

$^{200}\text{Tl}$        $Z = 81$        $N = 119$       adopted link      ENSDF link

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

BE = 1577.941 ( 0.006) MeV

Qbeta+ = 2.456 ( 0.006) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-1.667	( 0.006)	-----		
200TL 1			0.000 2-		1 26.1 H 1
200TL 2			0.148 0-		2 7.10 NS 15
200TL 3			0.257 1-		3
200TL 4			0.290 1-	0.289 (2)-	4
200TL 5			0.290 1-		5
200TL 6			0.324 (3)-		6
200TL 7			0.451 1-		7
200TL 8			0.526 1-		8
200TL 9			0.541 4-		9
200TL 10			0.605 1-		10
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200TL 11	0.754	7+			11 34.0 MS 9
200TL 12	0.762	5+			12 0.33 US 5
200TL 13				0.886 (6)+	13
200TL 14	1.024	6+			14
200TL 15				1.174 (6,7,8)+	15
200TL 16			1.244 7-		16 4.8 NS 2
200TL 17				1.247 (8-)	17
200TL 18				1.323 (9,10)-	18
200TL 19				1.349	19
200TL 20				1.442 (10,11)-	20
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200TL 21				1.659 (11,12)-	21
200TL 22				1.889 (12,13)-	22
200TL 23				2.070	23
200TL 24				2.237 (13,14)-	24
200TL 25				2.548 (14,15)-	25

S-p = 4.790 ( 0.006)-----  
S-n = 7.059 ( 0.029)-----  
S-2p = 12.044 ( 0.006)-----  
S-2n = 15.661 ( 0.009)-----  
S-alpha= -1.667 ( 0.006)-----

S+p = -5.513 ( 0.015)  
S+n = -8.205 ( 0.015)  
S+2p = -8.282 ( 0.015)  
S+2n = -15.076 ( 0.006)

S+alpha = 3.976 ( 0.011)

gap p = -0.723 ( 0.016)

gap n = -1.146 ( 0.032)

gap 2p = 3.763 ( 0.016)

gap 2n = 0.585 ( 0.011)

gap alpha = 2.310 ( 0.013)