

$^{191}\text{Ir}(^{14}\text{N},5n\gamma)$ 1972Na02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 192,1 (2023)	1-Aug-2023

$E(^{14}\text{N})=85$ MeV pulsed beam; Target: 85% enriched in ^{191}Ir , 15 mg/cm² thick and nat Ir, 10 mg/cm² thick; Detectors: 30 cm³ Ge(Li) detector; Measured: γ singles, $\gamma(t)$, $E\gamma$, $I\gamma$; Deduced: $T_{1/2}$, level scheme.

 ^{200}Po Levels

E(level) [†]	J^π [‡]	$T_{1/2}$	Comments
0	0 ⁺	11.54 min 9	$T_{1/2}$: From Adopted Levels.
668.0 10	2 ⁺		
1279.0 15	4 ⁺		
1763.0 18	6 ⁺		
1775.3 18	8 ⁺	190 ns 60	$T_{1/2}$: From 484 $\gamma(t)$, 611 $\gamma(t)$ and 666 $\gamma(t)$ in 1972Na02, but the value is not corrected for contributions from the 11 ⁻ and 12 ⁺ isomers (see the Adopted Levels for details).

[†] From a least squares fit to $E\gamma$.

[‡] From Adopted Levels.

 $\gamma(^{200}\text{Po})$

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	$\alpha^\#$	Comments
(12.3 3)	1775.3	8 ⁺	1763.0	6 ⁺			E_γ : From adopted gammas.
484 1	1763.0	6 ⁺	1279.0	4 ⁺	E2	0.0347 5	$\alpha(\text{K})=0.02369$ 35; $\alpha(\text{L})=0.00828$ 13; $\alpha(\text{M})=0.002087$ 32 $\alpha(\text{N})=0.000536$ 8; $\alpha(\text{O})=0.0001068$ 17; $\alpha(\text{P})=1.165\times 10^{-5}$ 18
611 1	1279.0	4 ⁺	668.0	2 ⁺	E2	0.02026 29	$\alpha(\text{K})=0.01479$ 21; $\alpha(\text{L})=0.00412$ 6; $\alpha(\text{M})=0.001022$ 15 $\alpha(\text{N})=0.000262$ 4; $\alpha(\text{O})=5.29\times 10^{-5}$ 8; $\alpha(\text{P})=6.01\times 10^{-6}$ 9
668 1	668.0	2 ⁺	0	0 ⁺	E2	0.01668 24	$\alpha(\text{K})=0.01242$ 18; $\alpha(\text{L})=0.00322$ 5; $\alpha(\text{M})=0.000793$ 12 $\alpha(\text{N})=0.0002036$ 30; $\alpha(\text{O})=4.12\times 10^{-5}$ 6; $\alpha(\text{P})=4.76\times 10^{-6}$ 7

[†] From 1972Na02, unless otherwise stated. $\Delta E\gamma$ were estimated by the evaluator.

[‡] From Adopted Levels.

[#] Additional information 1.

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Legend

Level Scheme

-----► γ Decay (Uncertain)