

$^{209}\text{Bi}(\text{pol p},\alpha)$ **1993Ga05,1994Gu05**

Type	Author	History
Full Evaluation	F. G. Kondev	Citation
		NDS 201,346 (2025)

1993Ga05,1994Gu05: Polarized proton beam, E=22 MeV. Measured scattered α 's at $\theta=10^\circ$ to 50° in 5° steps. Detector: magnetic spectrometer. Determined differential cross-sections and analyzing powers.

 ^{206}Pb Levels

E(level) [†]	J ^π [†]	E(level) [†]	J ^π [†]	E(level) [†]	J ^π [†]	E(level) [†]	J ^π [†]
0.0	0 ⁺	3237 3	4 ⁻	4044 3	(3 ⁻ ,4 ⁻)	4818 3	10 ^{+‡}
806 3	2 ⁺	3262 3		4064 3		4833 3	(5 ⁻)
1168 3		3273 3	5 ⁻	4080 3		4862 3	(3 ⁻)
1462 3		3376 3		4120 3	(6 ⁻ ,7 ⁻)	4878 3	(6 ⁻)
1683 3	4 ⁺	3399 3	5 ⁻	4221 3	(3 ⁻ ,4 ⁻)	4912 3	4 ^{+‡}
1994 3		3447 3		4243 3	(7 ⁻ ,8 ⁻)	4925 3	5 ^{+‡}
2149 3		3510 3		4257 3	(5 ⁻ ,7 ⁻)	4941 3	7 ^{+‡}
2200 3	7 ⁻	3555 3		4317 3	2 ⁻	4979 3	
2314 3		3653 3	6 ⁻	4373 3		5011 3	9 ^{+‡}
2423 3		3672 3	4 ⁻	4532 3		5078 3	3 ^{+‡}
2654 3	9 ⁻	3716 3	3 ⁻	4584 3	(7 ⁻)	5112 3	6 ^{+‡}
2782 3	5 ⁻	3769 3		4673 3	(8 ⁻)	5149 3	8 ^{+‡}
2864 3		3828 3	(6 ⁻ ,7 ⁻)	4687 3	(2 ⁻)	5317 3	
2933 3		3980 3	2 ⁻	4728 3	(9 ⁻)	5333 3	
3016 3		3994 3	5 ⁻	4748 3			
3191 3		4012 3		4778 3			

[†] From [1993Ga05](#), unless otherwise stated. J^π based on comparison between experimental differential cross-sections and analyzing powers with theoretical results from DWBA calculations.

[‡] From [1994Gu05](#).