

$^{198}\text{Tl}$        $Z = 81$        $N = 117$       adopted link      ENSDF link

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

BE = 1562.280 ( 0.008) MeV

Qbeta+ = 3.426 ( 0.008) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-2.258	( 0.008)	-----		
198TL 1			0.000 2-		1 5.3 H 5
198TL 2				0.173 0-,1-	2 4.5 NS 10
198TL 3				0.260 (2)-	3
198TL 4			0.283 3-		4
198TL 5			0.290 1-		5
198TL 6			0.382 1-		6
198TL 7				0.398 1-,2-,3-	7
198TL 8	0.544	7+			8 1.87 H 3
198TL 9			0.649 1-		9
198TL 10				0.656 0-,1-	10
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198TL 11				0.674 (6,8)+	11
198TL 12				0.687 (5,7,9)+	12 150 NS 40
198TL 13				0.742 (10-)	13 32.1 MS 10
198TL 14			0.865 1-		14
198TL 15			0.934 8-		15 12.3 NS 3
198TL 16				0.966 (6,8)+	16
198TL 17				0.977 (6,8,10)+	17
198TL 18				1.001 (6,8)+	18
198TL 19			1.006 9-		19
198TL 20			1.129 10-		20
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198TL 21				1.141 0-,1-	21
198TL 22				1.190 (7,9)+	22
198TL 23				1.230	23
198TL 24				1.290 (7,9)+	24
198TL 25			1.388 11-		25
198TL 26				1.617 (8,10)+	26
198TL 27			1.634 12-		27
198TL 28			1.654 10-		28
198TL 29				1.780 (7)	29
198TL 30			1.837 11-		30
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198TL 31				1.866	31
198TL 32				1.873	32
198TL 33				1.875	33
198TL 34				1.893 (9,11)+	34
198TL 35				1.922 11	35
198TL 36				2.004	36

198TL 37						2.004		37
198TL 38						2.014		38
198TL 39				2.036	13-			39
198TL 40				2.085	12-			40
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198TL 41						2.090	(10,12)+	41
198TL 42		2.154	11+					42
198TL 43						2.190		43
198TL 44						2.197		44
198TL 45		2.214	12+					45
198TL 46						2.255		46
198TL 47						2.263		47
198TL 48						2.280	(12-)	48
198TL 49		2.325	13+					49
198TL 50				2.333	14-			50
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198TL 51						2.367		51
198TL 52				2.401	13-			52
198TL 53						2.430		53
198TL 54		2.443	14+					54
198TL 55						2.474		55
198TL 56						2.482	(13-)	56
198TL 57						2.489		57
198TL 58						2.505		58
198TL 59						2.591		59
198TL 60				2.612	14-			60
-----								
198TL 61						2.625		61
198TL 62						2.636		62
198TL 63						2.646		63
198TL 64		2.666	15+					64
198TL 65				2.690	15-			65
198TL 66						2.717		66
198TL 67						2.793		67
198TL 68				2.822	15-			68
198TL 69				2.838	14-			69
198TL 70		2.865	16+					70
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198TL 71						3.009		71
198TL 72						3.017	14	72
198TL 73				3.096	16-			73
198TL 74				3.145	16-			74
198TL 75		3.234	17+					75
198TL 76						3.423		76
198TL 77				3.491	17-			77
198TL 78		3.537	18+					78
198TL 79				3.763	18-			79
198TL 80				3.900	19-			80
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198TL 81				4.068	20-			81

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S-p    =  4.278 ( 0.008)-----  
S-n    =  7.246 ( 0.016)-----  
S-2p   = 10.968 ( 0.008)-----  
S-2n   = 16.175 ( 0.014)-----  
S-alpha= -2.258 ( 0.008)-----  
  
S+p    = -4.992 ( 0.010)  
S+n    = -8.602 ( 0.029)  
S+2p   = -7.420 ( 0.024)  
S+2n   = -15.661 ( 0.009)  
S+alpha =  4.353 ( 0.016)  
  
gap p   = -0.714 ( 0.013)  
gap n   = -1.356 ( 0.033)  
gap 2p  =  3.548 ( 0.025)  
gap 2n  =  0.514 ( 0.017)  
gap alpha =  2.095 ( 0.018)
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