$^{83}_{38}$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 ($\dagger_\gamma$100) M1

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

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

545.4 3 γ_0**545.4** 3 ($\dagger_\gamma$100)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3644.9 *20*, $(23/2)^+$, 8.7 *4* ps γ_{3117}***527.9*** ($\dagger_\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*

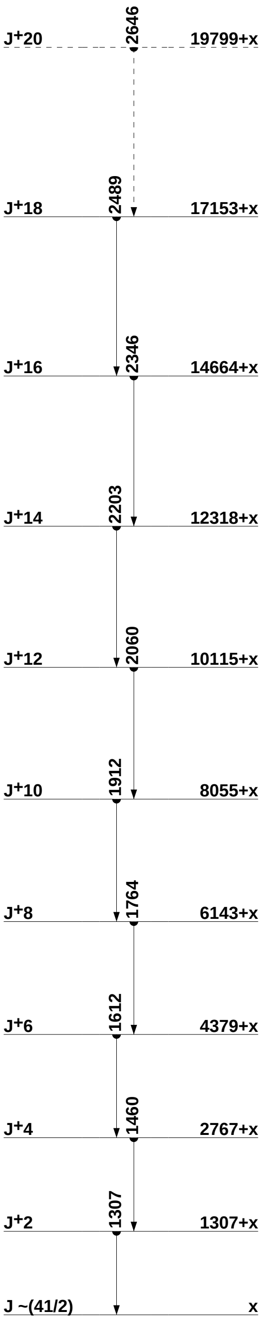
A **10115+x** *5*, J+12 γ_{8055+x}***2060*** *2* $I^{(2)}$*=28.0, ħω=1.066*

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