

$^{159}\text{Tb}(^{22}\text{Ne},5n\gamma)$ 1990ChZA,1989McZT

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107, 791 (2006)	15-Sep-2005

 $^{165}\text{Ho}(^{16}\text{O},5n\gamma)$.

Other: 1987ChZC.

1990ChZA, 1989McZT: Measured $E\gamma$, $\gamma\gamma$ coin, $\gamma(t)$. $^{159}\text{Tb}(^{22}\text{Ne},5n\gamma)$, $E(^{22}\text{Ne})=113$ MeV. Detectors: Two compton suppressed germanium detector placed $\pm 90^\circ$ with respect to beam direction; a LEPs at 125° . $^{165}\text{Ho}(^{16}\text{O},5n\gamma)$: $E(^{16}\text{O})=97$ MeV. Detectors: Six BGO shielded Ge array.

 ^{176}Re Levels

E(level)	J^π [†]	Comments
0.0 [‡]	(3 ⁺)	
0.0+x [#]		
70.5+x [#]		
76.2 [‡]	(5 ⁺)	E(level): From $^{165}\text{Ho}(^{16}\text{O},5n\gamma)$ dataset.
170.1+x [#]		
247.6 [‡]	(7 ⁺)	
292.6+x [#]		
453.7+x [#]		
515.6 [‡]	(9 ⁺)	
651.1+x [#]		
874.2+x [#]		
875.1 [‡]	(11 ⁺)	
1126.4+x [#]		
1316.4 [‡]	(13 ⁺)	
1401.4+x [#]		
1695.6+x [#]		
1826.3 [‡]	(15 ⁺)	
2009.3+x [#]		
2336+x ^{#?}		
2392.0 ^{‡@}	(17 ⁺)	
2993.0 ^{‡@}	(19 ⁺)	
3545.9 ^{‡@}	(21 ⁺)	
4142.4 ^{‡@}	(23 ⁺)	
4803.9 ^{‡@}	(25 ⁺)	
5525.9? ^{‡@}	(27 ⁺)	

[†] From Adopted Levels.[‡] K=1 band.[#] Band 3: Levels of this band are not adopted, because these levels are not recognizable in the similar type primary dataset $^{165}\text{Ho}(^{16}\text{O},5n\gamma)$.[@] Adopted level energy is different, because adopted $E\gamma$ and depopulating $E\gamma$ in this dataset from this state is different.

$^{159}\text{Tb}(^{22}\text{Ne},5n\gamma)$ **1990ChZA,1989McZT (continued)** $\gamma(^{176}\text{Re})$

E_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
70.5 \ddagger	70.5+x		0.0+x		313.7	2009.3+x		1695.6+x	
99.6	170.1+x		70.5+x		327 $\#$	2336+x?		2009.3+x	
122.4	292.6+x		170.1+x		359.5	875.1	(11 $^+$)	515.6	(9 $^+$)
161.1	453.7+x		292.6+x		441.3	1316.4	(13 $^+$)	875.1	(11 $^+$)
171.4	247.6	(7 $^+$)	76.2	(5 $^+$)	509.9	1826.3	(15 $^+$)	1316.4	(13 $^+$)
197.4	651.1+x		453.7+x		552.9	3545.9	(21 $^+$)	2993.0	(19 $^+$)
223.1	874.2+x		651.1+x		565.7	2392.0	(17 $^+$)	1826.3	(15 $^+$)
252.2	1126.4+x		874.2+x		596.5	4142.4	(23 $^+$)	3545.9	(21 $^+$)
268.0	515.6	(9 $^+$)	247.6	(7 $^+$)	601.0	2993.0	(19 $^+$)	2392.0	(17 $^+$)
275.0	1401.4+x		1126.4+x		661.5	4803.9	(25 $^+$)	4142.4	(23 $^+$)
294.2	1695.6+x		1401.4+x		722 $\#$	5525.9?	(27 $^+$)	4803.9	(25 $^+$)

\dagger From 1990ChZA.

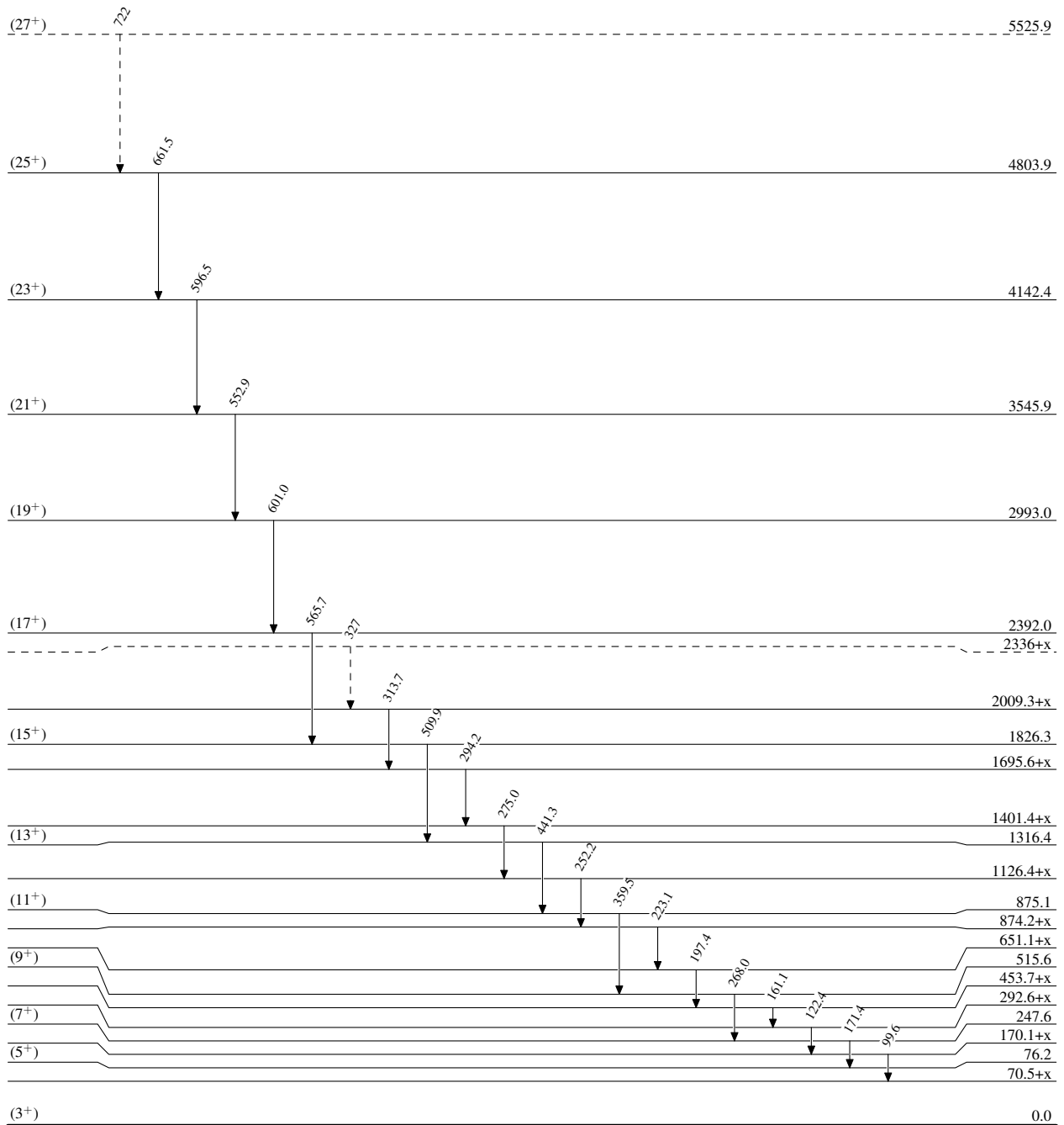
\ddagger From 1989McZT.

$\#$ Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

-----► γ Decay (Uncertain) $^{176}_{75}\text{Re}_{101}$