

^{159}Tb $Z = 65$ $N = 94$ adopted link ENSDF link

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

BE = 1302.020 (0.001) MeV

	Energy T	J+		J-		J-other	T1/2
159TB 1	0.000	3/2+					1 STABLE
159TB 2	0.058	5/2+					2 55.0 PS 22
159TB 3	0.138	7/2+					3 41.3 PS 21
S-alpha= 0.139 (0.002)-----							
159TB 4	0.241	9/2+					4 27.2 PS 12
159TB 5	0.348	5/2+					5
159TB 6	0.362	11/2+					6 15.2 PS 2
159TB 7				0.364	5/2-		7 153 PS 5
159TB 8				0.388	7/2-		8
159TB 9	0.428	7/2+					9
159TB 10						0.455 (9/2-)	10

159TB 11	0.510	13/2+					11 9.17 PS 22
159TB 12						0.532 (9/2+)	12
159TB 13						0.537	13
159TB 14				0.545	11/2-		14
159TB 15				0.548	7/2-		15
159TB 16	0.581	1/2+					16 0.76 PS 10
159TB 17	0.618	3/2+					17
159TB 18	0.669	15/2+					18 6.2 PS 4
159TB 19	0.674	5/2+					19 2.3 PS LT
159TB 20						0.678 (9/2-)	20

159TB 21						0.761 (7/2+)	21
159TB 22	0.777	7/2+					22
159TB 23				0.799	15/2-		23
159TB 24				0.822	11/2-		24
159TB 25						0.855 (1/2-)	25
159TB 26						0.857 (9/2+)	26
159TB 27	0.860	17/2+					27 3.98 PS 20
159TB 28						0.891 (5/2-)	28
159TB 29						0.946 (1/2+&3/2-)	29
159TB 30						0.971 (1/2+)	30

159TB 31						0.978 (3/2+)	31
159TB 32						1.009 (11/2+)	32
159TB 33						1.018 (5/2+)	33
159TB 34						1.049 (7/2+)	34
159TB 35	1.052	19/2+					35 2.45 PS 8
159TB 36						1.087	36
159TB 37						1.099 (5/2+)	37

159TB 38						1.102	(7/2+)	38
159TB 39						1.156	(1/2+)	39
159TB 40						1.218	(3/2+&5/2+)	40

159TB 41						1.264		41
159TB 42		1.283	21/2+					42 1.57 PS 16
159TB 43						1.325		43
159TB 44						1.358		44
159TB 45						1.392	(7/2+&9/2+)	45
159TB 46						1.439		46
159TB 47		1.505	23/2+					47 1.05 PS 13
159TB 48						1.530		48
159TB 49						1.567		49
159TB 50						1.604		50

159TB 51						1.634		51
159TB 52						1.666		52
159TB 53						1.712		53
159TB 54						1.743		54
159TB 55		1.770	25/2+					55
159TB 56						1.823		56
159TB 57						1.872		57
159TB 58						1.888		58
159TB 59						1.904		59
159TB 60						1.943		60

159TB 61		2.019	27/2+					61
159TB 62		2.312	29/2+					62
159TB 63		2.583	31/2+					63
159TB 64		2.893	33/2+					64
159TB 65		3.179	35/2+					65
159TB 66		3.498	37/2+					66
159TB 67						3.794	(39/2+)	67

S-p = 6.131 (0.001)-----
S-n = 8.133 (0.002)-----
S-2p = 14.651 (0.004)-----
S-2n = 14.911 (0.001)-----
S-alpha= 0.139 (0.002)-----

S+p = -7.429 (0.001)
S+n = -6.375 (0.002)
S+2p = -12.242 (0.002)
S+2n = -14.072 (0.002)
S+alpha = 0.730 (0.001)

gap p = -1.297 (0.002)
gap n = 1.758 (0.002)
gap 2p = 2.410 (0.005)

gap 2n = 0.840 (0.002)
gap alpha = 0.869 (0.002)