^{207}Pb(e,e′) 1979PaZP,1981Pa04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski	NDS 112, 707 (2011)	1-Aug-2010

1979PaZP, 1981Pa04: Facility: MIT linac; Beam: E(e)= 50-340 MeV; Target: 30.3 mg/cm^2 enriched in ^{207}Pb; Detectors: energy loss spectrometer, proportional wire chamber, Cherenkov detector, FWHM 35-50 keV; Measured: E, dσ/dΩ, Mult., $\sigma(\theta)$ at θ=90°, 160°; Deduced: line shape analysis, weak-coupling model interpretation, studied 1-particle 1-hole states. Observed 55% quenching of the cross sections when compared with single-particle predictions. Other references from the same collaboration 1987Pa14, 1980Pa09, 1978Pa10.

Others: 1968Zi02: E=28-73 MeV, FWHM≈200 keV; 1987Ca02 – ground-state charge density determined.

^{207}Pb Levels

E(level)[†]	J$^\pi$[‡]	Mult.[&]	Comments
0	1/2$^-$		J$^\pi$: From the Adopted Levels. configuration: $\nu(3p_{1/2})^{-1}$.
570.9	5/2$^-$,7/2$^-$	E2+M3	Mult.: From 1980Pa09. configuration: $\nu(2p_{5/2})^{-3/2}$.
898.6	1/2$^-$,3/2$^-$	M1+E2	Mult.: From 1980Pa09. configuration: $\nu(3p_{3/2})^{-1}$.
1633.7	11/2$^+$,13/2$^+$	M6+E7	Mult.: From 1980Pa09. configuration: $\nu(1i_{13/2})^{-1}$.
2339.8	5/2$^-$,7/2$^-$	M3+E4	Mult.: From 1980Pa09. configuration: $\nu(2f_{7/2})^{-1}$.
2623.0	3/2$^+$,5/2$^+$	M2+E3	B(E3)↑: 0.67 *4* to the 2.6-MeV doublet (1968Zi02). configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 3^-$(^{208}Pb) doublet.
2662.6	5/2$^+$,7/2$^+$	E3+M4	B(E3)↑: 0.67 *4* to the 2.6-MeV doublet (1968Zi02). configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 3^-$(^{208}Pb) doublet.
2727.6	7/2$^+$,9/2$^+$	M4+E5	Mult.: From 1980Pa09. configuration: $\nu(2g_{9/2})^{+1}$.
3223	(9/2$^+$,11/2$^+$)	(E5)	
3384	9/2$^+$,11/2$^+$	E5	
3413	9/2$^-$,11/2$^-$	E4+M5	
3429			
3509	11/2$^+$,13/2$^+$	E5+M6	Mult.: From 1980Pa09. configuration: $\nu(1i^{+1}_{11/2}$.
3583	9/2$^+$,11/2$^+$	E5	
3620	9/2$^+$,11/2$^+$	E5	
3634			
3650			
3726	(9/2$^+$,11/2$^+$)	(E5)	
3829	(9/2$^+$,11/2$^+$)	E(5)	
3869[#]	9/2$^+$,11/2$^+$	E5	
3901			
3986			
4034			
4103	3/2$^-$,5/2$^-$	E2	B(E2)↑: 0.26 *2* to the 4.1-MeV doublet (1968Zi02). configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 2^+$(^{208}Pb) doublet.
4140	3/2$^-$,5/2$^-$	E2	B(E2)↑: 0.26 *2* to the 4.1-MeV doublet (1968Zi02). configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 2^+$(^{208}Pb) doublet.
4213	(9/2$^+$,11/2$^+$)	E(5)	
4313	7/2$^-$,9/2$^-$	E4	B(E4)↑: 0.21 *3* (1968Zi02). configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 4^+$(^{208}Pb) doublet.
4364	11/2$^-$,13/2$^-$	E6	configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 6^+$(^{208}Pb) doublet.
4404	11/2$^-$,13/2$^-$	E6	configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 6^+$(^{208}Pb) doublet.
4422			

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^{207}Pb(e,e′) 1979PaZP,1981Pa04 (continued)

^{207}Pb Levels (continued)

E(level)[†]	Jπ[‡]	Mult.[&]	Comments
4465			
4558[#]			
4630	15/2⁻,17/2⁻	E8	configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 8^+(^{208}Pb)$ doublet.
4671	15/2⁻,17/2⁻	E8	configuration: Member of the $\nu(3p_{1/2})^{-1}\otimes 8^+(^{208}Pb)$ doublet.
4745	(19/2,21/2)⁻	E10	Mult.: From 1981Pa04.
4806			
4835[#]			
4870[@]			
4884	(19/2,21/2)⁻	E10	Mult.: From 1981Pa04.
4921			
4957	(19/2,21/2)⁻	E10	Mult.: From 1981Pa04.
4987			
5039			
5081			
5177			
5193[@]			
5217	(19/2,21/2)⁻	E10	Mult.: From 1981Pa04.
5267	(5/2⁺,7/2⁺)	(E3)	
5336[@]			
5352			
5440			
5474			
5501[@]			
5548			
5569[@]			
5614			
5689			
5720			
≈5786[@]			E(level): From 1979PaZP.
5840			
5897			
5915[#]			
5952			
5959			
5998[#]			
6031			
6064			
6105[#]			
6146			
6170[#]			
6188[#]			
6228			
6262			
6276			
6310			
6360			
6402[#]			
6449[#]	(23/2⁺,25/2⁺)	(M12)	configuration: Member of the $\nu((1j_{15/2})^{+1}(1i_{13/2})^{-1})\otimes 12^-(208PB)$ multiplet.
6483	23/2⁺,25/2⁺	M12	configuration: Member of the $\nu((1j_{15/2})^{+1}(1i_{13/2})^{-1})\otimes 12^-(208PB)$ multiplet.
6547			
6627	27/2⁺,29/2⁺	M14	configuration: Member of the $\nu((1j_{15/2})^{+1}(1i_{13/2})^{-1})\otimes 14^-(208PB)$ multiplet.
6670	27/2⁺,29/2⁺	M14	configuration: Member of the $\nu((1j_{15/2})^{+1}(1i_{13/2})^{-1})\otimes 14^-(208PB)$ multiplet.
6716			

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^{207}Pb(e,e′) 1979PaZP,1981Pa04 (continued)

^{207}Pb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	Mult.[&]	Comments
6762			
6788			
≈6826[#]			E(level): From 1979PaZP.
6864[#]			
6912			
≈6986			E(level): From 1979PaZP.
7048[#]	23/2$^+$,25/2$^+$	M12	configuration: $\pi((1i_{13/2})^{+1}(1h_{11/2})^{-1})\otimes 12-(^{208}Pb)$.
≈7096	23/2$^+$,25/2$^+$	M12	E(level): From 1979PaZP. configuration: $\pi((1i_{13/2})^{+1}(1h_{11/2})^{-1})\otimes 12-(^{208}Pb)$.
≈7165			E(level): From 1979PaZP.
≈7283			E(level): From 1979PaZP.

[†] Rounded values from the Adopted Levels, unless otherwise noted. ΔE in 1979PaZP is 5 to 20 keV. All states are seen at both 90° and 160°, unless otherwise noted.
[‡] From Mult. of the excitation.
[#] Seen only at 160°.
[@] Seen only at 90°.
[&] From 1979PaZP, unless otherwise noted.