$^{155}_{66}$Dy

Δ: –69164 12 **S_n:** 6835 14 **S_p:** 6300 50
Q_{EC}: 2094.5 19 **Q_α:** 2610 12

Nuclear Bands

- *A* 3/2[521]
- *B* 11/2[505] α=-1/2
- *C* 11/2[505] α=+1/2
- *D* $i_{13/2}$ α=+1/2
- *E* $i_{13/2}$ α=-1/2
- *F* α=+1/2
- *G* 3-QP α=+1/2
- *H* 3-QP α=-1/2
- *I* Band Structure
- *J* SD band (96Fi08)

Levels and γ-ray branchings:

A **0**, 3/2⁻, 9.9 2 h, %EC+%β^+=100

A **39.384** 9, 5/2⁻, 3.34 3 ns γ_0***39.39*** 2 (†$_\gamma$100) M1+E2: δ=0.222 4

A **86.767** 12, 7/2⁻, 1.1 2 ns γ_{39}***47.37*** 2 (†$_\gamma$100 11) M1+E2: δ=0.115 10 γ_0***86.75*** 2 (†$_\gamma$34 2) E2

D **132.195** 22, 9/2⁺, 51 3 ns γ_{87}***45.38*** 5 (†$_\gamma$100) E1

136.320 9, 5/2⁻, <0.4 ns γ_{87}***49.52*** 5 (†$_\gamma$1.5 3) M1+E2: δ=0.11 3 γ_{39}***96.91*** 2 (†$_\gamma$21 1) M1+E2: δ=0.22 4 γ_0***136.30*** 2 (†$_\gamma$100 5) M1+E2: δ=0.195 24

D **154.48** 5, 13/2⁺ γ_{132}***22.15*** 5 (†$_\gamma$100)

202.413 12, 3/2⁻, <0.4 ns γ_{136}***66.12*** 3 (†$_\gamma$9.6 4) M1+E2: δ=0.42 5 γ_{39}***163.02*** 2 (†$_\gamma$58 3) M1(+E2): δ<1.7 γ_0***202.41*** 2 (†$_\gamma$199 5) M1

224.532 13, 7/2⁻, <5 ns γ_{202}***22.15*** 5 (†$_\gamma$0.48 9) M1+E2: δ=0.07 $^{+3}_{-2}$ γ_{136}***88.26*** 5 (†$_\gamma$0.94 22) M1 γ_{132}***92.22*** 6 (†$_\gamma$1.7 6) γ_{87}***137.76*** 4 (†$_\gamma$14 3) M1 γ_{39}***185.13*** 2 (†$_\gamma$100 5) M1 γ_0***224.55*** 2 (†$_\gamma$6.7 22) E2

A **225.285** 16, 9/2⁻ γ_{87}***138.46*** 4 (†$_\gamma$100 10) E2(+M1): δ>2.4 γ_{39}***185.89*** 2 (†$_\gamma$39 3) E2

B **234.33** 3, 11/2⁻, 6 1 µs, %IT=100 $\gamma_{225.3}$***9.1*** 1 (†$_\gamma$0.52 6) M1+E2: δ=0.017 γ_{154}***79.72*** 5 (†$_\gamma$47 4) E1+M2: δ=0.23 3 γ_{132}***102.16*** 3 (†$_\gamma$100 12) E1+M2: δ=0.45 6 γ_{87}***147.63*** 6 (†$_\gamma$82 12)

240.196 12, 3/2⁺, <0.7 ns γ_{202}***37.80*** 4 (†$_\gamma$10.7 20) (E1) γ_{136}***103.89*** 2 (†$_\gamma$17.4 9) E1 γ_{39}***200.86*** 7 (†$_\gamma$12.2 5) E1 γ_0***240.19*** 2 (†$_\gamma$100 5) E1

247.791 13, 5/2⁺, <1 ns γ_{136}***111.47*** 3 (†$_\gamma$7.1 5) E1 γ_{132}***115.5*** 1 (†$_\gamma$51 2) E2 γ_{87}***161.08*** 8 (†$_\gamma$16 3) γ_{39}***208.41*** 2 (†$_\gamma$100 5) E1 γ_0***247.77*** 2 (†$_\gamma$96 5) E1

321 2, 1/2⁺

325.406 13, 3/2⁻,5/2⁻ $\gamma_{224.5}$***100.84*** 6 (†$_\gamma$1.7 6) γ_{202}***123.10*** 6 (†$_\gamma$0.9) (M1) γ_{136}***189.09*** 2 (†$_\gamma$9.1 9) M1 γ_{87}***238.54*** 9 (†$_\gamma$2.3 9) E2(+M1) γ_{39}***286.02*** 2 (†$_\gamma$23 1) M1 γ_0***325.40*** 2 (†$_\gamma$100 5) M1

345 2, 1/2⁻,3/2⁻

349.002 12, 5/2⁺ γ_{248}***101.34*** 7 (†$_\gamma$5.8 20) γ_{240}***108.79*** 2 (†$_\gamma$41 2) M1 $\gamma_{224.5}$***124.54*** 5 (†$_\gamma$28 1) E1 γ_{202}***146.57*** 2 (†$_\gamma$61 7) E1 γ_{136}***212.70*** 2 (†$_\gamma$38 2) E1+M2: δ=0.12 $^{+3}_{-5}$ γ_{87}***262.23*** 3 (†$_\gamma$100 11) E1 γ_{39}***309.65*** 4 (†$_\gamma$86 8) E1 γ_0***348.99*** 3 (†$_\gamma$62 3) E1

351.106 19, 5/2⁺,7/2⁺ γ_{132}***218.93*** 2 (†$_\gamma$100 5) E2 γ_{87}***264.35*** 14 (†$_\gamma$11.4 18) γ_{39}***311.85*** 3 (†$_\gamma$38 4) E1

375.401 24, 5/2⁻,7/2⁻ $\gamma_{225.3}$***150.09*** 6 (†$_\gamma$8 2) γ_{87}***288.64*** 4 (†$_\gamma$100 9) M1 γ_{39}***336.02*** 3 (†$_\gamma$79 9) M1+E2: δ=1.0 $^{+13}_{-6}$

D **381.8** 1, 17/2⁺ γ_{154}***227.3*** 1 (†$_\gamma$100) E2

382.89 8, 1/2⁻,3/2⁻ γ_0***382.88*** 14 (†$_\gamma$100) M1

408.533 14, 3/2⁺,5/2⁺ γ_{248}***160.76*** 4 (†$_\gamma$76 15) M1(+E2) γ_{202}***206.08*** 8 (†$_\gamma$15) E1 γ_{136}***272.22*** 2 (†$_\gamma$58 10) E1 γ_{39}***369.10*** 10 (†$_\gamma$45 9) γ_0***408.58*** 2 (†$_\gamma$100 5) E1

423.33 4, 5/2⁻,7/2⁻ γ_{345}***74.33*** 3 (?) (†$_\gamma$4.2 4) M1+E2: δ=0.9 $^{+9}_{-5}$ γ_{39}***383.95*** 14 (?) (†$_\gamma$100 10) E1

C **436.4** 2, 13/2⁻ γ_{234}***202.0*** 2 (†$_\gamma$100)

440.341 14, 5/2⁺,7/2⁺ γ_{349}***91.35*** 3 (†$_\gamma$18 3) M1 γ_{240}***200.17*** 2 (†$_\gamma$100 9) E2 $\gamma_{225.3}$***215.03*** 2 (†$_\gamma$62 3) E1 γ_{136}***304.02*** 2 (†$_\gamma$91 6) E1 γ_{87}***353.49*** 9 (†$_\gamma$44 26) E1

448.98 3, 1/2⁻,3/2⁻ γ_0***448.98*** 3 (†$_\gamma$100) M1

456.218 24, 5/2⁻ γ_{87}***369.30*** 10 (†$_\gamma$36 18) (M1) γ_{39}***416.84*** 3 (†$_\gamma$48 4) M1 γ_0***456.23*** 4 (†$_\gamma$100 5) M1

483.73 3, 5/2⁺ γ_{240}***243.55*** 3 (†$_\gamma$100 13) M1 $\gamma_{224.5}$***259.09*** 7 (†$_\gamma$83 4) E1 γ_{87}***397.14*** 15 (†$_\gamma$61 9) E1

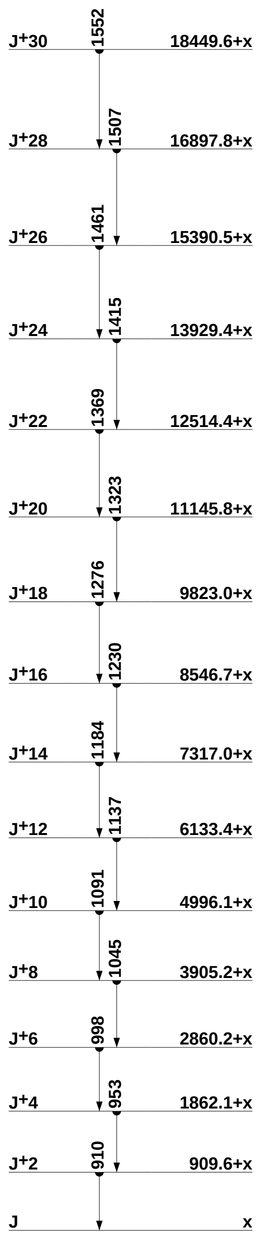
515 2, (1/2⁺)

547 2

557.550 19, 3/2⁻,5/2⁻,7/2⁻ γ_{409}***149.24*** 4 (†$_\gamma$13 1) γ_{351}***206.52*** 2 (†$_\gamma$52 13) E1 γ_{248}***309.65*** 4 (†$_\gamma$100 9) E1 γ_{136}***420.97*** 3 (†$_\gamma$73 4) M1

γ_{39}***518.43*** *15* ($\dagger_\gamma$16 *6*) γ_0***557.6*** *2* ($\dagger_\gamma$<36)
569.11 *6*, 3/2$^-$,5/2$^-$,7/2$^-$ γ_{409}***160.55*** ($\dagger_\gamma$37 *7*) γ_{248}***321.31*** *6* ($\dagger_\gamma$100 *6*) E1 γ_0***569.2*** *2* ($\dagger_\gamma$43 *15*) E2
F **577**, (13/2$^-$) $\gamma_{225.3}$***352***
594 *2*
E **644**, (15/2$^+$) γ_{382}***263*** γ_{154}***490***
656 *2*, (3/2$^+$,5/2$^+$)
B **657.5** *3*, 15/2$^-$ γ_{436}***221.0*** *3* ($\dagger_\gamma$100 *18*) γ_{234}***423.7*** *5* ($\dagger_\gamma$55 *18*)
I **659** (?), (13/2$^+$)
702.73 *20* $\gamma_{224.5}$***478.2*** *2* ($\dagger_\gamma$100)
D **745.2** *1*, 21/2$^+$ γ_{382}***363.4*** *1* ($\dagger_\gamma$100) E2
752.70 *8*, 3/2$^+$,5/2$^+$ γ_{409}***344.18*** *8* ($\dagger_\gamma$100 *15*) M1 γ_{136}***616.2*** *4* ($\dagger_\gamma$14 *5*) E1 γ_0***752.5*** *4*
774 *2*, (9/2$^-$,11/2$^-$)
803 *2*
874 *2*, (1/2$^+$)
I **894**, (17/2$^+$) γ_{659}***235*** (?) γ_{382}***512*** γ_{154}***739***
895 *2*, (1/2$^-$,3/2$^-$)
C **897.3** *5*, 17/2$^-$ γ_{658}***239.7*** *4* γ_{436}***461***
902.06 *5*, 3/2$^+$,5/2$^+$ γ_{409}***493.3*** *3* ($\dagger_\gamma$42 *4*) E2 γ_{248}***654.16*** *9* ($\dagger_\gamma$69 *8*) γ_{202}***699.50*** *15* ($\dagger_\gamma$46 *4*) γ_{136}***765.85*** *7* ($\dagger_\gamma$70 *4*) γ_0***902.03*** *11* ($\dagger_\gamma$100 *8*)
925 *2*
E **1006**, (19/2$^+$) γ_{745}***261*** γ_{644}***361*** γ_{382}***624***
F **1032**, (17/2$^-$) γ_{577}***454***
1033.47 *4*, 3/2$^+$,5/2$^+$ γ_{136}***897.14*** *7* ($\dagger_\gamma$94 *5*) E1 γ_{39}***994.10*** *7* ($\dagger_\gamma$71 *6*) E1 γ_0***1033.47*** *4* ($\dagger_\gamma$100 *5*) E1
1037 *2*, 5/2$^-$,7/2$^-$
1061 *2*
1084 *2*, 5/2$^-$,7/2$^-$
1119 *2*
1145 *2*
B **1151.6** *6*, 19/2$^-$ γ_{897}***254.2*** *4* ($\dagger_\gamma$75 *25*) γ_{656}***495*** *2* ($\dagger_\gamma$100 *38*)
1207 *2*
D **1209.7** *2*, 25/2$^+$ γ_{745}***464.5*** *2* ($\dagger_\gamma$100) E2
1217.75 *3*, 3/2$^+$,5/2$^+$ γ_{558}***659.6*** *2* ($\dagger_\gamma$24 *4*) γ_{383}***834.85*** *9* ($\dagger_\gamma$31 *7*) E1 γ_{325}***892.2*** *2* ($\dagger_\gamma$78 *9*) E1 γ_{202}***1015.35*** *6* ($\dagger_\gamma$87 *7*) E1 γ_{136}***1081.40*** *6* ($\dagger_\gamma$100 *9*) E1 γ_{39}***1178.39*** *4* ($\dagger_\gamma$82 *4*) E1 γ_0***1218.0*** *3* ($\dagger_\gamma$21 *3*)
I **1226**, (21/2$^+$) γ_{894}***332*** γ_{745}***481*** γ_{382}***844***
1295 *2*
1325 *2*
C **1420**, (21/2$^-$) γ_{1152}***268*** *1* γ_{897}***523***
1424 *2*, (9/2$^-$,11/2$^-$)
1441 *2*, 5/2$^-$,7/2$^-$
E **1463**, (23/2$^+$) γ_{1210}***253*** γ_{1006}***457*** γ_{745}***718***
F **1534**, (21/2$^-$) γ_{1032}***502***
1547 *2*, (9/2$^-$,11/2$^-$)
1573 *2*
1625 *5*
I **1651**, (25/2$^+$) γ_{1226}***425*** γ_{1207}***442***
1688 *2*, (9/2$^-$,11/2$^-$)
B **1701**, (23/2$^-$) γ_{1420}***281*** γ_{1152}***550***
1731 *5*
D **1754.0** *3*, 29/2$^+$ γ_{1210}***544.4*** *2* E2
C **1993**, (25/2$^-$) γ_{1701}***292*** γ_{1420}***573***
E **2000**, (27/2$^+$) γ_{1463}***537*** γ_{1210}***790***
G **2013**, (25/2$^-$) γ_{1534}***479*** γ_{1210}***803***
F **2083**, (25/2$^-$) γ_{1534}***549***
I **2171**, (29/2$^+$) γ_{1651}***519***
B **2294**, (27/2$^-$) γ_{1993}***300*** γ_{1701}***593***
D **2359.3** *5*, 33/2$^+$ γ_{1754}***605.3*** *4* E2
G **2477**, (29/2$^-$) γ_{2013}***463*** γ_{1754}***723***
C **2602**, (29/2$^-$) γ_{2294}***308*** γ_{1993}***609***
E **2603**, (31/2$^+$) γ_{2000}***603***
F **2689**, (29/2$^-$) γ_{2083}***606***
I **2787**, (33/2$^+$) γ_{2171}***616***
B **2913**, (31/2$^-$) γ_{2602}***311*** γ_{2294}***619***
G **2991**, (33/2$^-$) γ_{2477}***514*** γ_{2359}***633*** (?)
D **3014.2** *6*, 37/2$^+$ γ_{2359}***654.9*** *3* E2
C **3213**, (33/2$^-$) γ_{2913}***300*** γ_{2602}***611***
F **3243**, (33/2$^-$) γ_{2689}***554***
E **3258**, (35/2$^+$) γ_{2603}***655***
H **3306**, (35/2$^-$) γ_{2787}***519*** γ_{2359}***947***
B **3475**, (35/2$^-$) γ_{3213}***262*** γ_{2913}***562***
I **3484**, (37/2$^+$) γ_{2787}***697***
G **3557**, (37/2$^-$) γ_{2991}***566***
D **3713.6** *8*, (41/2$^+$), 0.27^{+76}_{-24} ps γ_{3014}***699.4*** *5*
C **3738**, (37/2$^-$) γ_{3475}***263*** γ_{3213}***525***
F **3834**, (37/2$^-$) γ_{3243}***591***
H **3914**, (39/2$^-$) γ_{3306}***608***
E **3953**, (39/2$^+$) γ_{3258}***695***
B **4017**, (39/2$^-$) γ_{3738}***279*** γ_{3475}***542***
G **4181**, (41/2$^-$) γ_{3557}***624***
I **4230**, (41/2$^+$) γ_{3484}***746***
C **4318**, (41/2$^-$) γ_{4017}***300*** γ_{3738}***580***
D **4455.4** *11*, (45/2$^+$), 0.13 *4* ps γ_{3714}***741.8*** *7*
F **4474**, (41/2$^-$) γ_{3834}***640***

H **4576**, (43/2$^-$) γ_{3914}***662***
B **4637**, (43/2$^-$) γ_{4318}***320*** γ_{4017}***620***
E **4687**, (43/2$^+$) γ_{3953}***734***
G **4866**, (45/2$^-$), 0.21 *11* ps γ_{4181}***685***
C **4977**, (45/2$^-$) γ_{4637}***340*** γ_{4318}***660***
I **5014**, (45/2$^+$) γ_{4230}***783***
F **5159**, (45/2$^-$) γ_{4474}***685***
D **5239**, (49/2$^+$), 0.05^{+3}_{-2} ps γ_{4455}***784***
H **5291**, (47/2$^-$) γ_{4576}***715***
B **5335**, (47/2$^-$) γ_{4977}***357*** γ_{4637}***697***
E **5461**, (47/2$^+$) γ_{4687}***774***
G **5610**, (49/2$^-$), 0.17^{+3}_{-6} ps γ_{4866}***744***
C **5710**, (49/2$^-$) γ_{5335}***375*** γ_{4977}***733***
F **5898**, (49/2$^-$) γ_{5159}***739***
H **6063**, (51/2$^-$) γ_{5291}***772***
D **6068**, (53/2$^+$), 0.13 *5* ps γ_{5239}***829***
B **6102**, (51/2$^-$) γ_{5710}***392*** γ_{5335}***767***
E **6277** (?), (51/2$^+$) γ_{5461}***816*** (?)
G **6404**, (53/2$^-$), 0.18 *4* ps γ_{5610}***794***
C **6510**, (53/2$^-$) γ_{6102}***409*** γ_{5710}***799***
F **6686**, (53/2$^-$) γ_{5898}***788***
H **6893**, (55/2$^-$) γ_{6063}***830***
B **6930**, (55/2$^-$) γ_{6102}***830***
D **6944**, (57/2$^+$), 0.15 *4* ps γ_{6068}***876***
G **7240**, (57/2$^-$), <0.07 ps γ_{6404}***836***
C **7369**, (57/2$^-$) γ_{6510}***859***
F **7507** (?), (57/2$^-$) γ_{6686}***821*** (?)
H **7778**, (59/2$^-$) γ_{6893}***885***
B **7818**, (59/2$^-$) γ_{6930}***888***
D **7871**, (61/2$^+$), 0.12^{+76}_{-7} ps γ_{6944}***927***
G **8108**, (61/2$^-$), 0.16 *8* ps γ_{7240}***868***
C **8283**, (61/2$^-$) γ_{7369}***914***
H **8696**, (63/2$^-$) γ_{7778}***918***
B **8759**, (63/2$^-$) γ_{7818}***941***
D **8850**, (65/2$^+$), 0.06^{+28}_{-3} ps γ_{7871}***979***
G **9007**, (65/2$^-$), 0.12^{+7}_{-10} ps γ_{8108}***899***
C **9253**, (65/2$^-$) γ_{8283}***970***
H **9624**, (67/2$^-$) γ_{8696}***928***
B **9755**, (67/2$^-$) γ_{8759}***996***
D **9884**, (69/2$^+$), <0.8 ps γ_{8850}***1034***
G **9964**, (69/2$^-$), <0.15 ps γ_{9007}***957***
C **10277** (?), (69/2$^-$) γ_{9253}***1024*** (?)
H **10519**, (71/2$^-$), >1.0 ps γ_{9624}***895***
B **10807** (?), (71/2$^-$) γ_{9755}***1052*** (?)
G **10972**, (73/2$^-$), 0.4^{+14}_{-1} ps γ_{9964}***1008***
H **11447**, (75/2$^-$), >1.0 ps γ_{10519}***928***
G **11972**, (77/2$^-$), <0.14 ps γ_{10972}***1000***
G **12983**, (81/2$^-$), 0.44^{+24}_{-17} ps γ_{11972}***1011***
G **14041**, (85/2$^-$) γ_{12983}***1058***
G **15160** (?), (89/2$^-$) γ_{14041}***1119*** (?)
J **x**, J
J **909.6+x** *9*, J+2 γ_{x}***909.6*** *9* († $_\gamma$ 0.28 *14*)
$I^{(2)}$*=93.2, ħω=0.466*
J **1862.1+x** *10*, J+4 γ_{910+x}***952.5*** *4*
(† $_\gamma$ 0.52 *12*) $I^{(2)}$*=87.7, ħω=0.488*
J **2860.2+x** *10*, J+6 γ_{1862+x}***998.1*** *2*
(† $_\gamma$ 0.98 *12*) $I^{(2)}$*=85.3, ħω=0.511*
J **3905.2+x** *11*, J+8 γ_{2860+x}***1045.0*** *2*
(† $_\gamma$ 0.92 *10*) $I^{(2)}$*=87.1, ħω=0.534*
J **4996.1+x** *11*, J+10 γ_{3905+x}***1090.9*** *2*
(† $_\gamma$ 1.04 *15*) $I^{(2)}$*=86.2, ħω=0.557*
J **6133.4+x** *11*, J+12 γ_{4996+x}***1137.3*** *2*
(† $_\gamma$ 0.96 *11*) $I^{(2)}$*=86.4, ħω=0.580*
J **7317.0+x** *11*, J+14 γ_{6133+x}***1183.6*** *2*
(† $_\gamma$ 1.07 *11*) $I^{(2)}$*=86.8, ħω=0.603*
J **8546.7+x** *11*, J+16 γ_{7317+x}***1229.7*** *2*
(† $_\gamma$ 0.98 *11*) $I^{(2)}$*=85.8, ħω=0.627*
J **9823.0+x** *12*, J+18 γ_{8547+x}***1276.3*** *2*
(† $_\gamma$ 0.97 *10*) $I^{(2)}$*=86.0, ħω=0.650*
J **11145.8+x** *12*, J+20 γ_{9823+x}***1322.8*** *2*
(† $_\gamma$ 0.92 *8*) $I^{(2)}$*=87.3, ħω=0.673*
J **12514.4+x** *12*, J+22 $\gamma_{11146+x}$***1368.6*** *2*
(† $_\gamma$ 1.00 *11*) $I^{(2)}$*=86.2, ħω=0.696*
J **13929.4+x** *12*, J+24 $\gamma_{12514+x}$***1415.0*** *2*
(† $_\gamma$ 0.81 *10*) $I^{(2)}$*=86.8, ħω=0.719*
J **15390.5+x** *12*, J+26 $\gamma_{13929+x}$***1461.1*** *2*
(† $_\gamma$ 0.56 *10*) $I^{(2)}$*=86.6, ħω=0.742*
J **16897.8+x** *13*, J+28 $\gamma_{15391+x}$***1507.3*** *3*
(† $_\gamma$ 0.45 *9*) $I^{(2)}$*=89.9, ħω=0.765*
J **18449.6+x** *14*, J+30 $\gamma_{16898+x}$***1551.8*** *6*
(† $_\gamma$ 0.16 *10*)



SD band
(96Fi08)

$^{155}_{66}$Dy