

$^{50}\text{Ti}$        $Z = 22$        $N = 28$       [link to full NNDC output](#)

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

BE = 437.786 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
50TI 1	0.000	0+			1 STABLE
50TI 2	1.554	2+			2 1.061 PS 35
50TI 3	2.675	4+			3 5.3 PS 11
50TI 4	3.199	6+			4 418 PS 17
50TI 5				3.863 (2)+	5
50TI 6	3.868	0+			6 0.50 PS 23
50TI 7				3.975	7
50TI 8				4.147 3-,4-	8
50TI 9	4.147	4+			9 33 FS +7-5
50TI 10	4.172	3+			10 0.83 PS GT
50TI 11				4.173 (2+)	11 11 FS LT
50TI 12	4.310	2+			12 6.1 FS 12
50TI 13			4.410 3-		13 2.8 NS LT
50TI 14				4.487 (2+)	14
50TI 15				4.536	15
50TI 16				4.576	16
50TI 17	4.790	2+			17 14 FS LT
50TI 18	4.881	5+			18 215 FS +45-35
50TI 19				4.928 (1:6)-	19
50TI 20				4.940 (2)+	20
50TI 21				5.125	21
50TI 22				5.186 (3,4)+	22 6.9 FS LT
50TI 23				5.191 3-,4-	23
50TI 24				5.336 (1:6)-	24
50TI 25	5.380	4+			25 33 FS +9-7
50TI 26				5.407 3-,4-	26
50TI 27				5.441 4+,5+	27
50TI 28				5.528 3-,4-	28
50TI 29				5.548 (4+)	29
50TI 30				5.560 (3)-	30
50TI 31				5.561 (2:5)+	31
50TI 32				5.600 (2:5)+	32
50TI 33	5.633	0+			33
50TI 34				5.695 2+,3+	34
50TI 35				5.717	35
50TI 36				5.771 3-,4-	36
50TI 37				5.787 (4+)	37
50TI 38				5.795 (1:6)-	38

50TI	39						5.807	4+,5+,6+	39			
50TI	40						5.837	(2:5)(+)	40	26 FS	+19-14	
-----												
50TI	41						5.880	(0:7)+	41			
50TI	42						5.945	(3)-	42			
50TI	43						5.946	3+,4+	43	19 FS	5	
50TI	44						6.044	3-,4-	44			
50TI	45		6.045	0+					45			
50TI	46						6.068	(2)+	46			
50TI	47						6.123	(4+)	47	38 FS	+12-9	
50TI	48						6.136	(7)+	48			
50TI	49						6.156	(2,3,4)+	49			
50TI	50						6.182	(0:7)+	50			
-----												
50TI	51						6.213	(1:6)(-)	51			
50TI	52						6.250	(0:7)+	52			
50TI	53						6.302	2-,3-	53			
50TI	54						6.380	(5)-	54	19 FS	LT	
50TI	55						6.392	(2:5)+	55			
50TI	56						6.400	(3)-	56			
50TI	57						6.461	(1:6)-	57			
50TI	58						6.481	(3)+	58	17 FS	LT	
50TI	59						6.521	(3,4)+	59	7.6 FS	+35-28	
50TI	60						6.541	(8)+	60			
-----												
50TI	61						6.548		61			
50TI	62						6.583	(1:6)-	62			
50TI	63						6.609	(3)-	63			
50TI	64						6.636	(0:7)+	64			
50TI	65						6.665	(1:6)-	65			
50TI	66		6.711	4+					66	11 FS	5	
50TI	67				6.730	3-			67			
50TI	68						6.770	(0:7)+	68			
50TI	69						6.770	(9)+	69			
50TI	70						6.838	(2+,3,4+)	70			
-----												
50TI	71				6.849	5-			71			
50TI	72						6.864	(2:5)+	72			
50TI	73						6.933		73			
50TI	74						6.975	3-,4-	74			
50TI	75						7.029	2+,3+,4+	75			
50TI	76						7.047	(3)-	76			
50TI	77						7.049	(2:5)+	77			
50TI	78				7.079	3-			78			
50TI	79						7.094	(1:6)-	79			
50TI	80						7.115	(1)+	80			
-----												
50TI	81				7.132	3-			81			
50TI	82		7.190	0+					82			
50TI	83						7.210	(3)-	83			

50TI 84				7.232	(2)+	84
50TI 85				7.249	(2:5)+	85
50TI 86				7.280	(1:7)+	86
50TI 87				7.293		87
50TI 88				7.335	(2)+	88
50TI 89				7.387	(3-)	89
50TI 90				7.407	(2:5)+	90
-----						
50TI 91				7.447		91
50TI 92				7.471	(2:5)+	92
50TI 93				7.483	(2)+	93
50TI 94				7.536	(3)-	94
50TI 95				7.540		95
50TI 96				7.573	(10)+	96
50TI 97				7.577	0+,1+	97
50TI 98			7.605 3-			98
50TI 99				7.631	(2:5)+	99
50TI 100	7.667	2+				100
-----						
50TI 101				7.699	(3)-	101
50TI 102				7.734		102
50TI 103				7.808	(0+)	103
50TI 104				7.862	0+,1+	104
50TI 105				7.925	(5)-	105
50TI 106				7.941		106
50TI 107				8.035	(4)+	107
50TI 108				8.074	(1)+	108
50TI 109				8.148		109
50TI 110				8.205	(3)-	110
-----						
50TI 111				8.238	0+,1+	111
50TI 112				8.258		112
50TI 113				8.287	(3)-	113
50TI 114				8.407		114
50TI 115				8.444	0+,1+	115
50TI 116	8.560	1+				116
50TI 117				8.578	(3)-	117
50TI 118				8.606	(1)+	118
50TI 119			8.640 2-			119
50TI 120				8.726	(2-)	120
-----						
50TI 121				8.755		121
50TI 122				8.793	(11+)	122
50TI 123	8.810	1+				123
50TI 124				8.815	(3)-	124
50TI 125				8.870	(2+)	125
50TI 126				8.881	(2,3)-	126
50TI 127				8.971	(3)-	127
50TI 128				9.030	(1)+	128
50TI 129			9.050 2-			129

50TI 130						9.061		130
-----								
50TI 131						9.127		131
50TI 132						9.188		132
50TI 133		9.210		1+				133
50TI 134						9.232	(4+,5-)	134
50TI 135						9.240	(1+,2)	135
50TI 136						9.280	(1,2-)	136
50TI 137						9.282	(5-,6+)	137
50TI 138						9.339	(3)-	138
50TI 139						9.367	(1+)	139
50TI 140						9.391	(4)+	140
-----								
50TI 141						9.442		141
50TI 142						9.504		142
50TI 143						9.508	(5-,6+)	143
50TI 144						9.550		144
50TI 145						9.614	(1)+	145
50TI 146						9.752	(3)-	146
50TI 147						9.790	(1)+	147
50TI 148						9.809		148
50TI 149						9.842	(4-,5+)	149
50TI 150						9.909	(3)-	150
-----								
50TI 151		9.964		1+				151
50TI 152						9.999	(3)-	152
50TI 153						10.000	(2-,1+)	153
50TI 154						10.047	(1)+	154
50TI 155						10.140	(1+,2-)	155
50TI 156		10.170		1+				156
50TI 157						10.205	(1)+	157
50TI 158						10.237	(1+,2-,3-)	158
50TI 159		10.357		1+				159
50TI 160						10.380	(2-,1+)	160
-----								
50TI 161		10.472		1+				161
50TI 162						10.495	(3)-	162
50TI 163						10.540	(1+,2-)	163
50TI 164		10.580		1+				164
50TI 165		10.660		1+				165
S-alpha=		10.717 ( 0.002)	-----					
50TI 166		10.800		1+				166
50TI 167						10.870	(1,2-)	167
50TI 168		10.900		2+				168
50TI 169						10.910	(1)+	169
S-n =		10.939 ( 0.000)	-----					
50TI 170						10.939	3-,4-	170
-----								
50TI 171				10.943		3-		171 0.26 KEV 3
50TI 172						10.944	(2:5)+	172

50TI 173				10.947	(2:5)+	173		
50TI 174		10.947	4-			174	0.28 KEV	3
50TI 175				10.950	1	175		
50TI 176				10.952	(2:5)+	176		
50TI 177				10.953	(2:5)+	177		
50TI 178				10.954	(2:5)+	178		
50TI 179				10.956	(2:5)+	179		
50TI 180				10.957	(2:5)+	180		
-----								
50TI 181		10.958	3-			181	126 EV	23
50TI 182		10.961	3-			182	149 EV	17
50TI 183				10.962	(2:5)+	183		
50TI 184		10.962	3-			184	0.65 KEV	12
50TI 185				10.965	(2:5)+	185		
50TI 186		10.966	4-			186	0.37 KEV	6
50TI 187				10.967	(2:5)+	187		
50TI 188				10.967	(2:5)+	188		
50TI 189				10.968	(2:5)+	189		
50TI 190				10.968	(2:5)+	190		
-----								
50TI 191				10.970	(2-,3+)	191		
50TI 192				10.970		192	32 EV	16
50TI 193		10.971	4-			193	1.4 KEV	4
50TI 194				10.973	(2:5)+	194		
50TI 195				10.974	(2:5)+	195		
50TI 196				10.975	(2:5)+	196		
50TI 197				10.975		197	0.0026 EV	7
50TI 198				10.975	(2:5)+	198	0.39 KEV	10
50TI 199		10.977	4-			199	1.51 KEV	18
50TI 200				10.981	(3)+	200		
-----								
50TI 201				10.981		201		
50TI 202				10.982	(4)+	202		
50TI 203				10.982	(3)+	203		
50TI 204				10.984	(3)+	204		
50TI 205				10.988	(3)+	205		
50TI 206				10.988		206		
50TI 207				10.989	(5)+	207		
50TI 208				10.990	(3)	208	0.23 KEV	6
50TI 209				10.990		209		
50TI 210				10.991		210		
-----								
50TI 211		10.995	4-			211	0.53 KEV	9
50TI 212				10.996		212		
50TI 213				10.997		213		
50TI 214				10.997		214		
50TI 215		10.998	3-			215	0.45 KEV	11
50TI 216				10.998	(2:5)+	216		
50TI 217				11.000	(2:5)+	217		
50TI 218				11.001	(3)	218	0.23 KEV	12

50TI 219				11.001	(2:5)+	219
50TI 220		11.005	3-			220
-----						
50TI 221				11.006	(2:5)+	221
50TI 222				11.010	(2:5)+	222
50TI 223				11.010	(2:5)+	223
50TI 224				11.010	(2:5)+	224
50TI 225		11.014	4-			225 0.89 KEV 20
50TI 226				11.016		226
50TI 227				11.016	(2:5)+	227
50TI 228				11.030	(1,2-)	228
50TI 229		11.034	3-			229
50TI 230		11.043	3-			230
-----						
50TI 231				11.070	1	231
50TI 232		11.075	4-			232
50TI 233		11.082	3-			233
50TI 234		11.087	3-			234
50TI 235		11.088	4-			235
50TI 236		11.106	4-			236
50TI 237		11.108	4-			237
50TI 238		11.112	4-			238
50TI 239		11.120	3-			239
50TI 240		11.121	4-			240
-----						
50TI 241		11.123	3-			241
50TI 242				11.130	(2,1+)	242
50TI 243		11.132	4-			243
50TI 244		11.144	3-			244
50TI 245		11.151	4-			245
50TI 246		11.159	3-			246
50TI 247		11.173	4-			247
50TI 248				11.190	(1-,2-)	248
50TI 249				11.220	(2-,1+)	249
50TI 250				11.290	3	250
-----						
50TI 251				11.310	(2-,1+)	251
50TI 252				11.350	(2-,1+)	252
50TI 253		11.420	2-			253
50TI 254				11.610	1	254
50TI 255		11.830	2-			255
-----						
S-p	=	12.159 ( 0.003)				
50TI 256				13.830	(2+)	256
50TI 257				15.390	(1)+	257
50TI 258				16.010	(0+)	258
50TI 259		16.580	0+			259
-----						
S-p	=	12.159 ( 0.003)				
S-n	=	10.939 ( 0.000)				

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S-2p = 21.785 ( 0.000)-----  
S-2n = 19.082 ( 0.000)-----  
S-alpha= 10.717 ( 0.002)-----  
  
S+p = -8.061 ( 0.000)  
S+n = -6.373 ( 0.001)  
S+2p = -18.566 ( 0.000)  
S+2n = -14.181 ( 0.007)  
S+alpha = -7.928 ( 0.000)  
  
gap p = 4.098 ( 0.003)  
gap n = 4.567 ( 0.001)  
gap 2p = 3.219 ( 0.000)  
gap 2n = 4.901 ( 0.007)  
gap alpha = 2.789 ( 0.002)
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