$^{142}_{63}$Eu

Δ: −71350 *30* **S_n:** 9460 *40* **S_p:** 2700 *30*

Q_{EC}: 7640 *30* **Q_α:** (1300)

Nuclear Bands

A SD band (95Mu11)

Levels and γ-ray branchings:

0, 1^+, 2.4 *2* s, %EC+%β^+=100, μ=+1.536 *19*, Q=+0.12 *5*

178.75 *6* (?), $(2)^-$ γ_0***178.90*** *5* ($\dagger_\gamma$100) E1

280.29 *5*, 1^+,2^+ γ_{179}***101.4*** *2* ($\dagger_\gamma$2.5 *4*) γ_0***280.33*** *5* ($\dagger_\gamma$100 *2*) E2+M1

284.44 *4*, 0^+,1^+,2^+ γ_0***284.44*** *5* ($\dagger_\gamma$100) M1

496.66 *7* γ_{284}***212.22*** *6* ($\dagger_\gamma$100) γ_{280}***216*** *1*

503.04 *5*, 1^+,2^+,3^+ γ_{280}***222.80*** *5* ($\dagger_\gamma$100 *4*) M1+E2 γ_0***503.0*** *1* ($\dagger_\gamma$44 *11*)

526.25 *5*, $^+$ γ_{284}***241.7*** *2* ($\dagger_\gamma$2.9 *7*) M1 γ_{179}***347.64*** *7* ($\dagger_\gamma$7.5 *12*) γ_0***526.19*** *5* ($\dagger_\gamma$100 *3*) E2

550.6 *2*, $^+$ γ_0***550.6*** *2* ($\dagger_\gamma$100) E2

585.72 *7* γ_{179}***406.98*** *6* ($\dagger_\gamma$100 *8*) γ_0***585.71*** *14* ($\dagger_\gamma$98 *13*)

591.35 *5* γ_{284}***306.93*** *5* ($\dagger_\gamma$73 *5*) γ_0***591.30*** *6* ($\dagger_\gamma$100 *7*)

614.49 *5* γ_{284}***329.9*** *2* ($\dagger_\gamma$50 *21*) γ_{280}***334.0*** *2* ($\dagger_\gamma$12 *9*) γ_0***614.51*** *5* ($\dagger_\gamma$100 *6*) E2

619.75 *5* γ_{284}***336*** *1* γ_0***619.74*** *5* ($\dagger_\gamma$100)

631.71 *1* γ_{526}***105*** *1* γ_{497}***136*** *1* γ_0***631.70*** *8* ($\dagger_\gamma$100)

660.83 *8* γ_{179}***482.0*** *1* ($\dagger_\gamma$61 *9*) γ_0***660.9*** *1* ($\dagger_\gamma$100 *13*)

705.0 *2* γ_0***704.9*** *2* ($\dagger_\gamma$100)

731.9 *2* γ_{503}***228.7*** *3* ($\dagger_\gamma$80 *70*) γ_{284}***447.5*** *3* ($\dagger_\gamma$100 *20*)

751.0 *2* γ_{503}***247.8*** *2* ($\dagger_\gamma$67) γ_{284}***466.6*** *2* γ_{280}***470.7*** *3* γ_{179}***572.1*** *4* ($\dagger_\gamma$100)

935.7 *1* γ_{732}***203.8*** *3* ($\dagger_\gamma$19 *4*) γ_{284}***651.3*** *1* ($\dagger_\gamma$66 *9*) γ_0***935.6*** *1* ($\dagger_\gamma$100 *12*)

1210.2 *3* γ_{936}***274.3*** *4* γ_{614}***595.9*** *3* ($\dagger_\gamma$100)

1412.8 *1* γ_{551}***861.8*** *2* ($\dagger_\gamma$2.4 *17*) γ_{526}***886.3*** *2* ($\dagger_\gamma$13 *6*) γ_{503}***910.0*** *1* ($\dagger_\gamma$11 *2*) γ_{280}***1132.2*** *3* ($\dagger_\gamma$8 *2*) γ_{179}***1233.9*** *1* ($\dagger_\gamma$68 *4*) γ_0***1412.4*** *2* ($\dagger_\gamma$100 *7*)

1437.8 *1* γ_{614}***823*** *1* γ_{586}***852.5*** *4* ($\dagger_\gamma$3.4 *8*) γ_{526}***912.0*** *2* ($\dagger_\gamma$7.6 *16*) γ_{284}***1153.1*** *1* ($\dagger_\gamma$5.6 *14*) γ_{179}***1259.60*** *5* ($\dagger_\gamma$100 *4*) γ_0***1438.4*** *2* ($\dagger_\gamma$30 *10*)

1481 *1* γ_{179}***1302*** *1* ($\dagger_\gamma$100)

1486 *1* γ_{179}***1307*** *1* ($\dagger_\gamma$100)

1778.95 *8* γ_{705}***1073.6*** *4* γ_{620}***1158*** *1* γ_{591}***1187.5*** *3* ($\dagger_\gamma$8 *3*) γ_{503}***1275.4*** *2* ($\dagger_\gamma$32 *3*) γ_{284}***1495.0*** *2* ($\dagger_\gamma$27 *7*) γ_{179}***1599.7*** *2* ($\dagger_\gamma$38 *2*) γ_0***1779.1*** *1* ($\dagger_\gamma$100 *10*)

2160.0 *4* γ_{179}***1981.2*** *4* ($\dagger_\gamma$100)

0+x, 8^-, 1.22 *2* m, %EC+%β^+=100, μ=+2.978 *11*, Q=+1.41 *6*

282+x, 8^+, 6.2 *4* ns γ_{0+x}***282*** ($\dagger_\gamma$100) E1

292+x, 9^+ γ_{282+x}***10*** γ_{0+x}***292***

376+x, 10^+ γ_{292+x}***84*** ($\dagger_\gamma$100) M1,E2

795+x, 11^+ γ_{376+x}***419*** ($\dagger_\gamma$100)

1098+x, 12^+ γ_{795+x}***303*** γ_{376+x}***722***

1397+x, (12^+) γ_{795+x}***602*** γ_{376+x}***1021***

1667+x, 13^+ γ_{1098+x}***569*** ($\dagger_\gamma$100)

1857+x, (14^+) γ_{1397+x}***460*** ($\dagger_\gamma$100)

2044+x γ_{795+x}***1249*** ($\dagger_\gamma$100)

2129+x, 14^+ γ_{1667+x}***462*** γ_{1098+x}***1031***

2287+x γ_{2129+x}***158***

2389+x, (16^+) γ_{1857+x}***532*** ($\dagger_\gamma$100)

2441+x γ_{2044+x}***397*** γ_{1098+x}***1343***

2483+x γ_{2044+x}***439*** γ_{1098+x}***1385***

2541+x γ_{2287+x}***254*** ($\dagger_\gamma$100)

2609+x γ_{2483+x}***126*** γ_{2441+x}***168*** γ_{1667+x}***942***

2749+x γ_{2609+x}***140*** γ_{2287+x}***462***

2933+x γ_{2749+x}***184*** ($\dagger_\gamma$100)

3054+x γ_{2541+x}***513*** ($\dagger_\gamma$100)

3200+x, (18^+) γ_{2389+x}***811*** ($\dagger_\gamma$100)

3327+x γ_{2933+x}***394*** ($\dagger_\gamma$100)

3431+x γ_{3054+x}***377*** ($\dagger_\gamma$100)

3545+x γ_{3327+x}***218*** ($\dagger_\gamma$100)

3716+x γ_{3431+x}***285*** ($\dagger_\gamma$100)

3971+x γ_{3545+x}***425*** ($\dagger_\gamma$100)

4107+x, (20^+) γ_{3200+x}***907*** ($\dagger_\gamma$100)

4927+x, (22^+) γ_{4107+x}***820*** ($\dagger_\gamma$100)

A **y**, J≈(27,29)

A **699.7+y**, J+2 γ_y***699.7*** *3* *$I^{(2)}$=64.3, ħω=0.365*

A **1461.6+y**, J+4 γ_{700+y}***761.9*** *3* *$I^{(2)}$=65.7, ħω=0.396*

A **2284.4+y**, J+6 γ_{1462+y}***822.8*** *3* *$I^{(2)}$=63.0, ħω=0.427*

A **3170.7+y**, J+8 γ_{2284+y}***886.3*** *3* *$I^{(2)}$=65.8, ħω=0.458*

A **4117.8+y**, J+10 γ_{3171+y}***947.1*** *3* *$I^{(2)}$=65.4, ħω=0.489*

A **5126.1+y**, J+12 γ_{4118+y}***1008.3*** *3* *$I^{(2)}$=65.5, ħω=0.519*

A **6195.5+y**, J+14 γ_{5126+y}***1069.4*** *3* *$I^{(2)}$=66.7, ħω=0.550*

A **7324.9+y**, J+16 γ_{6196+y}***1129.4*** *4* *$I^{(2)}$=69.3, ħω=0.579*

A **8512.0+y**, J+18 γ_{7325+y}***1187.1*** *6* *$I^{(2)}$=65.8, ħω=0.609*

A **9759.9+y**, J+20 γ_{8512+y}***1247.9*** *6*

$I^{(2)}$=*66.7, ħω=0.639*

A **11067.8+y**, J+22 γ_{9760+y} ***1307.9*** *10*

$I^{(2)}$=*66.3, ħω=0.669*

A **12436.0+y**, J+24 $\gamma_{11068+y}$ ***1368.2*** *12*

$I^{(2)}$=*66.4, ħω=0.699*

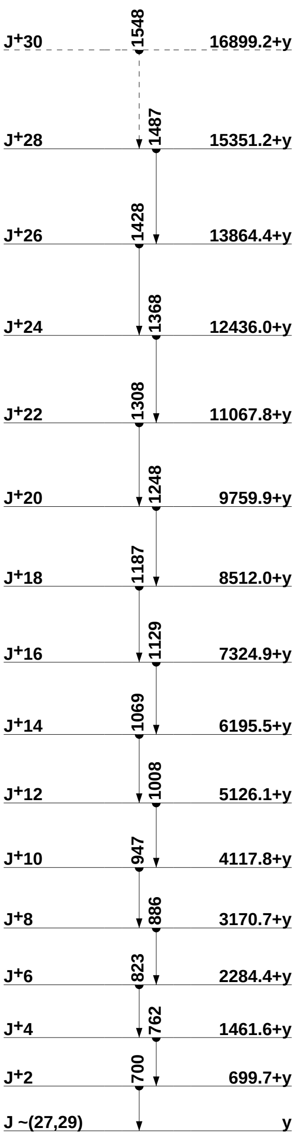
A **13864.4+y**, J+26 $\gamma_{12436+y}$ ***1428.4*** *18*

$I^{(2)}$=*68.5, ħω=0.729*

A **15351.2+y**, J+28 $\gamma_{13864+y}$ ***1486.8*** *20*

$I^{(2)}$=*65.4, ħω=0.759*

A **16899.2+y** (?), J+30 $\gamma_{15351+y}$ ***1548*** (?)



SD band
(95Mu11)

$^{142}_{63}Eu$