

$^{176}\text{Yb}(\text{p},\alpha)$ 1978Ta10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	V. S. Shirley	NDS 75,377 (1995)	1-Oct-1993

E(p)=16 MeV, $\theta=15^\circ, 20^\circ, 25^\circ, 30^\circ$; enriched (96.4%) targets; measured E(level) (quadrupole-quadrupole-dipole mag spect, FWHM(maximum)=20 keV for E(α)=21-24 MeV), angular distributions, differential cross sections.

 ^{173}Tm Levels

E(level) [‡]	J π [†]	L [#]	Comments
0.0 <i>15</i>		0+2	E(level) and L values are for unresolved 0.0 and 2.5 levels.
(2.46 <i>14</i>)			E(level) from Adopted Levels.
118.60 <i>14</i>		2+4	E(level) from Adopted Levels, L values are for unresolved 118.6 and 124.9 levels.
(124.86 <i>15</i>)			E(level) from Adopted Levels. See comment with 118.6 level.
319.0 [@] <i>18</i>	(7/2 ⁻)	(3+4+6)	L=(3) component is probably for 319.0 level; L=(4) and L=(6) components might be for unresolved 9/2 ⁺ and 11/2 ⁺ members of g.s. band (E(level) expected at 333.8 for 9/2 ⁺ and 343.5 for 11/2 ⁺).
339.8 <i>25</i>			See comment with 319.0 level.
410.4 [@] <i>18</i>	(9/2 ⁻)	5	
526.0 [@] <i>18</i>	(11/2 ⁻)	5	
609.5 <i>17</i>	(1/2 ⁻)	1	
669.5 [@] <i>17</i>	(13/2 ⁻)	2+7	
749.8 <i>18</i>		1,4	
817.9 <i>18</i>		4,5	
856.1 <i>18</i>			
983.0 <i>18</i>			
1137.0 <i>22</i>			
1186.9 <i>31</i>			
1210.6 <i>30</i>			
1243.5 <i>27</i>			
1335.6 <i>18</i>			
1361.5 <i>29</i>			
1414.1 <i>18</i>			
1439.4 <i>29</i>			
1514.4 <i>25</i>			
1588.2 <i>18</i>			
1672.2 <i>18</i>			
1703.3 <i>26</i>			
1901.2 <i>18</i>			
2005.9 <i>25</i>			
2038.5 <i>25</i>			
2069.0 <i>23</i>			
2095.8 <i>23</i>			
2126.7 <i>23</i>			
2150.6 <i>25</i>			
2192.0 <i>28</i>			

[†] From analysis of angular distributions; see ^{173}Tm Adopted Levels for comments on individual assignments.

[‡] Weighted average from all four angles, unless otherwise specified. Energies would have to be increased by 2.5 keV if the first α group is found to correspond to the 2.5 level rather than the 0.0 level.

[#] DWBA analysis of angular distributions.

[@] 7/2[523] band member.