

^{223}Th $Z = 90$ $N = 133$ adopted link ENSDF link

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

BE = 1710.107 (0.008) MeV

Qbeta+ = 1.560 (0.011) MeV

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

S-alpha=	-7.567 (0.010)				
223TH 1				0.000 (5/2)+	1 0.60 S 2
223TH 2				0.051 (7/2)+	2
223TH 3				0.119 (9/2)+	3
223TH 4				0.181 (9/2-)	4
223TH 5				0.209 (7/2)+	5
223TH 6				0.212 (11/2)+	6
223TH 7				0.243 (11/2-)	7
223TH 8				0.247 (3/2)+	8
223TH 9				0.310 (5/2)+	9
223TH 10				0.320 (13/2+)	10

223TH 11				0.324 (13/2)-	11
223TH 12				0.412 (15/2-)	12
223TH 13				0.429 (15/2)+	13
223TH 14				0.547 (17/2)-	14
223TH 15				0.570 (17/2)+	15
223TH 16				0.657 (19/2-)	16
223TH 17				0.706 (19/2)+	17
223TH 18				0.838 (21/2)-	18
223TH 19				0.858 (21/2)+	19
223TH 20				0.962 (23/2-)	20

223TH 21				1.022 (23/2)+	21
223TH 22				1.179 (25/2)-	22
223TH 23				1.185 (25/2)+	23
223TH 24				1.314 (27/2)-	24
223TH 25				1.371 (27/2)+	25
223TH 26				1.552 (29/2)+	26
223TH 27				1.558 (29/2)-	27
223TH 28				1.702 (31/2)-	28

S-p = 4.525 (0.009)-----

S-n = 5.889 (0.013)-----

S-2p = 8.156 (0.009)-----

S-2n = 13.697 (0.011)-----

S-alpha= -7.567 (0.010)-----

S+p = -2.812 (0.011)

S+n = -7.461 (0.012)
S+2p = -6.591 (0.013)
S+2n = -13.218 (0.009)
S+alpha = 7.235 (0.012)

gap p = 1.713 (0.014)
gap n = -1.572 (0.018)
gap 2p = 1.565 (0.016)
gap 2n = 0.479 (0.015)
gap alpha = -0.332 (0.016)