$^{195}_{82}$Pb

Δ: (–23800) **S_n:** (7600) **S_p:** (4100)
Q_{EC}: (4500) **Q_α:** (4500)

Nuclear Bands

A SD-1 band (95Fa11)
B SD-2 band (95Fa11)
C SD-3 band (95Fa11)
D SD-4 band (95Fa11)

Levels and γ-ray branchings:

0, 3/2$^-$, ≈ 15 m, %EC+%β$^+$=100

134.52 *20*, (5/2)$^-$ γ_0***134.4*** *3* (†$_\gamma$100) M1(+E2)

201 *4*, 13/2$^+$, 15.0 *12* m, %EC+%β$^+$=100

329.29 *16*, 1/2$^-$,3/2$^-$,5/2$^-$ γ_0***329.2*** *2* (†$_\gamma$100) M1

829.9 *4*, (7/2)$^-$ γ_{135}***695.4*** *3* (†$_\gamma$100) M1

966.94 *20*, (3/2,5/2)$^-$ γ_{135}***831.7*** *7* (†$_\gamma$100 *7*) M1(+E2) γ_0***967.0*** *2* (†$_\gamma$17.9 *13*) M1(+E2)

978.9 *7*, (11/2)$^+$ γ_{201}***776.2*** *3* (†$_\gamma$100) E2

1009.86 *24*, (1/2 to 7/2)$^-$ γ_{135}***875.4*** *3* (†$_\gamma$77 *10*) E2 γ_0***1009.8*** *3* (†$_\gamma$100 *7*) E2

1010.8 *7*, (9/2)$^+$ γ_{201}***807.6*** *4* (†$_\gamma$100) E2

1093.1 *8*, 13/2$^+$ γ_{201}***890.0*** *4* (†$_\gamma$100) E0+M1+E2

1095.99 *15*, 3/2$^-$,5/2$^-$,7/2$^-$ γ_{329}***766.6*** *2* (†$_\gamma$20.0 *16*) γ_{135}***961.4*** *3* (†$_\gamma$52.6 *45*) M1(+E2) γ_0***1096.1*** *2* (†$_\gamma$100 *10*) E2

1120.3 *5*, 9/2$^-$,(1/2 to 7/2)$^-$ γ_{135}***985.8*** *4* (†$_\gamma$100) E2

1172.6 *7*, 17/2$^+$ γ_{201}***969.6*** *2* (†$_\gamma$100) E2

1180.1 *3*, (1/2 to 7/2)$^-$ γ_{329}***850.8*** *2* (†$_\gamma$9.9 *8*) M1

1212.8 *6*, (1/2 to 7/2)$^-$ γ_{135}***1078.3*** *5* (†$_\gamma$100) E2

1308.1 *3*, (3/2,5/2,7/2)$^-$ γ_{135}***1173.6*** *2* (†$_\gamma$100) M1

1328.7 *7*, (9/2)$^+$ γ_{1011}***317.7*** *5* (†$_\gamma$1.5 *10*) E0+M1+E2 γ_{830}***498.8*** *5* (†$_\gamma$43.9 *36*) E1 γ_{201}***1125.8*** *2* (†$_\gamma$100 *7*) E2

1379.8 *7*, (11/2)$^+$ γ_{1093}***286.4*** *6* (†$_\gamma$37.2 *43*) M1 γ_{1011}***368.9*** *3* (†$_\gamma$100 *7*) M1(+E2) γ_{979}***401.3*** *4* (†$_\gamma$10.6 *32*) E0+M1+E2 γ_{201}***1176.5*** *5* (†$_\gamma$78.7 *64*) M1

1391.5 *7*, (7/2)$^+$ γ_{1011}***380.6*** *3* (†$_\gamma$100 *33*) M1+E2 γ_{979}***412.7*** *2* (†$_\gamma$87 *13*) E2

1428.5 *3*, (3/2,5/2,7/2)$^-$ γ_{135}***1294.0*** *2* (†$_\gamma$100) M1,E2

1444.1 *7*, (5/2 to 13/2)$^+$ γ_{1011}***433.3*** *2* (†$_\gamma$100) E2

1566.9 *8*, (9/2,11/2)$^+$ γ_{1011}***556.2*** *4* (†$_\gamma$64 *13*) M1+E2 γ_{979}***587.6*** *6* (†$_\gamma$100 *11*) M1+E2

1645.0 *7*, (7/2 to 11/2)$^+$ γ_{1011}***634.2*** *2* (†$_\gamma$100) M1+E2

1670.2 *5*, (3/2 to 11/2)$^-$ γ_{830}***840.3*** *3* (†$_\gamma$100) E2

1754.0 *7*, 21/2$^+$ γ_{1173}***581.4*** *2* (†$_\gamma$100) E2

1759.1 *7*, 21/2$^-$, 10.0 *7* μs γ_{1754}***5.1*** (†$_{\gamma+e}$69 *9*) γ_{1173}***586.5*** *2* (†$_{\gamma+e}$100 *9*) E3(+M2): δ=4.5$^{+26}_{-10}$

1780.0 *6*, (¯) γ_{1096}***684.0*** *5* (†$_\gamma$100) E2(+M1)

1884.0 *7*, (23/2$^-$) γ_{1759}***125.0*** *1* (†$_\gamma$100) (E2)+M1: δ<0.65

2186.1 *7*, (23/2$^-$) γ_{1759}***427.0*** *2* (†$_\gamma$100) M1

2371.7 *7*, (25/2$^+$) γ_{1754}***617.7*** *2* (†$_\gamma$100)

2413.2 *7*, 27/2$^-$, 2.3 *7* ns γ_{2186}***227.1*** *1* (†$_{\gamma+e}$59 *10*) E2 γ_{1884}***529.2*** *1* (†$_{\gamma+e}$100 *6*) E2

2815.0 *7*, 29/2$^+$ γ_{2413}***401.8*** *1* (†$_{\gamma+e}$100.4 *14*) E1 γ_{2372}***443.3*** *2* (†$_{\gamma+e}$7.9 *14*)

2901.8 *8*, 33/2$^+$, 95 *20* ns, g=–0.156 *6* γ_{2815}***86.8*** *3* (†$_\gamma$100) E2

A **x**, J≈(15/2)

A **182.13+x**, J+2 γ_x***182.13*** *21* (†$_\gamma$0.30) *I$^{(2)}$=99.5, ħω=0.101*

A **404.46+x**, J+4 γ_{182+x}***222.33*** *14* (†$_\gamma$0.45) *I$^{(2)}$=100.9, ħω=0.121*

A **666.43+x**, J+6 γ_{404+x}***261.97*** *10* (†$_\gamma$0.78) *I$^{(2)}$=101.1, ħω=0.141*

A **967.95+x**, J+8 γ_{666+x}***301.52*** *9* (†$_\gamma$0.87) *I$^{(2)}$=101.1, ħω=0.161*

A **1309.04+x**, J+10 γ_{968+x}***341.09*** *9* (†$_\gamma$1.00) *I$^{(2)}$=101.4, ħω=0.180*

A **1689.58+x**, J+12 γ_{1309+x}***380.54*** *10* (†$_\gamma$0.90) *I$^{(2)}$=103.2, ħω=0.200*

A **2108.87+x**, J+14 γ_{1690+x}***419.29*** *16* (†$_\gamma$0.95) *I$^{(2)}$=102.6, ħω=0.219*

A **2567.13+x**, J+16 γ_{2109+x}***458.26*** *9* (†$_\gamma$0.84) *I$^{(2)}$=102.2, ħω=0.239*

A **3064.51+x**, J+18 γ_{2567+x}***497.38*** *9* (†$_\gamma$0.86) *I$^{(2)}$=104.4, ħω=0.258*

A **3600.20+x**, J+20 γ_{3065+x}***535.69*** *15* (†$_\gamma$0.80) *I$^{(2)}$=103.0, ħω=0.278*

A **4174.72+x**, J+22 γ_{3600+x}***574.52*** *18* (†$_\gamma$0.50) *I$^{(2)}$=104.8, ħω=0.297*

A **4787.4+x**, J+24 γ_{4175+x}***612.7*** *3* (†$_\gamma$0.42) *I$^{(2)}$=104.7, ħω=0.316*

A **5438.3+x**, J+26 γ_{4787+x}***650.9*** *4* (†$_\gamma$0.35) *I$^{(2)}$=105.0, ħω=0.335*

A **6127+x** (?), J+28 γ_{5438+x}***689*** (?) (†$_\gamma$0.10)

B **y**, J≈(13/2)

B **162.58+y**, J+2 γ_y***162.58*** *18* (†$_\gamma$0.50)

$I^{(2)}$=98.4, ħω=0.091

B **365.80+y**, J+4 γ_{163+y}***203.22*** *16* (†$_\gamma$0.62)
$I^{(2)}$=98.1, ħω=0.112

B **609.79+y**, J+6 γ_{366+y}***243.99*** *11* (†$_\gamma$0.90)
$I^{(2)}$=98.4, ħω=0.132

B **894.42+y**, J+8 γ_{610+y}***284.63*** *9* (†$_\gamma$0.86)
$I^{(2)}$=97.5, ħω=0.153

B **1220.06+y**, J+10 γ_{894+y}***325.64*** *9*
(†$_\gamma$0.95) $I^{(2)}$=96.9, ħω=0.173

B **1586.97+y**, J+12 γ_{1220+y}***366.91*** *10*
(†$_\gamma$0.85) $I^{(2)}$=97.4, ħω=0.194

B **1994.96+y**, J+14 γ_{1587+y}***407.99*** *11*
(†$_\gamma$0.95) $I^{(2)}$=97.2, ħω=0.214

B **2444.10+y**, J+16 γ_{1995+y}***449.14*** *9*
(†$_\gamma$0.80) $I^{(2)}$=98.6, ħω=0.235

B **2933.80+y**, J+18 γ_{2444+y}***489.70*** *8*
(†$_\gamma$0.86) $I^{(2)}$=98.0, ħω=0.255

B **3464.31+y**, J+20 γ_{2934+y}***530.51*** *13*
(†$_\gamma$1.00) $I^{(2)}$=100.5, ħω=0.275

B **4034.63+y**, J+22 γ_{3464+y}***570.32*** *16*
(†$_\gamma$0.78) $I^{(2)}$=98.9, ħω=0.295

B **4645.38+y**, J+24 γ_{4035+y}***610.75*** *23*
(†$_\gamma$0.56) $I^{(2)}$=100.4, ħω=0.315

B **5296.0+y**, J+26 γ_{4645+y}***650.6*** *3* (†$_\gamma$0.38)
$I^{(2)}$=104.2, ħω=0.335

B **5985+y**, J+28 γ_{5296+y}***689***(?) (†$_\gamma$0.10)

C **z**, J≈(15/2)

C **198.2+z**, J+2 γ_z***198.2*** *4* (†$_\gamma$0.28)
$I^{(2)}$=105.3, ħω=0.109

C **434.4+z**, J+4 γ_{198+z}***236.19*** *14* (†$_\gamma$0.70)
$I^{(2)}$=96.9, ħω=0.128

C **711.9+z**, J+6 γ_{434+z}***277.47*** *13* (†$_\gamma$0.56)
$I^{(2)}$=99.7, ħω=0.149

C **1029.5+z**, J+8 γ_{712+z}***317.60*** *12* (†$_\gamma$0.62)
$I^{(2)}$=101.0, ħω=0.169

C **1386.7+z**, J+10 γ_{1030+z}***357.22*** *11*
(†$_\gamma$0.85) $I^{(2)}$=102.9, ħω=0.188

C **1782.8+z**, J+12 γ_{1387+z}***396.08*** *13*
(†$_\gamma$0.90) $I^{(2)}$=105.4, ħω=0.208

C **2216.8+z**, J+14 γ_{1783+z}***434.02*** *13*
(†$_\gamma$0.80) $I^{(2)}$=106.7, ħω=0.226

C **2688.3+z**, J+16 γ_{2217+z}***471.52*** *15*
(†$_\gamma$0.70) $I^{(2)}$=105.4, ħω=0.245

C **3197.8+z**, J+18 γ_{2688+z}***509.46*** *14*
(†$_\gamma$0.70) $I^{(2)}$=111.0, ħω=0.264

C **3743.3+z**, J+20 γ_{3198+z}***545.51*** *16*
(†$_\gamma$0.65) $I^{(2)}$=112.6, ħω=0.282

C **4324.3+z**, J+22 γ_{3743+z}***581.04*** *17*
(†$_\gamma$1.00) $I^{(2)}$=114.4, ħω=0.299

C **4940.3+z**, J+24 γ_{4324+z}***616.0*** *3* (†$_\gamma$0.42)
$I^{(2)}$=118.7, ħω=0.316

C **5590.0+z**, J+26 γ_{4940+z}***649.7*** *5* (†$_\gamma$0.30)
$I^{(2)}$=115.3, ħω=0.334

C **6274.4+z**, J+28 γ_{5590+z}***684.4*** *8* (†$_\gamma$0.24)

D **u**, J≈(17/2)

D **213.6+u**, J+2 γ_0***213.6*** *4* (†$_\gamma$0.45)
$I^{(2)}$=90.8, ħω=0.118

D **471.3+u**, J+4 γ_{214+u}***257.66*** *23* (†$_\gamma$0.60)
$I^{(2)}$=99.9, ħω=0.139

D **769.0+u**, J+6 γ_{471+u}***297.70*** *17* (†$_\gamma$0.72)
$I^{(2)}$=99.7, ħω=0.159

D **1106.8+u**, J+8 γ_{769+u}***337.83*** *16* (†$_\gamma$1.00)
$I^{(2)}$=100.4, ħω=0.179

D **1484.5+u**, J+10 γ_{1107+u}***377.68*** *17*
(†$_\gamma$0.90) $I^{(2)}$=100.2, ħω=0.199

D **1902.1+u**, J+12 γ_{1485+u}***417.59*** *19*
(†$_\gamma$0.72) $I^{(2)}$=109.2, ħω=0.218

D **2356.3+u**, J+14 γ_{1902+u}***454.21*** *14*
(†$_\gamma$0.80) $I^{(2)}$=106.8, ħω=0.236

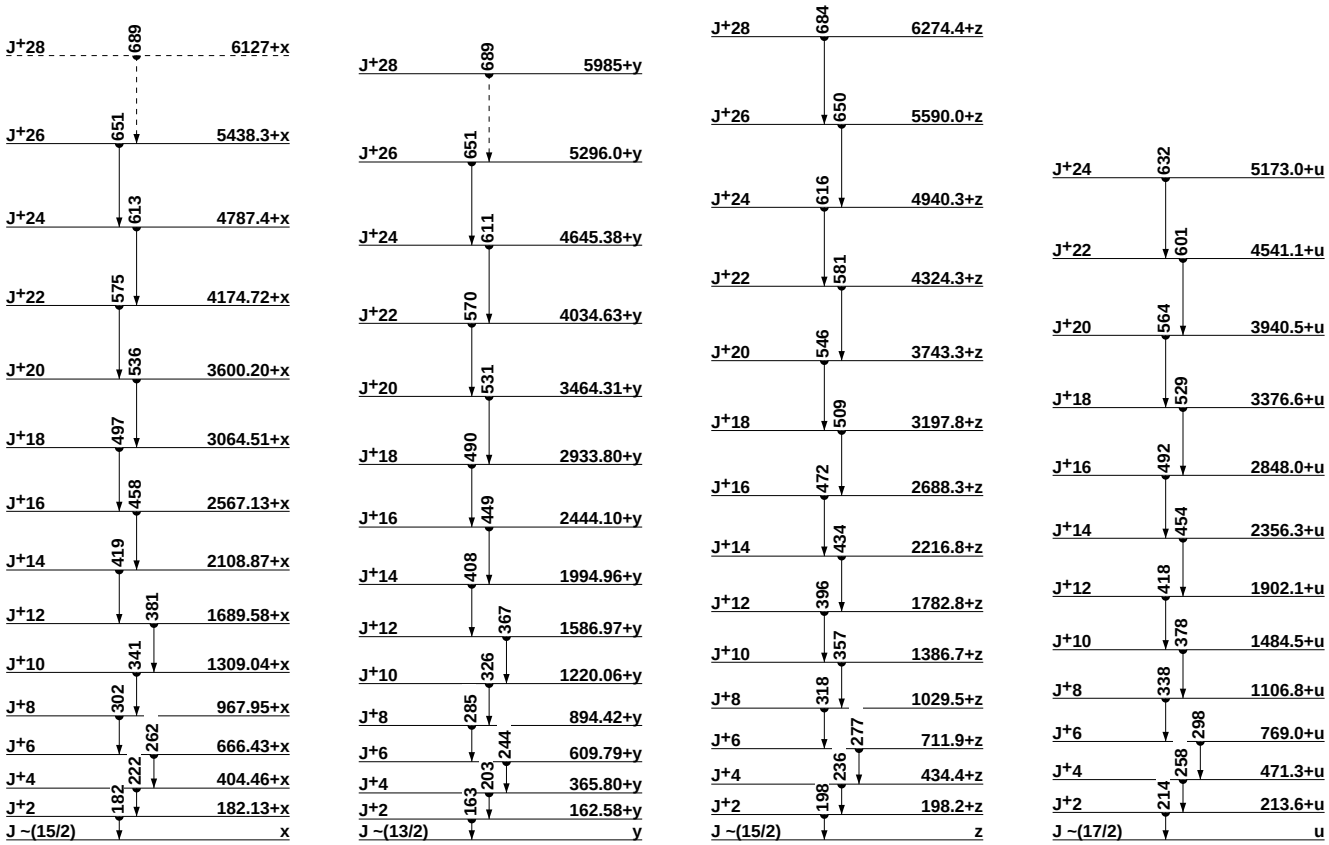
D **2848.0+u**, J+16 γ_{2356+u}***491.68*** *20*
(†$_\gamma$0.70) $I^{(2)}$=108.3, ħω=0.255

D **3376.6+u**, J+18 γ_{2848+u}***528.6*** *3* (†$_\gamma$0.80)
$I^{(2)}$=113.3, ħω=0.273

D **3940.5+u**, J+20 γ_{3377+u}***563.9*** *3* (†$_\gamma$0.65)
$I^{(2)}$=109.0, ħω=0.291

D **4541.1+u**, J+22 γ_{3941+u}***600.6*** *4* (†$_\gamma$0.45)
$I^{(2)}$=127.8, ħω=0.308

D **5173.0+u**, J+24 γ_{4541+u}***631.9*** *4* (†$_\gamma$0.28)


J+28 689 6127+x
J+26 651 5438.3+x
J+24 613 4787.4+x
J+22 575 4174.72+x
J+20 536 3600.20+x
J+18 497 3064.51+x
J+16 458 2567.13+x
J+14 419 2108.87+x
J+12 381 1689.58+x
J+10 341 1309.04+x
J+8 302 967.95+x
J+6 262 666.43+x
J+4 222 404.46+x
J+2 182 182.13+x
J ~(15/2) x
SD-1 band
(95Fa11)
J+28 689 5985+y
J+26 651 5296.0+y
J+24 611 4645.38+y
J+22 570 4034.63+y
J+20 531 3464.31+y
J+18 490 2933.80+y
J+16 449 2444.10+y
J+14 408 1994.96+y
J+12 367 1586.97+y
J+10 326 1220.06+y
J+8 285 894.42+y
J+6 244 609.79+y
J+4 203 365.80+y
J+2 163 162.58+y
J ~(13/2) y
SD-2 band
(95Fa11)
J+28 684 6274.4+z
J+26 650 5590.0+z
J+24 616 4940.3+z
J+22 581 4324.3+z
J+20 546 3743.3+z
J+18 509 3197.8+z
J+16 472 2688.3+z
J+14 434 2216.8+z
J+12 396 1782.8+z
J+10 357 1386.7+z
J+8 318 1029.5+z
J+6 277 711.9+z
J+4 236 434.4+z
J+2 198 198.2+z
J ~(15/2) z
SD-3 band
(95Fa11)
J+24 632 5173.0+u
J+22 601 4541.1+u
J+20 564 3940.5+u
J+18 529 3376.6+u
J+16 492 2848.0+u
J+14 454 2356.3+u
J+12 418 1902.1+u
J+10 378 1484.5+u
J+8 338 1106.8+u
J+6 298 769.0+u
J+4 258 471.3+u
J+2 214 213.6+u
J ~(17/2) u
SD-4 band
(95Fa11)

$^{195}_{82}$Pb