$^{82}_{38}$Sr

Δ: −76009 6 **S_n:** 12554 9 **S_p:** 7841 8
Q_{EC}: 180 9

Nuclear Bands

- *A* Band Structure
- *B* Band Structure
- *C* Band Structure
- *D* Band Structure
- *E* Yrast band
- *F* Band Structure
- *G* Band Structure
- *H* Yrast
- *I* Band Structure
- *J* SD-1 band (95Sm08)
- *K* SD-2 band (95Sm08)

Levels and γ-ray branchings:

C **0**, 0^+, 25.55 15 d, %EC=100

C **573.54** 8, 2^+, 8.9 4 ps γ_0 ***573.64*** 10 ($\dagger_\gamma$100) E2

B **1175.71** 8, 2^+, 7.5 24 ps γ_{574} ***602.15*** 10 ($\dagger_\gamma$100 7) M1(+E2): δ=+1.2 14 γ_0 ***1175.6*** 1 ($\dagger_\gamma$10.4 8)

1310.89 13, 0^+, <3.5 ns γ_{574} ***737.35*** 10 ($\dagger_\gamma$100)

C **1328.54** 10, 4^+, 1.0 2 ps γ_{574} ***754.9*** 1 ($\dagger_\gamma$100) E2

A **1688.96** 11, 3^+ γ_{1329} ***359.9*** 3 ($\dagger_\gamma$9 3) γ_{1176} ***512.9*** 2 ($\dagger_\gamma$80 12) γ_{574} ***1115.8*** 2 ($\dagger_\gamma$100 15)

1865 5, 2^+

B **1996.02** 10, 4^+, 1.3 4 ps γ_{1329} ***667.53*** 10 ($\dagger_\gamma$60 9) M1(+E2): δ=+0.3 7 γ_{1176} ***820.25*** 10 ($\dagger_\gamma$100 12) E2 γ_{574} ***1422.4*** 3 ($\dagger_\gamma$5 2)

2195 5, 2^+

C **2229.47** 11, 6^+, 0.37^{+15}_{-11} ps γ_{1329} ***900.84*** 10 ($\dagger_\gamma$100) E2

E **2401.82** 10, 3^- γ_{1689} ***712.4*** 1 ($\dagger_\gamma$100 8) γ_{574} ***1828.4*** 1 ($\dagger_\gamma$29 8)

A **2525.80** 12, 5^+ γ_{1996} ***529.8*** 2 ($\dagger_\gamma$13 4) γ_{1689} ***837.1*** 1 ($\dagger_\gamma$100 22) γ_{1329} ***1197.1*** 2 ($\dagger_\gamma$21 6)

2665 5, 0^+

E **2817.31** 11, 5^-, 3.0 6 ps γ_{2402} ***415.17*** 10 ($\dagger_\gamma$13 13) γ_{1329} ***1489.00*** 10 ($\dagger_\gamma$100 13) E1

I **2824.40** 12, 4^- γ_{2402} ***422.6*** 3 ($\dagger_\gamma$7 2) γ_{1996} ***828.4*** 2 ($\dagger_\gamma$16 4) γ_{1689} ***1135.52*** 10 ($\dagger_\gamma$100 13) E1(+M2): δ=+0.03 5 γ_{1329} ***1494.9*** 3 ($\dagger_\gamma$5 2)

B **2836.26** 12, 6^+, 0.6 4 ps γ_{2229} ***606.65*** 10 ($\dagger_\gamma$50 3) M1(+E2): δ=+0.2 3 γ_{1996} ***840.24*** 10 ($\dagger_\gamma$100 8) E2

2885 5, (2^+)

2920 5

H **3006.91** 12, 4^- γ_{2402} ***605.1*** 1 ($\dagger_\gamma$60 20) γ_{1996} ***1010.7*** 2 ($\dagger_\gamma$20 10) γ_{1689} ***1318.3*** 3 ($\dagger_\gamma$100 20) γ_{1329} ***1677.6*** 4 ($\dagger_\gamma$40 10)

F **3073.28** 14, (5^-) γ_{2817} ***255.4*** 3 ($\dagger_\gamma$7 7) γ_{2229} ***843.6*** 2 ($\dagger_\gamma$64 14) γ_{1996} ***1077.4*** 2 ($\dagger_\gamma$100 21)

I **3086.23** 12, 6^- γ_{2824} ***261.83*** 10 ($\dagger_\gamma$100 9) γ_{2817} ***269.02*** 10 ($\dagger_\gamma$78 9) γ_{2526} ***560.8*** 2 ($\dagger_\gamma$22 4)

G **3142.30** 22, (5^-) γ_{1329} ***1812.8*** 4 ($\dagger_\gamma$100)

C **3242.82** 12, 8^+, 0.24^{+10}_{-6} ps γ_{2229} ***1013.36*** 10 ($\dagger_\gamma$400) E2

H **3339.57** 12, 6^- γ_{3073} ***266.2*** 2 ($\dagger_\gamma$4 1) γ_{3007} ***332.5*** 2 ($\dagger_\gamma$8 2) γ_{2817} ***522.1*** 1 ($\dagger_\gamma$100 12) γ_{2526} ***813.9*** 1 ($\dagger_\gamma$16 3) γ_{2229} ***1110.3*** 2 ($\dagger_\gamma$16 3)

A **3476.96** 15, 7^+ γ_{2526} ***951.15*** 10 ($\dagger_\gamma$100)

3511.15 13, $(7)^-$ γ_{3086} ***424*** (?) γ_{2817} ***694.04*** 10 ($\dagger_\gamma$100 7) E2 γ_{2229} ***1281.1*** 2 ($\dagger_\gamma$4.6 8)

E **3525.75** 12, 7^- γ_{3086} ***439.88*** 10 ($\dagger_\gamma$8 2) γ_{3073} ***451.9*** 3 ($\dagger_\gamma$4 1) γ_{2817} ***707.9*** 2 ($\dagger_\gamma$7 2) γ_{2229} ***1296.19*** 10 ($\dagger_\gamma$100 12) D+Q: δ=+0.5 5

F **3565.75** 13, 7^- γ_{3086} ***479.3*** 2 ($\dagger_\gamma$17 6) γ_{3073} ***492.7*** 4 ($\dagger_\gamma$1 1) γ_{2817} ***748.3*** 2 ($\dagger_\gamma$14 1) γ_{2229} ***1336.5*** 2 ($\dagger_\gamma$100 13)

G **3607.94** 13, 7^- γ_{3142} ***465.4*** 2 ($\dagger_\gamma$30 8) γ_{3086} ***521.5*** 2 ($\dagger_\gamma$100 14) (M1+E2): δ=−0.7 5 γ_{3073} ***534.6*** 2 ($\dagger_\gamma$35 8) γ_{2836} ***771.8*** 2 ($\dagger_\gamma$68 68) γ_{2817} ***790.6*** 2 ($\dagger_\gamma$32 8) γ_{2229} ***1378.6*** 2 ($\dagger_\gamma$73 19)

B **3622.78** 12, 8^+, 0.7 4 ps γ_{3243} ***379.96*** 10 ($\dagger_\gamma$8.8 9) γ_{2836} ***786.36*** 10 ($\dagger_\gamma$100 7) E2 γ_{2229} ***1393.5*** 1 ($\dagger_\gamma$18 6)

D **3686.07** 15, (8^+) γ_{3243} ***443.28*** 10 ($\dagger_\gamma$100 15) γ_{2229} ***1456.2*** 3 ($\dagger_\gamma$36 11)

H **4033.49** 15, 8^- γ_{3526} ***507.9*** 3 ($\dagger_\gamma$8 2) γ_{3340} ***693.9*** 1 ($\dagger_\gamma$100 22)

I **4142.60** 14, 8^- γ_{3608} ***534.7*** 2 ($\dagger_\gamma$26 8) γ_{3566} ***577.0*** 2 ($\dagger_\gamma$31 8) γ_{3526} ***617.1*** 4 ($\dagger_\gamma$8 3) γ_{3086} ***1056.3*** 1 ($\dagger_\gamma$100 23) E2

4248.4 10 γ_{3243} ***1005.6*** ($\dagger_\gamma$100)

C **4350.30** 15, 10^+, 0.14^{+6}_{-4} ps γ_{3243} ***1107.47*** 10 ($\dagger_\gamma$100) (E2)

E **4366.82** 14, 9^- γ_{3608} ***758.8*** 1 ($\dagger_\gamma$30 3) γ_{3566} ***801.11*** 10 ($\dagger_\gamma$100 8) (E2) γ_{3526} ***841.3*** 3 ($\dagger_\gamma$32 4)

4387.09 14, (9^-) γ_{3511} ***876.0*** 1 ($\dagger_\gamma$100 18) (E2) γ_{3243} ***1144.20*** 10 ($\dagger_\gamma$88 7)

B **4423.85** 14, (10^+), 0.9 2 ps γ_{3623} ***801.11*** 10 ($\dagger_\gamma$100 12) (E2)

γ_{3243} **1180.98** 10 ($\dagger_\gamma$16 2)

F **4472.85** 14, 9^- γ_{3566} **907.0** 1 ($\dagger_\gamma$62 8) γ_{3526} **947.2** 2 ($\dagger_\gamma$44 4) γ_{3243} **1230.3** 2 ($\dagger_\gamma$100 8)

A **4492.5** 4, 9^+ γ_{3477} **1015.5** 3 ($\dagger_\gamma$100)

D **4637.34** 18, (10^+) γ_{4424} **213.5** 3 ($\dagger_\gamma$10 3) γ_{4350} **287.0** 2 ($\dagger_\gamma$38 7) γ_{3686} **951.2** 2 ($\dagger_\gamma$100 10) γ_{3243} **1394.7** 3 ($\dagger_\gamma$72 10)

H **4909.39** 18, 10^-, 0.36^{+11}_{-8} ps γ_{4387} **521.7** (?) γ_{4033} **875.9** 1 ($\dagger_\gamma$100) E2

I **5237.4** 4, 10^- γ_{4143} **1094.8** 3 ($\dagger_\gamma$100)

E **5308.15** 17, 11^- γ_{4367} **941.32** 10 ($\dagger_\gamma$100) E2

5333.8 15 γ_{4248} **1085.4** ($\dagger_\gamma$100)

5392.31 18 (?) γ_{4387} **1005.43** 10 (?) ($\dagger_\gamma$100)

B **5427.12** 17, 12^+, 0.33^{+11}_{-8} ps γ_{4424} **1003.26** 10 ($\dagger_\gamma$100) E2

5468.9 10 γ_{4424} **1045** 1 ($\dagger_\gamma$100)

F **5479.09** 25, (11^-) γ_{4473} **1006.2** 3 ($\dagger_\gamma$100 7) γ_{4350} **1128.8** 3 ($\dagger_\gamma$62 4)

C **5569.0** 4, 12^+, 0.06 6 ps γ_{4350} **1218.7** 3 ($\dagger_\gamma$100)

D **5738.2** 5, (12^+) γ_{4637} **1100.9** 4 ($\dagger_\gamma$100)

H **5913.9** 4, 12^-, 0.27^{+11}_{-8} ps γ_{4909} **1004.5** 3 ($\dagger_\gamma$100) E2

E **6367.2** 3, 13^- γ_{5308} **1059.0** 2 ($\dagger_\gamma$100) E2

6450.1 11 γ_{5427} **1023** 1 ($\dagger_\gamma$100)

B **6543.6** 4, 14^+, 0.25^{+11}_{-9} ps γ_{5427} **1116.5** 3 ($\dagger_\gamma$100) E2

6556.4 18 γ_{5334} **1222.6** ($\dagger_\gamma$100)

F **6564.8** 4, (13^-) γ_{5479} **1085.7** 3 ($\dagger_\gamma$100)

C **6937.0** 5, (14^+), 0.04^{+6}_{-3} ps γ_{5569} **1368.0** 3 ($\dagger_\gamma$100)

H **7066.5** 5, 14^-, 0.08^{+5}_{-4} ps γ_{5914} **1152.6** 3 ($\dagger_\gamma$100) E2

7534.6 11 γ_{6544} **991** 1 ($\dagger_\gamma$100)

E **7545.5** 4, 15^-, 0.12 5 ps γ_{6367} **1178.3** 3 ($\dagger_\gamma$100) E2

F **7788.2** 5, (15^-) γ_{6565} **1223.4** 3 ($\dagger_\gamma$100)

B **7812.0** 6, 16^+, 0.09^{+5}_{-4} ps γ_{6544} **1268.4** 4 ($\dagger_\gamma$100) E2

7936.1 20 γ_{6556} **1379.6** ($\dagger_\gamma$100)

H **8377.6** 6, 16^-, 0.14 6 ps γ_{7067} **1311.1** 4 ($\dagger_\gamma$100) E2

C **8434.6** 6, (16^+), <0.18 ps γ_{6937} **1497.6** 3 ($\dagger_\gamma$100) E2

E **8842.0** 7, 17^-, 0.08 6 ps γ_{7546} **1296.5** 5 ($\dagger_\gamma$100) E2

F **9167.4** 7, (17^-) γ_{7788} **1379.2** 4 ($\dagger_\gamma$100)

B **9237.8** 7, 18^+, 0.05^{+7}_{-4} ps γ_{7812} **1425.7** 4 ($\dagger_\gamma$100)

9478.1 23 γ_{7936} **1542** ($\dagger_\gamma$100)

H **9842.6** 12, (18^-), <0.19 ps γ_{8378} **1465** 1 ($\dagger_\gamma$100)

10061.6 12, (18^+) γ_{8435} **1626.9** ($\dagger_\gamma$100)

E **10258.8** 9, (19^-), 0.08^{+6}_{-4} ps γ_{8842} **1416.8** 5 ($\dagger_\gamma$100)

F **10709.4** 12, (19^-) γ_{9167} **1542** 1 ($\dagger_\gamma$100)

B **10872.4** 9, (20^+), <0.21 ps γ_{9238} **1634.6** 5 ($\dagger_\gamma$100)

H **11379.6** 16, (20^-) γ_{9843} **1537** 1 ($\dagger_\gamma$100)

E **11798.4** 10, (21^-), <0.06 ps γ_{10259} **1539.6** 5 ($\dagger_\gamma$100)

11837.6 16 (?), (20^+) γ_{10062} **1776** ($\dagger_\gamma$100)

12758.8 13, (22^+) γ_{10872} **1886.4** ($\dagger_\gamma$100)

H **13005.7** 19, (22^-) γ_{11380} **1626** 1 ($\dagger_\gamma$100)

E **13489.4** 14, (23^-) γ_{11798} **1691** 1 ($\dagger_\gamma$100)

14832.7 21 (?), (24) γ_{13006} **1827** ($\dagger_\gamma$100)

14910.8 17, (24^+) γ_{12759} **2152** ($\dagger_\gamma$100)

15409.4 17, (25) γ_{13489} **1920** ($\dagger_\gamma$100)

17246.9 20 (?), (26^-) γ_{14911} **2336** ($\dagger_\gamma$100)

17616.5 20, (27) γ_{15409} **2207** ($\dagger_\gamma$100)

J **x**, J≈(19)

J **1432+x**, J+2 γ_{x} **1432** 2 ($\dagger_\gamma$0.60 7) $I^{(2)}$=24.4, $\hbar\omega$=0.757

J **3028+x**, J+4 γ_{1432+x} **1596** 2 ($\dagger_\gamma$0.65 7) $I^{(2)}$=24.8, $\hbar\omega$=0.838

J **4785+x**, J+6 γ_{3028+x} **1757** 2 ($\dagger_\gamma$0.83 7) $I^{(2)}$=24.7, $\hbar\omega$=0.919

J **6704+x**, J+8 γ_{4785+x} **1919** 2 ($\dagger_\gamma$1.00 7) $I^{(2)}$=25.2, $\hbar\omega$=0.999

J **8782+x**, J+10 γ_{6704+x} **2078** 2 ($\dagger_\gamma$1.00 7) $I^{(2)}$=26.0, $\hbar\omega$=1.078

J **11014+x**, J+12 γ_{8782+x} **2232** 2 ($\dagger_\gamma$1.00 7) $I^{(2)}$=26.0, $\hbar\omega$=1.154

J **13400+x**, J+14 $\gamma_{11014+x}$ **2386** 2 ($\dagger_\gamma$0.80 7) $I^{(2)}$=24.4, $\hbar\omega$=1.234

J **15950+x**, J+16 $\gamma_{13400+x}$ **2550** 2 ($\dagger_\gamma$0.50 7) $I^{(2)}$=21.5, $\hbar\omega$=1.322

J **18686+x** (?), J+18 $\gamma_{15950+x}$ **2736** (?) ($\dagger_\gamma$0.25 5)

K **y**, J≈(20)

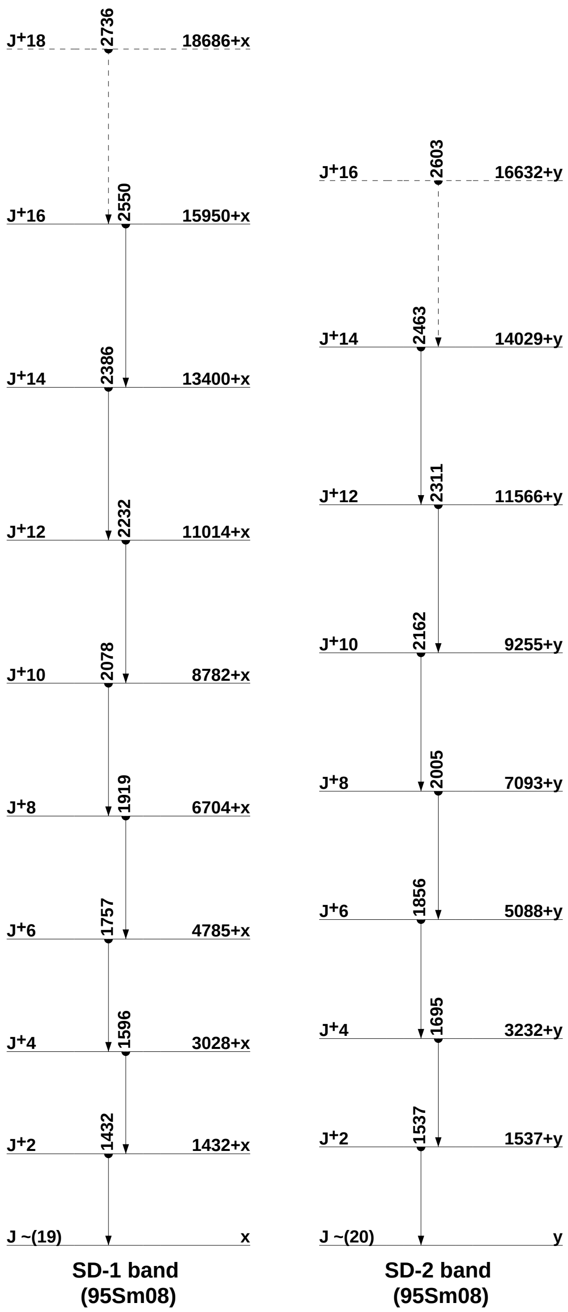
K **1537+y**, J+2 γ_{y} **1537** 2 ($\dagger_\gamma$0.70 5) $I^{(2)}$=25.3, $\hbar\omega$=0.808

K **3232+y**, J+4 γ_{1537+y} **1695** 2 ($\dagger_\gamma$0.85 5) $I^{(2)}$=24.8, $\hbar\omega$=0.888

K **5088+y**, J+6 γ_{3232+y} **1856** 2 ($\dagger_\gamma$1.00 10) $I^{(2)}$=26.8, $\hbar\omega$=0.965

K **7093+y**, J+8 γ_{5088+y} **2005** 2 ($\dagger_\gamma$0.95 5) $I^{(2)}$=25.5, $\hbar\omega$=1.042

K **9255+y**, J+10 γ_{7093+y} ***2162*** *2* ($\dagger_{\gamma}$0.92 *5*)
$I^{(2)}$=*26.8*, $\hbar\omega$=*1.118*
K **11566+y**, J+12 γ_{9255+y} ***2311*** *2* ($\dagger_{\gamma}$0.80 *5*)
$I^{(2)}$=*26.3*, $\hbar\omega$=*1.194*
K **14029+y**, J+14 $\gamma_{11566+y}$ ***2463*** *2*
($\dagger_{\gamma}$0.30 *5*) $I^{(2)}$=*28.6*, $\hbar\omega$=*1.266*
K **16632+y** (?), J+16 $\gamma_{14029+y}$ ***2603*** (?)
($\dagger_{\gamma}$0.25 *5*)


J+18 2736 18686+x
J+16 2550 15950+x
J+14 2386 13400+x
J+12 2232 11014+x
J+10 2078 8782+x
J+8 1919 6704+x
J+6 1757 4785+x
J+4 1596 3028+x
J+2 1432 1432+x
J ~(19) x
SD-1 band
(95Sm08)
J+16 2603 16632+y
J+14 2463 14029+y
J+12 2311 11566+y
J+10 2162 9255+y
J+8 2005 7093+y
J+6 1856 5088+y
J+4 1695 3232+y
J+2 1537 1537+y
J ~(20) y
SD-2 band
(95Sm08)

$^{82}_{38}$Sr