

^{194}Tl $Z = 81$ $N = 113$ adopted link ENSDF link

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

BE = 1529.403 (0.014) MeV

Qbeta+ = 5.246 (0.014) MeV

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

S-alpha=	-3.471	(0.014)	-----		
194TL 1			0.000 2-		1 33.0 M 5
194TL 2				0.192 (0)-	2
194TL 3			0.204 1-		3
194TL 4				0.225 (2)-	4
194TL 5				0.260 (7+)	5 32.8 M 2
194TL 6				0.271 (3)-	6
194TL 7			0.368 1-		7
194TL 8				0.460 (2-)	8
194TL 9				0.522 1(-)	9
194TL 10				0.553 (8-)	10

194TL 11				0.589 (2-)	11
194TL 12				0.598 (9-)	12
194TL 13				0.694 (10-)	13
194TL 14				0.753 (0-,1-)	14
194TL 15				0.786 (1-)	15
194TL 16				0.833 (1-)	16
194TL 17				0.973 (11-)	17
194TL 18				0.979 (1-,2-)	18
194TL 19				0.999 1(-)	19
194TL 20				1.011 (1-)	20

194TL 21				1.152 (1-)	21
194TL 22				1.179 (1-)	22
194TL 23				1.188 (0-,1-)	23
194TL 24				1.217 (12-)	24
194TL 25				1.272 (0-,1-,2-)	25
194TL 26				1.435 (11-)	26
194TL 27	1.519	1+			27
194TL 28				1.553 (0,1)	28
194TL 29				1.603 (0-,1,2-)	29
194TL 30				1.621 (13-)	30

194TL 31				1.639 (1-)	31
194TL 32				1.708 (1-)	32
194TL 33				1.723 (0-,1)	33
194TL 34				1.741 (12-)	34
194TL 35				1.753 (0,1)	35
194TL 36				1.795 (11+)	36

194TL 37				1.810	(1)	37		
194TL 38				1.843	(12-)	38		
194TL 39				1.859	(0,1,2-)	39		
194TL 40				1.904	(14-)	40		

194TL 41				1.939	(12+)	41		
194TL 42				1.998	(13-)	42		
194TL 43				2.031	(12+)	43		
194TL 44				2.056	(13+)	44		
194TL 45				2.115	(13-)	45		
194TL 46				2.133	(14+)	46		
194TL 47				2.192	(1,2-)	47		
194TL 48				2.214	(14+)	48		
194TL 49				2.238	(15+)	49		
194TL 50				2.261	(14-)	50		

194TL 51				2.343	(0-,1)	51		
194TL 52				2.373	(15-)	52		
194TL 53				2.393	(16+)	53		
194TL 54				2.401	(15+)	54		
194TL 55				2.476	(14-)	55		
194TL 56				2.568	(17+)	56		
194TL 57				2.604	(15-)	57		
194TL 58				2.629	(16+)	58		
194TL 59				2.664	(16-)	59		
194TL 60				2.715	(15-)	60		

194TL 61				2.780	(16-)	61		
194TL 62				2.858	(18+)	62		
194TL 63				2.859	(17-)	63		
194TL 64				2.882	(17+)	64		
194TL 65				2.942	(16-)	65		
194TL 66				3.022	(18-)	66		
194TL 67				3.142	(17-)	67		
194TL 68				3.161	(19+)	68		

S-p	=	3.164	(0.021)					
194TL 69				3.205	(18+)	69		
194TL 70				3.263	(17-)	70		

194TL 71				3.301	(19-)	71	0.74 PS	+25-17
194TL 72				3.389	(18-)	72		
194TL 73				3.425	(18-)	73		
194TL 74				3.508	(20-)	74	0.73 PS	+55-24
194TL 75				3.517	(18-)	75		
194TL 76				3.522	(20+)	76		
194TL 77				3.531	(19+)	77		
194TL 78				3.641	(19-)	78		
194TL 79				3.687	(19-)	79	1.18 PS	GT
194TL 80				3.777	(20-)	80		

194TL 81			3.884	(21+)	81		
194TL 82			3.885	(21-)	82	0.44 PS	+18-12
194TL 83			3.887	(20-)	83	0.83 PS	GT
194TL 84			3.897	(20+)	84		
194TL 85			4.100	(21-)	85	0.82 PS	+14-10
194TL 86			4.136	(21-)	86	0.57 PS	+12-9
194TL 87			4.213	(22-)	87	0.49 PS	+17-10
194TL 88			4.238	(22+)	88		
194TL 89			4.340	(22-)	89	0.83 PS	+28-14
194TL 90			4.440	(22-)	90	0.62 PS	+14-10

194TL 91			4.573	(23+)	91		
194TL 92			4.642	(23-)	92	0.20 PS	+5-3
194TL 93			4.721	(23-)	93	1.25 PS	+31-21
194TL 94			4.819	(23-)	94	1.04 PS	GT
194TL 95			4.895	(24+)	95	0.87 PS	+45-24
194TL 96			5.038	(24-)	96	0.29 PS	+8-6
194TL 97			5.082	(24-)	97	0.97 PS	+49-21
194TL 98			5.258	(25+)	98	0.35 PS	+14-8
194TL 99			5.492	(25-)	99		
194TL 100			5.656	(26+)	100	0.33 PS	+17-8

194TL 101			6.104	(27+)	101	0.33 PS	+10 -6
194TL 102			6.587	(28+)	102	0.31 PS	+8-6

S-p = 3.164 (0.021)-----
S-n = 7.532 (0.015)-----
S-2p = 8.743 (0.021)-----
S-2n = 17.208 (0.035)-----
S-alpha= -3.471 (0.014)-----

S+p = -4.090 (0.015)
S+n = -9.289 (0.018)
S+2p = -5.650 (0.028)
S+2n = -16.702 (0.018)
S+alpha = 5.139 (0.031)

gap p = -0.925 (0.026)
gap n = -1.758 (0.024)
gap 2p = 3.094 (0.035)
gap 2n = 0.506 (0.039)
gap alpha = 1.668 (0.034)