

$^{209}\text{Bi}(\pi^{-},9n\gamma)$ [1978Be24](#)

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

Beam: π^{-} accelerated in CERN Synchro-cyclotron to 125 MeV; Target: Bi powder mounted in thin plastic cover; Detectors: Cherenkov counter, four scintillation detectors, planar Ge(Li) detector and Compton-suppressed Ge(Li). The NaI(Tl) detector was mounted in a lead cylinder and used as a Compton-suppressor; Measured: $E\gamma$, $I\gamma$.

 ^{200}Pb Levels

<u>$E(\text{level})^{\dagger}$</u>	<u>$J\pi^{\ddagger}$</u>
0	0^{+}
1026.5	2^{+}
1488.7	4^{+}
1908.5	$(5)^{-}$
2153.7	$(7)^{-}$
2183.2	$(9)^{-}$
2960.2	(10^{+})

† From $E\gamma$.

‡ From Adopted Levels.

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

<u>$E_{\gamma}^{\dagger}$</u>	<u>$I_{\gamma}^{\dagger}$</u>	<u>$E_i(\text{level})$</u>	<u>J_i^{π}</u>	<u>E_f</u>	<u>J_f^{π}</u>	Comments
29.5		2183.2	$(9)^{-}$	2153.7	$(7)^{-}$	$E\gamma$: From adopted gammas. Not observed in 1978Be24 .
245.2	≤ 0.061	2153.7	$(7)^{-}$	1908.5	$(5)^{-}$	
419.8	0.052 4	1908.5	$(5)^{-}$	1488.7	4^{+}	
462.2	0.071 5	1488.7	4^{+}	1026.5	2^{+}	
777	0.017 3	2960.2	(10^{+})	2183.2	$(9)^{-}$	
1026.5	0.067 5	1026.5	2^{+}	0	0^{+}	

† From [1978Be24](#), unless otherwise stated. $I\gamma$ per stopped π^{-} .

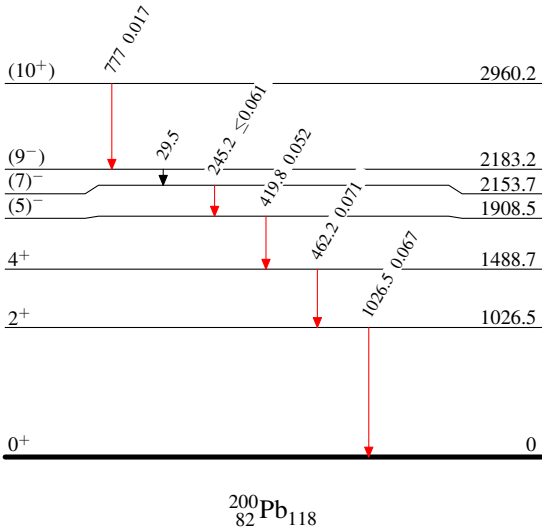
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Level Scheme

Intensities: Type not specified

Legend

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



$^{200}_{82}\text{Pb}_{118}$