

$^{181}\text{Tl}$        $Z = 81$        $N = 100$       adopted link      ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE      =    1410.337 ( 0.009) MeV

Qbeta+ =      7.862 ( 0.018) MeV

	Energy T	J+	J-	J-other	T1/2
-----					
S-alpha=	-6.322	( 0.013)	-----		
S-p	= -0.163	( 0.016)	-----		
181TL 1			0.000	(1/2+)	1 3.2 S 3
181TL 2			0.258	(3/2+)	2
181TL 3			0.836	(9/2-)	3 1.40 MS 3
181TL 4			1.031	(1/2+)	4
181TL 5			1.223	(13/2-)	5
181TL 6			1.251	(5/2+)	6
181TL 7			1.265	(11/2-)	7
181TL 8			1.296	(11/2-)	8
181TL 9			1.531	(17/2-)	9
181TL 10			1.548	(9/2+)	10
-----					
181TL 11			1.620	(15/2-)	11
181TL 12			1.646	(15/2-)	12
181TL 13			1.911	(21/2-)	13
181TL 14			1.924	(13/2+)	14
181TL 15			2.028	(19/2-)	15
181TL 16			2.058	(19/2-)	16
181TL 17			2.362	(25/2-)	17
181TL 18			2.367	(17/2+)	18
-----					
S-2p	= 2.388	( 0.015)	-----		
181TL 19			2.503	(23/2-)	19
181TL 20			2.536	(23/2-)	20
-----					
181TL 21			2.863	(29/2-)	21
181TL 22			3.028	(27/2-)	22
181TL 23			3.074	(27/2-)	23
181TL 24			3.657	(27/2-)	24
-----					
S-p	= -0.163	( 0.016)	-----		
S-n	= 11.480	( 0.071)	-----		
S-2p	= 2.388	( 0.015)	-----		
S-2n	= 20.672	( 0.040)	-----		
S-alpha=	-6.322	( 0.013)	-----		
-----					
S+p	= -1.315	( 0.015)	-----		
S+n	= -8.600	( 0.015)	-----		
S+2p	= 0.000	( 0.000)	-----		

S+2n = -19.931 ( 0.013)  
S+alpha = 8.213 ( 0.009)

gap p = -1.477 ( 0.022)  
gap n = 2.880 ( 0.072)  
gap 2p = 0.000 ( 0.000)  
gap 2n = 0.741 ( 0.042)  
gap alpha = 1.891 ( 0.016)