

$^{222}\text{Th}$        $Z = 90$        $N = 132$       adopted link      ENSDF link

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

BE = 1704.218 ( 0.010) MeV

Qbeta+ = 0.581 ( 0.011) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-8.133	( 0.014)	-----		
222TH 1	0.000	0+			1 2.24 MS 3
222TH 2	0.183	2+			2 240 PS 20
222TH 3	0.440	4+			3 46 PS 6
222TH 4			0.467	3-	4
222TH 5			0.651	5-	5
222TH 6	0.750	6+			6 45 PS LE
222TH 7			0.924	7-	7
222TH 8	1.094	8+			8
222TH 9			1.255	9-	9
222TH 10	1.461	10+			10
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222TH 11			1.623	11-	11
222TH 12	1.851	12+			12
222TH 13			2.016	13-	13
222TH 14	2.260	14+			14
222TH 15			2.432	15-	15
222TH 16	2.688	16+			16
222TH 17			2.873	17-	17
222TH 18	3.134	18+			18
222TH 19			3.341	19-	19
222TH 20	3.596	20+			20
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222TH 21			3.836	21-	21
222TH 22	4.078	22+			22
222TH 23			4.350	23-	23
222TH 24	4.578	24+			24
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S-p	= 4.617	( 0.058)	-----		
222TH 25				4.883 (25-)	25
222TH 26				5.098 (26+)	26
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S-p	= 4.617	( 0.058)	-----		
S-n	= 7.808	( 0.013)	-----		
S-2p	= 7.647	( 0.013)	-----		
S-2n	= 13.629	( 0.017)	-----		
S-alpha=	-8.133	( 0.014)	-----		
S+p	= -2.154	( 0.076)			
S+n	= -5.889	( 0.013)			

S+2p = -6.038 ( 0.018)  
S+2n = -13.350 ( 0.014)  
S+alpha = 7.701 ( 0.015)

gap p = 2.463 ( 0.096)  
gap n = 1.919 ( 0.018)  
gap 2p = 1.609 ( 0.022)  
gap 2n = 0.279 ( 0.022)  
gap alpha = -0.432 ( 0.021)