

^{153}Tm $Z = 69$ $N = 84$ adopted link ENSDF link

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

BE = 1234.902 (0.012) MeV

Qbeta+ = 6.494 (0.015) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-5.248	(0.017)	-----		
153TM	1			0.000 (11/2-)	1 1.48 S 1
153TM	2			0.043 (1/2+)	2 2.5 S 2
153TM	3			0.135 (3/2+)	3
153TM	4			0.504 (5/2+)	4
153TM	5			0.547 (7/2-,9/2-)	5
153TM	6			0.674 (7/2-,9/2-)	6
S-p	=	0.761	(0.015)	-----	
153TM	7			0.791 (15/2-)	7
153TM	8			0.805	8
153TM	9			0.843	9
153TM	10			0.887	10

153TM	11			0.892	11
153TM	12			0.909	12
153TM	13			0.939	13
153TM	14			0.961	14
153TM	15			1.020	15
153TM	16			1.102	16
153TM	17			1.134	17
153TM	18			1.152	18
153TM	19			1.327	19
153TM	20			1.365	20

153TM	21			1.439 (19/2-)	21
153TM	22			1.456	22
153TM	23			1.617	23
153TM	24			1.776	24
153TM	25			1.786 (23/2-)	25
153TM	26			1.854	26
153TM	27			1.879 (25/2-)	27
153TM	28			2.035	28
153TM	29			2.039	29
153TM	30			2.240 (27/2-)	30

153TM	31			2.812 (27/2+)	31
153TM	32			3.016 (29/2+)	32
153TM	33			3.089 (31/2+)	33
153TM	34			3.249 (29/2-)	34
153TM	35			3.423 (31/2+)	35

153TM	36				3.608	(31/2-)	36
153TM	37				3.635	(31/2-)	37
153TM	38				3.660	(31/2+)	38
153TM	39				3.912	(33/2-)	39
153TM	40				3.996	(35/2+)	40

153TM	41				4.131	(35/2-)	41
153TM	42				4.149	(37/2+)	42
153TM	43				4.187	(37/2-)	43
153TM	44				4.335	(39/2-)	44
153TM	45				4.541	(39/2+)	45
153TM	46				4.704	(39/2)	46
153TM	47				4.873	(41/2)	47
153TM	48				4.919	(43/2-)	48
S-2p	=	4.928	(0.015)	-----			
153TM	49				5.180	(41/2)	49
153TM	50				5.317	(41/2)	50

153TM	51				5.349	(43/2)	51
153TM	52				5.580	(43/2)	52
153TM	53				5.956	(45/2)	53
153TM	54				6.078	(47/2)	54
153TM	55				6.128	(47/2+)	55
153TM	56				6.196	(47/2-)	56
153TM	57				6.667	(51/2+)	57
153TM	58				6.900	(51/2-)	58
153TM	59				7.207	(49/2)	59
153TM	60				7.353	(51/2)	60

153TM	61				7.724	(53/2)	61
153TM	62				7.976	(55/2)	62
153TM	63				8.134	(55/2)	63
153TM	64				9.169	(57/2)	64

S-p	=	0.761	(0.015)	-----			
S-n	=	10.324	(0.055)	-----			
S-2p	=	4.928	(0.015)	-----			
S-2n	=	19.344	(0.023)	-----			
S-alpha	=	-5.248	(0.017)	-----			
S+p	=	-3.249	(0.021)				
S+n	=	-8.526	(0.019)				
S+2p	=	-3.150	(0.023)				
S+2n	=	-18.796	(0.016)				
S+alpha	=	5.108	(0.017)				
gap p	=	-2.487	(0.026)				
gap n	=	1.798	(0.058)				
gap 2p	=	1.777	(0.027)				

gap 2n = 0.548 (0.028)
gap alpha = -0.140 (0.024)