

¹⁴⁸Gd
⁶⁴Gd Δ : -76279.3 S_n : 8983.814 S_p : 6014.3 Q_α : 3271.213

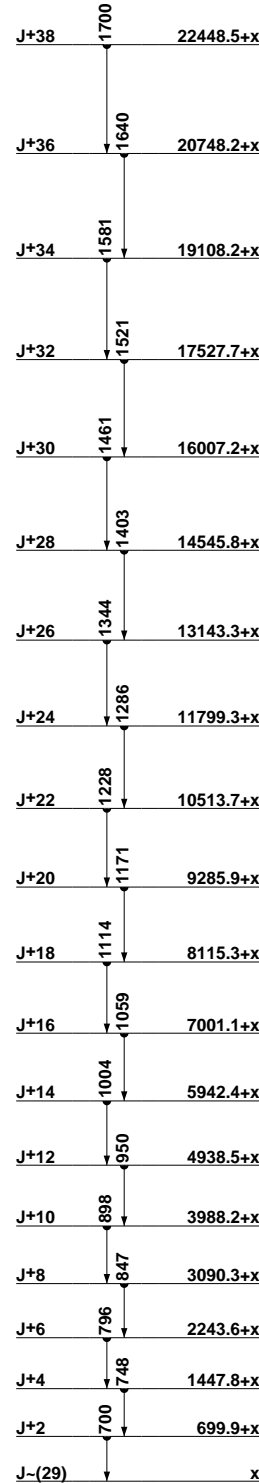
Nuclear Bands

- A SD-1 band (96DeAA,95DeZZ)(93Ha19,88De10)
 B SD-2 band (96DeAA,95DeZZ,93Ha19)
 C SD-3 band (95DeZZ,96DeAA)
 D SD-4 band (95DeZZ,96DeAA)
 E SD-5 band (95DeZZ,96DeAA)
 F SD-6 band (95DeZZ,96DeAA)

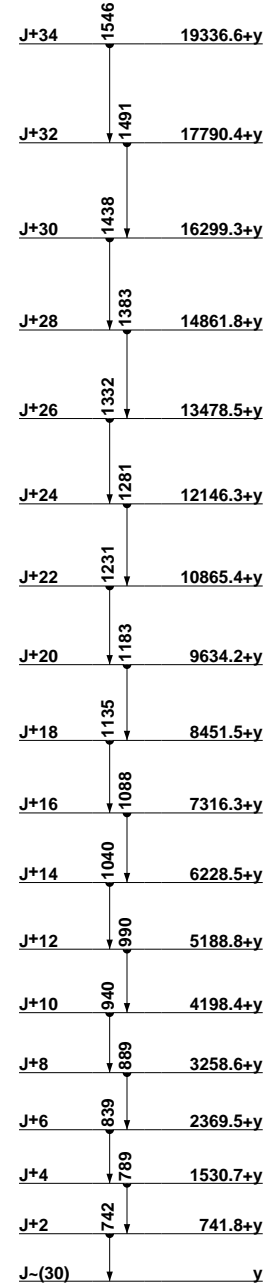
Levels and γ -ray branchings:0, 0⁺, 74.6 30 y, % α =100**784.430** 16, 2⁺ γ_0 **784.430** 16 (†₁₀₀) E2**1273.479** 20, 3⁻ γ_{784} **489.049** 12 (†₁₀₀) E1**1416.377** 23, 4⁺ γ_{1273} **142.878** 14 (†_{2.90} 13) E1 γ_{784} **631.947** 17 (†_{100.0} 19) E2**1811.0**, 6⁺ γ_{1416} **394.6** (†₁₀₀) E2**1834.58** 5, ⁺ γ_{784} **1050.15** 4 (†₁₀₀) E2,M1**1863.42** 5, 2⁺ γ_{1273} **589.9** 7 (†_{5.2} 3) γ_{784} **1079.025** 25 (†_{100.0} 19) E2+M1: $\delta=4.6$ \pm 0.35 γ_0 **1863.391** 38 (†_{49.3} 10)**1912.95** 10, 4⁻ γ_{1273} **639.47** 7 (†₁₀₀) M1**2082.04** 15, 5⁻ γ_{1913} **169.2** γ_{1811} **270.9** (†₃₈) E1 γ_{1416} **665.6** (†_{<39}) γ_{1273} **808.56** 7 (†₁₀₀) E2**2188.65** 20, 2⁺ γ_{1273} **915.30** 12 (†₁₄) γ_{784} **1404.224** 35 (†₁₀₀) E2,M1 γ_0 **2188.65** 7 (†₈₀)**2233.59** 6, 3⁻ γ_{1273} **960.09** 7 (†_{<100}) E2,M1 γ_{784} **1449.16** 4 (†₈₅)**2310.88** 7, 2⁺ γ_{784} **1526.45** 7 (†₅₅) γ_0 **2311.03** 7 (†₁₀₀)**2424.09** 15, ⁺ γ_{1416} **1007.72** 9 (†_{<100}) γ_{784} **1639.66** 22 (†₆₅) M1,E2**2503.86** 15, ⁻ γ_{1273} **1230.18** 5 (†₅₆) E2,M1 γ_{784} **1719.63** 20 (†₁₀₀)**2506.4** 5, 3⁻ γ_{1416} **1089.411** 28 (†₁₀₀) E1 γ_{784} **1722.47** 28 (†_{15.3})**2522.0** 3, 4⁺ γ_{1416} **1105.65** 11 (†₁₀₀) M1,E2 γ_{1273} **1248.2** 8 (†₃₃) γ_{784} **1737.9** 6 (†₂₇)**2563.8** 3, 7⁻ γ_{2082} **481.65** 10 (†₁₀₀) E2 γ_{1811} **752.8** 2 (†_{23.3}) E1**2615.0** 8, 2⁺ γ_{1273} **1342.2** 6 (†_{9.2}) γ_{784} **1830.14** 4 (†₁₀₀) γ_0 **2614.3** 6 (†₃₈)**2632.8** 2, 5⁻ γ_{784} **1848.36** 8 (†₁₀₀)**2693.3** 2, 8⁺ γ_{2564} **129.5** 2 (†_{2.7} 4) γ_{1811} **882.3** E2**2694.6**, 9⁻, 16.5 3 ns, $\mu=-0.162$ 18, $Q=1.01$ 5 γ_{2564} **130.8** E2 γ_{1811} **883.6** E3**2700.3** 2, (2⁺) γ_{1273} **1426.49** 8 (†₄₄) γ_{784} **1915.54** 19 (†₆₃) γ_0 **2700.57** 20 (†₁₀₀)**2763** 3, 4⁺**2872.9** 4 γ_{1913} **960.09** 7 (†_{<100}) γ_{1273} **1599.39** 6 (†₁₀₀) γ_{784} **2089** 1 (†₄₁)**2886.3** 2 γ_{2504} **382.0** 8 (†₂₄) γ_{1416} **1470.1** 8 (†₂₀) γ_{784} **2101.87** 10 (†₁₀₀)**2915.3** 3 γ_{1913} **1002.48** 9 (†₂₈) γ_{1273} **1641.98** 21 (†₃₇) γ_{784} **2131.14** 11 (†₁₀₀)**2936.3**, 7⁻ γ_{1811} **1125.3** (†₁₀₀)**3029.3**, 8⁻ γ_{2695} **334.7** (†₁₀₀) M1 γ_{2564} **465.6** (†₅₈) M1**3065** γ_{1835} **1230****3076.1** 4 γ_{1273} **1802.62** 24 (†₁₀₀)**3089.5** 4 γ_{2082} **1007.72** 9 (†_{<100}) (E2,M1) γ_{1273} **1816.06** 9 (†₆₈) γ_0 **3090.5** 15 (†₂₅)**3130.9** 2 γ_{784} **2345.1** 8 (†₆₃) γ_0 **3130.89** 16 (†₁₀₀)**3152.1**, 8⁻ γ_{3029} **122.9** D+Q γ_{2695} **457.6** γ_{2564} **588.3****3295.0** 2 γ_{784} **2510.56** 15 (†₁₀₀) γ_0 **3295.5** 10 (†₃₃)**3310.0** (?), 8⁻ γ_{2936} **373.7** (†₁₀₀)**3366.8**, 9⁻ γ_{3310} **57** γ_{3152} **214.7** γ_{3029} **337.2** γ_{2936} **430.5** (†₁₀₀) γ_{2693} **673.8** (†₇₈) γ_{2564} **803.2****3574.9** 4 γ_{1273} **2301.44** 21 (†₁₀₀) γ_0 **3574.6** 10 (†₉₀)**3701.3**, 11⁻ γ_{2695} **1006.7** (†₁₀₀) E2**3757.9**, 10⁺ γ_{2695} **1063.3** (†₁₀₀)**3822**, 10⁺ γ_{3758} **63** γ_{2693} **1128** γ_{2633} **1129****3917.4**, 10⁻ γ_{3367} **550.3** γ_{3152} **765.3** γ_{3029} **888.3****3980.1**, 12⁺ γ_{3758} **221.6** γ_{3701} **278.8** E1 γ_{2695} **1285.4****4050.8** 15 γ_{1416} **2634.6** 10 (†₃₉) γ_{1273} **2777.5** 10 (†₁₉) γ_{784} **3266.4** 10 (†₁₀₀)**4068.7** 15 γ_{1913} **2155.33** 25 (†₁₀₀) γ_{1273} **2794.6** 10 (†₅₁) γ_0 **4066.8** 10 (†₄₃)**4121.2**, 11⁻ γ_{3701} **420.1** γ_{3367} **754.2****4429.4**, 12⁻ γ_{4121} **308.2** γ_{3980} **449.1** γ_{3917} **511** γ_{3701} **728.3****4499.8**, 12⁺ γ_{3980} **519.7** (†₁₀₀) γ_{3822} **678** γ_{3758} **742.1** (†₁₀₀) γ_{3701} **799****4542.3** 4 γ_{1416} **3125.44** 29 (†₄₇) γ_{1273} **3269.22** 30 (†₁₀₀)**4550.6**, 13⁻ γ_{4429} **121.2** γ_{4121} **429.4** γ_{3980} **570****4905.5**, 14⁻ γ_{4551} **354.9****5025.1**, 14⁺ γ_{4551} **475** γ_{4500} **525.3** γ_{3980} **1045.1****5116.9**, 15⁻ γ_{4906} **211.4** (†₁₀₀) γ_{4551} **566.3** (†₁₀₀)**5167.4**, 14⁺ γ_{3980} **1187.3** (†₁₀₀)**5354.7**, 16⁺ γ_{5117} **237.9** (†₁₄) γ_{5025} **329.6** (†₁₀₀)**5437.7**, 16⁻ γ_{5117} **320.8** γ_{4906} **532****5578** γ_{5167} **411****5689**, 17 γ_{5355} **334****5800** γ_{5578} **222****5831.8**, 18⁺ γ_{5689} **142** γ_{5355} **476.8****5882**, 17 γ_{5438} **444****5933**, 17 γ_{5800} **133** γ_{5438} **495** γ_{5355} **578** γ_{5117} **816****6268**, 18 γ_{5832} **436****6381**, 18 γ_{5933} **448** γ_{5882} **499** γ_{5832} **549****6545**, 18⁻ γ_{5933} **612** γ_{5689} **855****6574**, 19⁺ γ_{6381} **193** γ_{6268} **306** γ_{5832} **742****6640**, 19⁻ γ_{5832} **808****6834**, 20⁻, \approx 2 ns γ_{6640} **194** γ_{6574} **259** γ_{6545} **289** γ_{5832} **1002****7051**, 19⁺ γ_{6381} **670** γ_{5832} **1219****7110**, 20⁺ γ_{5832} **1278****7155**, 21⁻ γ_{6834} **321** γ_{6640} **516****7273**, 20⁺ γ_{7051} **223** γ_{6574} **699****7333** γ_{6574} **759****7530**, 21⁺ γ_{7333} **197** γ_{7273} **257** γ_{7110} **420** γ_{7051} **479****7790**, 22⁺ γ_{7530} **260** γ_{7110} **680****8003**, 22⁻ γ_{7155} **849** γ_{6834} **1170****8241**, 22⁻ γ_{6834} **1408****8304**, 23⁻ γ_{7155} **1149****8308**, 23⁺ γ_{7790} **518****8363**, 23⁻ γ_{7790} **574** γ_{7155} **1208****8453**, 23⁻ γ_{8304} **151** γ_{8241} **213** γ_{8003} **451** γ_{7790} **664****8608**, 23 γ_{7790} **818****8637**, 24⁻ γ_{8453} **184** γ_{8308} **330** γ_{8003} **634****8831**, 24 γ_{8608} **223** γ_{8453} **377** γ_{8363} **468** γ_{8308} **523****8986**, 25⁻ γ_{8831} **155** γ_{8637} **348** γ_{8363} **623****9241**, 25⁻ γ_{8637} **604****9258** γ_{8637} **620** γ_{8363} **895****9652**, 26⁻ γ_{8986} **666****9755**, 26⁻ γ_{9241} **514** γ_{8986} **771****9933**, 26 γ_{8831} **1102****9956** γ_{9241} **714****10045**, 25⁻ γ_{9258} **788** γ_{8363} **1682** γ_{8304} **1742****10060**, 27 γ_{9755} **305****10317**, 27⁻ γ_{10045} **272** γ_{9956} **361** γ_{9755} **560** γ_{9652} **665** γ_{8986} **1331****10472**, 27⁻ γ_{9755} **717****10694**, 27⁻ γ_{9652} **1042****10757**, 28 γ_{10060} **697****10867**, 28 γ_{10060} **807****11157**, 28 γ_{10694} **464** γ_{10472} **684** γ_{10317} **840****11183**, 29 γ_{10060} **1123****11455**, 29 γ_{11183} **271** γ_{11157} **298**

11478	γ_{10317}	1160	
11546	$29^- \gamma_{10694}$	852	γ_{10317} 1228
11585	$30 \gamma_{11455}$	130	
11725	$30 \gamma_{11183}$	542	γ_{10867} 858 γ_{10757} 967
12011	γ_{11455}	556	
12061	$30^- \gamma_{11183}$	878	
12139	$31^- \gamma_{12061}$	74	γ_{11725} 411 γ_{11585} 554 γ_{11546} 593 γ_{11478} 661
12283	$30^- \gamma_{11455}$	880	γ_{11157} 1126
12380	$31 \gamma_{11455}$	925	
12527	$32 \gamma_{12283}$	244	γ_{12139} 391 γ_{11585} 943
12681	$31 \gamma_{11585}$	1096	
13037	$33 \gamma_{12681}$	361	γ_{12527} 510 γ_{12380} 657
13123	$33^- \gamma_{12139}$	987	
13146	$32 \gamma_{12681}$	462	γ_{12380} 766 γ_{12139} 1009
13242	$32 \gamma_{12681}$	561	
13352	$34 \gamma_{12527}$	825	
13734	$34 \gamma_{181}$	γ_{13242} 492	γ_{13146} 588 γ_{13037} 697
13868	$35, \approx 2 \text{ ns}$	γ_{13734} 134	γ_{12527} 1340
13886	γ_{13037}	849	
14009	$34 \gamma_{13037}$	972	
14144	$35 \gamma_{13037}$	1107	
14827	$37 \gamma_{13868}$	959	
14923	$36 \gamma_{14144}$	779	γ_{13886} 1036 γ_{13868} 1056
15122	$38 \gamma_{14827}$	295	
15164	$38 \gamma_{14927}$	337	
15726	γ_{14923}	803	
16076	γ_{15726}	350	
16111	$38 \gamma_{14923}$	1188	
16203	$40 \gamma_{15164}$	1039	
16256	$40 \gamma_{15164}$	1092	
16406	$40 \gamma_{16111}$	295	
16472	$39 \gamma_{15164}$	1308	
17240	γ_{16406}	834	
17318	γ_{16472}	846	
17370	$42 \gamma_{16406}$	964	
18481	$44 \gamma_{17370}$	1111	
19148	γ_{18481}	667	
A	x, J=(29)		
A	699.9+x, J+2	$\gamma_{699.9}$ 1 (\dagger_{γ} 0.54 15)	$I^{(1)}=85.6, I^{(2)}=83.3, \hbar\omega=0.362$
A	1447.8+x, J+4	γ_{700+x} 747.9 1 (\dagger_{γ} 0.87 9)	$I^{(1)}=85.5, I^{(2)}=83.5, \hbar\omega=0.386$
A	2243.6+x, J+6	γ_{1448+x} 795.8 1 (\dagger_{γ} 0.99 8)	$I^{(1)}=85.2, I^{(2)}=78.6, \hbar\omega=0.411$
A	3090.3+x, J+8	γ_{2244+x} 846.7 1 (\dagger_{γ} 0.97 8)	$I^{(1)}=84.8, I^{(2)}=78.1, \hbar\omega=0.436$
A	3988.2+x, J+10	γ_{3090+x} 897.9 1 (\dagger_{γ} 1.00 8)	$I^{(1)}=84.4, I^{(2)}=76.3, \hbar\omega=0.462$
A	4938.5+x, J+12	γ_{3988+x} 950.3 1 (\dagger_{γ} 0.97 8)	$I^{(1)}=83.9, I^{(2)}=74.6, \hbar\omega=0.489$
A	5942.4+x, J+14	γ_{4939+x} 1003.9 1 (\dagger_{γ} 1.00 10)	$I^{(1)}=83.4, I^{(2)}=73.0, \hbar\omega=0.516$
A	7001.1+x, J+16	γ_{5942+x} 1058.7 1 (\dagger_{γ} 0.98 9)	$I^{(1)}=82.8, I^{(2)}=72.1, \hbar\omega=0.543$
A	8115.3+x, J+18	γ_{7001+x} 1114.2 1 (\dagger_{γ} 0.99 10)	$I^{(1)}=82.3, I^{(2)}=70.9, \hbar\omega=0.571$
A	9285.9+x, J+20	γ_{8115+x} 1170.6 1 (\dagger_{γ} 1.00 15)	$I^{(1)}=81.7, I^{(2)}=69.9, \hbar\omega=0.600$
A	10513.7+x, J+22	γ_{9286+x} 1227.8 1 (\dagger_{γ} 0.84 7)	$I^{(1)}=81.2, I^{(2)}=69.2, \hbar\omega=0.628$
A	11799.3+x, J+24	$\gamma_{10514+x}$ 1285.6 1 (\dagger_{γ} 0.71 8)	$I^{(1)}=80.6, I^{(2)}=68.5, \hbar\omega=0.657$
A	13143.3+x, J+26	$\gamma_{11799+x}$ 1344.0 2 (\dagger_{γ} 0.66 7)	$I^{(1)}=80.1, I^{(2)}=68.4, \hbar\omega=0.687$
A	14545.8+x, J+28	$\gamma_{13143+x}$ 1402.5 2 (\dagger_{γ} 0.55 6)	$I^{(1)}=79.6, I^{(2)}=67.9, \hbar\omega=0.716$
A	16007.2+x, J+30	$\gamma_{14546+x}$ 1461.4 2 (\dagger_{γ} 0.48 7)	$I^{(1)}=79.1, I^{(2)}=67.7, \hbar\omega=0.745$
A	17527.7+x, J+32	$\gamma_{16007+x}$ 1520.5 3 (\dagger_{γ} 0.34 5)	$I^{(1)}=78.7, I^{(2)}=66.7, \hbar\omega=0.775$
A	19108.2+x, J+34	$\gamma_{17528+x}$ 1580.5 6 (\dagger_{γ} 0.19 3)	$I^{(1)}=78.2, I^{(2)}=67.2, \hbar\omega=0.805$
A	20748.2+x, J+36	$\gamma_{19108+x}$ 1640.0 10 (\dagger_{γ} 0.15 5)	$I^{(1)}=77.8, I^{(2)}=66.3, \hbar\omega=0.835$
A	22448.5+x, J+38	$\gamma_{20748+x}$ 1700.3 6 (\dagger_{γ} 0.07 3)	
B	y, J=(30)		
B	741.8+y, J+2	$\gamma_{741.8}$ 3 (\dagger_{γ} 83.6, $I^{(2)}=84.9, \hbar\omega=0.383$)	
B	1530.7+y, J+4	γ_{742+y} 788.9 2 (\dagger_{γ} 0.46 10)	$I^{(1)}=83.6, I^{(2)}=80.2, \hbar\omega=0.407$
B	2369.5+y, J+6	γ_{1531+y} 838.8 2 (\dagger_{γ} 0.88 9)	$I^{(1)}=83.3, I^{(2)}=79.5, \hbar\omega=0.432$
B	3258.6+y, J+8	γ_{2370+y} 889.1 2 (\dagger_{γ} 0.89 9)	$I^{(1)}=83.1, I^{(2)}=78.9, \hbar\omega=0.457$
B	4198.4+y, J+10	γ_{3259+y} 939.8 2 (\dagger_{γ} 0.93 15)	$I^{(1)}=82.9, I^{(2)}=79.1, \hbar\omega=0.483$
B	5188.8+y, J+12	γ_{4198+y} 990.4 3 (\dagger_{γ} 1.00 11)	$I^{(1)}=82.8, I^{(2)}=81.1, \hbar\omega=0.508$
B	6228.5+y, J+14	γ_{5189+y} 1039.7 2 (\dagger_{γ} 0.95 20)	$I^{(1)}=82.7, I^{(2)}=83.2, \hbar\omega=0.532$
B	7316.3+y, J+16	γ_{6229+y} 1087.8 2 (\dagger_{γ} 1.03 15)	$I^{(1)}=82.8, I^{(2)}=84.4, \hbar\omega=0.556$
B	8451.5+y, J+18	γ_{7316+y} 1135.2 2 (\dagger_{γ} 0.94 10)	$I^{(1)}=82.8, I^{(2)}=84.2, \hbar\omega=0.579$
B	9634.2+y, J+20	γ_{8452+y} 1182.7 2 (\dagger_{γ} 0.82 8)	$I^{(1)}=82.9, I^{(2)}=82.5, \hbar\omega=0.603$
B	10865.4+y, J+22	γ_{9634+y} 1231.2 2 (\dagger_{γ} 0.79 8)	$I^{(1)}=82.8, I^{(2)}=80.5, \hbar\omega=0.628$
B	12146.3+y, J+24	$\gamma_{10865+y}$ 1280.9 2 (\dagger_{γ} 0.77 8)	$I^{(1)}=82.7, I^{(2)}=78.0, \hbar\omega=0.653$
B	13478.5+y, J+26	$\gamma_{12146+y}$ 1332.2 2 (\dagger_{γ} 0.62 7)	$I^{(1)}=82.5, I^{(2)}=78.3, \hbar\omega=0.679$
B	14861.8+y, J+28	$\gamma_{13479+y}$ 1383.3 3 (\dagger_{γ} 0.56 6)	$I^{(1)}=82.2, I^{(2)}=73.8, \hbar\omega=0.705$
B	16299.3+y, J+30	$\gamma_{14862+y}$ 1437.5 5 (\dagger_{γ} 0.44 5)	$I^{(1)}=82.0, I^{(2)}=74.6, \hbar\omega=0.732$
B	17790.4+y, J+32	$\gamma_{16299+y}$ 1491.1 8 (\dagger_{γ} 0.27 4)	$I^{(1)}=81.7, I^{(2)}=72.6, \hbar\omega=0.759$
B	19336.6+y, J+34	$\gamma_{17790+y}$ 1546.2 10 (\dagger_{γ} 0.23 4)	
C	z, J		
C	830.3+z, J+2	$\gamma_{830.3}$ 6 (\dagger_{γ} 0.23 5)	$I^{(2)}=88.1, \hbar\omega=0.426$
C	1706.0+z, J+4	γ_{830+z} 875.7 3 (\dagger_{γ} 0.42 6)	$I^{(2)}=81.1, \hbar\omega=0.450$
C	2631.0+z, J+6	γ_{1706+z} 925.0 2 (\dagger_{γ} 0.43 7)	$I^{(2)}=78.9, \hbar\omega=0.475$
C	3606.7+z, J+8	γ_{2631+z} 975.7 3 (\dagger_{γ} 0.62 7)	$I^{(2)}=77.2, \hbar\omega=0.501$
C	4634.2+z, J+10	γ_{3607+z} 1027.5 2 (\dagger_{γ} 0.63 8)	$I^{(2)}=76.8, \hbar\omega=0.527$
C	5713.8+z, J+12	γ_{4634+z} 1079.6 3 (\dagger_{γ} 0.95 11)	$I^{(2)}=75.3, \hbar\omega=0.553$
C	6846.5+z, J+14	γ_{5714+z} 1132.7 2 (\dagger_{γ} 1.00 12)	$I^{(2)}=75.2, \hbar\omega=0.580$
C	8032.4+z, J+16	γ_{6847+z} 1185.9 3 (\dagger_{γ} 0.93 30)	$I^{(2)}=74.9, \hbar\omega=0.606$
C	9271.7+z, J+18	γ_{8032+z} 1239.3 3 (\dagger_{γ} 0.72 15)	$I^{(2)}=74.6, \hbar\omega=0.633$
C	10564.6+z, J+20	γ_{9272+z} 1292.9 3 (\dagger_{γ} 0.95 20)	$I^{(2)}=77.5, \hbar\omega=0.659$
C	11909.1+z, J+22	$\gamma_{10565+z}$ 1344.5 3 (\dagger_{γ} 0.71 18)	$I^{(2)}=78.9, \hbar\omega=0.685$
C	13304.3+z, J+24	$\gamma_{11909+z}$ 1395.2 4 (\dagger_{γ} 0.64 15)	$I^{(2)}=100.0, \hbar\omega=0.708$
C	14739.5+z, J+26	$\gamma_{13304+z}$ 1435.2 5 (\dagger_{γ} 0.46 8)	$I^{(2)}=540.5, \hbar\omega=0.719$
C	16182.1+z, J+28	$\gamma_{14740+z}$ 1442.6 10 (\dagger_{γ} 0.40 12)	$I^{(2)}=784.3, \hbar\omega=0.723$
C	17629.8+z, J+30	$\gamma_{16182+z}$ 1447.7 6 (\dagger_{γ} 0.18 9)	$I^{(2)}=164.6, \hbar\omega=0.730$
C	19101.8+z, J+32	$\gamma_{17630+z}$ 1472.0 10 (\dagger_{γ} 0.22 8)	
D	u, J		
D	849.7+u, J+2	γ_0 849.7 3	$I^{(2)}=99.3, \hbar\omega=0.435$
D	1739.7+u, J+4	γ_{850+u} 890.0 2 (\dagger_{γ} 0.62 15)	$I^{(2)}=82.1, \hbar\omega=0.457$
D	2678.4+u, J+6	γ_{1740+u} 938.7 2 (\dagger_{γ} 0.60 12)	$I^{(2)}=80.5, \hbar\omega=0.482$
D	3666.8+u, J+8	γ_{2678+u} 988.4 3 (\dagger_{γ} 0.64 10)	$I^{(2)}=78.1, \hbar\omega=0.507$
D	4706.4+u, J+10	γ_{3667+u} 1039.6 3 (\dagger_{γ} 0.68 10)	$I^{(2)}=77.7, \hbar\omega=0.533$
D	5797.5+u, J+12	γ_{4706+u} 1091.1 3 (\dagger_{γ} 0.92 15)	$I^{(2)}=75.3, \hbar\omega=0.559$
D	6941.7+u, J+14	γ_{5798+u} 1144.2 3 (\dagger_{γ} 1.05 20)	$I^{(2)}=74.3, \hbar\omega=0.586$
D	8139.7+u, J+16	γ_{6942+u} 1198.0 3 (\dagger_{γ} 1.00 15)	$I^{(2)}=73.0, \hbar\omega=0.613$
D	9392.5+u, J+18	γ_{8140+u} 1252.8 3 (\dagger_{γ} 1.02 13)	$I^{(2)}=72.3, \hbar\omega=0.640$
D	10700.6+u, J+20	γ_{9393+u} 1308.1 3 (\dagger_{γ} 0.88 15)	$I^{(2)}=71.0, \hbar\omega=0.668$
D	12065.0+u, J+22	$\gamma_{10701+u}$ 1364.4 3 (\dagger_{γ} 0.90 18)	$I^{(2)}=70.3, \hbar\omega=0.696$
D	13486.3+u, J+24	$\gamma_{12065+u}$ 1421.3 4 (\dagger_{γ} 0.82 10)	$I^{(2)}=69.9, \hbar\omega=0.725$
D	14964.8+u, J+26	$\gamma_{13486+u}$ 1478.5 4 (\dagger_{γ} 0.57 9)	$I^{(2)}=68.5, \hbar\omega=0.754$
D	16501.7+u, J+28	$\gamma_{14965+u}$ 1536.9 10 (\dagger_{γ} 0.30 10)	
E	v, J		
E	853.7+v, J+2	γ_0 853.7 3 (\dagger_{γ} 0.45 6)	$I^{(2)}=86.6, \hbar\omega=0.438$

E	1753.6+v, J+4	γ_{854+v}	899.9 2 (\dagger_{γ} 0.83 9)	$I^{(2)}=88.9, \hbar\omega=0.461$
E	2698.5+v, J+6	γ_{1754+v}	944.9 3 (\dagger_{γ} 0.85 10)	$I^{(2)}=86.0, \hbar\omega=0.484$
E	3689.9+v, J+8	γ_{2699+v}	991.4 2 (\dagger_{γ} 0.86 10)	$I^{(2)}=86.0, \hbar\omega=0.507$
E	4727.8+v, J+10	γ_{3690+v}	1037.9 2 (\dagger_{γ} 0.85 20)	$I^{(2)}=85.7, \hbar\omega=0.531$
E	5812.4+v, J+12	γ_{4728+v}	1084.6 2 (\dagger_{γ} 1.00 15)	$I^{(2)}=84.6, \hbar\omega=0.554$
E	6944.3+v, J+14	γ_{5812+v}	1131.9 2 (\dagger_{γ} 1.00 13)	$I^{(2)}=84.0, \hbar\omega=0.578$
E	8123.8+v, J+16	γ_{6944+v}	1179.5 2 (\dagger_{γ} 0.90 10)	$I^{(2)}=85.1, \hbar\omega=0.602$
E	9350.3+v, J+18	γ_{8124+v}	1226.5 2 (\dagger_{γ} 0.80 10)	$I^{(2)}=84.6, \hbar\omega=0.625$
E	10624.1+v, J+20	γ_{9350+v}	1273.8 2 (\dagger_{γ} 0.80 10)	$I^{(2)}=82.8, \hbar\omega=0.649$
E	11946.2+v, J+22	$\gamma_{10624+v}$	1322.1 2 (\dagger_{γ} 0.52 8)	$I^{(2)}=84.2, \hbar\omega=0.673$
E	13315.8+v, J+24	$\gamma_{11946+v}$	1369.6 2 (\dagger_{γ} 0.50 10)	$I^{(2)}=84.2, \hbar\omega=0.697$
E	14732.9+v, J+26	$\gamma_{13316+v}$	1417.1 3 (\dagger_{γ} 0.44 7)	$I^{(2)}=83.7, \hbar\omega=0.721$
E	16197.8+v, J+28	$\gamma_{14733+v}$	1464.9 4 (\dagger_{γ} 0.31 5)	$I^{(2)}=83.0, \hbar\omega=0.744$
E	17710.9+v, J+30	$\gamma_{16198+v}$	1513.1 0 (\dagger_{γ} 0.26 4)	$I^{(2)}=81.8, \hbar\omega=0.769$
E	19272.9+v, J+32	$\gamma_{17711+v}$	1562 1 (\dagger_{γ} 0.20 6)	
F	w, J			
F	802.2+w, J+2	γ_0	802.2 3	$I^{(2)}=85.5, \hbar\omega=0.413$
F	1651.2+w, J+4	γ_{802+w}	849.0 2	$I^{(2)}=82.3, \hbar\omega=0.437$
F	2548.8+w, J+6	γ_{1651+w}	897.6 2 (\dagger_{γ} 0.91 12)	$I^{(2)}=82.5, \hbar\omega=0.461$
F	3494.9+w, J+8	γ_{2549+w}	946.1 4 (\dagger_{γ} 1.00 12)	$I^{(2)}=80.2, \hbar\omega=0.486$
F	4490.9+w, J+10	γ_{3495+w}	996.0 3 (\dagger_{γ} 1.00 22)	$I^{(2)}=78.6, \hbar\omega=0.511$
F	5537.8+w, J+12	γ_{4491+w}	1046.9 2 (\dagger_{γ} 1.00 10)	$I^{(2)}=76.6, \hbar\omega=0.537$
F	6636.9+w, J+14	γ_{5538+w}	1099.1 4 (\dagger_{γ} 0.95 18)	$I^{(2)}=75.6, \hbar\omega=0.563$
F	7788.9+w, J+16	γ_{6637+w}	1152.0 2 (\dagger_{γ} 0.97 10)	$I^{(2)}=73.8, \hbar\omega=0.590$
F	8995.1+w, J+18	γ_{7789+w}	1206.2 2 (\dagger_{γ} 1.00 15)	$I^{(2)}=73.7, \hbar\omega=0.617$
F	10255.6+w, J+20	γ_{8995+w}	1260.5 2 (\dagger_{γ} 1.00 19)	$I^{(2)}=72.5, \hbar\omega=0.644$
F	11571.3+w, J+22	$\gamma_{10256+w}$	1315.7 3 (\dagger_{γ} 0.96 10)	$I^{(2)}=70.9, \hbar\omega=0.672$
F	12943.4+w, J+24	$\gamma_{11571+w}$	1372.1 2 (\dagger_{γ} 0.78 9)	$I^{(2)}=70.9, \hbar\omega=0.700$
F	14371.9+w, J+26	$\gamma_{12943+w}$	1428.5 3 (\dagger_{γ} 0.77 10)	$I^{(2)}=72.6, \hbar\omega=0.728$
F	15855.5+w, J+28	$\gamma_{14372+w}$	1483.6 6 (\dagger_{γ} 0.70 15)	$I^{(2)}=70.9, \hbar\omega=0.756$
F	17395.5+w, J+30	$\gamma_{15856+w}$	1540 1 (\dagger_{γ} 0.63 15)	

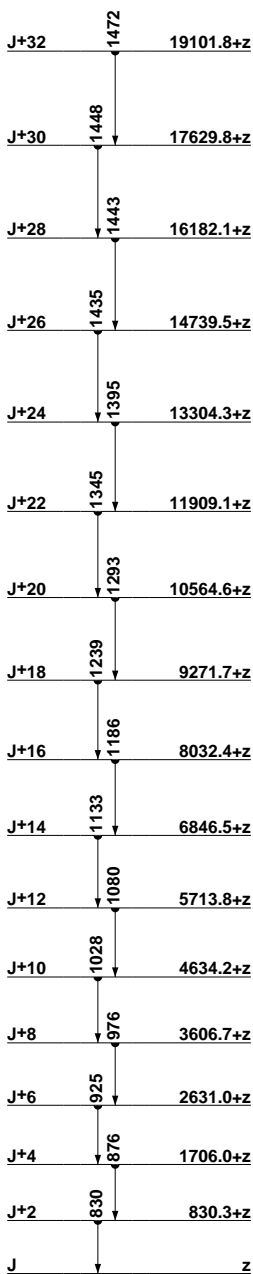


SD-1 band
(⁹⁶DeAA, ⁹⁵DeZZ)
(⁹³Ha19, ⁸⁸De10)

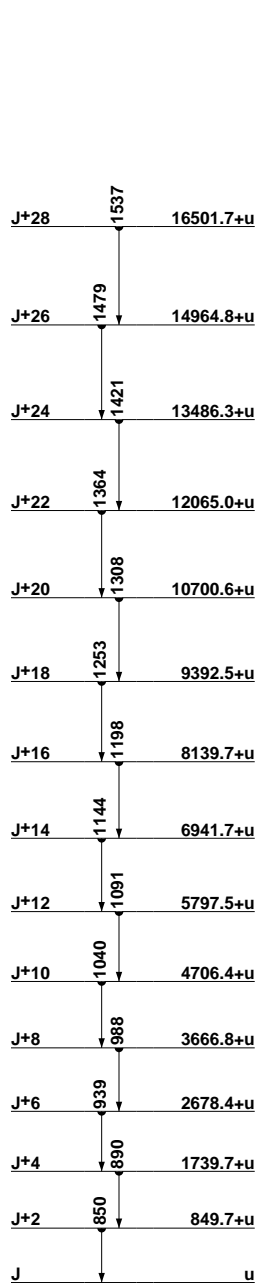


SD-2 band
(⁹⁶DeAA, ⁹⁵DeZZ, ⁹³Ha19)

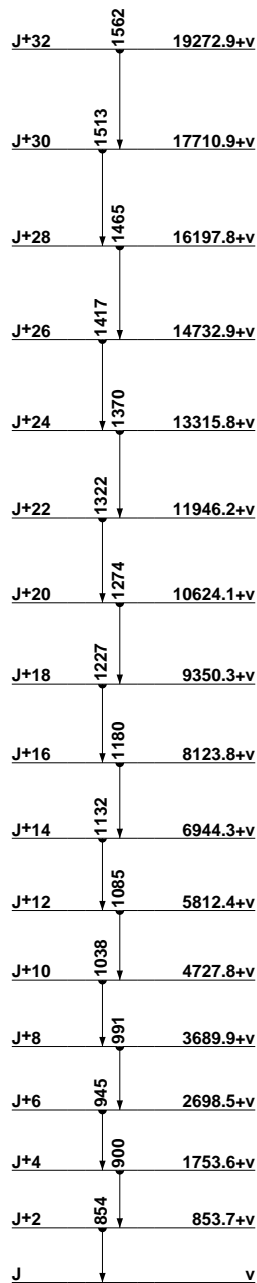
¹⁴⁸₆₄Gd



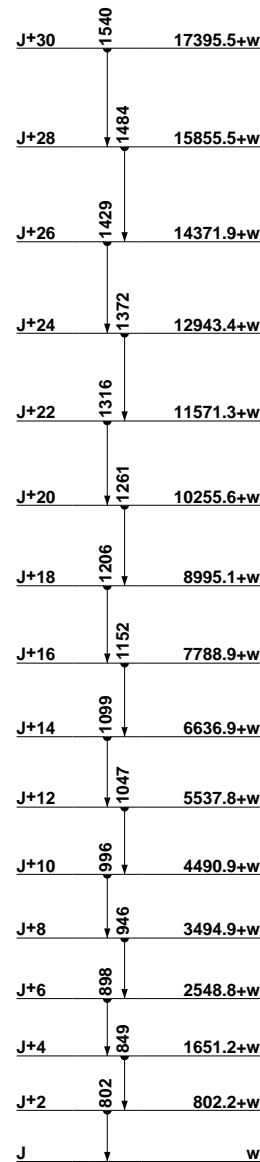
SD-3 band
(95DeZZ,96DeAA)



SD-4 band
(95DeZZ,96DeAA)



SD-5 band
(95DeZZ,96DeAA)



SD-6 band
(95DeZZ,96DeAA)

¹⁴⁸₆₄Gd