

$^{209}\text{Bi}(\pi^-, \text{xn}\gamma)$  1978Be24

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 177, 1 (2021)	3-Sep-2021

1978Be24: E=125 MeV pions were produced from the CERN Synchro-cyclotron muon channel. Target was 1.22 g/cm<sup>2</sup> Bi powder.  $\gamma$  rays were detected with Ge(Li) detectors and NaI(Tl) crystals. Measured  $E_\gamma$ ,  $I_\gamma$ .

 $^{194}\text{Pb}$  Levels

E(level)	$J^\pi$ <sup>†</sup>
0.0	0 <sup>+</sup>
964.2	2 <sup>+</sup>
1539.2	4 <sup>+</sup>
1819.3	(5) <sup>-</sup>
2239.9	(7) <sup>-</sup>

<sup>†</sup> From the Adopted Levels.

 $\gamma(^{194}\text{Pb})$ 

$E_\gamma$	$I_\gamma$ <sup>†</sup>	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
(280.1)		1819.3	(5) <sup>-</sup>	1539.2	4 <sup>+</sup>
420.6	0.57 26	2239.9	(7) <sup>-</sup>	1819.3	(5) <sup>-</sup>
575.0	0.28 12	1539.2	4 <sup>+</sup>	964.2	2 <sup>+</sup>
964.2	0.43 12	964.2	2 <sup>+</sup>	0.0	0 <sup>+</sup>

<sup>†</sup> Intensity per 100 pions.

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Legend

Level SchemeIntensities: Relative  $I_{\gamma}$ 

- ▶  $I_{\gamma} < 2\% \times I_{\gamma}^{\text{max}}$
- ▶  $I_{\gamma} < 10\% \times I_{\gamma}^{\text{max}}$
- ▶  $I_{\gamma} > 10\% \times I_{\gamma}^{\text{max}}$
- - - -▶  $\gamma$  Decay (Uncertain)

