^{180}Hf(p,t) 1973Oo01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Achterberg, O. A. Capurro, G. V. Marti	NDS 110, 1473 (2009)	31-May-2008

Target: 98.21% enriched ^{180}Hf. FWHM=10 to 12 keV. Angular distributions were measured at θ=12.5°, 27.5°, 42.5°, and 55° to identify L=0 angular momentum transfers. L≠0 transfers were tentatively identified by comparison of the data with shapes of angular distributions to well-known states.

^{178}Hf Levels

E(level)	J^π	L[†]	Comments
0.0[‡]	0^+	0	
92[‡] *10*	2^+	(2)	
304[‡] *10*	4^+		
635[‡] *10*	6^+		
1088? *10*			E(level): may be due to source contaminant.
1179 *10*	2^+	(2)	
1272 *10*			
1325 *10*			
1387 *10*	4^+		E(level): possible doublet.
1448[#] *10*	0^+	0	
1510[#] *10*	2^+	(2)	E(level): doublet.
1562 *10*			
1643 *10*			
1776[@] *10*	0^+	0	
1816[@] *10*	(2^+)	(2)	E(level): doublet.
1874 *10*			
1947 *10*			
1991 *10*			
2024[&] *10*		0	
2056[&] *10*		(2)	
2121 *10*			
2156 *10*			
2203 *10*			
2227 *10*			
2286 *10*			
2316[a] *10*		(0)	
2371[a] *10*		(2)	
2393 *10*			
2435 *10*			
2474 *10*			
2572 *10*			
2628 *10*			
2668 *10*		(2)	
2707 *10*			

[†] L-values have been determined by comparison with shapes of angular distributions for transfers to known states. L=0 transfers have a very distinctive oscillatory pattern which gives a firmer identification. Determination of L=2 transfers is more tentative.
[‡] $K^\pi=0^+$ g.s. rotational band.
[#] $K^\pi=0^+$ band.
[@] $K^\pi=0^+$ band.
[&] $K^\pi=0^+$ band.
[a] $K^\pi=0^+$ band.