^{208}Pb(p,t)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

These data are primarily from the (p,t) studies of:
1977La10: E=35 MeV. t(θ) measured in magnetic spectrograph with FWHM=15 and 30 keV. Reported 37 levels.
1983Ta05: E=51.9 MeV. t(θ) measured in magnetic spectrograph with FWHM≈90 keV. Reported 24 levels.
1984Wi04: E=20 and 50 MeV. t(θ) measured in magnetic spectrograph with FWHM=15 to 30 keV. Reported 5 levels.
1985Wi12: E=20 and 50 MeV. t(θ) measured in magnetic spectrograph with FWHM=15 to 30 keV. Reported 31 levels.
1987Ku14: E=22 MeV polarized beam. t(θ) measured in magnetic spectrograph with FWHM≈30 keV. Reported 14 levels.
1989Ge03: E=168 MeV. t(θ) measured in magnetic spectrograph with FWHM≈130 keV. Reported 19 levels.
2001Mi33: E=120 MeV polarized beam. t(θ) measured with magnetic spectrometer and FWHM=25-40 keV. Analyzing power was also deduced.
Other (p,t) studies: 1967Fl09 (E=22 MeV, FWHM=10 keV, 30 levels), 1967Re02 (E=40 MeV, reported 6 levels), 1968Sm06 (E=40 MeV, FWHM= 100 keV, 17 levels), 1970Sm07 (E=40.7 MeV, FWHM=40 keV, 25 levels), 1973La22 (E=35 MeV), 1973Ma47 (pol p at E=40 MeV, 4 levels), 1974LuZK, 1974Or01 (E=51.9 MeV, FWHM≈100 keV, 2 levels), 1977Ma27 (reanalysis), 1979Sh02 (E=80 MeV, 8 levels), 1979To14 (pol p at E=22 MeV, FWHM≈50 keV, 2 levels), 1981We03 (E=26.2 MeV, FWHM≈30 keV, 20 levels), and 1985Ya03 (pol p at E=35 and 50 MeV, 1 level).

^{206}Pb Levels

E(level)[†]	J$^\pi$[†]	L[†]	Comments
0	0^+	0	
804 *1*	2^+	2	
1167 *1*	0^+	0	
1339 *1*	3^+		J$^\pi$: From 1984Wi04.
1466 *2*	2^+	2	
1684 *2*	4^+	4	
1702[‡] *4*	1^+		J$^\pi$: From 1984Wi04.
1783 *2*	2^+	2	
1997 *2*	4^+	4	
2147 *2*	2^+	2	
2199 *2*	7^-	7	J$^\pi$: Also analyzing power in 2001Mi33. Dominant configuration=$\nu(p^{-1}_{1/2},i^{-1}_{13/2})$.
2239[‡] *4*			
2314 *2*	0^+	0	
2379 *2*	6^-		J$^\pi$: From 1984Wi04.
2421 *2*	2^+	2	
2644 *3*	3^-	3	J$^\pi$,L: From 1985Wi12.
2655 *3*	9^-	9	J$^\pi$: Also analyzing power in 2001Mi33. Dominant configuration=$\nu(f^{-1}_{5/2},i^{-1}_{13/2})$.
2780 *3*	5^-	5	
2827 *3*	4^-		J$^\pi$: From 1984Wi04.
2865 *3*	7^-	7	J$^\pi$: Also analyzing power in 2001Mi33. Dominant configuration=$\nu(f^{-1}_{5/2},i^{-1}_{13/2})$.
2928 *3*	4^+	4	
2979 *3*	2^+	2	J$^\pi$,L: From 1985Wi12.
3014 *3*	5^-	5	
3119 *3*	3^+		J$^\pi$: From 1984Wi04.
3193 *2*	(5^-)	(5)	J$^\pi$,L: From 1985Wi12.
3256 *3*	6^+	6	J$^\pi$: Also analyzing power in 2001Mi33. Dominant configuration=$\nu(f^{-1}_{5/2},f^{-1}_{7/2})$.
3390 *3*	7^-	7	J$^\pi$: Also analyzing power in 2001Mi33. L: From 2001Mi33; L=(7) is assigned in 1970Sm06 and 1977La10, but L=5 in 1985Wi12. Dominant configuration=$\nu(p^{-1}_{3/2},i^{-1}_{13/2})$.

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^{208}Pb(p,t) (continued)

^{206}Pb Levels (continued)

E(level)[†]	J^{π}[†]	L[†]	Comments
3452 *3*	5^-	5	J^{π},L: From 1985Wi12.
3516 *4*	4^+	4	J^{π},L: From 1985Wi12; L=5 is assigned in 1983Ta05 to a level at ≈3540.
3603 *4*	2^+	2	
3636[‡] *5*	4^+	4	J^{π},L: From 1985Wi12.
3765 *4*	2^+	2	J^{π},L: From 1983Ta05; J=(7^+) is assigned in 1977La10.
3910 *15*	8^+	8	E(level),J^{π},L: From 2001Mi33. Dominant configuration=$\nu(i_{13/2}^{-2})$.
3958 *4*	4^+	4	
3960 *15*	10^+	10	E(level),J^{π},L: From 2001Mi33. Dominant configuration=$\nu(i_{13/2}^{-2})$.
4030 *15*	12^+	12	E(level),J^{π},L: From 2001Mi33. Dominant configuration=$\nu(i_{13/2}^{-2})$.
4113 *4*	4^+	4	
4140 *4*	3^-	3	J^{π},L: From 1983Ta05.
4225 *4*	(4^+)	(4)	
4484 *4*			
4550 *15*	9^-	9	E(level),J^{π},L: From 2001Mi33. Other: E=4560 keV and $J^{\pi}=7^-$ in 1983Ta05. Dominant configuration=$\nu(f_{7/2}^{-1},i_{13/2}^{-1})$.
4900 *15*	7^-	7	E(level),J^{π},L: From 1983Ta05.
5100 *15*	7^-	7	E(level),J^{π},L: From 1983Ta05.
5317 *5*			
5348 *5*			
5383 *5*			
5410 *15*	11^-	11	E(level),J^{π},L: From 1983Ta05. Other: E=5390 keV *35* and $J^{\pi}=11^-$ in 1989Ge03. Dominant configuration=$\nu(h_{9/2}^{-1},i_{13/2}^{-1})$.
5555?[#] *50*			
5610 *60*	(9^-)	(9)	E(level),J^{π},L: From 1989Ge03.
5660 *15*	9^-	9	E(level),J^{π},L: From 2001Mi33. Dominant configuration=$\nu(h_{9/2}^{-1},i_{13/2}^{-1})$.
5800 *15*	8^+	8	E(level),J^{π},L: From 1983Ta05.
6200 *15*	8^+	8	E(level),J^{π},L: From 2001Mi33. Other: E=6100 keV *40* and $J^{\pi}=8^+$,(9^-) in 1989Ge03 and E=6200 keV and $J^{\pi}=9^-$ in 1983Ta05. Dominant configuration=$\nu(h_{9/2}^{-1},f_{7/2}^{-1})$.
6460[@] *60*	(6^+)	(6)	J^{π},L: From 1983Ta05.
6830[@] *60*			
7370[@] *70*		>8	
7860[@] *80*			

[†] From 1977La10, unless otherwise stated.
[‡] From 1985Wi12.
[#] From 1968Sm06.
[@] From 1989Ge03.