

238U
92U₁₄₆S_n: 6153.7₁₂, S_p: 7.62x10³₁₀

Nuclear Bands

- A GS band
 B Kπ=0⁻ octupole band
 C Kπ=0⁺ band
 D Kπ=0⁺ β band
 E Kπ=2⁺ γ band
 F Kπ=(1⁻) band (?)
 G Kπ=(1⁻) band (?)
 H Kπ=3⁺, v1/2[631]+v5/2[622]
 I Kπ=(0⁺) band (?)
 J Fission isomer (1992St05, 1989Ha40, 1982Go02, 1980Me15, 1979UI01, 1969La14)
 K Fission isomer (1980Me15)
 Q₀=29₃

Levels and γ-ray branchings:

- 0, 0⁺, 4.468x10⁻³ y, %SF=5.38x10⁻⁵, %α=100, Q=13.9₂₀
 A 44.921₁₃, 2⁺, 2037 ps, μ=0.508₃₀, γ₀44.915₁₃(100) E2
 A 148.39₃, 4⁺, γ_{44.921}103.50₄(100)
 A 307.23₈, 6⁺, γ_{148.39}158.80₈(100)
 A 518.4₃, 8⁺, 23₃ ps, γ_{307.23}211.2₃(100)
 B 680.09₄, 1⁻, γ_{44.921}635.18₃(100₂), γ_{680.09}680.1₃(74₄)
 B 731.92₃, 3⁻, γ_{148.39}583.55₃(83₂), γ_{44.921}686.99₃(100₂)
 A 776.2₅, 10⁺, 9.0₉ ps, γ_{518.4}257.8₄(100)
 B 826.66₁₁, 5⁻, γ_{307.23}519.44₈(57₄), γ_{148.39}678.4₆(100₆)
 C 927.23₁₉, (0⁺), γ_{44.921}882.3₂(100)
 F 930.66₂₁, (1⁻), γ_{680.09}251.3₁₀(11₃), γ_{44.921}886.2₄(100₄), γ₀931.5₆(27₂)
 F 950.22₁₈, (2⁻), γ_{731.92}218.0₃(43₅), γ_{680.09}270.1₄(37₆), γ_{44.921}905.6₆(100₆)
 C 966.14₄, 2⁺, 0.6₄ ps, γ_{731.92}234.5₁₀(16₂), γ_{680.09}286.4₁₀(14₁), γ_{148.39}818.4₄(100₅), γ_{44.921}921.19₃(59₃)
 E2+M1+E0 δ = +4.10₆⁰, γ₀967.3₂(18₁)
 B 966.61₁₅, 7⁻, γ_{518.4}448.4₉, γ_{307.23}659.1₂
 D 996.94₂₄, 0⁺, γ₉₄₇(E2), γ₀997.23₂₄ E0
 F 997.63₇, 3⁻, γ_{826.66}171(≤1.5), γ_{680.09}318.0₁₀(7.6₃), γ_{148.39}849.1₄(100₃), γ_{44.921}952.70₇(61₃)
 D 1037.28₇, 2⁺, 0.67₁₅ ps, γ_{731.92}305.5₆(10.5₄) E1, γ_{680.09}357.7₄(9.0₄) E1, γ_{148.39}888.9₃(76.5₁₅) E2, γ_{44.921}992.31₇(73.8₁₅) E2+M1+E0 δ = +3.48₂₂, γ₀1037.4₂(100₃) E2
 C 1056.5₃, (4⁺), γ_{307.23}749.3₃(100) E2, γ_{148.39}908
 H 1059.7₄, (3⁺), γ_{148.39}911.1(43), γ_{44.921}1014.6(100)
 E 1060.53₁₁, 2⁺, 0.66₃ ps, γ_{148.39}911.9₄(3.3₂) E2, γ_{44.921}1015.3₂(100₂) M1+E2 δ = 10.1₁₆, γ₀1060.3₂(68.4₁₃) E2
 A 1077.0₇, 12⁺, 4.2₆ ps, γ_{776.2}300.6₉(100)
 E 1105.73₇, (3⁺), γ_{148.39}957.33₆(100)
 G 1112.60₁₇, (1⁻), γ_{680.09}432.5₉, γ₀1112.7₃
 G 1128.70₁₇, (2⁻), γ_{950.22}179, γ_{930.66}198.6₃(≈12(?)), γ_{731.92}396.4₃(25.5₁₄), γ_{680.09}448.3₄(100₄), γ_{44.921}1084.0₄(<80)
 D 1129.92₂₂, (4⁺), γ_{826.66}300.6₁₀(?), γ_{148.39}982.44₂₄
 1135.82₁₇, γ_{307.23}828.3₆(258), γ_{44.921}1090.9₂(100₈)
 B 1151.0₅, 9⁻, γ_{776.2}374.8₄, γ_{518.4}632.6₄
 E 1168.06₈, 4⁺, γ_{307.23}861 E2, γ_{148.39}1019.61₈(100₇) E2, γ_{44.921}1123.1₂(40₄) E2
 G 1170.21₁₉, 3⁻, γ_{997.63}172, γ_{966.61}203.4₁₀, γ_{731.92}437
 M1+E2 δ = +0.23₈¹¹, γ_{680.09}490.3₂ E2, γ_{148.39}1021.1, γ_{44.921}1124
 1224.17₁₄, 2⁺, γ_{1060.53}163.9₅(17.4₁₅) M1+E2(?), γ_{966.14}258 E2, γ_{950.22}274.0₁₀(≤11) E1, γ_{930.66}293 E1, γ_{927.23}296 E2, γ_{148.39}1076 E2, γ_{44.921}1179.4₂(93₄) M1+E2 δ = +7.2₁₂, γ₀1223.7₄(100₄) E2
 1231
 G 1232.5₅, (4⁻), γ_{950.22}282.2₆(100₄₃), γ_{826.66}405.8₁₀(57₂₈), γ_{731.92}501₁(100₃₀), γ_{148.39}(1084.2)
 1260.90₁₆, γ_{1037.28}223.4₄(100₂₄), γ_{148.39}1112.7₃(<41), γ_{44.921}1215.9₂(65₆), γ₀1262₁(12₆)
 D 1269.2₁₀, (6⁺), γ_{307.23}962.0₁₀(100)
 1278.80₁₅, 2⁺, γ_{731.92}547.0₃(80₂₀) E1, γ_{148.39}1130 E2, γ_{44.921}1233.8₃(80₂₀) E2, γ₀1278.8₂(100₁₀) E2

- G 1285.78₁₉, (5⁻), γ_{997.63}287.9₄(<100), γ_{307.23}978.5₃(<63), γ_{148.39}1138.0₁₀(27₉)
 1355.4₃, (1, 2⁺), γ_{44.921}1310.5₄(100₂₀), γ₀1354.5₁₀(60₂₀)
 1375
 B 1379.1₅, 11⁻, γ_{1151.0}228.1₄, γ_{1077.0}302.3, γ_{776.2}602.9₄
 G 1381.70₁₉, (6⁻), γ_{826.66}555.3₅(71₂₈), γ_{307.23}1074.4₂(100₁₄)
 1412.98₁₂, 2⁺, γ_{1112.60}300.6₁₀, γ_{1060.53}352.3₁(100₈) E2, γ_{930.66}482.9₃(28₈), γ_{148.39}1265.6₁₀(12₄), γ_{44.921}1368.3₂, γ₀1414 E2
 A 1415.8₇, 14⁺, 2.6₂ ps, γ_{1077.0}338.8₄(100)
 I 1482.06₁₆, (0⁺), γ_{1112.60}369.5₂(100₁₅), γ_{1037.28}443.8₁₀(38₁₆), γ_{930.66}552.5₁₀(38₁₆), γ_{44.921}1437.1₂(100₁₅)
 1516.53₁₆, (4⁺), γ_{950.22}566.1₃, γ_{307.23}1209.3₃, γ_{148.39}1368.3₂, γ_{44.921}1470₁
 I 1530.59₁₆, 2⁺, γ_{1128.70}401.6₃(91₁₈) E1, γ_{966.14}564, γ_{930.66}599, γ_{731.92}798.9₂(100₁₀), γ_{148.39}1381.8₅(36₉) E2, γ_{44.921}1485₁(18₉) M1+E2 δ = -30₁₀, γ₀1531.6₁₀(18₉) E2
 1594.82₂₂, (2⁺, 3, 4⁺), γ_{826.66}768.3, γ_{731.92}863.5₆(<37), γ_{148.39}1446.2₃(100₁₃), γ_{44.921}1550.0₄(75₁₃)
 1630
 I 1643.33₂₁, 4⁺, γ_{1355.4}287.9₄(<100), γ_{826.66}(816.6)_{CA}, γ_{307.23}1336.2₃(54₉), γ_{148.39}1495₁(30₁₂), γ_{44.921}1598.2₄(46₁₃)
 B 1649.5₆, 13⁻, γ_{1379.1}270.5₄, γ_{1077.0}572.4₄
 1665
 1671.99₂₁, γ_{1105.73}566.1₃(<100), γ_{148.39}1523.7₃(56₁₁), γ_{44.921}1627.3₆(33₁₁)
 1712
 1761.06₂₁, (4⁺), γ_{1224.17}536.8₄(46₁₈), γ_{1135.82}625.2₂(100₂₀), γ_{1105.73}655₁(46₁₈), γ_{307.23}1454₁(27₉), γ_{44.921}1716.7₆(36₉)
 1775.08₁₅, (3⁻, 4, 5⁻), γ_{1168.06}606.6₂(100₁₂), γ_{1129.92}647.7₄(24₈), γ_{966.61}808.4₁(56₈), γ_{731.92}1043₁(4₄), γ_{148.39}1627.3₆(12₃)
 1782.0₇, 2⁺, γ_{44.921}1737 M1+E2 δ = 11₄⁹, γ₀1782 E2
 A 1788.7₈, 16⁺, 1.66₇ ps, γ_{1415.8}372.9₄(100)
 I 1814.27₂₄, (6⁺), γ_{1381.70}432.5₃(<100), γ_{518.4}1296₁(37₁₂), γ_{307.23}1507.1₃(100₁₂)
 1892.25₁₇, (4⁺, 5⁻), γ_{1643.33}248.6₇(90₄₀), γ_{731.92}1160.4₂(100₁₀), γ_{307.23}1584.9₃(70₁₀)
 B 1959.4₇, 15⁻, γ_{1649.5}309.9₄, γ_{1415.8}543.7₄
 1992.45₁₈, (3⁻), γ_{1285.78}706.6₂(100₁₃), γ_{1224.17}768.3₂(<69), γ_{1128.70}863.5₆(<19), γ_{1059.73}932.7₃(50₆), γ_{148.39}1844.6₅(25₆)
 2163.5₃, γ_{731.92}1431.3₁₀(67₁₅), γ_{307.23}1856.6₄(100₁₅), γ_{148.39}2014.8₄(84₁₅)
 2176.0₇, 1⁺, 58x10⁻³ eV, γ_{44.921}2131(52₂), γ₀2176(100) M1
 A 2191.3₈, 18⁺, 1.18₇ ps, γ_{1788.7}402.6₄(100)
 2209.0₇, 1⁺, 61x10⁻³ eV, γ_{44.921}2164(55₃), γ₀2209(100) M1
 2245.0₇, 1⁺, 33.5x10⁻³ eV, γ_{44.921}2200(47₃), γ₀2245(100) M1
 2295.0₇, 1⁺, 14.6x10⁻³ eV, γ_{44.921}2250(59₁₀), γ₀2295(100) M1
 B 2306.9₈, 17⁻, γ_{1959.4}347.5₄, γ_{1788.7}518.3₄
 2410.0₇, 1⁺, 28.2x10⁻³ eV, γ_{44.921}2365(54₅), γ₀2410(100) M1
 2468.0₇, 1⁺, 33.2x10⁻³ eV, γ_{44.921}2423(50₅), γ₀2468(100) M1
 J 2557.9₅, 0⁺, 274₁₀ ns, %IT ≈ 95, %SF ≈ 5, %α < 0.5, γ_{680.09}1879(≈37), γ_{44.921}2512.7₅(≈100), γ₀2558₂ E0
 K 2557.9+x(?) > 1 ns
 J 2577.5₁₁, (2⁺), γ_{2557.9}19.6
 A 2619.2₉, 20⁺, 0.90₇ ps, γ_{2191.3}427.9₄(100)
 B 2689.6₈, 19⁻, γ_{2306.9}382.7₄, γ_{2191.3}498.3
 2754.0₇, (1), 8.4x10⁻⁵ eV, γ_{44.921}2709(20₁₀), γ₀2754(100)
 A 3068.1₁₀, 22⁺, 0.69₁₄ ps, γ_{2619.2}448.9₄(100)
 B 3104.7₁₃, 21⁻, γ_{2689.6}415.1₁₀
 J 3203.1₁₁(?), (0⁺), γ_{2557.9}645.2 (E0)
 3253.8₃, 1⁻, 5.2x10⁻⁴ eV, γ_{1128.70}2125(44), γ_{1037.28}2217(9), γ_{997.63}2256(8), γ_{966.14}2288(91), γ_{950.22}2303(16), γ_{930.66}2323(32), γ_{927.23}2327(33), γ_{731.92}2522(14), γ_{680.09}2574(28), γ_{44.921}3209(22), γ₀3253(100)
 A 3535.1₁₄, 24⁺, 0.51₄ ps, γ_{3068.1}467₁(100)
 B 3548.3₁₇, 23⁻, γ_{3104.7}443.6₁₀
 3808.8₅, (1, 2), > 1.6x10⁻³ eV, γ_{927.23}2882(55₂₂), γ_{680.09}3128(28₂₂), γ_{44.921}3764(96₁₄), γ₀3809(100)
 A 4017.9₁₈, 26⁺, 0.40₆ ps, γ_{3535.1}482.8₁₀(100)

- 4495.0**₁₀, (1, 2), $>4.7 \times 10^{-5}$ eV, $\gamma_{44.921}$ **4450**(32₂₈)(?), γ_0 **4495**(100)
- A **4517.2**₂₀, 28⁺, 0.379 ps, $\gamma_{4017.9}$ **499.3**₁₀(100)
- 4591.5**₇, (1, 2), $>2.8 \times 10^{-4}$ eV, $\gamma_{44.921}$ **4546**(190), γ_0 **4592**(100)
- 4806.6**₇, (1), 2.5×10^{-4} eV, $\gamma_{966.14}$ **3840**(47₁₇), γ_0 **4807**(100)
- A **5034.9**₂₃, 30⁺, $\gamma_{4517.2}$ **517.7**₁₀
- 5205.5**₇, (1, 2), $>4.1 \times 10^{-4}$ eV, $\gamma_{1056.5}$ **4148**(33₂₆)(?),
 $\gamma_{44.921}$ **5160**(90₂₈), γ_0 **5206**(100)

