$^{192}_{81}$Tl

Δ: (−25950) **S_n:** (7800) **S_p:** (2560)
Q_{EC}: (6120) **Q_α:** (4150)

Nuclear Bands

- *A* SD-1 band (96Fi02,92Li21)
- *B* SD-2 band (96Fi02,92Li21)
- *C* SD-3 band (96Fi02,92Li21)
- *D* SD-4 band (96Fi02)

Levels and γ-ray branchings:

0+x, (2^-), 9.6 *4* m, %EC+%β^+=100, μ=+0.200 *3*, Q=−0.337 *11*

0+y, (7^+), 10.8 *2* m, %EC+%β^+=100, μ=+0.5180 *36*, Q=+0.477 *20*

167.5+x *1*, (1^-) γ_{0+x}***167.5*** *1* (†$_\gamma$100) M1(+E2): δ=0.7 $^{+3}_{-7}$

250.6+y *2*, (8^-), 296 *5* ns, μ=+1.656 *40*, Q=0.44 *7* γ_{0+y}***250.6*** *2* (†$_\gamma$100) E1

250.6+z *2*(?)

333.6+z *3* γ_{251+z}***83*** *1* (†$_\gamma$100) (M1+E2)

371.0+x *2*, (1^-) γ_{0+x}***371.0*** *2* (†$_\gamma$100) M1(+E2): δ=0.6 $^{+5}_{-6}$

414.0+x *3*, (1^-,2^-) γ_{0+x}***414.1*** *3* (†$_\gamma$100) M1

609.6+z *3* γ_{334+z}***275.8*** *2* (†$_\gamma$100 *15*) (M1+E2) γ_{251+z}***359.0*** *2*(?) (†$_\gamma$20 *3*)

775.7+x *2*, (0^-,1^-) γ_{371+x}***404.5*** *3* (†$_\gamma$17.1 *24*) γ_{168+x}***608.2*** *1* (†$_\gamma$100 *8*) M1+E2: δ=1.6 $^{+6}_{-4}$

871.6+z *3* γ_{610+z}***261.8*** *2* (†$_\gamma$100 *15*) (M1+E2) γ_{334+z}***538.2*** *2* (†$_\gamma$46 *7*) (E2)

1195.5+x *2*, (1^+) γ_{414+x}***781.6*** *3* (†$_\gamma$18 *2*) γ_{0+x}***1195.4*** *2* (†$_\gamma$100 *6*) E1

1267.9+z *3* γ_{872+z}***396.4*** *2* (†$_\gamma$100 *15*) (M1+E2) γ_{610+z}***658.3*** *2* (†$_\gamma$71 *11*) (E2)

1576.6+z *3* γ_{1268+z}***308.7*** *2* (†$_\gamma$37 *6*) (M1+E2) γ_{872+z}***705.0*** *2* (†$_\gamma$100 *15*) (E2)

2034.8+z *4* γ_{1577+z}***458.2*** *2* (M1+E2) γ_{1268+z}***767.6***(?)

2255.7+z *4*(?) γ_{2035+z}***220.9*** *2*(?) (†$_\gamma$100) (M1+E2)

A **u**, (13)

A **283.0+u** *2*, (15) γ_0***283.0*** *2* $I^{(1)}$=99.4, $I^{(2)}$=105.8, ħω=0.151

A **603.8+u** *3*, (17) γ_{283+u}***320.8*** *2* $I^{(1)}$=100.0, $I^{(2)}$=104.7, ħω=0.170

A **962.8+u** *4*, (19) γ_{604+u}***359.0*** *2* $I^{(1)}$=100.4, $I^{(2)}$=103.1, ħω=0.189

A **1360.6+u** *4*, (21) γ_{963+u}***397.8*** *2* $I^{(1)}$=100.6, $I^{(2)}$=101.8, ħω=0.209

A **1797.7+u** *5*, (23) γ_{1361+u}***437.1*** *2* $I^{(1)}$=100.7, $I^{(2)}$=102.6, ħω=0.228

A **2273.8+u** *5*, (25) γ_{1798+u}***476.1*** *2* $I^{(1)}$=100.9, $I^{(2)}$=102.3, ħω=0.248

A **2789.0+u** *6*, (27) γ_{2274+u}***515.2*** *2* $I^{(1)}$=101.0, $I^{(2)}$=102.0, ħω=0.267

A **3343.4+u** *6*, (29) γ_{2789+u}***554.4*** *2* $I^{(1)}$=101.1, $I^{(2)}$=103.6, ħω=0.287

A **3936.4+u** *6*, (31) γ_{3343+u}***593.0*** *2* $I^{(1)}$=101.2, $I^{(2)}$=102.6, ħω=0.306

A **4568.4+u** *7*, (33) γ_{3936+u}***632.0*** *3* $I^{(1)}$=101.4, $I^{(2)}$=104.2, ħω=0.326

A **5238.8+u** *8*, (35) γ_{4568+u}***670.4*** *4* $I^{(1)}$=101.6, $I^{(2)}$=106.7, ħω=0.345

A **5946.7+u** *12*, (37) γ_{5239+u}***707.9*** *8*

B **v**, (16)

B **337.5+v** *2*, (18) γ_0***337.5*** *2* $I^{(1)}$=101.1, $I^{(2)}$=107.0, ħω=0.178

B **712.4+v** *3*, (20) γ_{338+v}***374.9*** *2* $I^{(1)}$=101.5, $I^{(2)}$=103.9, ħω=0.197

B **1125.8+v** *4*, (22) γ_{712+v}***413.4*** *2* $I^{(1)}$=101.8, $I^{(2)}$=106.1, ħω=0.216

B **1576.9+v** *4*, (24) γ_{1126+v}***451.1*** *2* $I^{(1)}$=102.1, $I^{(2)}$=103.9, ħω=0.235

B **2066.5+v** *5*, (26) γ_{1577+v}***489.6*** *2* $I^{(1)}$=102.3, $I^{(2)}$=105.8, ħω=0.254

B **2593.9+v** *5*, (28) γ_{2067+v}***527.4*** *2* $I^{(1)}$=102.5, $I^{(2)}$=105.0, ħω=0.273

B **3159.4+v** *6*, (30) γ_{2594+v}***565.5*** *2* $I^{(1)}$=102.7, $I^{(2)}$=106.4, ħω=0.292

B **3762.5+v** *6*, (32) γ_{3159+v}***603.1*** *3* $I^{(1)}$=102.9, $I^{(2)}$=105.8, ħω=0.311

B **4403.4+v** *7*, (34) γ_{3763+v}***640.9*** *3* $I^{(1)}$=103.1, $I^{(2)}$=108.7, ħω=0.330

B **5081.1+v** *9*, (36) γ_{4403+v}***677.7*** *5* $I^{(1)}$=103.4, $I^{(2)}$=107.2, ħω=0.348

B **5796.1+v** *12*, (38) γ_{5081+v}***715.0*** *8*

C **w**, (8)

C **233.4+w** *2*, (10) γ_0***233.4*** *2* $I^{(1)}$=78.9, $I^{(2)}$=99.0, ħω=0.127

C **507.2+w** *3*, (12) γ_{233+w}***273.8*** *2* $I^{(1)}$=81.8, $I^{(2)}$=102.0, ħω=0.147

C **820.2+w** *4*, (14) γ_{507+w}***313.0*** *2* $I^{(1)}$=84.3, $I^{(2)}$=103.6, ħω=0.166

C **1171.8+w** *4*, (16) γ_{820+w}***351.6*** *2* $I^{(1)}$=86.3, $I^{(2)}$=103.1, ħω=0.186

C **1562.2+w** *5*, (18) γ_{1172+w}***390.4*** *2* $I^{(1)}$=88.0, $I^{(2)}$=106.7, ħω=0.205

C **1990.1+w** *5*, (20) γ_{1562+w}***427.9*** *2* $I^{(1)}$=89.6, $I^{(2)}$=106.7, ħω=0.223

C **2455.5+w** *6*, (22) γ_{1990+w}***465.4*** *2* $I^{(1)}$=91.0, $I^{(2)}$=109.9, ħω=0.242

C **2957.3+w** *6*, (24) γ_{2456+w}***501.8*** *2* $I^{(1)}$=92.3, $I^{(2)}$=111.1, ħω=0.260

C **3495.1+w** *6*, (26) γ_{2957+w}***537.8*** *2* $I^{(1)}$=93.6, $I^{(2)}$=113.6, ħω=0.278

C **4068.1+w** *7*, (28) γ_{3495+w}***573.0*** *2* $I^{(1)}$=94.9, $I^{(2)}$=117.0, ħω=0.295

C **4675.3+w** *7*, (30) γ_{4068+w}***607.2*** *3* $I^{(1)}$=96.0, $I^{(2)}$=113.0, ħω=0.312

C **5317.9+w** *8*, (32) γ_{4675+w}***642.6*** *4*

$I^{(1)}$=97.0, $I^{(2)}$=117.0, ħω=0.330

C **5994.7+w** *9*, (34) γ_{5318+w} ***676.8*** *3*
$I^{(1)}$=97.9, $I^{(2)}$=112.0, ħω=0.347

C **6707.2+w** *12*, (36) γ_{5995+w} ***712.5*** *8*
$I^{(1)}$=98.8, $I^{(2)}$=124.2, ħω=0.364

C **7451.9+w** *15*, (38) γ_{6707+w} ***744.7*** *8*

D **s**, (7)

D **213.4+s** *3*, (9) γ_0 ***213.4*** *3* $I^{(1)}$=77.1, $I^{(2)}$=99.3, ħω=0.117

D **467.1+s** *4*, (11) γ_{213+s} ***253.7*** *2* $I^{(1)}$=80.4, $I^{(2)}$=101.0, ħω=0.137

D **760.4+s** *5*, (13) γ_{467+s} ***293.3*** *2* $I^{(1)}$=83.1, $I^{(2)}$=102.8, ħω=0.156

D **1092.6+s** *5*, (15) γ_{760+s} ***332.2*** *2* $I^{(1)}$=85.3, $I^{(2)}$=103.1, ħω=0.176

D **1463.6+s** *5*, (17) γ_{1093+s} ***371.0*** *2*
$I^{(1)}$=87.1, $I^{(2)}$=104.4, ħω=0.195

D **1872.9+s** *6*, (19) γ_{1464+s} ***409.3*** *2*
$I^{(1)}$=88.8, $I^{(2)}$=107.8, ħω=0.214

D **2319.3+s** *6*, (21) γ_{1873+s} ***446.4*** *2*
$I^{(1)}$=90.3, $I^{(2)}$=107.5, ħω=0.232

D **2802.9+s** *6*, (23) γ_{2319+s} ***483.6*** *2*
$I^{(1)}$=91.7, $I^{(2)}$=110.2, ħω=0.251

D **3322.8+s** *7*, (25) γ_{2803+s} ***519.9*** *2*
$I^{(1)}$=93.0, $I^{(2)}$=112.7, ħω=0.269

D **3878.2+s** *7*, (27) γ_{3323+s} ***555.4*** *2*
$I^{(1)}$=94.2, $I^{(2)}$=111.7, ħω=0.287

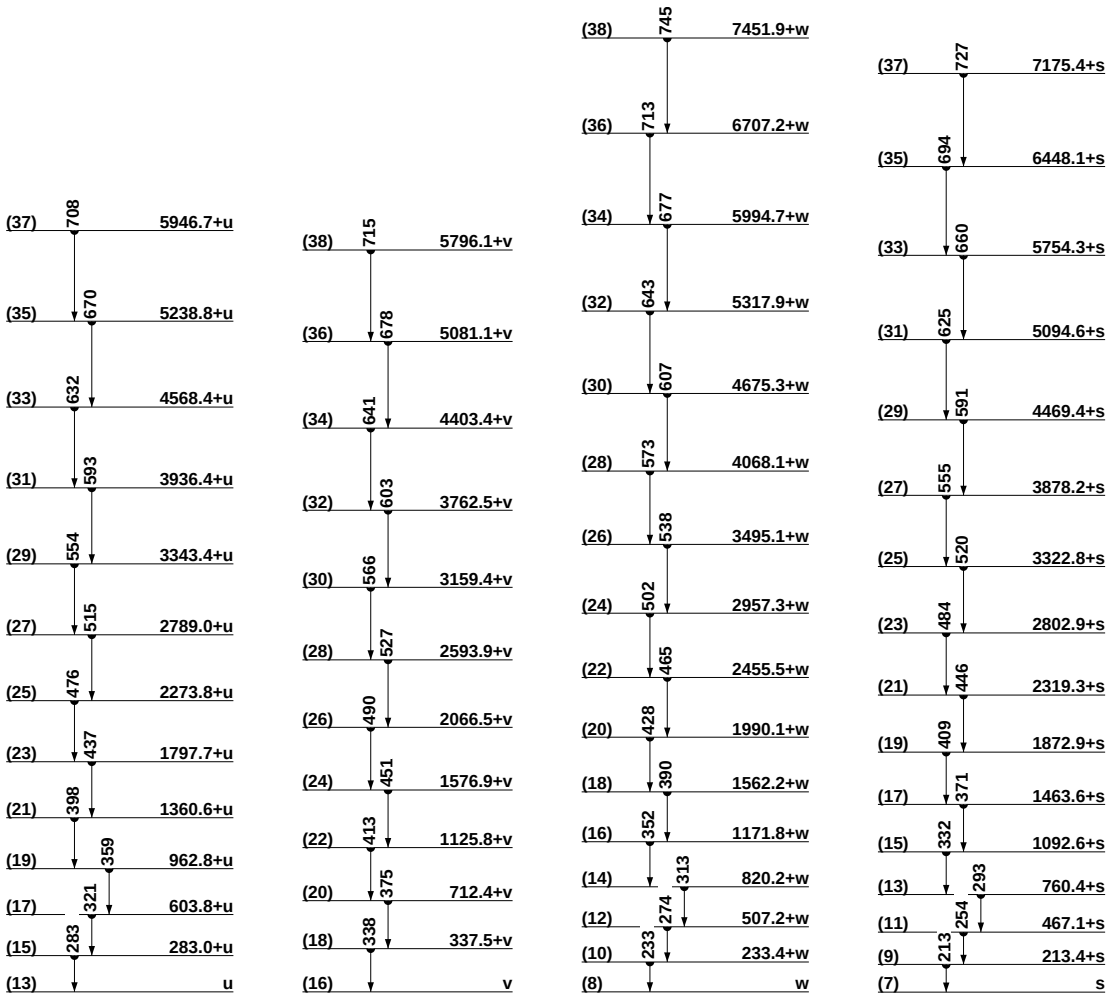
D **4469.4+s** *8*, (29) γ_{3878+s} ***591.2*** *3*
$I^{(1)}$=95.4, $I^{(2)}$=117.6, ħω=0.304

D **5094.6+s** *8*, (31) γ_{4469+s} ***625.2*** *3*
$I^{(1)}$=96.5, $I^{(2)}$=115.9, ħω=0.321

D **5754.3+s** *9*, (33) γ_{5095+s} ***659.7*** *3*
$I^{(1)}$=97.5, $I^{(2)}$=117.3, ħω=0.338

D **6448.1+s** *10*, (35) γ_{5754+s} ***693.8*** *4*
$I^{(1)}$=98.5, $I^{(2)}$=119.4, ħω=0.355

D **7175.4+s** *13*, (37) γ_{6448+s} ***727.3*** *8*



SD-1 band (96Fi02,92Li21)

SD-2 band (96Fi02,92Li21)

SD-3 band (96Fi02,92Li21)

SD-4 band (96Fi02)

$^{192}_{81}$Tl