

^{205}Po IT decay (57.4 ms) 1985Ra18,1974Oh06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 166, 1 (2020)	20-Apr-2020

Parent: ^{205}Po : E=1461.21 21; $J^\pi=19/2^-$; $T_{1/2}=57.4$ ms 9; %IT decay=100.0

 ^{205}Po Levels

E(level) [†]	J^π [‡]	$T_{1/2}$ [‡]
0.0 [#]	5/2 ⁻	1.74 h 8
719.30 [@] 4	9/2 ⁻	
880.33 ^{&} 5	13/2 ⁺	0.645 ms 20
1461.21 ^a 21	19/2 ⁻	57.4 ms 9

[†] From least squares fit to E_γ .

[‡] From Adopted Levels.

[#] configuration= $\nu(f_{5/2}^{-1})$.

[@] configuration= $n(f_{5/2}^{-1})\otimes\pi(h_{9/2}^{+2})_2^+$.

[&] configuration= $\nu(i_{13/2}^{-1})$.

^a configuration= $\nu(f_{5/2}^{-1})\otimes\pi(h_{9/2}^{+2})_8^+$.

 $\gamma(^{205}\text{Po})$

E_γ [†]	I_γ ^{‡@}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	α [#]	Comments
161.030 17	5.87 8	880.33	13/2 ⁺	719.30	9/2 ⁻	M2	16.05	$\alpha(\text{K})=11.08$ 16; $\alpha(\text{L})=3.71$ 6; $\alpha(\text{M})=0.950$ 14 $\alpha(\text{N})=0.248$ 4; $\alpha(\text{O})=0.0513$ 8; $\alpha(\text{P})=0.00630$ 10
580.9 2	93.49 9	1461.21	19/2 ⁻	880.33	13/2 ⁺	E3	0.0696	$\alpha(\text{K})=0.0397$ 6; $\alpha(\text{L})=0.0223$ 4; $\alpha(\text{M})=0.00580$ 9 $\alpha(\text{N})=0.001497$ 21; $\alpha(\text{O})=0.000297$ 5; $\alpha(\text{P})=3.16\times 10^{-5}$ 5
719.30 4	98.594 19	719.30	9/2 ⁻	0.0	5/2 ⁻	E2	0.01426	$\alpha(\text{K})=0.01077$ 15; $\alpha(\text{L})=0.00264$ 4; $\alpha(\text{M})=0.000647$ 9 $\alpha(\text{N})=0.0001662$ 24; $\alpha(\text{O})=3.37\times 10^{-5}$ 5; $\alpha(\text{P})=3.94\times 10^{-6}$ 6

[†] From adopted gammas.

[‡] From $I(\gamma+\text{ce})=100$ and α .

[#] Additional information 1.

[@] Absolute intensity per 100 decays.

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Decay Scheme

Intensities: I_γ per 100 parent decays
%IT=100.0

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

