

^{204}Tl $Z = 81$ $N = 123$ adopted link ENSDF link

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

BE = 1607.525 (0.001) MeV
 Qbeta- = 0.764 (0.002) MeV
 Qbeta+ = 0.344 (0.001) MeV

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

S-alpha=	-0.469 (0.027)				
204TL 1			0.000 2-		1 3.783 Y 12
204TL 2				0.140 (1)-	2
204TL 3				0.146 (0-)	3 18.7 NS 14
204TL 4				0.300 (1,2)-	4
204TL 5				0.319 1-,2-	5
204TL 6				0.348 (3,4)-	6
204TL 7				0.414 (4-)	7 6 NS LT
204TL 8				0.415 (1,2-)	8
204TL 9				0.425 (1,2)-	9
204TL 10			0.428 4-		10

204TL 11				0.432 (1,2)-	11
204TL 12				0.472 (1,2)-	12
204TL 13				0.488 0-,1-,2-	13
204TL 14				0.536 (1,2)-	14
204TL 15				0.626 (1-,2-)	15
204TL 16				0.629 (1-,2-)	16
204TL 17				0.678 (2,3)-	17
204TL 18				0.736 (0-,1-,2-)	18
204TL 19				0.737 (1-,2-)	19
204TL 20				0.764 0-,1-,2-	20

204TL 21				0.859 (2-)	21
204TL 22				0.873 (3,4)-	22
204TL 23			0.906 2-		23
204TL 24				0.966 (3,4)-	24
204TL 25				1.013 0-,1-,2-	25
204TL 26				1.046 (3,4)-	26
204TL 27				1.051 0-,1-,2-	27
204TL 28				1.059	28
204TL 29				1.100	29
204TL 30				1.104 (7)+	30 61.7 US 10

204TL 31				1.121 0-,1-,2-	31
204TL 32				1.134 0-,1-,2-	32
204TL 33				1.181 (3,4)-	33
204TL 34				1.204 0-,1-,2-	34
204TL 35				1.250 0-,1-,2-	35

204TL 36				1.286	(6)+	36
204TL 37				1.375	(2)-	37
204TL 38				1.393	(2)-	38
204TL 39				1.399	(4,5)	39
204TL 40				1.405	0-,1-,2-	40

204TL 41				1.416		41
204TL 42				1.424	(2)-	42
204TL 43				1.454	(8+)	43
204TL 44				1.463		44
204TL 45				1.474	0-,1-,2-	45
204TL 46				1.482	(2-)	46
204TL 47				1.500		47
204TL 48				1.516	0-,1-,2-	48
204TL 49				1.524		49
204TL 50				1.545	0-,1-,2-	50

204TL 51				1.584		51
204TL 52				1.640		52
204TL 53				1.650	(8,9+)	53
204TL 54				1.652	0-,1-,2-	54
204TL 55				1.673		55
204TL 56				1.683	0-,1-,2-	56
204TL 57				1.709		57
204TL 58				1.710		58
204TL 59				1.731	(8,9)	59
204TL 60				1.741	0-,1-,2-	60

204TL 61				1.787		61
204TL 62				1.813		62
204TL 63				1.830	(7)+	63
204TL 64				1.834	2-,3-,4-	64
204TL 65		1.850	2-			65
204TL 66				1.902	(2)-	66
204TL 67		1.939	2-			67
204TL 68		1.949	2-			68
204TL 69		1.967	2-			69
204TL 70				1.980	2-,3-,4-	70

204TL 71				1.997		71
204TL 72				2.045	(LE 3)	72
204TL 73				2.054	(LE 3)	73
204TL 74				2.085	(LE 3)	74
204TL 75				2.114	(LE 3)	75
204TL 76				2.117		76
204TL 77				2.135		77
204TL 78				2.146	(2-)	78
204TL 79				2.159	(0,1,2)-	79
204TL 80				2.188		80

204TL	81				2.206	(LE 3)	81
204TL	82				2.214	(LE 3)	82
204TL	83				2.228	2-,3-,4-	83
204TL	84				2.252	(2-,3-,4-)	84
204TL	85				2.262	(LE 3)	85
204TL	86				2.274	(LE 3)	86
204TL	87				2.311		87
204TL	88				2.319		88

S-p = 6.366 (0.002)-----
S-n = 6.656 (0.002)-----
S-2p = 14.571 (0.023)-----
S-2n = 14.508 (0.002)-----
S-alpha= -0.469 (0.027)-----

S+p = -6.713 (0.002)
S+n = -7.546 (0.002)
S+2p = -10.260 (0.008)
S+2n = -14.050 (0.002)
S+alpha = 3.051 (0.003)

gap p = -0.347 (0.003)
gap n = -0.890 (0.002)
gap 2p = 4.311 (0.025)
gap 2n = 0.459 (0.003)
gap alpha = 2.582 (0.027)