

$^{47}\text{Ti}$        $Z = 22$        $N = 25$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 407.078 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
47Ti 1			0.000	5/2-	1 STABLE
47Ti 2			0.159 3	7/2-	2 210 PS 6
47Ti 3				1.251 (1/2-,3/2-)	3
47Ti 4			1.252	9/2-	4 140 FS 13
47Ti 5			1.444	11/2-	5 0.90 PS 14
47Ti 6			1.550	3/2-	6 1.5 PS 4
47Ti 7				1.670	7
47Ti 8			1.794	1/2-	8 1.7 PS +17-6
47Ti 9				1.825 3/2+,5/2+	9 2.1 PS +19-7
47Ti 10			2.163	3/2-	10 25.1 FS 43
47Ti 11				2.167 5/2	11 19 FS 5
47Ti 12	2.260	5/2+			12 0.54 PS 12
47Ti 13				2.297 5/2-,7/2-	13 10 FS LT
47Ti 14				2.344	14
47Ti 15	2.365	1/2+			15 1.53 PS GT
47Ti 16				2.406 (9/2-)	16 23 FS 7
47Ti 17			2.416	1/2- TO 7/2-	17 1.0 PS +6-3
47Ti 18				2.499 1/2(-),3/2,5/2+	18
47Ti 19	2.520	1/2+			19
47Ti 20				2.526 3/2-,5/2-	20 94 FS 19
47Ti 21			2.548	3/2-	21 6.2 FS 7
47Ti 22	2.573	1/2+			22 0.53 PS +22-14
47Ti 23				2.600 3/2-,5/2,7/2	23 1.3 PS +5-3
47Ti 24			2.619	7/2-	24 29 FS 8
47Ti 25				2.668 9/2,13/2	25 21 FS 16
47Ti 26				2.682 11/2(-)	26 2.10 PS GT
47Ti 27				2.695	27
47Ti 28			2.749	15/2-	28 1.11 PS 21
47Ti 29			2.758	7/2- TO 13/2-	29 17 FS 11
47Ti 30				2.785 3/2 TO 9/2	30
47Ti 31			2.793	1/2-	31
47Ti 32				2.800	32 0.35 PS +26-16
47Ti 33				2.809 5/2-,7/2,9/2-	33 49 FS 23
47Ti 34			2.829	1/2- TO 7/2	34 0.16 PS 5
47Ti 35			2.839	3/2- TO 9/2-	35 33 FS LT
47Ti 36			2.846	5/2- TO 11/2-	36 19 FS LT
47Ti 37				2.855 1/2(-),3/2,5/2+	37
47Ti 38				2.868	38

47TI	39				3.033		5/2-,7/2		39	0.41	PS	9
47TI	40				3.052		5/2- T0 11/2-		40	0.43	PS	+12-9
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47TI	41								41	0.23	PS	+10-7
47TI	42								42			
47TI	43				3.226	3/2	7/2-		43	7	FS	+7-6
47TI	44				3.252		7/2-		44	29	FS	9
47TI	45				3.278		3/2-		45	42	FS	22
47TI	46				3.288		13/2-		46	0.51	PS	+16-10
47TI	47								47	0.19	PS	6
47TI	48				3.401		7/2- T0 13/2		48	1.4	PS	+10-4
47TI	49				3.435		1/2- T0 7/2		49	65	FS	22
47TI	50							(3/2-)	50	30	FS	10
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47TI	51		3.516	1/2+					51	40	FS	12
47TI	52								52	35	FS	LT
47TI	53				3.554		3/2- T0 11/2-		53	35	FS	+38-33
47TI	54				3.568		17/2-		54	69	FS	21
47TI	55								55	15	FS	LT
47TI	56				3.622		5/2- T0 13/2-		56	20	FS	19
47TI	57								57			
47TI	58				3.676		3/2-		58	40	FS	LT
47TI	59								59	24	FS	+24-22
47TI	60								60			
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47TI	61							(13/2-)	61			
47TI	62								62	44	FS	19
47TI	63				3.827		7/2-	3/2(-) T0 9/2-	63	17	FS	9
47TI	64								64			
47TI	65								65			
47TI	66				3.923		3/2-		66			
47TI	67								67			
47TI	68				3.994		15/2-		68	0.10	PS	+8-5
47TI	69								69			
47TI	70							1/2-,3/2-	70			
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47TI	71								71			
47TI	72								72			
47TI	73								73			
47TI	74								74			
47TI	75								75			
47TI	76								76			
47TI	77								77			
47TI	78								78			
47TI	79								79			
47TI	80								80			
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47TI	81							3/2+,5/2+	81			
47TI	82								82			
47TI	83							3/2+,5/2+	83			

47TI 84						4.466			84
47TI 85						4.492			85
47TI 86				4.494		19/2-			86 0.111 PS 28
47TI 87						4.518			87
47TI 88						4.541			88
47TI 89						4.553			89
47TI 90						4.588		7/2+,9/2+	90
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47TI 91						4.605			91
47TI 92				4.637		1/2-			92
47TI 93						4.670			93
47TI 94				4.673		17/2-			94 0.12 PS 6
47TI 95						4.686		3/2+,5/2+	95
47TI 96						4.708		-	96
47TI 97						4.743			97
47TI 98						4.758			98
47TI 99						4.793			99
47TI 100						4.811			100
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47TI 101						4.829			101
47TI 102						4.847			102
47TI 103						4.876			103
47TI 104						4.898			104
47TI 105						4.924		1/2-,3/2-	105
47TI 106		4.957		1/2+					106
47TI 107						4.982		3/2+,5/2+	107
47TI 108						5.013		1/2-,3/2-	108
47TI 109						5.043			109
47TI 110						5.070			110
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47TI 111						5.102			111
47TI 112						5.125			112
47TI 113						5.148			113
47TI 114						5.195			114
47TI 115				5.197		21/2-			115 49 FS 35
47TI 116		5.265		1/2+					116
47TI 117						5.301			117
47TI 118						5.313		1/2-,3/2-	118
47TI 119				5.355		1/2-			119
47TI 120						5.372			120
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47TI 121		5.407		1/2+					121
47TI 122						5.433		1/2-,3/2-	122
47TI 123						5.451			123
47TI 124						5.478			124
47TI 125						5.540		1/2-,3/2-	125
47TI 126				5.580		1/2-			126
47TI 127						5.615		1/2-,3/2-	127
47TI 128						5.635			128
47TI 129						5.670			129

47TI 130				5.702		130
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47TI 131				5.746		131
47TI 132				5.755		132
47TI 133				5.774		133
47TI 134			5.810	1/2-		134
47TI 135				5.836		135
47TI 136				5.872		136
47TI 137				5.937		137
47TI 138	5.976	1/2+				138
47TI 139				6.013		139
47TI 140				6.039	3/2+,5/2+	140
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47TI 141				6.067	(1/2-,3/2-)	141
47TI 142			6.089	23/2-		142 35 FS 21
47TI 143				6.095		143
47TI 144				6.129		144
47TI 145	6.158	1/2+				145
47TI 146	6.169	1/2+				146
47TI 147				6.195		147
47TI 148				6.209		148
47TI 149				6.234		149
47TI 150				6.265		150
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47TI 151				6.304		151
47TI 152				6.333	1/2-,3/2-	152
47TI 153				6.364		153
47TI 154				6.366	(21/2-)	154 28 FS LT
47TI 155				6.387		155
47TI 156				6.402		156
47TI 157	6.430	1/2+				157
47TI 158				6.449		158
47TI 159				6.474		159
47TI 160	6.494	1/2+				160
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47TI 161				6.514		161
47TI 162				6.530	-	162
47TI 163				6.554		163
47TI 164				6.565		164
47TI 165				6.585		165
47TI 166				6.607	(1/2+)	166
47TI 167				6.624		167
47TI 168				6.645		168
47TI 169				6.662		169
47TI 170				6.673		170
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47TI 171				6.692		171
47TI 172				6.709		172
47TI 173				6.727		173
47TI 174				6.749		174

47TI 175				6.771	(1/2+)	175
47TI 176				6.787		176
47TI 177				6.823		177
47TI 178				6.838		178
47TI 179				6.854		179
47TI 180				6.882		180
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47TI 181				6.903		181
47TI 182				6.917		182
47TI 183				6.936		183
47TI 184				6.957		184
47TI 185				6.980		185
47TI 186				7.002		186
47TI 187				7.018		187
47TI 188				7.038		188
47TI 189				7.067		189
47TI 190				7.076		190
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47TI 191				7.095		191
47TI 192				7.123		192
47TI 193				7.141		193
47TI 194				7.166	3/2+,5/2+	194
47TI 195				7.187	3/2+,5/2+	195
47TI 196				7.205		196
47TI 197				7.225		197
47TI 198		7.349	7/2-			198
47TI 199				7.481	-	199
47TI 200		8.005	27/2-			200 0.49 PS 11
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47TI 201				8.160	5/2 (3/2)+	201
47TI 202		8.790	5/2 1/2+			202

S-p = 10.465 ( 0.001)-----  
S-n = 8.881 ( 0.000)-----  
S-2p = 18.703 ( 0.000)-----  
S-2n = 22.070 ( 0.001)-----  
S-alpha= 8.954 ( 0.000)-----

S+p = -6.829 ( 0.001)  
S+n = -11.627 ( 0.000)  
S+2p = -14.974 ( 0.002)  
S+2n = -19.769 ( 0.000)  
S+alpha = -8.939 ( 0.000)

gap p = 3.636 ( 0.001)  
gap n = -2.746 ( 0.000)  
gap 2p = 3.730 ( 0.002)  
gap 2n = 2.301 ( 0.001)  
gap alpha = 0.015 ( 0.000)