Coulomb excitation 1982Ro07,1977Ro27,1963Bj04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 113, 2537 (2012)	1-Mar-2012

Additional information 1.

Coulomb excitation studies have been carried out with α particles at 13 MeV (1977Ro27,1982Ro07), with p and d (1963Bj04), and with ^{208}Pb (1987KuZX). B(E2) and B(E3) are from 1982Ro07 unless otherwise noted.

1963Bj04: Enriched (≈99%) target excited with d and p.

1977Ro27: Enriched (99.53%) target. E(α)=13 MeV. Scattered α's measured in magnetic spectrograph with FWHM=18-30 keV.

1982Ro07: Same as 1977Ro27, with same authors.

1987KuZX: Target excited with ^{208}Pb, E(^{208}Pb)=4.7 MeV/A.

^{156}Dy Levels

E(level)	J^π	Comments
0[†]	0^+	
138[†]	2^+	B(E2)↑=3.72 *3* B(E2)↑: Other: 3.79 *30* (1963Bj04).
828[‡]	2^+	B(E2)↑=0.008 *5*
891[#]	2^+	B(E2)↑=0.180 *11* B(E2)↑: Other: 0.225, deduced from (d,d′) study (1968Gr08).
1367[@]	3^-	B(E3)↑=0.22 *7* B(E3)↑: Other: 0.194 deduced from (d,d′) study (1968Gr08).

[†] Band(A): $K^\pi=0^+$ g.s. band.

[‡] Band(B): Member of the first excited $K^\pi=0^+$ band.

[#] Band(C): Member of the γ-vibrational band ($K^\pi=2^+$).

[@] Band(D): Member of the $K^\pi=0^-$ octupole-vibrational band.

Coulomb excitation 1982Ro07,1977Ro27,1963Bj04

Band(D): Member of the $K^{\pi}=0^{-}$ octupole-vibrational band

3^{-} 1367

Band(C): Member of the γ-vibrational band ($K^{\pi}=2^{+}$)

2^{+} 891

Band(B): Member of the first excited $K^{\pi}=0^{+}$ band

2^{+} 828

Band(A): $K^{\pi}=0^{+}$ g.s. band

2^{+} 138

0^{+} 0