^{150}Nd(α,α2nγ) 1988Ur01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 117, 1 (2014)	1-Oct-2013

E=52 MeV.
Measured: γ, $\gamma\gamma$, $\gamma(\theta)$.
Decay scheme and J^π were presented in 1988Ur01.

^{148}Nd Levels

E(level)	J^π †	E(level)	J^π †	E(level)	J^π †	E(level)	J^π †
0.0‡	0^+	999.3#	3^-	1644.6#	7^-	2471.3‡	(10^+)
301.8‡	2^+	1242.6#	5^-	1856.3‡	8^+	2676.6#	(11^-)
752.5‡	4^+	1280.1‡	6^+	2132.0#	9^-		

† From Adopted Levels; supported by $\gamma(\theta)$ and DCO data from this data set.
‡ Band(A): g.s. band.
# Band(B): negative-parity band.

$\gamma(^{148}$Nd)

According to 1987Ur01 quoted by 1988Ur01 all DCO ratios were measured In $\Delta J=2$ gates for which DCO ratios equal to 1.00 are from dipole, $\Delta J=1$ transitions and DCO ratios equal to 1.94 are from quadrupole, $\Delta J=2$ transitions.

E_γ	I_γ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.†	Comments
205.3	2 *1*	2676.6	(11^-)	2471.3	(10^+)	D	DCO=2.0 *3*.
211.7	6 *1*	1856.3	8^+	1644.6	7^-	D	DCO=1.88 *16*.
275.5	10 *1*	2132.0	9^-	1856.3	8^+	D	DCO=1.82 *13*.
301.8	100 *5*	301.8	2^+	0.0	0^+		Known to be $\Delta J=2$ transition.
339.4	3 *1*	2471.3	(10^+)	2132.0	9^-	D	DCO=2.2 *3*.
364.6	20 *1*	1644.6	7^-	1280.1	6^+	(D)	DCO=1.75 *6*.
402.0	3 *1*	1644.6	7^-	1242.6	5^-	Q	DCO=0.92 *15*.
450.7	90 *5*	752.5	4^+	301.8	2^+	Q	DCO=1.01 *2*.
487.4	8 *1*	2132.0	9^-	1644.6	7^-	Q	DCO=1.02 *8*.
490.1	20 *1*	1242.6	5^-	752.5	4^+	(D)	DCO=1.70 *8*.
527.6	53 *3*	1280.1	6^+	752.5	4^+	Q	DCO=1.01 *2*.
544.6	5 *1*	2676.6	(11^-)	2132.0	9^-	Q	DCO=0.91 *18*.
576.2	16 *1*	1856.3	8^+	1280.1	6^+	Q	DCO=0.99 *3*.
615.0	2 *1*	2471.3	(10^+)	1856.3	8^+	(Q)	DCO=1.06 *12*; for the unresolved 615.0 and 615.1 doublet.
x615.1	5 *2*					(Q)	
697.5	10 *1*	999.3	3^-	301.8	2^+	(D)	DCO=1.56 *15*.

† From DCO and RUL (1988Ur01).
‡ Relative intensity.
x γ ray not placed in level scheme.

^{150}Nd(α,α2nγ) 1988Ur01

Level Scheme

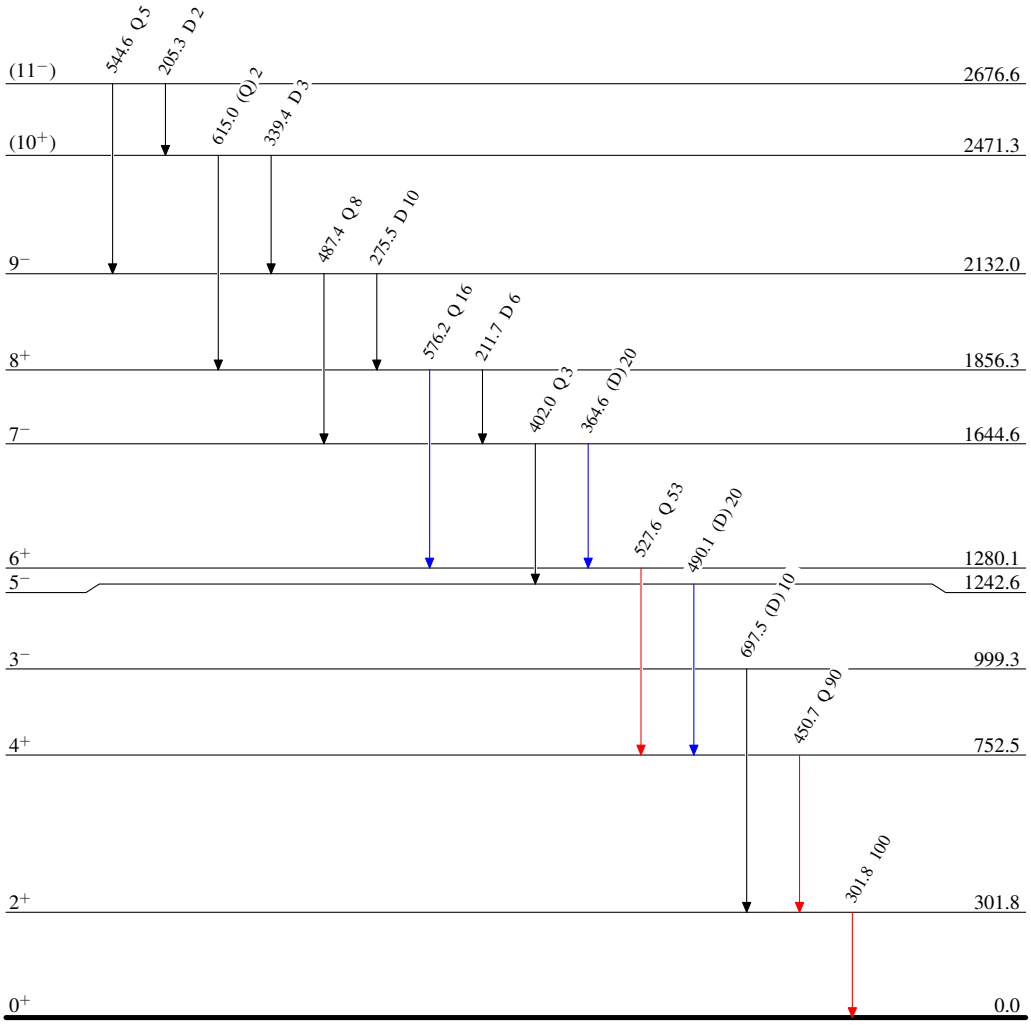
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

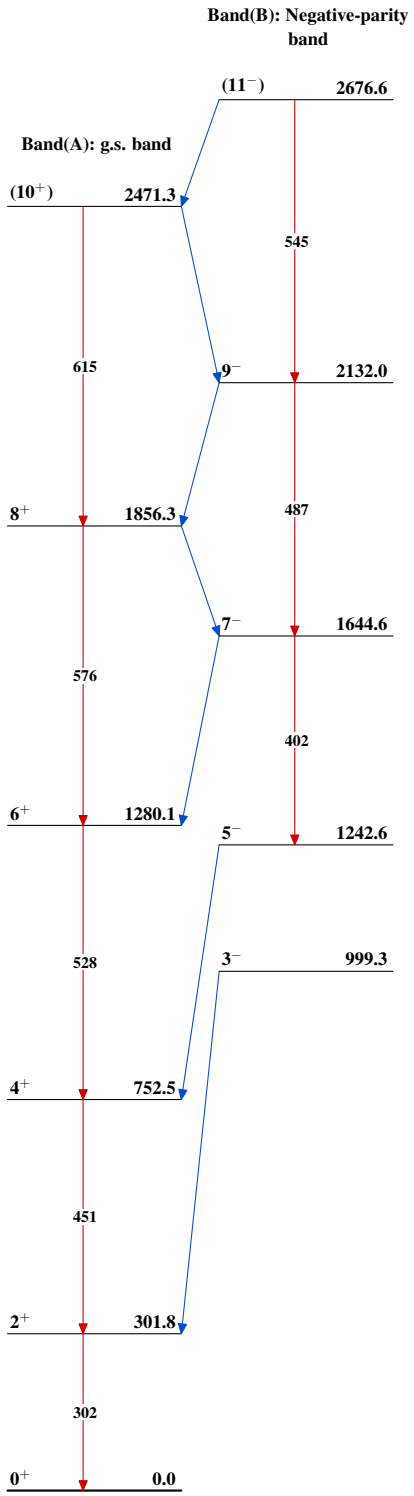
$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{148}_{60}Nd_{88}$

^{150}Nd(α,α2nγ) 1988Ur01



$^{148}_{60}Nd_{88}$