^{209}Bi(π^-,7nγ) 1978Be24

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 196,342 (2024)	1-Sep-2023

1978Be24: E(π^-)=125 MeV from CERN Synchro-cyclotron μ channel. Target: ^{209}Bi, 1.22 g/cm^2 thick. Approximately 5×10^4 stopped π^- per second. 1 planar Ge and 1 Compton-suppressed Ge(Li). Prompt (within 50 ns after a stopped π^-) and delayed (50 ns to 1 μs and 1 μs to next stopped π^-) gammas were measured.

^{202}Pb Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[‡]
0	0$^+$	
960.8 *10*	2$^+$	
1383.0 *15*	4$^+$	
2040.5 *18*	5$^-$	
2169.9 *18*	9$^-$	3.54 h *2*

[†] From a least-square fit to Eγ, by assuming ΔEγ=1 keV.
[‡] From Adopted Levels.

γ(^{202}Pb)

Iγ normalization: Iγ per 100 stopped π^-, normalized to pionic x-ray intensity (1978Be24).

E$_\gamma$[†]	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
422.2	9.4 *12*	1383.0	4$^+$	960.8	2$^+$
657.5	5.0 *14*	2040.5	5$^-$	1383.0	4$^+$
786.9	2.9 *5*	2169.9	9$^-$	1383.0	4$^+$
960.8	8.8 *13*	960.8	2$^+$	0	0$^+$

[†] From 1978Be24.

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Level Scheme

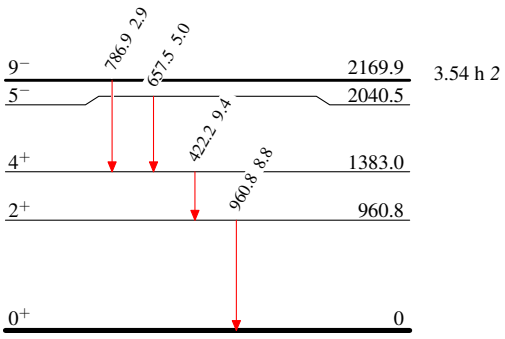
Intensities: Relative I_γ

Legend

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

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

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



$^{202}_{82}Pb_{120}$