$^{197}_{83}$Bi

Δ: –19620 *240* **S_n:** (9600) **S_p:** (1500)
Q_{EC}: (5200) **Q_α:** (5390)

Nuclear Bands

A SD band? (96Cl03)

Levels and γ-ray branchings:

0, (9/2⁻), 9.33 *50* m, %EC+%β^+=100, %α=1×10^{-4}(syst)

(500), (1/2⁺), 5.04 *16* m, %EC+%β^+=45 *40*, %α=55 *40*, %IT<0.3

1000.74 *17*, (13/2⁻) γ_0***1000.8*** *2* (†$_\gamma$100) (E2)

1009.20 *20*, (11/2⁻) γ_0***1009.2*** *2* (†$_\gamma$100) (M1+E2): δ= –0.38 *14*

1196.27 *17*, (13/2⁺) γ_{1009}***187.0*** *2* (†$_\gamma$≈100) (E1) γ_{1001}***195.6*** *2* (†$_\gamma$83 *17*) (E1) γ_0***1196.2*** *2* (†$_\gamma$53 *6*) (M2)

1601.0 *3*, (17/2⁺) γ_{1196}***404.7*** *2* (†$_\gamma$100) (E2)

1968.6 *4*, (21/2⁺) γ_{1601}***367.6*** *2* (†$_\gamma$100) (E2)

2065.5 *4*, (25/2⁺), 60 *22* ns γ_{1969}***96.9*** *2* (†$_\gamma$100) (E2)

2129.3 *4*, (23/2⁻), 204 *18* ns γ_{1969}***160.7*** *2* (†$_\gamma$100) (E1)

2360.4 *5*, (27/2⁺) γ_{2066}***294.9*** *2* (†$_\gamma$100) (E2)

2384.5 *5*, (25/2) γ_{2360}***20*** *20* γ_{2129}***255.2*** *2* (†$_\gamma$100) D

2360.4+x *5*, (29/2⁻), 263 *13* ns

2688.7 *5*, (27/2) γ_{2066}***623.2*** *2* (†$_\gamma$100) D

2846.0+x *5*, (31/2⁻) γ_{2360+x}***485.6*** *2* (†$_\gamma$100) (M1+E2): δ= –0.33 *18*

2929.5 *5*, (31/2⁻), 209 *30* ns γ_{2066}***864.0*** *2* (†$_\gamma$100) (E3)

3284.9+x *6*, (33/2⁻) γ_{2846+x}***438.9*** *2* (†$_\gamma$100) (M1+E2): δ= –0.37 *21*

3558.3 *7* γ_{2930}***628.8*** *5*

A **y**, J≈(15/2)

A **186.7+y** *5*, J+2 γ_y***186.7*** *5* (†$_\gamma$0.66 *7*)
$I^{(2)}$=94.3, ħω=0.104

A **415.8+y** *7*, J+4 γ_{187+y}***229.1*** *5* (†$_\gamma$1.09 *10*)
$I^{(2)}$=98.8, ħω=0.125

A **685.4+y** *9*, J+6 γ_{416+y}***269.6*** *5* (†$_\gamma$1.03 *10*)
$I^{(2)}$=99.0, ħω=0.145

A **995.4+y** *10*, J+8 γ_{685+y}***310.0*** *5* (†$_\gamma$0.94 *10*) $I^{(2)}$=97.3, ħω=0.165

A **1346.5+y** *11*, J+10 γ_{995+y}***351.1*** *5* (†$_\gamma$0.98 *10*) $I^{(2)}$=101.0, ħω=0.185

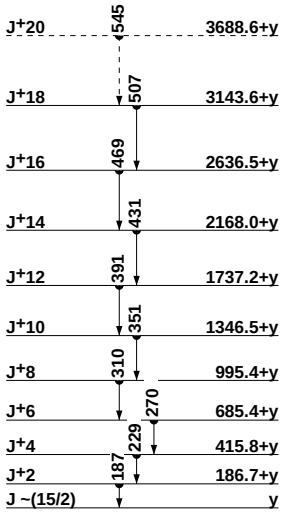
A **1737.2+y** *12*, J+12 γ_{1347+y}***390.7*** *5* (†$_\gamma$0.97 *10*) $I^{(2)}$=99.8, ħω=0.205

A **2168.0+y** *13*, J+14 γ_{1737+y}***430.8*** *5* (†$_\gamma$0.87 *8*) $I^{(2)}$=106.1, ħω=0.225

A **2636.5+y** *15*, J+16 γ_{2168+y}***468.5*** *5* (†$_\gamma$0.46 *8*) $I^{(2)}$=103.6, ħω=0.244

A **3143.6+y** *15*, J+18 γ_{2637+y}***507.1*** *5* (†$_\gamma$0.56 *8*) $I^{(2)}$=105.5, ħω=0.263

A **3688.6+y** *20* (?), J+20 γ_{3144+y}***545*** *1* (?)



SD band?
(96Cl03)

$^{197}_{83}$Bi