

^{153}Tb $Z = 65$ $N = 88$ adopted link ENSDF link

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

BE = 1255.373 (0.004) MeV

Qbeta+ = 1.569 (0.004) MeV

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

S-alpha=	-2.703	(0.006)	-----		
153TB 1	0.000	5/2+			1 2.34 D 1
153TB 2	0.081	7/2+			2 0.49 NS 2
153TB 3	0.148	3/2+			3 0.84 NS 3
153TB 4			0.163	11/2-	4 186 US 4
153TB 5				0.214 (7/2)-	5
153TB 6				0.219 3/2+,5/2+	6
153TB 7				0.230 (9/2-,11/2-)	7
153TB 8	0.241	5/2+			8
153TB 9	0.254	7/2+			9
153TB 10			0.263	9/2-	10 0.22 NS 2

153TB 11			0.275	5/2-	11
153TB 12	0.325	9/2+			12
153TB 13	0.372	5/2+			13
153TB 14	0.390	7/2+			14
153TB 15	0.445	9/2+			15
153TB 16	0.510	7/2+			16
153TB 17			0.511	15/2-	17
153TB 18	0.529	11/2+			18 0.60 NS 3
153TB 19			0.535	13/2-	19
153TB 20				0.537 5/2-,7/2-	20

153TB 21	0.543	5/2+			21
153TB 22	0.572	9/2+			22
153TB 23				0.597 (9/2)-	23
153TB 24				0.624 1/2,3/2,5/2+	24
153TB 25	0.630	11/2+			25
153TB 26				0.652	26
153TB 27	0.660	5/2+			27
153TB 28				0.695 7/2-,9/2-	28
153TB 29				0.710 1/2,3/2,5/2+	29
153TB 30				0.722 7/2+,9/2+	30

153TB 31				0.723 1/2,3/2,5/2+	31
153TB 32			0.726	9/2-	32
153TB 33				0.727 5/2-,7/2-	33
153TB 34				0.741 (7/2+)	34
153TB 35	0.755	13/2+			35
153TB 36				0.767 1/2,3/2-	36

153TB 37						0.773	(5/2,7/2)-	37
153TB 38						0.790	7/2+,9/2+	38
153TB 39						0.791	(11/2+)	39
153TB 40						0.800	(5/2)+	40

153TB 41				0.807	9/2-			41
153TB 42		0.848	13/2+					42
153TB 43						0.877		43
153TB 44						0.883	(9/2-,11/2-)	44
153TB 45						0.957		45
153TB 46				0.960	7/2-			46
153TB 47						0.967	(17/2-)	47
153TB 48						0.968	(15/2+)	48
153TB 49						0.979	(19/2-)	49
153TB 50						1.010	(11/2-,13/2-)	50

153TB 51						1.064		51
153TB 52						1.067	(15/2+)	52
153TB 53				1.083	7/2-			53
153TB 54						1.105	(5/2-,7/2-)	54
153TB 55						1.131	5/2-,7/2-	55
153TB 56				1.152	7/2-			56
153TB 57		1.170	1/2+					57
153TB 58						1.187		58
153TB 59						1.199	(17/2+)	59
153TB 60						1.219		60

153TB 61						1.226	(5/2,7/2)+	61
153TB 62						1.240	(7/2)+	62
153TB 63						1.283	(1/2+)	63
153TB 64						1.305		64
153TB 65						1.341	7/2-,9/2-	65
153TB 66						1.342	3/2+,5/2+	66
153TB 67				1.365	9/2-			67
153TB 68						1.391	1/2,3/2,5/2+	68
153TB 69						1.423	(19/2+)	69
153TB 70				1.429	9/2-			70

153TB 71						1.474	19/2(-)	71
153TB 72						1.495	(21/2-)	72
153TB 73						1.533	(23/2-)	73
153TB 74						1.603		74
153TB 75						1.627		75
153TB 76						1.682	(21/2+)	76
153TB 77						1.745		77
153TB 78						1.762	(5/2,7/2,9/2)-	78
153TB 79						1.779	(7/2)-	79
153TB 80						1.791	5/2-,7/2-,9/2-	80

153TB 81						1.823	(9/2,11/2,13/2)	81-

153TB 82						1.825	(9/2)-	82
153TB 83						1.836	(7/2)-	83
153TB 84				1.858	7/2-			84
153TB 85						1.913	(9/2-)	85
153TB 86						1.924	(23/2+)	86
153TB 87						1.940	(7/2)-	87
153TB 88						2.011	5/2-, 7/2-	88
153TB 89						2.020	(21/2+)	89
153TB 90						2.024	(7/2-, 9/2-)	90

153TB 91						2.087	(23/2+)	91
153TB 92						2.095	(25/2-)	92
153TB 93						2.096	(19/2+)	93
153TB 94						2.120	(7/2, 9/2)-	94
153TB 95						2.121		95
153TB 96						2.156	(27/2-)	96
153TB 97						2.211	(25/2+)	97
153TB 98						2.467	(27/2+)	98
153TB 99						2.534	27/2(+)	99
153TB 100		2.612	27/2+					100

153TB 101						2.614	23/2(+)	101
153TB 102						2.705	25/2(+)	102
153TB 103						2.740	(29/2-)	103
153TB 104		2.787	29/2+					104
153TB 105						2.827	(31/2-)	105
153TB 106						2.830	27/2(+)	106
153TB 107		2.952	31/2+					107
153TB 108						2.990	29/2(+)	108
153TB 109		3.023	31/2+					109
153TB 110						3.186	31/2(+)	110

153TB 111				3.320	33/2-			111
153TB 112		3.392	33/2+					112
153TB 113						3.414	33/2(+)	113
153TB 114		3.472	35/2+					114
153TB 115						3.490		115
153TB 116						3.494	(35/2-)	116
153TB 117						3.608	(35/2+)	117
153TB 118						3.672	35/2(+)	118
153TB 119				3.807	37/2-			119

S-p =	3.895	(0.004)	-----					
153TB 120						3.957	37/2(+)	120

153TB 121		3.995	37/2+					121
153TB 122				4.083	39/2-			122
153TB 123		4.111	39/2+					123
153TB 124						4.177		124
153TB 125						4.210	(39/2+)	125
153TB 126						4.268	39/2(+)	126

153TB 127		4.372	41/2-			127
153TB 128				4.601	41/2(+)	128
153TB 129				4.622	(41/2+)	129
153TB 130		4.695	43/2-			130

153TB 131				4.837	(43/2+)	131
153TB 132				4.945		132
153TB 133				4.956	43/2(+)	133
153TB 134		5.023	45/2-			134
153TB 135				5.330	(45/2+)	135
153TB 136		5.375	47/2-			136
153TB 137				5.633	(47/2+)	137
153TB 138				5.722	(47/2+)	138
153TB 139				5.737		139
153TB 140				5.757	(49/2-)	140

153TB 141				6.128	(51/2-)	141
153TB 142				6.133	(49/2+)	142
153TB 143				6.486	(51/2+)	143
153TB 144				6.516		144
153TB 145				6.555	(51/2+)	145
153TB 146				6.566	(53/2-)	146
153TB 147				6.947	(55/2-)	147
153TB 148				6.989	(53/2+)	148
153TB 149				7.219		149
153TB 150				7.433	(55/2+)	150

153TB 151				7.447	(57/2-)	151
153TB 152				7.825	(59/2-)	152
153TB 153				7.880	(57/2+)	153
153TB 154				7.977		154
153TB 155				8.347	(59/2+)	155
153TB 156				8.393	(61/2-)	156
S-n	=	8.668	(0.040)	-----		
153TB 157				8.759	(63/2-)	157
153TB 158				8.791	(61/2+)	158
153TB 159				8.814		159
153TB 160				9.401	(65/2-)	160

153TB 161				9.735		161
153TB 162				9.741	(67/2-)	162

S-p	=	3.895	(0.004)	-----		
S-n	=	8.668	(0.040)	-----		
S-2p	=	11.239	(0.004)	-----		
S-2n	=	15.833	(0.006)	-----		
S-alpha	=	-2.703	(0.006)	-----		

S+p	=	-6.369	(0.008)	-----		

S+n = -6.914 (0.045)
S+2p = -9.304 (0.018)
S+2n = -16.079 (0.011)
S+alpha = 2.056 (0.024)

gap p = -2.474 (0.009)
gap n = 1.754 (0.061)
gap 2p = 1.934 (0.018)
gap 2n = -0.247 (0.012)
gap alpha = -0.647 (0.024)