$^{184}W(\alpha,\alpha')$ 1981Ba01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111,275 (2010)	1-Oct-2009

1981Ba01: Eα= 24 MeV; split-pole spectrograph with position-sensitive proportional detector (FWHM≈35); measured $\sigma(\theta)$, θ=40°−140°; coupled-channels analysis.

1974Le16: Eα=12.5-19 MeV; cooled surface-barrier detectors (FWHM≈25 keV); measured excit, θ=140° and 173.5° for population of g.s., 111 and 364 level; coupled-channels calculations; deduced optical potential β_2 and β_4; observed strong destructive nuclear-Coulomb interference effects.

^{184}W Levels

E(level)†	J$^\pi$‡	Comments
0	0^+	
111	2^+	β_2(matter): +0.192 (1974Le16), +0.183 *15* (1981Ba01). β_4(charge): +0.254 (1974Le16), +0.316 *5* (1981Ba01).
364	4^+	β_4(matter): −0.075 (1974Le16), −0.064 *10* (1981Ba01). β_4(charge): −0.089 (1974Le16), −0.18 *4* (1981Ba01).
748	6^+	
903	2^+	
1121	2^+	
1221	3^-	β_3(matter)=+0.048, β_3(charge)=+0.063 (1981Ba01) (if K=0).

† Rounded value from Adopted Levels.

‡ From Adopted Levels.