^{194}Pt(pol p,p′) 1991Se04,1990Se13

History

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

1991Se04: E=647 MeV polarized protons were produced from the Clinton P. Anderson Meson Facility at LANL. Target was 99.2% enriched ^{194}Pt. Reaction products were momentum-analyzed with the High Resolution Spectrometer (HRS) (FWHM=50-65 keV) and detected with plastic scintillators. Measured scattered protons, analyzing powers at θ=3° to 21° in steps of 2°. Deduced deformation parameters, B(E2), and E4 transition matrix elements. Comparisons with Coupled-channel calculations.

1990Se13: E=135 MeV polarized protons were produced from the Indiana University Cyclotron Facility (IUCF). Target was 97.4% enriched ^{194}Pt. Reaction products were momentum-analyzed with a QDDM spectrometer (FWHM=60-80 keV) and detected with two scintillators. Measured scattered protons, analyzing powers at θ=10° to 60° in 1.5° steps. Deduced deformation parameters, E2 and E4 transition matrix elements. Comparisons with Coupled-channel calculations.

^{194}Pt Levels

E(level)	J^{π} †	Comments
0.0	0^+	
329	2^+	β_2=−0.161 *2*, B(E2)=1.84 *5* from B(E2)=0.368 *9* (1991Se04). β_2=−0.110 *7* (1990Se13).
622	2^+	B(E2)=0.010 *2* from B(E2)↓=0.0020 *4* (1991Se04).
811	4^+	β_4=−0.044 *2*, B(E4)=0.037 *4* from M(E4)=−1914 e fm^4 *92* (1991Se04). B(E4)=0.038 *3* from M(E4)=−1953 e fm^4 *67* (1990Se13), recalculated by 1991Se04.
1229	4^+	β_4=−0.030 *1*, B(E4)=0.0171 *14* from M(E4)=1307 e fm^4 *55* (1991Se04). B(E4)=0.0131 *15* from M(E4)=1145 e fm^4 *67* (1990Se13), recalculated by 1991Se04.
1911	4^+	β_4=−0.064 *2*, B(E4)=0.078 *6* from M(E4)=2799 e fm^4 *100* (1991Se04). B(E4)=0.052 *3* from M(E4)=2290 e fm^4 *67* (1990Se13), recalculated by 1991Se04.

† As given in 1991Se04.