

**Adopted Levels, Gammas**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93,599 (2001)	1-Dec-2000

Q(β<sup>-</sup>)=-11961 12; S(n)=12472 15; S(p)=3.44×10<sup>3</sup> 6; Q(α)=2.79×10<sup>3</sup> 3 [2012Wa38](#)  
 Note: Current evaluation has used the following Q record -11709 syst 12505 syst 3265 syst 2349 syst [1995Au04](#).  
 ΔQ(β<sup>-</sup>)=718 keV.  
 ΔS(n)=643 keV.  
 ΔS(p)=566 keV.  
 ΔQ(α)=568 keV.  
 Theory: [1996La03](#), [1988Dr01](#).  
[1986Wi15](#): <sup>92</sup>Mo(<sup>56</sup>Fe,2p2n) E=245 MeV. Observed (Tb K x ray)p.  
[1986Re11](#): <sup>35</sup>Cl on <sup>112</sup>Sn. Measured (K x ray)γ, ms.  
 All data, except for the g.s., are from <sup>96</sup>Ru(<sup>52</sup>Cr,2p2nγ) [1987Go10](#).

<sup>144</sup>Dy Levels

E(level)	J <sup>π</sup> †	T <sub>1/2</sub>	Comments
0.0‡	0 <sup>+</sup>	9.1 s 4	%ε+% <sub>0</sub> β <sup>+</sup> =100; %εp=? T <sub>1/2</sub> : weighted average of 9.0 s 7 ( <a href="#">1986Re11</a> ), 9.1 s 5 ( <a href="#">1986Wi15</a> ), 9 s 1 ( <a href="#">1987PI05</a> ).
492.5‡ 3	(2 <sup>+</sup> )		
1165.0‡ 5	(4 <sup>+</sup> )		
1916.6‡ 6	(6 <sup>+</sup> )		
2023.1#& 6			
2230.4#& 7			
2497.8# 8			
2565.5‡ 6	(8 <sup>+</sup> )		
2817.4# 8			
3117.0‡& 7			
3175.0@& 7			
3655.7‡& 8			
3936.9@& 8			
4335.2‡ 9			
4602.1@ 9			

† From [1987Go10](#) based upon systematics of even-even nuclei.  
 ‡ Band(A): g.s. band.  
 # Band(B): side-band 1.  
 @ Band(C): side-band 2.  
 & Level energy uncertain. Sequence of placement in level scheme for the following pairs of transitions is uncertain: 858.1γ, 207.3γ; 551.5γ, 538.7γ; and 609.5γ, 761.9γ.

γ(<sup>144</sup>Dy)

E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>γ</sub>	I <sub>γ</sub>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>
492.5	(2 <sup>+</sup> )	492.5 3	100	0.0	0 <sup>+</sup>
1165.0	(4 <sup>+</sup> )	672.5 3	100	492.5	(2 <sup>+</sup> )
1916.6	(6 <sup>+</sup> )	751.6 3	100	1165.0	(4 <sup>+</sup> )
2023.1		858.1 4	100	1165.0	(4 <sup>+</sup> )
2230.4		207.3 3	100	2023.1	

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $\gamma(^{144}\text{Dy})$  (continued)

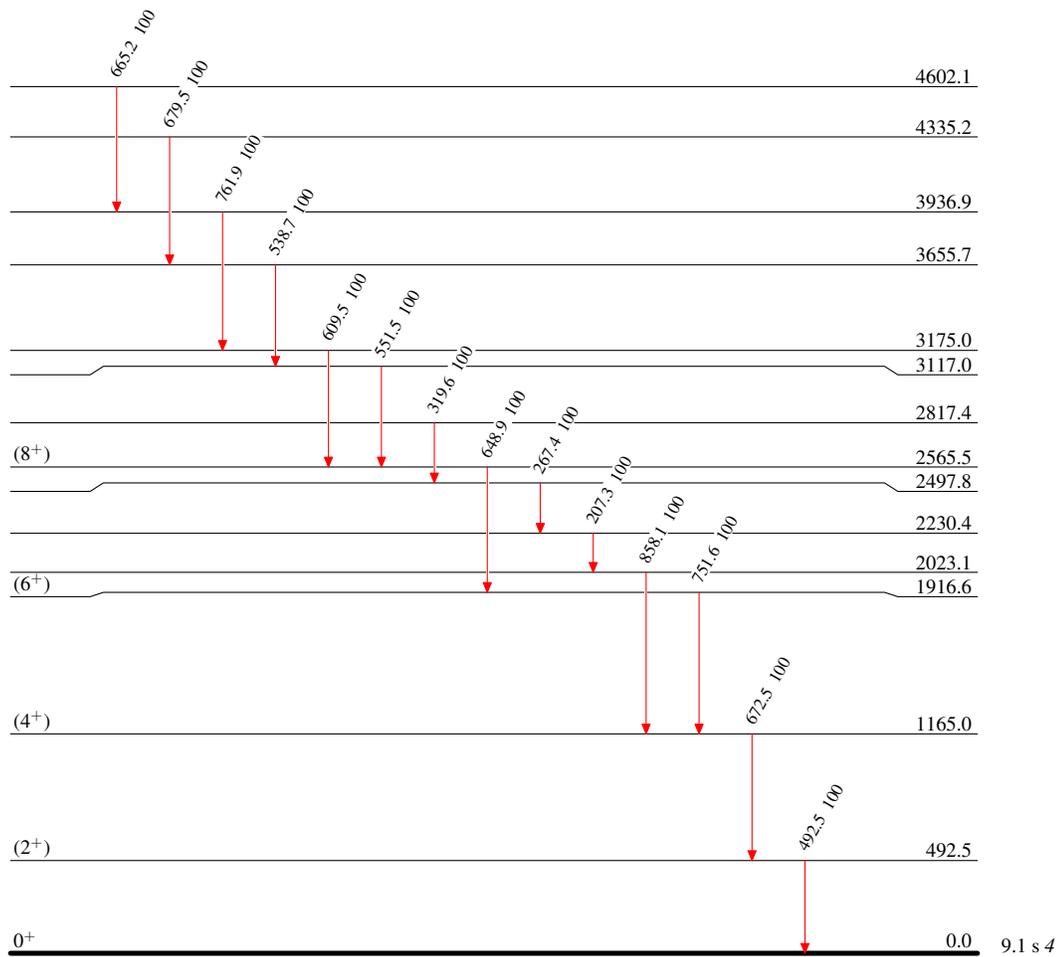
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$	$I_\gamma$	$E_f$	$J_f^\pi$	$E_i(\text{level})$	$E_\gamma$	$I_\gamma$	$E_f$
2497.8		267.4 3	100	2230.4		3655.7	538.7 3	100	3117.0
2565.5	(8 <sup>+</sup> )	648.9 3	100	1916.6	(6 <sup>+</sup> )	3936.9	761.9 4	100	3175.0
2817.4		319.6 3	100	2497.8		4335.2	679.5 5	100	3655.7
3117.0		551.5 3	100	2565.5	(8 <sup>+</sup> )	4602.1	665.2 4	100	3936.9
3175.0		609.5 3	100	2565.5	(8 <sup>+</sup> )				

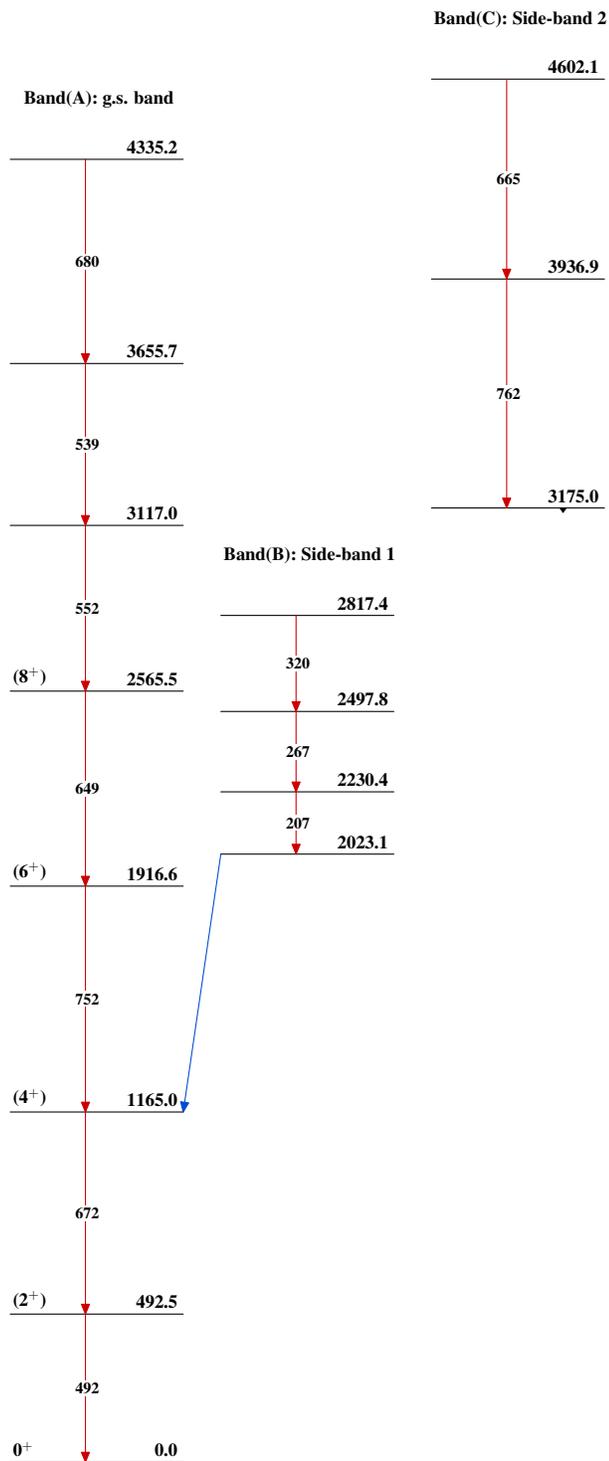
**Adopted Levels, Gammas****Level Scheme**

Intensities: Type not specified

## Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

 $^{144}_{66}\text{Dy}_{78}$

Adopted Levels, Gammas $^{144}_{66}\text{Dy}_{78}$