

^{221}Th $Z = 90$ $N = 131$ adopted link ENSDF link

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

BE = 1696.410 (0.008) MeV

Qbeta+ = 2.409 (0.057) MeV

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

S-alpha=	-8.625 (0.011)				
221TH 1				0.000 (7/2+)	1 1.74 MS 3
221TH 2				0.047	2
221TH 3				0.251 (11/2+)	3
221TH 4				0.488 (13/2-)	4
221TH 5				0.573 (15/2+)	5
221TH 6				0.747 (17/2-)	6
221TH 7				0.947 (19/2+)	7
221TH 8				1.079 (21/2-)	8
221TH 9				1.356 (23/2+)	9
221TH 10				1.472 (25/2-)	10

221TH 11				1.776 (27/2+)	11
221TH 12				1.935 (29/2-)	12
221TH 13				2.251 (31/2+)	13
221TH 14				2.421 (33/2-)	14

S-p = 4.093 (0.010)-----
S-n = 5.821 (0.016)-----
S-2p = 7.032 (0.011)-----
S-2n = 13.666 (0.057)-----
S-alpha= -8.625 (0.011)-----

S+p = -2.164 (0.087)
S+n = -7.808 (0.013)
S+2p = -5.473 (0.060)
S+2n = -13.697 (0.011)
S+alpha = 8.007 (0.013)

gap p = 1.928 (0.088)
gap n = -1.987 (0.020)
gap 2p = 1.559 (0.061)
gap 2n = -0.032 (0.058)
gap alpha = -0.618 (0.017)