$^{191}_{81}$Tl

Δ: (–26190) **S_n:** (9800) **S_p:** (2100)
Q_{EC}: (4490) **Q_α:** (4400)

Nuclear Bands

A Band Structure
B 9/2[505]
C Band Structure
D 13/2[606]
E Band Structure
F Band Structure
G Band Structure
H SD-1 band (94Pi01)
I SD-2 band (94Pi01)

Levels and γ-ray branchings:

0, ($1/2^+$), μ=1.588 *4*
B **299** *7*, 9/2($^-$), 5.22 *16* m, %EC+%β^+=100, μ=+3.9034 *48*, Q=–2.20 *2*
A **341.2** *2*, ($3/2^+$) γ_0 ***341.2*** *2* ($\dagger_\gamma$100)
B **686.1** *2*, ($11/2^-$) γ_{299} ***387.1*** *2* ($\dagger_\gamma$100)
A **745.3** *7* (?), ($5/2^+$) γ_{341} ***404.0*** (?) ($\dagger_\gamma$100)
C **859.6** *2*, ($7/2^-$) γ_{299} ***560.6*** *2* ($\dagger_\gamma$100)
B **1011.2** *2*, ($13/2^-$) γ_{686} ***325.0*** *2* ($\dagger_\gamma$59 *2*) γ_{299} ***712.2*** *2* ($\dagger_\gamma$100 *7*)
C **1172.8** *2*, ($9/2^-$) γ_{860} ***313.0*** *2* ($\dagger_\gamma$35 *4*) γ_{299} ***873.9*** *2* ($\dagger_\gamma$100 *4*)
A **1216.6** *7* (?), ($7/2^+$) γ_{745} ***471.3*** *2* ($\dagger_\gamma$67 *34*) γ_{341} ***875.5*** ($\dagger_\gamma$100 *7*)
D **1299.8** *2*, ($13/2^+$) γ_{1011} ***288.1*** γ_{686} ***613.5*** *2* ($\dagger_\gamma$100)
1392.1 *2*, ($13/2^-$) γ_{686} ***705.7*** *2* ($\dagger_\gamma$100 *13*) γ_{299} ***1093.3*** *2* ($\dagger_\gamma$94 *13*)
1438.9 (?), ($15/2^-$) γ_{1011} ***427.3*** (?) γ_{686} ***752.8*** (?)
1704.7 (?), ($15/2^+$) γ_{1300} ***404.6*** (?) ($\dagger_\gamma$100)
1760.2 (?), ($17/2^-$) γ_{1439} ***321.3*** (?) γ_{1011} ***748.8*** (?)
1929.3, ($17/2^-$) γ_{1439} ***490.4*** γ_{1011} ***918.5***
2010.7, ($17/2^+$) γ_{1705} ***306.0*** γ_{1439} ***571.6*** γ_{1300} ***710.9***
G **2077.5**, ($17/2^+$) γ_{1705} ***372.4*** γ_{1300} ***777.4***
2183.7, ($19/2^+$) γ_{2078} ***106.6*** γ_{2011} ***173.0*** γ_{1760} ***422.9***
2231.8 (?), ($19/2^-$) γ_{1760} ***471.6*** (?) γ_{1439} ***792.8*** (?)
2321.0, ($21/2^+$) γ_{2184} ***137.3***
E **2329.2**, ($21/2^+$) γ_{2184} ***145.5***
2387.1, ($19/2^-$) γ_{1929} ***457.8*** γ_{1439} ***948.3***
F **2407.5**, ($19/2^-$) γ_{2232} ***175.9*** γ_{2184} ***225.4*** (?) γ_{1760} ***647.3***
G **2431.9**, ($19/2^+$) γ_{2184} ***248.2*** γ_{2078} ***354.4***
2486.3, ($21/2^+$) γ_{2321} ***165.5*** γ_{2184} ***303.4***
2600.3 (?), ($21/2^-$) γ_{2408} ***193.0*** γ_{2387} ***212.8*** γ_{2232} ***368*** (?) γ_{1760} ***839*** (?)
F **2622.1**, ($21/2^-$) γ_{2408} ***214.6***
E **2642.0**, ($23/2^+$) γ_{2329} ***312.8*** γ_{2321} ***321.0*** γ_{2184} ***458.6***
2676.1, ($23/2^+$) γ_{2486} ***189.6*** γ_{2432} ***244.2*** γ_{2408} ***269.2*** (?)
G **2738.5**, ($21/2^+$) γ_{2486} ***252.0*** γ_{2432} ***306.6***
B **2852.0**, ($23/2^-$) γ_{2600} ***251.5***
F **2861.5**, ($23/2^-$) γ_{2622} ***239.4***
G **2882.7**, ($23/2^+$) γ_{2739} ***144.2*** γ_{2600} ***282.8*** (?)
2955.6, ($25/2^+$) γ_{2676} ***279.5***
E **2968.7**, ($25/2^+$) γ_{2642} ***326.7*** γ_{2329} ***639.6***
3018 (?), ($23/2^-$) γ_{2600} ***418*** (?) γ_{2232} ***786*** (?)
B **3077.3**, ($25/2^-$) γ_{2852} ***225.3*** γ_{2600} ***476.8***
F **3093.5**, ($25/2^-$) γ_{2862} ***232.0***
G **3131.1**, ($25/2^+$) γ_{2883} ***248.4***
3323.4, ($27/2^+$) γ_{3131} ***192.5*** γ_{2956} ***367.8***
E **3343.7**, ($27/2^+$) γ_{2969} ***375.0*** γ_{2642} ***702.0***
B **3446.4**, ($27/2^-$) γ_{3077} ***369.1*** γ_{2852} ***594.6***
3595.4, ($29/2^+$) γ_{3323} ***272.0***
E **3674.3**, ($29/2^+$) γ_{3344} ***330.6*** γ_{2969} ***706.2***
B **3763.0**, ($29/2^-$) γ_{3446} ***316.6*** γ_{3077} ***685.8***
E **3963.4**, ($31/2^+$) γ_{3674} ***289.1*** γ_{3344} ***620.0***
E **4123.0**, ($33/2^+$) γ_{3963} ***159.6*** γ_{3674} ***449.0***
B **4194.7**, ($31/2^-$) γ_{3763} ***431.7*** γ_{3446} ***748.6***
E **4323.9**, ($35/2^+$) γ_{4123} ***200.9***
E **4513.1**, ($37/2^+$) γ_{4324} ***189.2*** γ_{4123} ***390.4***
B **4566.4**, ($33/2^-$) γ_{4195} ***371.7*** γ_{3763} ***803.2***
E **4792.6**, ($39/2^+$) γ_{4513} ***279.5***
B **5030.4**, ($35/2^-$) γ_{4566} ***464.0*** γ_{4195} ***836.5***
E **5075.5**, ($41/2^+$) γ_{4793} ***282.5*** γ_{4513} ***564.1***
B **5425.9**, ($37/2^-$) γ_{5030} ***395.5*** γ_{4566} ***859.9***
E **5430.0**, ($43/2^+$) γ_{5076} ***354.5***
E **5793.0**, ($45/2^+$) γ_{5430} ***363.0***
H **x**, J
H **317.9+x**, J+2 γ_x ***317.9*** *3* (?) *$I^{(2)}$=97.6, ħω=0.169*
H **676.8+x**, J+4 γ_{318+x} ***358.9*** *3* ($\dagger_\gamma$0.71 *25*) *$I^{(2)}$=98.8, ħω=0.190*
H **1076.2+x**, J+6 γ_{677+x} ***399.4*** *3* ($\dagger_\gamma$0.79 *25*) (E2) *$I^{(2)}$=102.8, ħω=0.209*
H **1514.5+x**, J+8 γ_{1076+x} ***438.3*** *3* ($\dagger_\gamma$0.64 *17*) (E2) *$I^{(2)}$=103.9, ħω=0.229*
H **1991.3+x**, J+10 γ_{1515+x} ***476.8*** *3* ($\dagger_\gamma$0.57 *20*) (E2) *$I^{(2)}$=105.0, ħω=0.248*
H **2506.2+x**, J+12 γ_{1991+x} ***514.9*** *3* ($\dagger_\gamma$0.50 *17*) *$I^{(2)}$=110.8, ħω=0.266*
H **3057.2+x**, J+14 γ_{2506+x} ***551.0*** *3*

(†$_{\gamma}$0.39 *10*) (E2) I$^{(2)}$*=109.0, ħω=0.285*

H **3644.9+x**, J+16 γ_{3057+x}***587.7*** *3*
(†$_{\gamma}$0.25 *10*) (E2) I$^{(2)}$*=113.6, ħω=0.303*

H **4267.8+x**, J+18 γ_{3645+x}***622.9*** *6*
(†$_{\gamma}$0.18 *10*) I$^{(2)}$*=122.0, ħω=0.320*

H **4923.5+x**, J+20 γ_{4268+x}***655.7*** *6*
(†$_{\gamma}$0.13 *5*)

I **y**, J

I **377.8+y**, J+2 γ_{y}***377.8*** *6* (?) (†$_{\gamma}$0.40 *12*)
I$^{(2)}$*=101.5, ħω=0.199*

I **795.0+y**, J+4 γ_{378+y}***417.2*** *3* (†$_{\gamma}$0.86 *25*)
(E2) I$^{(2)}$*=104.4, ħω=0.218*

I **1250.5+y**, J+6 γ_{795+y}***455.5*** *3* (†$_{\gamma}$0.80 *23*)
(E2) I$^{(2)}$*=105.3, ħω=0.237*

I **1744.0+y**, J+8 γ_{1251+y}***493.5*** *3*
(†$_{\gamma}$0.71 *20*) (E2) I$^{(2)}$*=108.7, ħω=0.256*

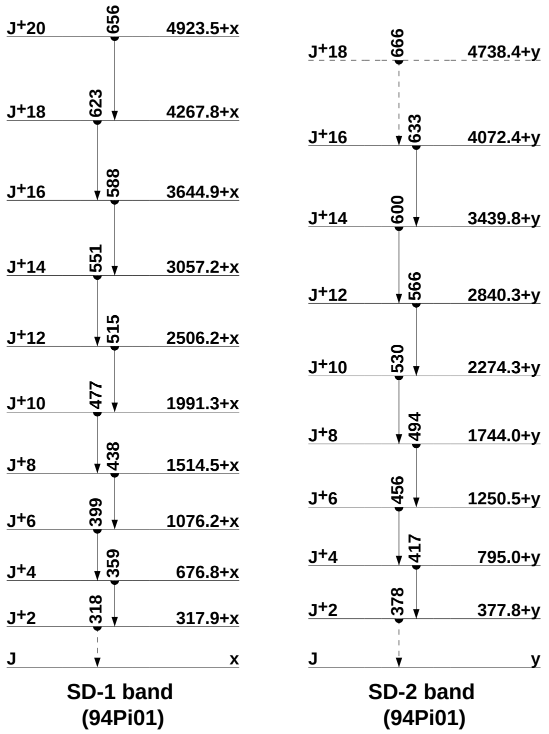
I **2274.3+y**, J+10 γ_{1744+y}***530.3*** *3*
(†$_{\gamma}$0.67 *18*) (E2) I$^{(2)}$*=112.0, ħω=0.274*

I **2840.3+y**, J+12 γ_{2274+y}***566.0*** *3*
(†$_{\gamma}$0.54 *15*) (E2) I$^{(2)}$*=119.4, ħω=0.291*

I **3439.8+y**, J+14 γ_{2840+y}***599.5*** *3*
(†$_{\gamma}$0.54 *15*) I$^{(2)}$*=120.8, ħω=0.308*

I **4072.4+y**, J+16 γ_{3440+y}***632.6*** *6*
(†$_{\gamma}$0.27 *10*) I$^{(2)}$*=119.8, ħω=0.325*

I **4738.4+y** (?), J+18 γ_{4072+y}***666*** (?)
(†$_{\gamma}$0.17 *8*)


J+20
656
4923.5+x
J+18
623
4267.8+x
J+16
588
3644.9+x
J+14
551
3057.2+x
J+12
515
2506.2+x
J+10
477
1991.3+x
J+8
438
1514.5+x
J+6
399
1076.2+x
J+4
359
676.8+x
J+2
318
317.9+x
J
x
SD-1 band
(94Pi01)
J+18
666
4738.4+y
J+16
633
4072.4+y
J+14
600
3439.8+y
J+12
566
2840.3+y
J+10
530
2274.3+y
J+8
494
1744.0+y
J+6
456
1250.5+y
J+4
417
795.0+y
J+2
378
377.8+y
J
y
SD-2 band
(94Pi01)

$^{191}_{81}$Tl