$^{245}_{95}$Am

Δ: 61893 *4* **S_n:** 6054 *3* **S_p:** 5195 *6*
Q_{β^-}: 894 *3* **Q_α:** 5210 *70*

Nuclear Bands

- *A* 5/2[642]
- *B* 5/2[523]
- *C* 7/2[633]
- *D* Band Structure
- *E* Fission isomer

Levels and γ-ray branchings:

A **0**, $(5/2)^+$, 2.05 *1* h, %β^-=100

A **19.20** *2*, $(7/2)^+$

B **27.93** *20*, $(5/2^-)$ γ_{0}***28*** *1* (E1)

A **47.07** *2*, $(9/2^+)$

B **70.43** *20*, $(7/2^-)$

A **87.65** *10*, $(11/2^+)$

B **124.59** *20*, $(9/2^-)$

A **134.51** *20*, $(13/2^+)$

B **190.82** *20*, $(11/2^-)$

C **327.428** *8*, $7/2^+$ γ_{47}***280.385*** *13* ($\dagger_\gamma$5.1 *8*) (M1+E2): δ=0.75 *25* γ_{28}***299.8*** *7* ($\dagger_\gamma$0.07 *4*) γ_{19}***308.222*** *8* ($\dagger_\gamma$19 *3*) M1+E2: δ=0.6^{+3}_{-6} γ_{0}***327.428*** *8* ($\dagger_\gamma$100 *15*) M1+E2: δ=0.5 *5*

C **395.87** *2*, $9/2^+$ γ_{88}***308.222*** (?) γ_{47}***348.782*** *9* ($\dagger_\gamma$30 *5*) γ_{19}***376.676*** *3* ($\dagger_\gamma$100) (M1) γ_{0}***395.87*** *20* ($\dagger_\gamma$3 *1*)

C **475.52** *3*, $11/2^+$ γ_{135}***341.00*** *20* ($\dagger_\gamma$19 *4*) γ_{88}***387.88*** *4* ($\dagger_\gamma$55 *14*) γ_{47}***428.438*** *22* ($\dagger_\gamma$100)

C **563.1** *3*, $(13/2^+)$ γ_{135}***428.438*** (?) γ_{88}***475.1*** *6*

D **887.47** *10*, $(7/2^+)$ γ_{476}***411.93*** *5* ($\dagger_\gamma$9.1 *13*) γ_{396}***491.591*** *9* ($\dagger_\gamma$50 *8*) (E2) γ_{327}***560.13*** *5* ($\dagger_\gamma$100) (E2) γ_{125}***762.73*** *20* ($\dagger_\gamma$13.1 *18*) γ_{88}***799.87*** *20* ($\dagger_\gamma$29 *5*) γ_{70}***817.04*** *20* ($\dagger_\gamma$16 *3*) γ_{47}***840.56*** *20* ($\dagger_\gamma$24 *4*) γ_{28}***859.53*** *20* ($\dagger_\gamma$9.4 *14*) γ_{19}***868.8*** *4* ($\dagger_\gamma$2.2 *7*) γ_{0}***887.14*** (?)

921.01 *20*, $(9/2^+,11/2^+)$ γ_{563}***357.90*** *20* ($\dagger_\gamma$17 *6*) γ_{476}***445.34*** *20* ($\dagger_\gamma$82 *18*) γ_{396}***525.08*** *20* ($\dagger_\gamma$73 *14*) γ_{327}***593.7*** *6* ($\dagger_\gamma$9 *5*) γ_{191}***730.40*** *20* ($\dagger_\gamma$50 *12*) γ_{135}***786.54*** *20* ($\dagger_\gamma$100) γ_{125}***796.37*** *20* ($\dagger_\gamma$68 *21*) γ_{88}***833.14*** *20* ($\dagger_\gamma$<141) γ_{47}***874.16*** *20* ($\dagger_\gamma$36 *11*) γ_{19}***901.9*** *8* ($\dagger_\gamma$14 *8*)

D **957.53** *2*, $(9/2)^+$ γ_{476}***481.9*** *10* ($\dagger_\gamma$0.50 *26*) γ_{396}***560.13*** (?) γ_{327}***630.102*** *14* ($\dagger_\gamma$100) M1(+E2) γ_{191}***766.59*** *15* ($\dagger_\gamma$13 *3*) γ_{135}***824*** (?) ($\dagger_\gamma$<1.3) γ_{125}***833.14*** *20* ($\dagger_\gamma$<19) γ_{88}***870.5*** *5* ($\dagger_\gamma$2.5 *13*) γ_{70}***887.14*** *20* ($\dagger_\gamma$26 *5*) γ_{47}***910.46*** *20* ($\dagger_\gamma$51 *8*) γ_{19}***938.4*** *2* ($\dagger_\gamma$37 *8*) γ_{0}***957.59*** *20* ($\dagger_\gamma$36 *6*)

987.51 *5*, $(7/2^+,9/2^+)$ γ_{476}***511.5*** *10* ($\dagger_\gamma$2.6 *13*) γ_{396}***591.6*** *3* ($\dagger_\gamma$13 *3*) γ_{327}***660.08*** *5* ($\dagger_\gamma$64 *12*) γ_{70}***917.0*** *5* ($\dagger_\gamma$6 *3*) γ_{47}***941.0*** *10* ($\dagger_\gamma$19 *13*) γ_{19}***968.5*** *7* ($\dagger_\gamma$2.6 *13*) γ_{0}***987.60*** *20* ($\dagger_\gamma$100)

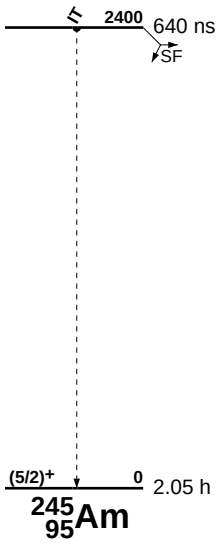
1024.22 *20*, $(7/2^+,9/2^-)$ γ_{476}***549.2*** *6* ($\dagger_\gamma$12 *8*) γ_{396}***630.102*** (?) γ_{327}***696.8*** *4* ($\dagger_\gamma$31 *17*) γ_{125}***899.3*** *10* ($\dagger_\gamma$12 *8*) γ_{70}***953*** *2* ($\dagger_\gamma$6 *4*) γ_{47}***977.2*** *2* ($\dagger_\gamma$<144) γ_{28}***996.0*** *3* ($\dagger_\gamma$75 *31*) γ_{19}***1005.1*** *3* ($\dagger_\gamma$100)

1065.30 *20* γ_{396}***669.28*** *20* ($\dagger_\gamma$33 *7*) γ_{327}***737.96*** *20* ($\dagger_\gamma$21 *6*) γ_{135}***930.3*** *6* ($\dagger_\gamma$5 *3*) γ_{88}***977.2*** (?) γ_{47}***1018.33*** *20* ($\dagger_\gamma$100)

1111.2 *3* γ_{88}***1023.32*** *20* ($\dagger_\gamma$100) γ_{70}***1040.2*** *12* ($\dagger_\gamma$1.3 *7*) γ_{28}***1083.9*** *5* ($\dagger_\gamma$6.3 *18*) γ_{0}***1111.9*** *5* ($\dagger_\gamma$10 *3*)

1185.6 *5* γ_{135}***1051.3*** *8* ($\dagger_\gamma$10 *4*) γ_{88}***1097.9*** *7* ($\dagger_\gamma$33 *11*) γ_{47}***1138.5*** *5* ($\dagger_\gamma$83 *18*) γ_{19}***1166.3*** *5* ($\dagger_\gamma$100)

E **2400** *400*, 640 *60* ns, %SF≤100


2400
640 ns
SF
(5/2)+
0
2.05 h
245
95
Am