

Coulomb excitation **1982Ro07,1977Ro27,1983Se09**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 141, 1 (2017)	1-Feb-2017

E(α)=15 MeV (1982Ro07), E(α)=12 MeV (1977Ro27), ²⁰⁸Pb at 4.7 MeV/nucleon (1983Se09), and E(p) and E(d) ≈ 4 MeV (1963Bj04). Other references by 1977Ro27 authors: 1976RoYX, 1976RoZI, 1977RoZK.

¹⁵⁸Dy Levels

B(E2) and B(E3) are from 1982Ro07, unless otherwise noted.

Average g-factor=+0.04 11 for yrast states in region with average J of 14 by rotation of particle-γ angular correlation (1983Se09).

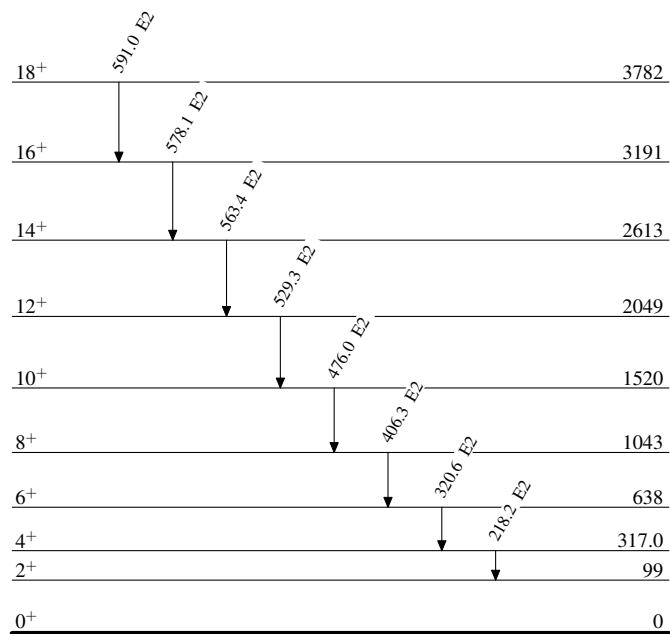
E(level)	J ^π	Comments
0 [†]	0 ⁺	
99 [†]	2 ⁺	B(E2)↑=4.67 4 B(E2)↑: From 1977Ro27, 1982Ro07; other: 4.7 4 (1963Bj04). 1977Ro27 list in Table II the following values (not retrieved by evaluator): 4.67 40 (1968Se02), 4.73 23 (1974Sh12), 4.41 25 (1966Ab01), 4.76 24 (1968Se04), 4.56 27 (F.K. McGowan, and P.H. Stelson, Nuclear Spectroscopy and Reactions, edited by J. Cerny (Academic, New York, 1974), Part C, p. 3).
317.0 [†]	4 ⁺	B(E4)↑=0.026 +42-25; μ=+1.40 24 B(E4)↑: From 1977Ro27. μ: From g-factor=+0.35 6 (1983Se09).
638 [†]	6 ⁺	
946	2 ⁺	B(E2)↑=0.149 8
1043 [†]	8 ⁺	μ=+3.3 10 μ: From g-factor=+0.41 13 (1983Se09).
1085	2 ⁺	B(E2)↑=0.053 8
1398	3 ⁻	B(E3)↑=0.23 5
1520 [†]	10 ⁺	
1610	(2) ⁺	B(E2)↑<0.023
2049 [†]	12 ⁺	
2613 [†]	14 ⁺	
3191 [†]	16 ⁺	
3782 [†]	18 ⁺	

[†] Band(A): K^π=0⁺ ground-state band (quoted by 1983Se09 as from 1981Em01, (HI,xny) dataset).

γ(¹⁵⁸Dy)

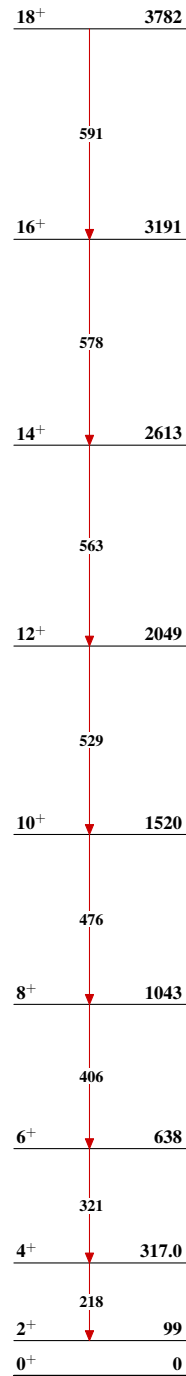
E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]
218.2	317.0	4 ⁺	99	2 ⁺	E2
320.6	638	6 ⁺	317.0	4 ⁺	E2
406.3	1043	8 ⁺	638	6 ⁺	E2
476.0	1520	10 ⁺	1043	8 ⁺	E2
529.3	2049	12 ⁺	1520	10 ⁺	E2
563.4	2613	14 ⁺	2049	12 ⁺	E2
578.1	3191	16 ⁺	2613	14 ⁺	E2
591.0	3782	18 ⁺	3191	16 ⁺	E2

[†] Quoted by 1983Se09 as from 1981Em01 (see (HI,xny) dataset).

Coulomb excitation 1982Ro07,1977Ro27,1983Se09Level Scheme $^{158}_{66}\text{Dy}_{92}$

Coulomb excitation 1982Ro07,1977Ro27,1983Se09

Band(A): $K^\pi=0^+$
ground-state band
(quoted by 1983Se09 as
from 1981Em01, (HI,xn γ)
dataset)

 $^{158}_{66}\text{Dy}_{92}$