$^{150}_{65}$Tb

Δ: –71116 *8* **S_n:** 7687 *9* **S_p:** 3267 *8*
Q_{EC}: 4656 *9* **Q_α:** 3587 *5*

Nuclear Bands

A SD-1 band (89De10,95Fa09)
B SD-2 band (95Fa09)
C SD-3 band (95Fa09)

Levels and γ-ray branchings:

0, (2^-), 3.48 *16* h, %EC+%β^+=100, %α<0.05

397.2 *3*, (1^+) γ_{0}***397.2*** *3*(?) (†$_\gamma$100) E1

474 *51*, 9^+, 5.8 *2* m, %EC+%β^+≈100

1067.95 *25*, 10^+ γ_{474}***594.0*** *3* (†$_\gamma$100.0)

1232.79 *24*, 11^+ γ_{474}***758.8*** *3* (†$_\gamma$100.0)

1306.55 *25*, 10^- γ_{474}***832.5*** *3* (†$_\gamma$100.0)

1348.40 *24*, 11^-, 0.39 *6* ns γ_{1307}***41.8*** *3* (†$_\gamma$0.000) γ_{1233}***115.7*** *3* (†$_\gamma$29 *3*) γ_{1068}***280.5*** *3* (†$_\gamma$100 *10*)

1586.5 *4*, 12^- γ_{1348}***238.1*** *3* (†$_\gamma$100.0)

1910.4 *4*, 13^+ γ_{1233}***677.5*** *3* (†$_\gamma$100.0)

2114.0 *4*, 13^- γ_{1348}***765.7*** *3* (†$_\gamma$100.0)

2404.9 *4*, 14^- γ_{2114}***290.9*** *3* (†$_\gamma$56 *7*) γ_{1587}***818.5*** *3* (†$_\gamma$100 *13*)

2413.0 *4*, 14^+ γ_{1910}***502.6*** *3* (†$_\gamma$100.0)

2641.7 *4*, 16^+ γ_{2413}***228.7*** *3* (†$_\gamma$100.0)

2741.4 *4*, 15^- γ_{2114}***627.4*** *3* (†$_\gamma$100.0)

2757.6 *4*, (15^+) γ_{1910}***847.1*** *3* (†$_\gamma$100.0)

3017.9 *4*, 16^- γ_{2758}***260.2*** *3* (†$_\gamma$2.1 *7*) γ_{2741}***276.5*** *3* (†$_\gamma$100 *10*) γ_{2642}***376.0*** *3* (†$_\gamma$3.4 *7*) γ_{2405}***613.0*** *3* (†$_\gamma$37 *5*)

3373.6 *5*, 18^- γ_{3018}***355.6*** *3* (†$_\gamma$100 *10*) γ_{2642}***732.1*** *3* (†$_\gamma$1.4 *6*)

3684.5 *5*, 19^- γ_{3374}***310.9*** *3* (†$_\gamma$100.0)

3898.2 *5*, 20^- γ_{3685}***213.7*** *3* (†$_\gamma$96 *9*) γ_{3374}***524.6*** *3* (†$_\gamma$100 *9*)

3933.2 *5*, 19^+ γ_{3374}***559.6*** *3* (†$_\gamma$100.0)

4324.0 *5*, 20^+ γ_{3933}***390.7*** *3* (†$_\gamma$100 *12*) γ_{3685}***639.4*** *3* (†$_\gamma$62 *8*)

4818.2 *5*, 21^+ γ_{4324}***494.1*** *3* (†$_\gamma$100 *10*) γ_{3898}***920.1*** *3* (†$_\gamma$85 *8*)

4894.6 *6*, 22^+ γ_{4818}***76*** *1* (†$_\gamma$0.000)

4972.7 *5*, 21^- γ_{3898}***1074.5*** *3* (†$_\gamma$30 *10*) γ_{3685}***1288.2*** *3* (†$_\gamma$100 *10*)

5238.9 *5*, 22^- γ_{4973}***266.2*** *3* (†$_\gamma$100 *10*) γ_{3898}***1340.7*** *3* (†$_\gamma$100 *20*)

5448.8 *6*, 22^+ γ_{4895}***554.1*** *3* (†$_\gamma$90 *10*) γ_{4818}***630.7*** *3* (†$_\gamma$100 *10*)

5667.5 *6*, (22^-) γ_{4818}***849.3*** *3* (†$_\gamma$100.0)

5725.8 *6*, 23^+ γ_{5668}***58*** *1* (†$_\gamma$0.000) γ_{5449}***277.1*** *3* (†$_\gamma$79 *15*) γ_{5239}***486.9*** *3* (†$_\gamma$86 *8*) γ_{4895}***831.2*** *3* (†$_\gamma$93 *22*) γ_{4818}***907.5*** *3* (†$_\gamma$100 *8*)

5842.5 *6*, 23^- γ_{5726}***116.6*** *3* (†$_\gamma$31 *8*) γ_{4895}***947.9*** *3* (†$_\gamma$100 *10*)

5975.7 *6*, (24^+) γ_{4895}***1081.0*** *3* (†$_\gamma$100.0)

6010.9 *6*, 24^+ γ_{5843}***168.4*** *3* (†$_\gamma$17.0 *19*) γ_{5726}***285.3*** *3* (†$_\gamma$100 *12*) γ_{4895}***1116.1*** *3* (†$_\gamma$44 *4*)

6044.1 *6*, 25^+ γ_{6011}***33*** *1* (†$_\gamma$0.000) γ_{5976}***68*** *1* (†$_\gamma$0.000) γ_{5726}***318.4*** *3* (†$_\gamma$100 *10*)

6382.5 *7*, 26^+ γ_{6044}***338.3*** *3* (†$_\gamma$100.0)

6509.0 *7*, (27^+) γ_{6044}***465.1*** *3* (†$_\gamma$100.0)

6571.4 *7*, 27^+ γ_{6509}***62.5*** *3* (†$_\gamma$0.000) γ_{6383}***188.8*** *3* (†$_\gamma$100 *9*) γ_{6044}***527.2*** *3* (†$_\gamma$56 *6*)

7067.9 *7*, 28^- γ_{6571}***496.5*** *3* (†$_\gamma$100.0)

8168.2 *8*, 30^- γ_{7068}***1100.5*** *3* (†$_\gamma$100.0)

8266.1 *8*, (29^+) γ_{7068}***1198.3*** *3* (†$_\gamma$100.0)

8335.0 *8*, (29^-) γ_{7068}***1266.9*** *3* (†$_\gamma$100.0)

8496.9 *8*, (30) γ_{8266}***230.8*** *3* (†$_\gamma$100.0)

8514.9 *8*, (30^-) γ_{8335}***180.1*** *3* (†$_\gamma$100.0)

8519.9 *13* γ_{7068}***1452*** *1* (†$_\gamma$100.0)

8540.5 *8* γ_{7068}***1472.6*** *3* (†$_\gamma$100.0)

8808.2 *8*, 31^- γ_{8497}***311.4*** *3* (†$_\gamma$<33.33) γ_{8168}***640.0*** *3* (†$_\gamma$100 *40*)

8901.2 *13*, 32 γ_{8168}***733*** *1* (†$_\gamma$100.0)

8957.6 *8*, 32^- γ_{8808}***149.5*** *3* (†$_\gamma$15 *4*) γ_{8168}***789.5*** *3* (†$_\gamma$100 *12*)

9013.4 *8*, (31) γ_{8335}***678.1*** *3* (†$_\gamma$100 *50*) γ_{8168}***846*** *1* (†$_\gamma$100 *50*)

9188.2 *13* γ_{8168}***1020*** *1* (†$_\gamma$100.0)

9327.2 *13*, (33) γ_{8901}***426.0*** *3* (†$_\gamma$100.0)

9403.5 *8* γ_{8808}***595.3*** *3* (†$_\gamma$<100.0)

9556.6 *8*, (32^-) γ_{8515}***1041.9*** *3* (†$_\gamma$100.0)

9914.3 *8*, (33^-) γ_{8958}***956.7*** *3* (†$_\gamma$100.0)

9921.4 *8*, (33^+) γ_{8958}***963.8*** *3* (†$_\gamma$100.0)

10006.9 *13* γ_{8497}***1510*** *1* (†$_\gamma$<100.0)

10046.6 *8*, (33) γ_{9013}***1032.8*** *3* (†$_\gamma$100.0)

10170.2 *17* γ_{9327}***843*** *1* (†$_\gamma$100.0)

10321.6 *13* γ_{8958}***1364*** *1* (†$_\gamma$<100.0)

10906.2 *9*, (35^-) γ_{9914}***991.9*** *3* (†$_\gamma$100.0)

11072.4 *13* γ_{9921}***1151*** *1* (†$_\gamma$<100.0)

11160.0 *8*, (34^-) γ_{10047}***1113.1*** *3* (†$_\gamma$100 *50*) γ_{9921}***1238.7*** *3* (†$_\gamma$<25.00) γ_{9914}***1245.8*** *3* (†$_\gamma$<50.00) γ_{9557}***1603.6*** *3* (†$_\gamma$45 *13*)

11567.7 *9*, (36^-) γ_{11160}***407.7*** *3* (†$_\gamma$100.0)

12596.5 *9*, (38^-) γ_{11568}***1028.8*** *3* (†$_\gamma$100.0)

13378.5 *14*, (39^+) γ_{12597}***782*** *1* (†$_\gamma$100.0)

A **x**, J≈(24)

A **596.8+x**, J+2 γ_{x}***596.8*** *2* (†$_\gamma$0.26 *5*)
$I^{(2)}$=*79.1*, ħω=*0.311*

A **1244.2+x**, J+4 γ_{597+x}***647.4*** *1* (†$_\gamma$0.57 *3*)

$I^{(2)}$=79.5, ħω=0.336

A **1941.9+x**, J+6 γ_{1244+x}**697.7** 1 (†$_\gamma$1.02 2)
$I^{(2)}$=79.2, ħω=0.361

A **2690.1+x**, J+8 γ_{1942+x}**748.2** 1 (†$_\gamma$1.04 2)
$I^{(2)}$=78.4, ħω=0.387

A **3489.3+x**, J+10 γ_{2690+x}**799.2** 1
(†$_\gamma$1.02 2) $I^{(2)}$=78.0, ħω=0.412

A **4339.8+x**, J+12 γ_{3489+x}**850.5** 1
(†$_\gamma$0.89 3) $I^{(2)}$=77.5, ħω=0.438

A **5241.9+x**, J+14 γ_{4340+x}**902.1** 1
(†$_\gamma$1.01 2) $I^{(2)}$=76.9, ħω=0.464

A **6196.0+x**, J+16 γ_{5242+x}**954.1** 1
(†$_\gamma$0.99 2) $I^{(2)}$=75.8, ħω=0.490

A **7202.9+x**, J+18 γ_{6196+x}**1006.9** 1
(†$_\gamma$0.98 2) $I^{(2)}$=75.9, ħω=0.517

A **8262.5+x**, J+20 γ_{7203+x}**1059.6** 1
(†$_\gamma$0.96 2) $I^{(2)}$=75.8, ħω=0.543

A **9374.9+x**, J+22 γ_{8263+x}**1112.4** 1
(†$_\gamma$0.90 2) $I^{(2)}$=75.3, ħω=0.569

A **10540.4+x**, J+24 γ_{9375+x}**1165.5** 1
(†$_\gamma$0.88 2) $I^{(2)}$=75.0, ħω=0.596

A **11759.2+x**, J+26 $\gamma_{10540+x}$**1218.8** 1
(†$_\gamma$0.90 2) $I^{(2)}$=74.8, ħω=0.623

A **13031.5+x**, J+28 $\gamma_{11759+x}$**1272.3** 1
(†$_\gamma$0.67 2) $I^{(2)}$=73.9, ħω=0.650

A **14357.9+x**, J+30 $\gamma_{13032+x}$**1326.4** 2
(†$_\gamma$0.48 2) $I^{(2)}$=74.2, ħω=0.677

A **15738.2+x**, J+32 $\gamma_{14358+x}$**1380.3** 2
(†$_\gamma$0.38 2) $I^{(2)}$=73.3, ħω=0.704

A **17173.1+x**, J+34 $\gamma_{15738+x}$**1434.9** 2
(†$_\gamma$0.24 2) $I^{(2)}$=73.4, ħω=0.731

A **18662.5+x**, J+36 $\gamma_{17173+x}$**1489.4** 3
(†$_\gamma$0.17 3) $I^{(2)}$=73.1, ħω=0.758

A **20206.6+x**, J+38 $\gamma_{18663+x}$**1544.1** 7
(†$_\gamma$0.10 2) $I^{(2)}$=72.1, ħω=0.786

A **21806.2+x**, J+40 $\gamma_{20207+x}$**1599.6** 10
(†$_\gamma$0.05 3)

B **y**, J

B **662.5+y**, J+2 γ_y**662.5** 2 (†$_\gamma$0.64 6)
$I^{(2)}$=74.6, ħω=0.345

B **1378.6+y**, J+4 γ_{663+y}**716.1** 2 (†$_\gamma$0.88 5)
$I^{(2)}$=74.6, ħω=0.371

B **2148.3+y**, J+6 γ_{1379+y}**769.7** 3 (†$_\gamma$1.10 6)
$I^{(2)}$=74.3, ħω=0.398

B **2971.8+y**, J+8 γ_{2148+y}**823.5** 3 (†$_\gamma$1.15 5)
$I^{(2)}$=74.3, ħω=0.425

B **3849.1+y**, J+10 γ_{2972+y}**877.3** 3
(†$_\gamma$0.93 5) $I^{(2)}$=75.2, ħω=0.452

B **4779.6+y**, J+12 γ_{3849+y}**930.5** 2
(†$_\gamma$0.82 5) $I^{(2)}$=75.2, ħω=0.479

B **5763.3+y**, J+14 γ_{4780+y}**983.7** 2
(†$_\gamma$0.97 5) $I^{(2)}$=73.8, ħω=0.505

B **6801.2+y**, J+16 γ_{5763+y}**1037.9** 2
(†$_\gamma$0.91 5) $I^{(2)}$=75.6, ħω=0.532

B **7892.0+y**, J+18 γ_{6801+y}**1090.8** 3
(†$_\gamma$0.95 5) $I^{(2)}$=76.5, ħω=0.558

B **9035.1+y**, J+20 γ_{7892+y}**1143.1** 3
(†$_\gamma$0.64 4) $I^{(2)}$=75.5, ħω=0.585

B **10231.2+y**, J+22 γ_{9035+y}**1196.1** 3
(†$_\gamma$0.70 5) $I^{(2)}$=77.7, ħω=0.611

B **11478.8+y**, J+24 $\gamma_{10231+y}$**1247.6** 4
(†$_\gamma$0.47 4) $I^{(2)}$=76.8, ħω=0.637

B **12778.5+y**, J+26 $\gamma_{11479+y}$**1299.7** 4
(†$_\gamma$0.58 4) $I^{(2)}$=77.4, ħω=0.663

B **14129.9+y**, J+28 $\gamma_{12779+y}$**1351.4** 6
(†$_\gamma$0.52 4) $I^{(2)}$=77.1, ħω=0.689

B **15533.2+y**, J+30 $\gamma_{14130+y}$**1403.3** 8
(†$_\gamma$0.31 3) $I^{(2)}$=80.5, ħω=0.714

B **16986.2+y**, J+32 $\gamma_{15533+y}$**1453.0** 11
(†$_\gamma$0.17 5)

C **z**, J

C **877.0+z**, J+2 γ_z**877.0** 4 (†$_\gamma$0.68 6)
$I^{(2)}$=354.0, ħω=0.441

C **1765.3+z**, J+4 γ_{877+z}**888.3** 3 (†$_\gamma$0.78 6)
$I^{(2)}$=97.3, ħω=0.454

C **2694.7+z**, J+6 γ_{1765+z}**929.4** 3 (†$_\gamma$1.08 7)
$I^{(2)}$=84.0, ħω=0.477

C **3671.7+z**, J+8 γ_{2695+z}**977.0** 3
(†$_\gamma$0.88 10) $I^{(2)}$=80.5, ħω=0.501

C **4698.4+z**, J+10 γ_{3672+z}**1026.7** 5
(†$_\gamma$1.01 10) $I^{(2)}$=79.5, ħω=0.526

C **5775.4+z**, J+12 γ_{4698+z}**1077.0** 4
(†$_\gamma$1.08 9) $I^{(2)}$=81.3, ħω=0.551

C **6901.6+z**, J+14 γ_{5775+z}**1126.2** 3
(†$_\gamma$0.91 8) $I^{(2)}$=77.4, ħω=0.576

C **8079.5+z**, J+16 γ_{6902+z}**1177.9** 5
(†$_\gamma$0.82 8) $I^{(2)}$=77.2, ħω=0.602

C **9309.2+z**, J+18 γ_{8080+z}**1229.7** 6
(†$_\gamma$1.03 10) $I^{(2)}$=75.9, ħω=0.628

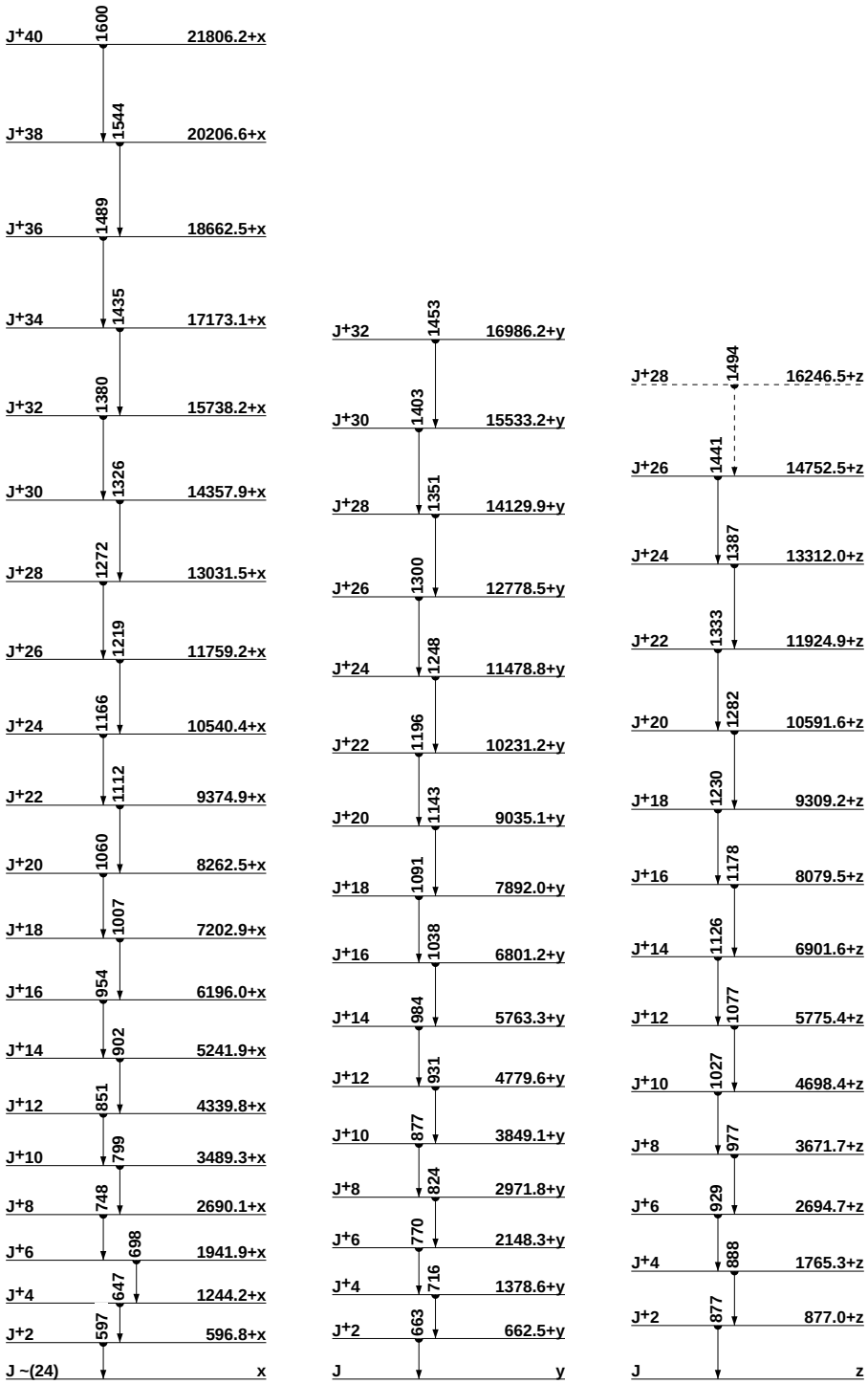
C **10591.6+z**, J+20 γ_{9309+z}**1282.4** 6
(†$_\gamma$0.80 10) $I^{(2)}$=78.6, ħω=0.654

C **11924.9+z**, J+22 $\gamma_{10592+z}$**1333.3** 7
(†$_\gamma$0.65 6) $I^{(2)}$=74.3, ħω=0.680

C **13312.0+z**, J+24 $\gamma_{11925+z}$**1387.1** 9
(†$_\gamma$0.32 5) $I^{(2)}$=74.9, ħω=0.707

C **14752.5+z**, J+26 $\gamma_{13312+z}$**1440.5** 10
(†$_\gamma$0.20 8) $I^{(2)}$=74.8, ħω=0.734

C **16246.5+z** (?), J+28
$\gamma_{14753+z}$**1494.0** 12 (?) (†$_\gamma$0.10 5)



SD-1 band (89De10,95Fa09)

SD-2 band (95Fa09)

SD-3 band (95Fa09)

$^{150}_{65}$Tb