

$^{161}\text{Dy}(^{61}\text{Ni}, ^{60}\text{Ni}\gamma)$ 1995Cr05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 195,1 (2024)	19-Sep-2023

Additional information 1.

$(^{61}\text{Ni}, ^{60}\text{Ni})$ at 270 MeV. Measured particle- γ coincidences in Ge detector array.

 ^{162}Dy Levels

See ^{162}Dy Adopted Levels for band assignments.

E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π
0	0 ⁺	1182.1	5 ⁺	1636.	7 ⁻	1989.	8 ⁺
80.7	2 ⁺	1296.	4 ⁻	1670.2	8 ⁺	2088.6	10 ⁺
264.9	4 ⁺	1324.6	6 ⁺	1759.	6 ⁺	2331.	11 ⁻
547.5	6 ⁺	1374.3	10 ⁺	1845.	8 ⁻	2336.	11 ⁺
920.2	8 ⁺	1407.	5 ⁻	1877.	9 ⁺	2492.6	14 ⁺
963.3	3 ⁺	1490.4	7 ⁺	1901.1	12 ⁺	3145.2? [‡]	16 ⁺
1061.1	4 ⁺	1527.5	6 ⁻	1958.	9 ⁻		

[†] From γ energies.

[‡] 2002Ju08 show the 16⁺ member of the g.s. band as deexcited by a 647.0 γ . The evaluator has chosen to show this level energy and the deexciting γ as questionable.

 $\gamma(^{162}\text{Dy})$

E _{γ}	I _{γ}	E _i (level)	J _i ^π	E _f	J _f ^π	E _{γ}	I _{γ}	E _i (level)	J _i ^π	E _f	J _f ^π
(80.7)		80.7	2 ⁺	0	0 ⁺	925.	<0.8	1845.	8 ⁻	920.2	8 ⁺
184.2	100.0 3	264.9	4 ⁺	80.7	2 ⁺	943.0	2.5 3	1490.4	7 ⁺	547.5	6 ⁺
282.6	94.5 4	547.5	6 ⁺	264.9	4 ⁺	957.	<1.8	2331.	11 ⁻	1374.3	10 ⁺
372.7	79.4 3	920.2	8 ⁺	547.5	6 ⁺	957.2	5.3 9	1877.	9 ⁺	920.2	8 ⁺
454.1	45.9 1	1374.3	10 ⁺	920.2	8 ⁺	962.	<1.8	2336.	11 ⁺	1374.3	10 ⁺
526.8	30.5 1	1901.1	12 ⁺	1374.3	10 ⁺	980.3	<1.0	1527.5	6 ⁻	547.5	6 ⁺
570.4	3.2 2	1490.4	7 ⁺	920.2	8 ⁺	1031.	<0.8	1296.	4 ⁻	264.9	4 ⁺
591.5	4.2 2	2492.6	14 ⁺	1901.1	12 ⁺	1038.	<0.8	1958.	9 ⁻	920.2	8 ⁺
634.9	3.5 3	1182.1	5 ⁺	547.5	6 ⁺	1059.1	1.7 2	1324.6	6 ⁺	264.9	4 ⁺
652.6 [‡]	0.7 1	3145.2?	16 ⁺	2492.6	14 ⁺	1089.	<1.0	1636.	7 ⁻	547.5	6 ⁺
698.4	2.3 2	963.3	3 ⁺	264.9	4 ⁺	1127.6 ^{†‡}	4.3 3	1670.2	8 ⁺	547.5	6 ⁺
714.3	2.5 2	2088.6	10 ⁺	1374.3	10 ⁺	1142.	<1.6	1407.	5 ⁻	264.9	4 ⁺
750.0	3.2 3	1670.2	8 ⁺	920.2	8 ⁺	1442.	<0.5	1989.	8 ⁺	547.5	6 ⁺
778.0	2.5 3	1324.6	6 ⁺	547.5	6 ⁺	1494.	<0.7	1759.	6 ⁺	264.9	4 ⁺
796.2	2.3 4	1061.1	4 ⁺	264.9	4 ⁺						

[†] Poor energy fit. Also, the γ branching from this level implied by this placement differs from the adopted branching. Thus, the evaluator has shown this γ as questionable.

[‡] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

Intensities: Relative I_γ

- ▶ $I_\gamma < 2\% \times I_\gamma^{\max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{\max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - -▶ γ Decay (Uncertain)

