^{209}Bi(p,5nγ) 1974Oh06

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

1974Oh06: E=33-52 MEV; Measured: Eγ, Iγ, Ice, γ(t) and ce(t). Detectors: Ge(Li) (2.3 keV FWHM at 1332 keV) and Si(Li) (2.4 keV FWHM at 976 keV). Deduced: Level scheme, J^π, $T_{1/2}$, transition rates, and configurations.
Other: 1962Ha26.

^{205}Po Levels

E(level)[†]	J^π[‡]	$T_{1/2}$	Comments
0.0[#]	$5/2^-$	1.74 h *8*	J^π,$T_{1/2}$: From Adopted Levels.
719.2[@] *6*	$9/2^-$		
880.0[&] *9*	$13/2^+$	0.644 ms	$T_{1/2}$: From 1962Ha26.
1029.9[a] *9*	$11/2^-$		
1460.8[b] *11*	$19/2^-$	62 ms *5*	$T_{1/2}$: From 581γ(t) in 1974Oh06.

[†] From least squares fit to Eγ.
[‡] From transition multipolarities deduced using conversion electron data in 1974Oh06, unless otherwise stated.
[#] configuration=$\nu(f^{-1}_{5/2})$.
[@] configuration=$\nu(f^{-1}_{5/2})\otimes\pi(h^{+2}_{9/2})_{2^+}$.
[&] configuration=$\nu(i^{-1}_{13/2})$.
[a] configuration=$\nu(f^{-1}_{5/2})\otimes 4^+$.
[b] configuration=$\nu(f^{-1}_{5/2})\otimes\pi(h^{+2}_{9/2})_{8^+}$.

γ(^{205}Po)

E$_\gamma$[†]	E$_i$(level)	J^π_i	E$_f$	J^π_f	Mult.	Comments
160.8 *6*	880.0	$13/2^+$	719.2	$9/2^-$	M2	Mult.: α(exp)=18.2 in 1962Ha26.
310.7 *6*	1029.9	$11/2^-$	719.2	$9/2^-$	M1[#]	
[x]334.2[‡] *6*						
[x]373.8[‡] *6*						
[x]447.7[‡] *6*						
580.8 *6*	1460.8	$19/2^-$	880.0	$13/2^+$	E3	Mult.: α(K)exp=0.037 *6*; K/L=1.8 *3* (1974Oh06).
[x]636.2[‡] *6*						
719.2 *6*	719.2	$9/2^-$	0.0	$5/2^-$	E2[#]	

[†] From 1974Oh06.
[‡] Observed in singles by 1974Oh06, but not placed in the level scheme.
[#] From the measured conversion electron coefficients and sub-shell ratios in 1974Oh06, but the values were not quoted by the authors.
[x] γ ray not placed in level scheme.

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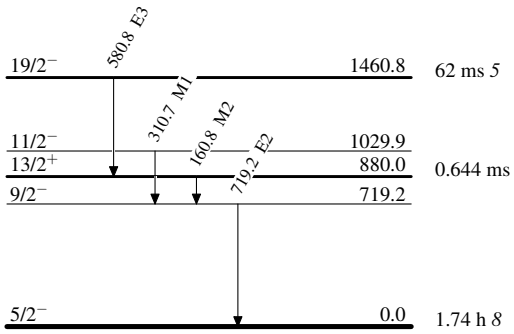
Level Scheme



$^{205}_{84}Po_{121}$