^{181}Ta(p,α)   1994Bu02

History

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

1994Bu02: ^{181}Ta(p,α), E(p)=17 MeV. Measured angular distribution of α particles at several angles. Detector: magnetic spectrograph, FWHM≤20 keV.

^{178}Hf Levels

Additional information 1.

E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)
0.0[#]	0$^+$	1447[&] 2	4$^+$	1868[‡] 1		2255 1
93[#] 1	2$^+$	1478[a] 1	8$^-$	1941[a] 1	10$^-$	2310 1
305[#] 1	4$^+$	1506?[‡] 2		2004 1		2354 1
630[#] 2	6$^+$	1559[‡] 1		2023 1		2383 1
1148[@] 1	8$^-$	1598[@] 2	10$^-$	2116 1		2463 1
1200[&] 2	0$^+$	1639[a] 1	3$^-$	2179 1		2508 1
1276[&] 1	2$^+$	1754[‡] 1		2204 1		2537 1
1363[@] 1	9$^-$	1812[‡] 2		2224 1		

[†] J^π and configuration assignments are based on comparisons of experimental cross sections with DWBA values calculated with Nilsson model wave functions.
[‡] Interpreted as a multiplet.
[#] Band(A): $K^\pi=0^+$, Configuration=((π 7/2[404]) − (π 7/2[404])).
[@] Band(B): $K^\pi=8^-$, Configuration=((π 7/2[404]) + (π 9/2[514])).
[&] Band(C): $K^\pi=0^+$.
[a] Band(D): $K^\pi=8^-$.

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Band(D): $K^{\pi}=8^{-}$

10^{-} 1941

Band(B): $K^{\pi}=8^{-}$,
Configuration=((π 7/2[404]) + (π 9/2[514]))

3^{-} 1639

10^{-} 1598

Band(C): $K^{\pi}=0^{+}$

8^{-} 1478

4^{+} 1447

9^{-} 1363

2^{+} 1276

0^{+} 1200

Band(A): $K^{\pi}=0^{+}$,
Configuration=((π 7/2[404]) − (π 7/2[404]))

8^{-} 1148

6^{+} 630

4^{+} 305

2^{+} 93

0^{+} 0.0

$^{178}_{72}$Hf$_{106}$