

83Y
39Y 44S_n: 12.21x10³₁₁, S_p: 3608₄₄

Nuclear Bands

- A band based on 7/2⁺
 B band based on 47/2⁺
 C GS band
 D band based on 3/2⁻
 E band based on 5/2⁻
 F band based on 33/2⁻
 G band based on 21/2⁻
 H band based on 19/2⁻
 I SD band (1999Le56)
 Q₀=4.47

Levels and γ-ray branchings:

- C **2371.05**₂₃, 21/2⁺, 0.59₁₀ ps, γ_{1406.50}**964.5**₂(100) E2
 E **2405.85**₁₃, 17/2⁻, 1.0₂ ps, γ_{2010.61}**395.2**₁(15₂) (M1+E2),
 γ_{1566.18}**839.7**₁(100₈) E2
 A **2429.5**₄, 19/2⁺, 0.76₁₄ ps, γ_{1532.03}**897.5**₃(100₈) E2,
 γ_{1406.50}**1024.0**₍₉₄₎
2551.9₁₂, γ_{1848.9}**703**₍₁₀₀₎
 F **2559.55**₁₆, 17/2⁻, 46₄ ps, γ_{2405.85}**153.7**₂(9₁), γ_{2010.61}**548.9**₂(36₃)
 (M1+E2) δ = -5.0₁₅, γ_{1566.18}**993.4**₂(100₈) E2
2738.1₆, (-), γ_{421.76}**2316.3**₅
 D **2822.74**₂₁, (19/2⁻), 3.1₃ ps, γ_{2405.85}**417.0**₄(13₁),
 γ_{2010.61}**812.2**₃(100₁₁), γ_{1406.50}**1416.1**₃(83₁₅)
 H **2887.84**₁₉, 19/2⁻, 3.9₈ ps, γ_{2559.55}**328.3**₁(100)
 (M1+E2) δ = -0.24₆
2937.6₆, γ_{2371.05}**566.6**₆(13₁), γ_{1406.50}**1531.0**₁₅(100)
 G **3308.14**₂₁, 21/2⁻, γ_{2887.84}**420.3**₁(100) (M1+E2) δ = -1.84
 E **3314.57**₁₇, (21/2⁻), γ_{2822.74}**492.4**₍₁₃₎, γ_{2405.85}**908.7**₁(100₁₀) (E2)
 A **3397.1**₄, 23/2⁺, 0.43₉^I ps, γ_{2429.5}**967.7**₂(100₁₂),
 γ_{2371.05}**1025.2**_(8.7)
3420.1₁₅, γ_{2551.9}**868.2**₉(100)
 C **3450.6**₃, 25/2⁺, γ_{2371.05}**1079.5**₂(100₅) E2
 D **3731.3**₇, (23/2⁻), γ_{2822.74}**908.1**₉(100₁₇), γ_{2371.05}**1361**_(23₃)
 H **3830.34**₂₃, (23/2⁻), 0.9₁₃^I ps, γ_{3308.14}**522.2**₁(100₉)
 (M1+E2) δ = -0.8₂, γ_{2887.84}**942.5**₂(81₇) E2
3916.9₆, γ_{3450.6}**466.3**₅(100₂₅)
4177.2₈, γ_{3450.6}**726.6**₇(100₇)
 E **4340.6**₄, (25/2⁻), 0.34₉^S ps, γ_{3314.57}**1026.0**₃(100₉) E2
 G **4385.8**₆, (25/2⁻), 0.48₁₈^I ps, γ_{3830.34}**555.7**₆(61₇),
 γ_{3308.14}**1077.6**₁₁(100₁₄) E2
 A **4421.9**₅, (27/2⁺), γ_{3397.1}**1024.8**₃(100)
4472.8₁₉, γ_{3420.1}**1052.7**₁₁(100₁₀)
 A **4488.1**₇, 27/2⁺, 0.20₈^S ps, γ_{3450.6}**1037.0**_(18₆), γ_{3397.1}**1092.1**_(100₁₂)
 E2
 C **4643.6**₅, 29/2⁺, 0.19₃^I ps, γ_{3450.6}**1192.9**₃(100₆) E2
 D **4796.3**₁₀, (27/2⁻), γ_{3731.3}**1065.3**₁₇(100₈), γ_{3450.6}**1345.6**
 H **4992.3**₇, (27/2⁻), γ_{4385.8}**606.6**_(32₃), γ_{3830.34}**1161.7**₁₂(100₁₃)
5176.6₇, γ_{4643.6}**533.0**₅(100₁₁)
5244.0₁₉, γ_{3450.6}**1793.4**₁₈(100₁₀)
5346.6₉, γ_{4643.6}**703.0**₇(100)
 E **5502.3**₁₀, (29/2⁻), 0.19₃^S ps, γ_{4340.6}**1161.3**_(100₁₃) E2
 G **5562.3**₁₁, (29/2⁻), γ_{4385.8}**1177.0**₁₂(100)
5565₁₂, γ_{4472.8}**1092**₁₁(100)
5669₅, γ_{5176.6}**492**₅(100)
 A **5747.5**₈, (31/2⁺), 0.20₇^S ps, γ_{4643.6}**1103.1**_(8₂),
 γ_{4488.1}**1259.9**_(100₁₄) E2
 D **5950.3**₁₅, (31/2⁻), γ_{4796.3}**1154.0**₁₂(100)
 C **5983.5**₇, 33/2⁺, 0.22₇^S ps, γ_{4643.6}**1340.0**₅(100) E2
 H **6334.4**₁₃, (31/2⁻), 0.26 ps, γ_{4992.3}**1342**_{(100) E2}
6676.5₁₄, (33/2⁻), 0.46 ps, γ_{5502.3}**1174.2**_{(100) E2}
 F **6780.9**₁₁, (33/2⁻), 0.13₃^S ps, γ_{5562.3}**1219** E2, γ_{5502.3}**1278.2**_(100₂₁)
 G **6782.3**₁₅, (33/2⁻), γ_{5562.3}**1220**₁
 A **7179.0**₁₀, (35/2⁺), <0.24 ps, γ_{5983.5}**1195.7**, γ_{5747.5}**1431.2**_(100₂₀)
 E2
 D **7238.5**₂₀, (35/2⁻), γ_{5950.3}**1288.2**₁₃(100)
7450.8₁₆, γ_{6676.5}**774.3**₈(100)
 C **7468.3**₁₀, 37/2⁺, 0.05₂^S ps, γ_{5983.5}**1484.8**₇(100) E2
 H **7819.4**₁₆, (35/2⁻), γ_{6334.4}**1485**
 E **7921.2**₁₇, (37/2⁻), γ_{6676.5}**1244.7**₍₁₀₀₎
 G **8070.3**₁₈, (37/2⁻), 0.28 ps, γ_{6782.3}**1288** E2
 F **8108.9**₁₅, (37/2⁻), γ_{6780.9}**1328.0**₍₁₀₀₎
8442.1₁₂, γ_{5983.5}**2458.6**₍₁₀₀₎
 D **8709.2**₂₅, (39/2⁻), γ_{7238.5}**1470.6**₁₅(100)
 A **8712.9**₁₄, (39/2⁺), γ_{7179.0}**1533.9**₍₁₀₀₎
 C **9072.3**₂₂, 41/2⁺, 0.014₇^S ps, γ_{7468.3}**1604**₂(100) E2
 E **9334.4**₂₀, (41/2⁻), γ_{7921.2}**1413.2**₍₁₀₀₎
9597.9₁₄, γ_{7468.3}**2129.6**₍₁₀₀₎
 F **9639.9**₁₈, (41/2⁻), γ_{8108.9}**1531**₍₁₀₀₎
10001.4₁₄, γ_{7468.3}**2533**
10360.4₁₇, (43/2⁺), γ_{8712.9}**1647.5**₍₁₀₀₎

- 10396₃, (43/2⁻), $\gamma_{8709.2}$ 1687
- 10452₃, (43/2⁻), $\gamma_{8709.2}$ 1743
- C 10826.2₂₅, 45/2⁺, 0.014₇⁵⁵ ps, $\gamma_{9072.3}$ 1753.9(100) E2
- E 10929.0₂₂, (45/2⁻), $\gamma_{9334.4}$ 1594.6(100)
- F 11267(?), (45/2⁻), $\gamma_{9639.9}$ 1627(?)
- A 12245.3₂₀, (47/2⁺), $\gamma_{10360.4}$ 1884.9(100)
- E 12728.3₂₅, (49/2⁻), $\gamma_{10929.0}$ 1799.2(100)
- C 12792₃, (49/2⁺), 0.007₇³⁵ ps, $\gamma_{10826.2}$ 1965.7(100) E2
- 13024₃, 47/2⁺, $\gamma_{10826.2}$ 2198(100)
- B 13038₃, (47/2⁺), $\gamma_{10826.2}$ 2212(100)
- A 14029.7₂₂, (51/2⁺), $\gamma_{12245.3}$ 1784.4(100)
- E 14769₃, (53/2⁻), $\gamma_{12728.3}$ 2041(100)
- C 14886₃, (53/2⁺), γ_{12792} 2093.9(100)
- B 14951₃, (51/2⁺), γ_{13038} 1913(50), γ_{12792} 2159(100)
- B 17105₃, (55/2⁺), γ_{14951} 2154(100)
- B 19470₃, (59/2⁺), γ_{17105} 2365(100)
- I x, J
- I 1870+x, J+2, γ_x 1870
- I 3880+x, J+4, γ_{1870+x} 2010
- I 6010+x, J+6, γ_{3880+x} 2130
- I 8290+x, J+8, γ_{6010+x} 2280
- I 10720+x, J+10, γ_{8290+x} 2430
- I 13300+x, J+12, $\gamma_{10720+x}$ 2580
- I 16010+x, J+14, $\gamma_{13300+x}$ 2710

