

^{234}Th $Z = 90$ $N = 144$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 1777.664 (0.003) MeV

Qbeta- = 0.274 (0.005) MeV

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

S-alpha=	-3.672	(0.011)	-----		

234TH 1	0.000	0+			1 24.10 D 3
234TH 2	0.050	2+			2 0.37 NS 3
234TH 3	0.163	4+			3
234TH 4	0.336	6+			4
234TH 5	0.565	8+			5
234TH 6			0.688	(1-)	6
234TH 7	0.810	(0+)			7
234TH 8	0.842	10+			8
234TH 9			0.995	(7-)	9
234TH 10	1.150	(0+)			10

234TH 11	1.165	(12+)			11
234TH 12			1.195	(9-)	12
234TH 13			1.442	(11-)	13
234TH 14	1.470	(0+)			14
234TH 15	1.527	(14+)			15
234TH 16			1.731	(13-)	16
234TH 17				1.896 (1,2+)	17
234TH 18				1.913 (1,2+)	18
234TH 19	1.923	(16+)			19
234TH 20			2.059	(15-)	20

234TH 21	2.351	(18+)			21
234TH 22			2.423	(17-)	22
234TH 23	2.805	(20+)			23
234TH 24			2.817	(19-)	24
234TH 25			3.238	(21-)	25
234TH 26	3.281	(22+)			26
234TH 27			3.684	(23-)	27
234TH 28	3.775	(24+)			28

S-p	=	7.984	(0.013)	-----	
S-n	=	6.190	(0.003)	-----	
S-2p	=	14.462	(0.010)	-----	
S-2n	=	10.976	(0.003)	-----	
S-alpha=	=	-3.672	(0.011)	-----	

S+p = -5.613 (0.014)
S+n = -4.667 (0.013)
S+2p = -12.746 (0.003)
S+2n = -10.500 (0.014)
S+alpha = 4.270 (0.003)

gap p = 2.371 (0.019)
gap n = 1.523 (0.014)
gap 2p = 1.716 (0.010)
gap 2n = 0.476 (0.015)
gap alpha = 0.598 (0.011)