

^{232}Th $Z = 90$ $N = 142$ adopted link ENSDF link

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

BE = 1766.688 (0.001) MeV

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

S-alpha=	-4.082	(0.002)	-----					

232TH	1	0.000	0+					1 1.40E10 Y 1
232TH	2	0.049	2+					2 345 PS 15
232TH	3	0.162	4+					3 164 PS 13
232TH	4	0.333	6+					4 62 PS 4
232TH	5	0.557	8+					5 24 PS 1
232TH	6			0.714	1-			6
232TH	7	0.731	0+					7
232TH	8	0.774	2+					8 6 PS 2
232TH	9			0.774	3-			9
232TH	10	0.785	2+					10 2.3 PS 3

232TH	11	0.827	10+					11 10.3 PS 6
232TH	12	0.830	(3+)					12
232TH	13	0.873	4+					13
232TH	14			0.884	5-			14
232TH	15	0.890	4+					15
232TH	16	0.960	(5+)					16
232TH	17	1.023	6+					17
232TH	18			1.043	7-			18
232TH	19	1.051	6+					19
232TH	20	1.054	(2+)					20

232TH	21	1.072	(2+)					21
232TH	22			1.078	(1-)			22
232TH	23	1.079	(0+)					23
232TH	24	1.094	(2)+					24
232TH	25			1.106	3-			25
232TH	26	1.122	2+					26
232TH	27	1.137	12+					27 5.5 PS 4
232TH	28			1.143	(4-)			28
232TH	29	1.146	(7+)					29
232TH	30	1.148	(4+)					30

232TH	31			1.183	3-			31
232TH	32			1.209	(5-)			32
232TH	33					1.218		33
232TH	34	1.222	(8+)					34
232TH	35			1.250	9-			35
232TH	36	1.259	(8+)					36

232TH	37			1.293	(5-)			37		
232TH	38						1.303	38		
232TH	39	1.322	2+					39		
232TH	40	1.327	2+					40		

232TH	41						1.352	41		
232TH	42	1.370	(9+)					42		
232TH	43	1.387	2+					43	0.4 PS	1
232TH	44	1.414	4+					44	2.2 PS	5
232TH	45						1.419	45		
232TH	46						1.450	46		
232TH	47	1.466	4+					47		
232TH	48	1.469	(10+)					48		
232TH	49	1.477	2+					49		
232TH	50						1.480	50		

232TH	51	1.482	14+					51	3.1 PS	2
232TH	52	1.485	(5+)					52		
232TH	53						1.489 (1,2+)	53		
232TH	54	1.490	(5+)					54		
232TH	55			1.499	11-			55		
232TH	56	1.512	(10+)					56		
232TH	57						1.520	57		
232TH	58	1.554	2+					58	110 FS	10
232TH	59						1.561 (1,2+)	59		
232TH	60						1.573 (1,2+)	60		

232TH	61	1.574	(6+)					61		
232TH	62	1.579	(2+)					62		
232TH	63						1.609	63		
232TH	64						1.618	64		
232TH	65	1.640	(11+)					65		
232TH	66						1.648	66		
232TH	67						1.691	67		
232TH	68						1.728	68		
232TH	69						1.738 (1,2+)	69		
232TH	70	1.755	(12+)					70		

232TH	71	1.783	(8)+					71		
232TH	72			1.785	13-			72		
232TH	73						1.791	73		
232TH	74	1.801	(12+)					74		
232TH	75	1.859	16+					75	2.3 PS	2
232TH	76	2.043	1+					76	6.1 FS	4
232TH	77	2.080	(14+)					77		
232TH	78			2.102	15-			78		
232TH	79	2.117	(14+)					79		
232TH	80	2.248	1+					80	13 FS	2

232TH	81	2.262	18+					81	1.4 PS	2

232TH 82		2.274	1+				82	25	FS	6
232TH 83		2.296	1+				83	19	FS	9
232TH 84		2.441	(16+)				84			
232TH 85					2.445	17-		85		
232TH 86		2.446	(16+)				86			
232TH 87		2.446	(16+)				87			
232TH 88		2.691	20+				88	1.2	PS	2
232TH 89		2.767	(18+)				89			
232TH 90					2.813	19-		90		

232TH 91		2.832	(18+)				91			
232TH 92		3.144	22+				92	0.8	PS	1
232TH 93					3.204	21-		93		
232TH 94		3.249	(20+)				94			
232TH 95					3.616	23-		95		
232TH 96		3.620	24+				96	1.1	PS	3
232TH 97					4.050	25-		97		
232TH 98		4.117	26+				98	0.6	PS	2
232TH 99					4.506	27-		99		
232TH 100		4.633	(28+)				100	0.2	PS	AP

232TH 101		5.164	(30+)				101			

S-p = 7.605 (0.013) -----
S-n = 6.441 (0.002) -----
S-2p = 13.647 (0.010) -----
S-2n = 11.558 (0.002) -----
S-alpha= -4.082 (0.002) -----

S+p = -5.246 (0.002)
S+n = -4.786 (0.002)
S+2p = -11.880 (0.002)
S+2n = -10.976 (0.003)
S+alpha = 4.573 (0.002)

gap p = 2.359 (0.013)
gap n = 1.654 (0.003)
gap 2p = 1.768 (0.011)
gap 2n = 0.582 (0.003)
gap alpha = 0.491 (0.003)