$^{83}_{38}$Sr

Δ: –76797 *9* **S_n:** 8860 *10* **S_p:** 7897 *11*
Q_{EC}: 2276 *6*

Nuclear Bands

A SD band (95Ba26,95La21)

Levels and γ-ray branchings:

0, 7/2$^+$, 32.41 *3* h, %EC+%β$^+$=100, μ= –0.8298 *3*, Q=+0.823 *50*

35.47 *6*, (9/2)$^+$, <15 ns **γ_0*35.50*** *10* (†$_\gamma$100) M1

259.15 *9*, 1/2$^-$, 4.95 *12* s, %IT=100, μ=+0.582 *1* **γ_0*259.10*** *10* (†$_\gamma$100) E3

489.92 *8* **γ_{35}*454.40*** *20* (†$_\gamma$43.3 *11*) **γ_0*489.90*** *20* (†$_\gamma$100.0 *22*)

545.4 *3* **γ_0*545.4*** *3* (†$_\gamma$100)

650.81 *15*, (3/2,5/2$^-$) **γ_{259}*391.60*** *20* (†$_\gamma$100)

681.11 *23*, (3/2$^-$,5/2$^-$) **γ_{259}*421.8*** *3* (†$_\gamma$100)

717.53 *9*, (7/2,9/2,11/2$^+$) **γ_{490}*227.50*** *20* (†$_\gamma$9.1 *10*) **γ_{35}*682.10*** *10* (†$_\gamma$100 *5*) **γ_0*717.60*** *20* (†$_\gamma$36.5 *15*)

753.72 *16*, (3/2$^-$) **γ_{259}*494.50*** *20* (†$_\gamma$100)

790.83 *17* **γ_0*790.80*** *20* (†$_\gamma$100)

800.40 *10*, (7/2,11/2)$^+$, 3.7 *25* ps **γ_{35}*764.9*** *6* (†$_\gamma$80 *10*) **γ_0*800.40*** *10* (†$_\gamma$100 *6*) E2

846.3 *3*, (5/2$^-$,7/2,9/2$^-$) **γ_{651}*195.4*** *4* (†$_\gamma$100)

894.16 *11*, (11/2)$^+$, 1.6 *6* ps **γ_{35}*858.70*** *10* (†$_\gamma$100 *4*) M1+E2: δ=0.83 *13* **γ_0*893.9*** *4* (†$_\gamma$3.5 *8*) (E2)

910.5 *10*, (13/2)$^+$, 3.5 *2* ps **γ_{35}*875.0*** (†$_\gamma$100) E2

951.77 *9*, (5/2$^+$,7/2$^-$) **γ_{718}*234.4*** *3* (†$_\gamma$3.2 *6*) **γ_{681}*270.5*** *3* (†$_\gamma$3.9 *5*) **γ_{35}*916.5*** *5* (†$_\gamma$4.2 *10*) **γ_0*951.80*** *10* (†$_\gamma$100 *5*)

962.79 *8*, (7/2,9/2,11/2$^+$) **γ_{718}*245.3*** *4* (†$_\gamma$7.2 *22*) **γ_{35}*927.30*** *10* (†$_\gamma$100 *5*) **γ_0*962.80*** *10* (†$_\gamma$61 *4*)

1092.8 *3* **γ_{490}*603.0*** *3* (†$_\gamma$100 *20*) **γ_0*1092.4*** *6* (†$_\gamma$100 *30*)

1098.06 *12*, (7/2,9/2,11/2$^+$) **γ_{35}*1062.60*** *10* (†$_\gamma$100 *33*) **γ_0*1097.2*** *8* (†$_\gamma$80 *40*)

1140.71 *25*, (7/2,9/2$^-$) **γ_{651}*489.90*** *20* (†$_\gamma$100)

1233.40 *11*, (7/2,9/2,11/2$^+$) **γ_{490}*743.50*** *10* (†$_\gamma$100 *5*) **γ_{35}*1197.90*** *20* (†$_\gamma$29.7 *26*) **γ_0*1233.3*** *6* (†$_\gamma$5.1 *10*)

1239.19 *19*, (7/2,9/2,11/2$^+$) **γ_{35}*1203.6*** *5* (†$_\gamma$12.1 *22*) **γ_0*1239.20*** *20* (†$_\gamma$100 *4*)

1365.9 *3*, (7/2,9/2,11/2$^+$) **γ_{490}*875.8*** *3* (†$_\gamma$100 *17*) **γ_0*1366.4*** *6* (†$_\gamma$34 *10*)

1371.98 *7*, (7/2$^+$) **γ_{1233}*138.8*** *4* (†$_\gamma$1.6 *2*) **γ_{963}*409.3*** *4* (†$_\gamma$1.1 *2*) **γ_{952}*420.3*** *3* (†$_\gamma$29.2 *20*) **γ_{846}*525.6*** *4* (†$_\gamma$1.2 *3*) **γ_{791}*581.1*** *3* (†$_\gamma$2.3 *3*) **γ_{754}*618.2*** *2* (†$_\gamma$9.7 *7*) **γ_{718}*654.5*** *2* (†$_\gamma$3.1 *3*) **γ_{651}*721.2*** *2* (†$_\gamma$16.8 *7*) **γ_{545}*827*** **γ_{490}*882.1*** *1* (†$_\gamma$100.0 *25*) **γ_{35}*1336.5*** *1* (†$_\gamma$49.0 *20*) **γ_0*1371.9*** *1* (†$_\gamma$16.0 *8*)

1434.12 *19*, (7/2,9/2,11/2$^+$) **γ_{490}*943.6*** *5* (†$_\gamma$26 *8*) **γ_0*1434.20*** *20* (†$_\gamma$100 *9*)

1498.83 *15*, (7/2,9/2) **γ_{952}*547.1*** *3* (†$_\gamma$62 *12*) **γ_{35}*1463.4*** *3* (†$_\gamma$100 *12*) **γ_0*1498.80*** *20* (†$_\gamma$93 *8*)

1574.0 *10*, (9/2)$^+$ **γ_{894}*679.8*** (†$_\gamma$100) M1+E2: δ=+1.1 *8*

1604.8 *5*, (7/2,9/2,11/2$^+$) **γ_{490}*1115.0*** *5* (†$_\gamma$100 *30*) **γ_0*1604.6*** *8* (†$_\gamma$72 *20*)

1745.4 *8*, (7/2,9/2,11/2$^+$) **γ_{35}*1710.0*** *15* (†$_\gamma$56 *28*) **γ_0*1745.3*** *9* (†$_\gamma$100 *29*)

1752.6 *4*, (7/2,9/2,11/2$^+$) **γ_{35}*1717.0*** *8* (†$_\gamma$22 *7*) **γ_0*1752.6*** *4* (†$_\gamma$100 *16*)

1856.4 *13*, (15/2)$^+$ **γ_{911}*945.9*** *7* (†$_\gamma$100) M1+E2: δ=+0.9 *6*

1882.50 *23*, (7/2,9/2) **γ_{952}*931.5*** *5* (†$_\gamma$68 *18*) **γ_{490}*1392.4*** *3* (†$_\gamma$100 *9*) **γ_{35}*1846.8*** *5* (†$_\gamma$55 *14*) **γ_0*1882.2*** *8* (†$_\gamma$32 *14*)

1915.4 *3*, (7/2,9/2$^-$) **γ_{651}*1264.3*** *4* (†$_\gamma$36 *6*) **γ_{35}*1879.8*** *7* (†$_\gamma$48 *10*) **γ_0*1915.7*** *4* (†$_\gamma$100 *12*)

1964.1 *5*, (7/2,9/2,11/2$^+$) **γ_{490}*1473.8*** *6* (†$_\gamma$87 *16*) **γ_{35}*1928*** *2* (†$_\gamma$32 *16*) **γ_0*1964.5*** *6* (†$_\gamma$100 *16*)

1987.6 *15*, (17/2)$^+$, 0.7 *2* ps **γ_{911}*1077.1*** (†$_\gamma$100) E2

2017.0 *6*, (7/2,9/2,11/2$^+$) **γ_{490}*1527.2*** *10* (†$_\gamma$34 *10*) **γ_0*2016.9*** *6* (†$_\gamma$100 *16*)

2074.0 *8*, (7/2,9/2,11/2$^+$) **γ_{490}*1584.3*** *10* (†$_\gamma$70 *33*) **γ_0*2073.6*** *12* (†$_\gamma$100 *40*)

2089.7 *8*, (7/2,9/2,11/2$^+$) **γ_{35}*2054.1*** *12* (†$_\gamma$100 *32*) **γ_0*2089.8*** *10* (†$_\gamma$63 *32*)

2107.5 *10*, (13/2)$^+$ **γ_{894}*1213.3*** (†$_\gamma$100) M1

2373.2 *6*, (7/2,9/2,11/2$^+$) **γ_{1372}*1001.2*** *6* (†$_\gamma$100)

2905.2 *3*, (7/2$^+$,9/2$^+$,11/2$^+$) **γ_{1499}*1407.1*** *10* (†$_\gamma$15 *4*) **γ_{1372}*1532.2*** *10* (†$_\gamma$9 *4*) **γ_{963}*1942.3*** *10* (†$_\gamma$13 *4*) **γ_{894}*2011.1*** *5* (†$_\gamma$56 *9*) **γ_{800}*2104.9*** *8* (†$_\gamma$29 *5*) **γ_{718}*2187.0*** *10* (†$_\gamma$15 *6*) **γ_{35}*2869.6*** *15* (†$_\gamma$20 *6*) **γ_0*2905.3*** *9* (†$_\gamma$100 *12*)

2943.9 *8*, (7/2$^+$,9/2$^+$,11/2$^+$) γ_{894}***2049.0*** *15* (†$_\gamma$17 *8*) γ_{35}***2909*** *2* (†$_\gamma$16 *8*) γ_0***2944.0*** *10* (†$_\gamma$100 *12*)

3117.0 *18*, (21/2)$^+$, <0.7 ps γ_{1988}***1129.4*** (†$_\gamma$100) E2

3644.9 *20*, (23/2)$^+$, 8.7 *4* ps γ_{3117}***527.9*** (†$_\gamma$100) M1+E2: δ=0.14 *4*

A **x**, J≈(41/2)

A **1307+x** *2*, J+2 γ_x***1307*** *2* I$^{(2)}$*=26.1, ħω=0.692*

A **2767+x** *3*, J+4 γ_{1307+x}***1460*** *2* I$^{(2)}$*=26.3, ħω=0.768*

A **4379+x** *4*, J+6 γ_{2767+x}***1612*** *2* I$^{(2)}$*=26.3, ħω=0.844*

A **6143+x** *4*, J+8 γ_{4379+x}***1764*** *2* I$^{(2)}$*=27.0, ħω=0.919*

A **8055+x** *5*, J+10 γ_{6143+x}***1912*** *2* I$^{(2)}$*=27.0, ħω=0.993*

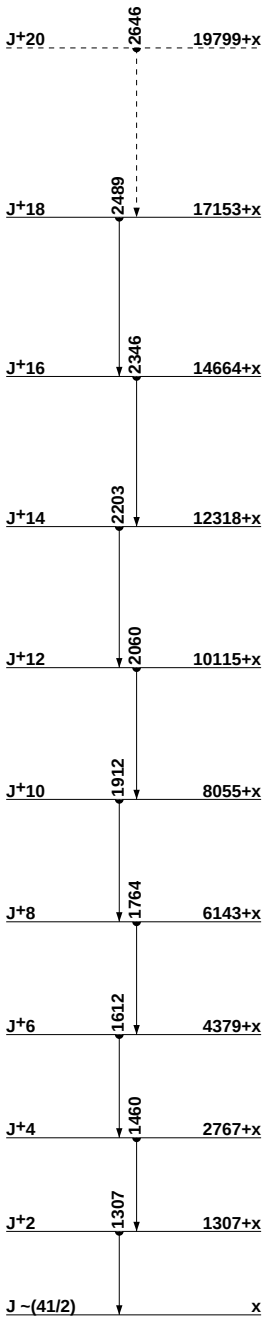
A **10115+x** *5*, J+12 γ_{8055+x}***2060*** *2* I$^{(2)}$*=28.0, ħω=1.066*

A **12318+x** *6*, J+14 $\gamma_{10115+x}$***2203*** *2* I$^{(2)}$*=28.0, ħω=1.137*

A **14664+x** *6*, J+16 $\gamma_{12318+x}$***2346*** *2* I$^{(2)}$*=28.0, ħω=1.209*

A **17153+x** *6*, J+18 $\gamma_{14664+x}$***2489*** *2* I$^{(2)}$*=25.5, ħω=1.284*

A **19799+x** *7*(?), J+20 $\gamma_{17153+x}$***2646*** *2*(?)



SD band
(95Ba26,95La21)

$^{83}_{38}$Sr