^{210}Po(d,d′) E=17 MeV 1973El06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 121, 561 (2014)	31-Mar-2014

Others: (p,p′) E=17.8 MeV, (t,t′) E=20 MeV, with 95% ^{210}Po target (1973El06).

Collective excitations were studied primarily by (d,d′), supplemented by (p,p′),(t,t′), using magnetic spectrometer. Measured (d,d′) spectrum at 7 angles (θ=36-90), (p,p′) at 4 angles (θ=34-130), (t,t′) at 5 angles (θ=30-95).

^{210}Po Levels

ΔE: Uncertainty=10 keV; energies are shifted≈7 keV upward.

E(level)‡	Jπ@	Comments
0.0	0^+	
1185 *10*	2^+#	B(E2)(0^+ to 2^+)=0.021 *4* (1973El06) relative to B(E2)(^{206}Pb,0^+ to 2^+)=0.103 (1978Jo04).
≈1420	4^+	
2298 *10*		
2393 *10*	3^-#	E(level): first 3^- excitation of ^{206}Pb,^{208}Pb occurs at 2648,2615 keV, respectively. B(E3)(0^+ to 3^-)=0.63 *7* (1973El06) relative to B(E3)(^{208}Pb,0^+ to 3^-)=0.72 *4* (1968Zi02).
2658 *10*		
2874 *10*		
2920 *10*	5^-#	E(level): first 5^- excitation of ^{206}Pb,^{208}Pb occurs at 2782,3198 keV, respectively.
3033 *10*	5^-#	Close-lying 5^- states divide almost equally the strength observed for 5^-, ^{208}Pb at 3198 keV. Split of 5^- states is attributed to configuration mixing.
3437 *10*		
3801 *10*		
4040 *10*		
4105 *10*		
4146 *10*		
4237 *10*		
4346 *10*		
4376 *10*		

† Uncertainty=10 keV; energies are shifted≈7 keV upward.

‡ Collective excitations are expected at energies close to analogous states of the ^{208}Pb core.

Consistent with absolute cross-sections and angular distributions compared with DWBA calc.

@ From Adopted Levels.