

^{199}Tl $Z = 81$ $N = 118$ adopted link ENSDF link

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

BE = 1570.882 (0.028) MeV

Qbeta+ = 1.487 (0.028) MeV

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

S-alpha=	-2.083	(0.028)	-----		
199TL 1	0.000	1/2+			1 7.42 H 8
199TL 2	0.367	3/2+			2 1.5 NS LT
199TL 3				0.720 (5/2)+	3
199TL 4			0.749 9/2-		4 28.4 MS 2
199TL 5			1.118 11/2-		5
199TL 6				1.121 1/2,3/2,5/2(+)	6
199TL 7				1.205 (7/2+)	7
199TL 8				1.242 1/2,3/2,5/2	8
199TL 9				1.395 (11/2-)	9
199TL 10			1.450 13/2-		10

199TL 11				1.482 1/2,3/2,5/2	11
199TL 12				1.502 1/2(+) TO 5/2(+)	12)
199TL 13				1.528 1/2,3/2,5/2	13
199TL 14				1.554 1/2,3/2,5/2	14
199TL 15				1.632 1/2,3/2,5/2	15
199TL 16				1.658 1/2,3/2,5/2(+)	16
199TL 17				1.695 1/2,3/2,5/2(+)	17
199TL 18				1.717 (13/2-)	18
199TL 19				1.725 1/2,3/2,5/2	19
199TL 20				1.750 1/2,3/2,5/2(+)	20

199TL 21				1.769 1/2,3/2,5/2	21
199TL 22				1.867 (15/2-)	22
199TL 23				1.891 1/2,3/2,5/2(+)	23
199TL 24				1.898 1/2,3/2,5/2	24
199TL 25				1.930 1/2,3/2,5/2(+)	25
199TL 26				1.944 (9/2-, 11/2-, 13/2	26-)
199TL 27				1.959 1/2,3/2,5/2	27
199TL 28				1.977 1/2,3/2,5/2	28
199TL 29				1.985 (17/2-)	29
199TL 30				2.032 1/2,3/2,5/2(+)	30

199TL 31				2.080 (15/2+)	31
199TL 32				2.160 1/2,3/2,5/2	32
199TL 33				2.207 1/2,3/2,5/2(+)	33)
199TL 34				2.226 1/2,3/2,5/2	34
199TL 35				2.237 1/2,3/2,5/2(+)	35
199TL 36				2.367 1/2,3/2,5/2(+)	36

199TL 37				2.434	1/2,3/2,5/2(+)	37
199TL 38				2.472	(19/2-)	38
199TL 39				2.548	1/2,3/2,5/2(+)	39
199TL 40				2.643	1/2,3/2,5/2(+)	40)

S-p = 4.394 (0.028)-----

S-n = 8.602 (0.029)-----

S-2p = 11.498 (0.028)-----

S-2n = 15.848 (0.031)-----

S-alpha= -2.083 (0.028)-----

S+p = -5.480 (0.030)

S+n = -7.059 (0.029)

S+2p = -7.948 (0.030)

S+2n = -15.264 (0.031)

S+alpha = 4.110 (0.031)

gap p = -1.086 (0.041)

gap n = 1.543 (0.041)

gap 2p = 3.550 (0.041)

gap 2n = 0.584 (0.044)

gap alpha = 2.027 (0.042)