9+y 4(?), J+2 γ_y **260.9 4** ($\dagger_{\gamma} 0.057 7$)
 $I^{(2)}=97.3$, $\bar{h}\omega=0.141$
- L 562.9+y 5(?), J+4 γ_{261+y} **302.0 3**
 $(\dagger_{\gamma} 0.072 8)$ $I^{(2)}=101.8$, $\bar{h}\omega=0.161$
- L 904.2+y 6(?), J+6 γ_{563+y} **341.3 3**
 $(\dagger_{\gamma} 0.027 4)$ $I^{(2)}=103.4$, $\bar{h}\omega=0.180$
- L 1284.2+y 8(?), J+8 γ_{904+y} **380.0 5**
 $(\dagger_{\gamma} 0.046 6)$ $I^{(2)}=107.2$, $\bar{h}\omega=0.199$
- L 1701.5+y 9(?), J+10 γ_{1284+y} **417.3 3**
 $(\dagger_{\gamma} 0.048 6)$ $I^{(2)}=103.9$, $\bar{h}\omega=0.218$
- L 2157.3+y 9(?), J+12 γ_{1702+y} **455.8 3**
 $(\dagger_{\gamma} 0.063 8)$ $I^{(2)}=110.2$, $\bar{h}\omega=0.237$
- L 2649.4+y 10(?), J+14 γ_{2157+y} **492.1 4**
 $(\dagger_{\gamma} 0.082 10)$ $I^{(2)}=109.6$, $\bar{h}\omega=0.255$
- L 3178.0+y 12(?), J+16 γ_{2649+y} **528.6 8**
 $(\dagger_{\gamma} 0.044 6)$ $I^{(2)}=115.6$, $\bar{h}\omega=0.273$
- L 3741.2+y 15(?), J+18 γ_{3178+y} **563.2 8**
 $(\dagger_{\gamma} 0.069 9)$





SD-2 band
(94Hu10)



SD-3 band?
(94Hu10)