

¹²⁴Te(α ,t) 1979Sz05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	J. Katakura	NDS 112, 495 (2011)	1-Jan-2010

1979Sz05: ¹²⁴Te(α ,t) E=36 MeV; magnetic spectrograph, position-sensitive proportional counter. (E)(Δ E); $\theta=12^\circ, 15^\circ$; FWHM=8 keV, enriched target; deduced L-values are from $\sigma(\theta)$ and $\sigma(^3\text{He,d})/\sigma(\alpha,t)$.

¹²⁵I Levels

E(level)	L [‡]	S [#]	Comments
0.0	2	1.00	
113 4	4	1.79	
188 4	2	0.14	
244 4	0	0.41	
371 4	2	0.069	
539 4	4	0.04	
625 4	(2,4)		
930 4	(4,2)		
1006 4	2		S: 0.70 if 2d3/2, 0.35 if 2d5/2.
1087 [†] 6	(2+5+0)		S: <1.40 if 1h11/2 for L=(5) component.
1195 6	2		S: 0.11 if 2d5/2, 0.22 if 2d3/2.
1249 6	4	0.22	
1336 6	2		S: 0.14 if 2d5/2, 0.28 if 2d3/2.
1365 6			
1392 6	2+(0)	0.18	S: if 2d5/2.
1441 6	2+(0)	0.06	S: if 2d5/2.
1662 6			
1729 6			
1777 6			
1827 8			
1936 8			

[†] Unresolved multiplet.

[‡] From authors' (³He,d) work. Assignments for L=0, 4, 5 are 3s1/2, 1g7/2, 1h11/2, respectively, from shell model; L=2 states are assigned to 2d3/2 (188 keV) or 2d5/2 shell model states.

[#] C²S is relative to C²S(g.s.)=1.