$^{236}_{92}$U

Δ: 42440.6 *19* **S_n:** 6544.8 *5* **S_p:** 7170 *50*
Q_α: 4572.0 *9*
σ_f: 0.07 b , **σ^0_γ:** 5.11 *21* b

Nuclear Bands

- *A* Band Structure
- *B* Band Structure
- *C* ν7/2[743]-ν1/2[631]
- *D* ν7/2[743]+ν5/2[622]
- *E* Band Structure
- *F* Band Structure
- *G* ν7/2[743]-ν5/2[622]
- *H* ν7/2[743]+ν1/2[631]
- *I* Band Structure
- *J* Fission isomer band

Levels and γ-ray branchings:

A **0**, 0^+, 2.342×10^7 *3* y, %α=100, %SF=9.6×10^{-8} *6*

A **45.242** *3*, 2^+, 234 *6* ps γ_0***45.242*** *3* (†$_\gamma$100) E2

A **149.476** *15*, 4^+, 124 *7* ps γ_{45}***104.234*** *6* (†$_\gamma$100) E2

A **309.784** *8*, 6^+, 58 *3* ps γ_{149}***160.308*** *3* (†$_\gamma$100) E2

A **522.24** *5*, 8^+, 24 *2* ps γ_{310}***212.46*** *5* (†$_\gamma$100) E2

B **687.60** *5*, 1^-, 3.78 *9* ns γ_{149}***538.11*** *10* (†$_\gamma$1.20 *10*) E3 γ_{45}***642.35*** *9* (†$_\gamma$100) E1(+M2+E3) γ_0***687.59*** *9* (†$_\gamma$27.3 *5*) E1

B **744.15** *8*, 3^- γ_{688}***56.6*** *5* (†$_\gamma$≈5) (E2) γ_{149}***594.5*** *3* (†$_\gamma$100)

A **782.3** *5*, 10^+, 11.6 *11* ps γ_{522}***260.1*** *5* (†$_\gamma$100) E2

B **848.3** *8*, 5^- γ_{744}***104.1*** *10* (†$_\gamma$100) (E2)

E **919.21** *17*, 0^+ γ_{45}***874.1*** *2* (†$_\gamma$100) γ_0***918.9*** *3* (E0)

F **957.99** *17*, (2^+) γ_{45}***≈912.7*** (†$_\gamma$≈71) (M1) γ_0***958.0*** *2* (†$_\gamma$100)

E **960.3** *3*, (2^+) γ_{149}***≈810.9*** (†$_\gamma$≈68) γ_{45}***915.1*** *3* (†$_\gamma$100) (M1+E0) γ_0***≈959.9*** (†$_\gamma$≈80)

G **966.63** *9*, 1^- γ_{688}***279.0*** *1* (†$_\gamma$60 *4*) (M1,E2) γ_{45}***921.2*** *2* (†$_\gamma$44 *11*) E1 γ_0***966.9*** *2* (†$_\gamma$100) E1

G **987.67** *8*, 2^- γ_{744}***243.6*** *2* (†$_\gamma$28 *3*) E2+M1: δ=1.6^{+15}_{-6} γ_{688}***300.0*** *1* (†$_\gamma$20 *3*) (E2) γ_{45}***942.4*** *2* (†$_\gamma$100) E1

B **999.8** *9*, 7^- γ_{848}***151.5*** *5* (†$_\gamma$100) E2

F **1001.5** *3*, (3^+) γ_{744}***≈258.4*** γ_{149}***≈852.2*** (†$_\gamma$≈13) γ_{45}***956.2*** *3* (†$_\gamma$100)

G **1035.6** *7*, (3^-) γ_{149}***886.2*** *10* (†$_\gamma$100) γ_{45}***990.2*** *10* (†$_\gamma$≈88)

E **1050.85** *15*, (4^+) γ_{149}***901.25*** *17* γ_{45}***1006.0*** *3* (†$_\gamma$100)

H **1052.89** *19*, $(4)^-$, 100 *4* ns γ_{988}***65*** *1* (†$_\gamma$1.5 *2*) (E2) γ_{848}***204.6*** *10* (†$_\gamma$41 *6*) (E2) γ_{744}***308.0*** *6* (†$_\gamma$37 *6*) E2+M1: δ=1.4 *7* γ_{149}***903.5*** *2* (†$_\gamma$17 *3*) E1

F **1058.61** *20*, (4^+) γ_{149}***909.1*** *2* (†$_\gamma$100) (M1) γ_{45}***1014.1*** (†$_\gamma$100)
1066.1 *10*, $(3^+,4^+)$

G **1070.0** *10*, (4^-) γ_{149}***920.5*** (†$_\gamma$100)

A **1085.3** *7*, 12^+, 5.3 *8* ps γ_{782}***303.0*** *5* (†$_\gamma$100) E2
1093.8 *10*, $(2^+,5^+)$

H **1104.4** *14*, (5^-)

I **1110.67** *8*, (2^-) γ_{744}***366.6*** *1* (†$_\gamma$82 *10*) γ_{688}***423.1*** *1* (†$_\gamma$100 *6*) γ_{45}***1065.0*** *2* (†$_\gamma$34 *4*)

F **1126.9** *6*, (5^+) γ_{149}***977.4*** *6* (†$_\gamma$100)
1147.0 *10*, $(3^+,4^+)$

I **1149.4** *10*, (3^-) γ_{744}***405.2*** (†$_\gamma$100)

G **1164** *3*, (5^-)

H **1164** *3*, (6^-)
1171.8 *2*

B **1198.6** *10*, 9^- γ_{1000}***198.8*** *3* (†$_\gamma$100) E2
1221.4 *10*, $(2^+,5^+)$

H **≈1232**, (7^-)

C **1232.2** *10*, (4^-)
1249.3 *10*, $2^+,5^+$
1265.2 *10*, $3^+,4^+$
1271.09 *8*, $(1^-,2,3)$ γ_{744}***526.7*** *2* (†$_\gamma$39 *4*) γ_{45}***1225.9*** *1* (†$_\gamma$100 *8*)

C **1282.2** *10*, (5^-)

H **1320** *4*, (8^-)
1320.4 *10*, $2^+,5^+$
1329.0 *10*, $3^+,4^+$
1332.8 *10*, $3^+,4^+$

C **1342.8** *10*, (6^-)
1347.5 *10*, $(3^+,4^+)$
1351.3 *10*, $3^+,4^+$
1381.3 *10*, $3^+,4^+$
1399.8 *10*, $2^+,5^+$

C **1413.3** *19*, (7^-)

A **1426.3** *9*, 14^+, 2.8 *3* ps γ_{1085}***341.0*** *5* (†$_\gamma$100) E2

B **1443.6** *11*, 11^- γ_{1199}***245.0*** *5* (†$_\gamma$100) E2

D **1471.7** *10*, (6^-)

D **1541.8** *13*, (7^-)
1572.2 *6*
1580 *11* (?), (1,2) γ_0***1580*** *11*
1604.80 *7*, $1^-,2^+$ γ_{1271}***333.7*** *1* (†$_\gamma$37 *2*) γ_{988}***617.1*** *2* (†$_\gamma$9.5 *20*) γ_{744}***860.6*** *1* (†$_\gamma$35 *1*) γ_{688}***917.0*** *3* (†$_\gamma$62 *4*) γ_{45}***1559.6*** *1* (†$_\gamma$100 *9*) γ_0***1604.9*** *2* (†$_\gamma$18 *5*)

D **1621.8** *12*, (8^-)

1642.5 *20*

1662.37 *8*, 1,2$^+$ γ_{988}***674.5*** *2* (†$_\gamma$23 *8*) γ_{688}***975.0*** *2* (†$_\gamma$21 *5*) γ_{45}***1617.1*** *1* (†$_\gamma$100 *9*) γ_0***1662.4*** *2* (†$_\gamma$66 *7*)

B **1732.6** *15*, 13$^-$ γ_{1444}***289*** *1* (†$_\gamma$100) E2

1791.3 *8*, 1(+) γ_{45}***1746.1*** *10* (†$_\gamma$38 *8*) (M1) γ_0***1791.3*** *10* (†$_\gamma$100) (M1)

A **1800.9** *10*, 16$^+$, 2.1 *2* ps γ_{1426}***374.6*** *5* (†$_\gamma$100) E2

1807.88 *7*, 1,2$^+$ γ_{45}***1762.7*** *1* (†$_\gamma$100 *5*) γ_0***1807.8*** *1* (†$_\gamma$37 *2*)

1865.41 *15*, 1,2$^+$ γ_{688}***1177.7*** *2* (†$_\gamma$100 *14*) γ_0***1865.5*** *2* (†$_\gamma$67 *8*)

1896.9 *7*

1972.62 *9*, 1,2$^+$ γ_{45}***1927.0*** *2* (†$_\gamma$100 *7*) γ_0***1972.7*** *1* (†$_\gamma$100 *9*)

1979.1, 1$^-$,2 γ_{744}***1234.9*** *1* (†$_\gamma$100 *8*) γ_{688}***1291.6*** *1* (†$_\gamma$100 *8*) γ_{45}***1934.1*** *2* (†$_\gamma$98 *8*)

1981.06 *16*, 1,2$^+$ γ_{1111}***870.4*** *2* (†$_\gamma$100 *9*) γ_{958}***1023.1*** *3* (†$_\gamma$84 *8*) γ_0***1981.0*** *3* (†$_\gamma$74 *7*)

2054.2 *8*, 1(+) γ_{45}***2009.0*** *10* (†$_\gamma$75 *14*) (M1) γ_0***2054.2*** *10* (†$_\gamma$100) (M1)

B **2060.6** *18*, 15$^-$ γ_{1733}***328*** *1* (†$_\gamma$100) E2

2086.54 *9*, 1(−) γ_{45}***2041.3*** *1* (†$_\gamma$100 *5*) (E1) γ_0***2086.5*** *2* (†$_\gamma$56 *5*) (E1)

2095.7 *8*, 1(+) γ_{45}***2050.5*** *10* (†$_\gamma$47 *15*) (M1) γ_0***2095.7*** *10* (†$_\gamma$100) (M1)

2155.40 *12*, 0,1,2 γ_{1605}***550.6*** *1* (†$_\gamma$100)

2188.8 *8*, 1(+) γ_{45}***2143.6*** *10* (†$_\gamma$49 *3*) (M1) γ_0***2188.8*** *10* (†$_\gamma$100) (M1)

2190 *10*, (1,2$^+$) γ_0***2190*** *30* (†$_\gamma$100)

A **2203.9** *12*, 18$^+$, 1.17 *12* ps γ_{1801}***403.0*** *5* (†$_\gamma$100) E2

2226.9 *3* (?), (2) γ_{45}***2181.6*** *3* (†$_\gamma$100)

2243.9 *10*, 1 γ_0***2243.9*** *10* (†$_\gamma$100)

2251.1 *8*, 1(+) γ_{45}***2205.9*** *10* (†$_\gamma$100) γ_0***2251.1*** *10* (†$_\gamma$96 *13*)

2284.7 *8*, 1(+) γ_{45}***2239.5*** *10* (†$_\gamma$51 *7*) (M1) γ_0***2284.7*** *10* (†$_\gamma$100) (M1)

B **2426.6** *21*, 17$^-$ γ_{2061}***366*** *1* (†$_\gamma$100) E2

2435.6 *8*, 1(+) γ_{45}***2390.4*** *10* (†$_\gamma$34 *7*) (M1) γ_0***2435.6*** *10* (†$_\gamma$100) (M1)

2440.2 *8*, 1(+) γ_{45}***2395.0*** *10* (†$_\gamma$26 *7*) (M1) γ_0***2440.2*** *10* (†$_\gamma$100) (M1)

2457.3 *8*, 1(+) γ_{45}***2412.1*** *10* (†$_\gamma$50 *9*) (M1) γ_0***2457.3*** *10* (†$_\gamma$100) (M1)

2494.5 *8*, 1(+) γ_{45}***2449.3*** *10* (†$_\gamma$29 *8*) (M1) γ_0***2494.5*** *10* (†$_\gamma$100) (M1)

2498.5 *8*, 1(+) γ_{45}***2453.3*** *10* (†$_\gamma$66 *12*) (M1) γ_0***2498.5*** *10* (†$_\gamma$100) (M1)

A **2631.7** *13*, 20$^+$, 0.84 *12* ps γ_{2204}***427.8*** *5* (†$_\gamma$100) E2

2699.0 *8*, 1(+) γ_{45}***2653.8*** *10* (†$_\gamma$62 *10*) (M1) γ_0***2699.0*** *10* (†$_\gamma$100) (M1)

2712.1 *8*, 1(−) γ_{45}***2666.9*** *10* (†$_\gamma$100 *12*) (E1) γ_0***2712.1*** *10* (†$_\gamma$44 *8*) (E1)

J **2750** *10*, (0$^+$), 120 *2* ns, %SF=13 *6*, %IT=87 *6*, %α<10 γ_{2189}***560*** *10* (†$_\gamma$12) γ_{1580}***1170*** *10* (†$_\gamma$20) γ_{967}***1783*** *10* (†$_\gamma$100) γ_{688}***2062*** *10* (†$_\gamma$26) γ_{45}***≈2705*** (†$_\gamma$<12)

2756.2 *8*, 1(+) γ_{45}***2711.0*** *10* (†$_\gamma$55 *16*) (M1) γ_0***2756.2*** *10* (†$_\gamma$100) (M1)

J **2770** *10*, (2$^+$) γ_{2750}***20.16*** (†$_\gamma$100)
I$^{(1)}$=119.1, I$^{(2)}$=149.0, ħω=0.017

J **2817** *10*, (4$^+$) γ_{2770}***47.0*** (†$_\gamma$100) (E2)
I$^{(1)}$=132.3, I$^{(2)}$=148.7, ħω=0.030

2823.3 *8*, 1(+) γ_{45}***2778.1*** *10* (†$_\gamma$97 *26*) (M1) γ_0***2823.3*** *10* (†$_\gamma$100) (M1)

B **≈2825**, (19$^-$) γ_{2427}***≈396*** (†$_\gamma$100) (E2)

2838.3 *8*, 1(+) γ_{45}***2793.1*** *10* (†$_\gamma$100) (M1) γ_0***2838.3*** *10* (†$_\gamma$92 *27*) (M1)

2877.8 *8*, 1(−) γ_{45}***2832.6*** *10* (†$_\gamma$100) (E1) γ_0***2877.8*** *10* (†$_\gamma$45 *12*) (E1)

J **2891** *10*, (6$^+$) γ_{2817}***73.9*** (†$_\gamma$100) (E2)
I$^{(1)}$=137.4, I$^{(2)}$=148.7, ħω=0.044

2924.0 *8*, (2) γ_{45}***2878.8*** *10* (†$_\gamma$100) γ_0***2924.0*** *10* (†$_\gamma$60 *17*)

2969.0 *8*, 1(+) γ_{45}***2923.8*** *10* (†$_\gamma$50 *12*) (M1) γ_0***2969.0*** *10* (†$_\gamma$100) (M1)

J **2992** *10*, (8$^+$) γ_{2891}***100.8***

3040 (?), (1$^-$)

A **3081.2** *14*, 22$^+$, 0.65 *15* ps γ_{2632}***449.2*** *5* (†$_\gamma$100) E2

3143.8 *8*, 1(+) γ_{45}***3098.6*** *10* (†$_\gamma$56 *14*) (M1) γ_0***3143.8*** *10* (†$_\gamma$100) (M1)

3436 *10* (?), (0$^+$) γ_{2750}***684.5*** *7* (E0)

A **3550** *2*, (24$^+$), 0.41 *8* ps γ_{3081}***469*** *1* (†$_\gamma$100) (E2)

3580 (?), (2$^+$) γ_{2750}***830*** not M1

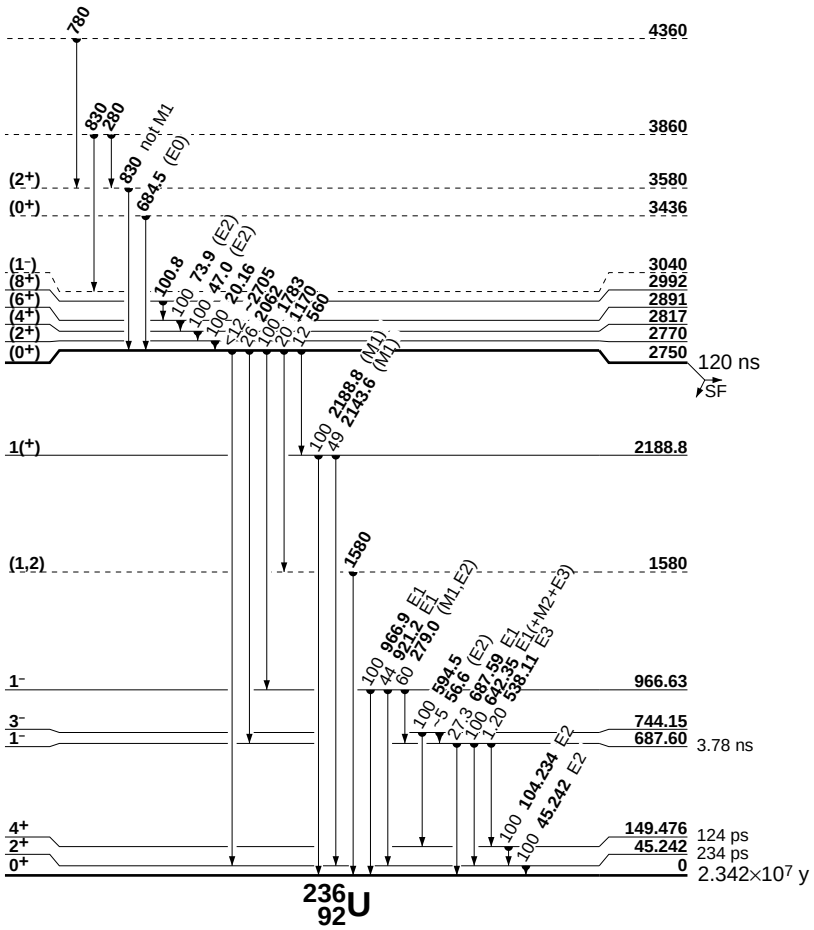
3860 (?) γ_{3580}***280*** γ_{3040}***830***

A **4039** *2*, (26$^+$), 0.33 *9* ps γ_{3550}***489*** *1* (†$_\gamma$100) (E2)

4360 (?) γ_{3580}***780***

A **4549** *2*, (28$^+$), 0.17 *7* ps γ_{4039}***510*** *1* (†$_\gamma$100) (E2)

A **≈5077**, (30$^+$) γ_{4549}***≈528*** (†$_\gamma$100) (E2)


780
830
280
830
684.5
not M1
(E0)
100.8
73.9
47.0
20.16
2705
2862
1783
1170
560
(E2)
(E2)
100
100
100
<12
26
100
20
12
2188.8
2143.6
(M1)
(M1)
100
49
1580
966.9
921.2
279.0
E1
E1
(M1,E2)
100
44
60
594.5
56.6
687.59
642.35
538.11
E1
E1(+M2+E3)
E3
(E2)
100
5
27.3
100
1.20
104.234
45.242
E2
E2
100
100
4360
3860
(2+)
3580
(0+)
3436
(1−)
3040
(8+)
2992
(6+)
2891
(4+)
2817
(2+)
2770
(0+)
2750
120 ns
SF
1(+)
2188.8
(1,2)
1580
1−
966.63
3−
744.15
1−
687.60
3.78 ns
4+
149.476
124 ps
2+
45.242
234 ps
0+
0
2.342×10^7 y
236
92
U