^{178}Hf(t,α) 1992Bu12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 159, 1 (2019)	30-Aug-2019

^{178}Hf(t,α): 94.7% enriched target. E=17 MeV. Measured Eα and σ(θ). Detector: magnetic spectrograph with position sensitive silicon surface-barrier detector, FWHM=25-30 keV.
$J^\pi(^{178}Hf)=0^+$.

^{177}Lu Levels

E(level)[†]	Jπ[†]	dσ/dΩ (μb/sr)[d]	E(level)[†]	dσ/dΩ (μb/sr)[d]
0.0[‡]	7/2+	89	1501 5	10
123[‡] 4	9/2+	9	1555 5	6
153[#] 4	9/2−	9	1628 6	≈23
293[#] 3	11/2−	130	1651 6	≈24
461[@] 3	5/2+	85	1757 5	21
574[&] 3	1/2+,3/2+	275	1842 5	10
709[&] 3	5/2+,7/2+	162	1897 6	4
812[a] 3	9/2−	15	2009 6	15
959[&a] 3	3/2−,9/2+	30	2037 6	12
1073[b] 3	3/2+	75	2077 5	30
1133[b] 3	5/2+	135	2158 5	14
1191 5		≈20	2230 5	30
1227[b] 5	(7/2+)	10	2294 5	12
1328[c] 5	11/2−	248		

[†] From 1992Bu12.
[‡] $K^\pi=7/2^+$, π7/2[404].
[#] $K^\pi=9/2^-$, π9/2[514].
[@] $K^\pi=5/2^+$, π5/2[402].
[&] $K^\pi=1/2^+$, π1/2[411].
[a] $K^\pi=1/2^-$, π1/2[541].
[b] $K^\pi=3/2^+$, π3/2[411].
[c] $K^\pi=7/2^-$, π7/2[523].
[d] Values measured at 25°. For strong and well-resolved peaks the uncertainty of the absolute cross-sections is≈20 %.