

^{97}Tc $Z = 43$ $N = 54$ adopted link ENSDF link

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

BE = 836.501 (0.004) MeV

Qbeta+ = 0.320 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
97TC 1	0.000	9/2+			1 4.21E+6 Y 16
97TC 2			0.097 1/2-		2 91.0 D 6
97TC 3	0.216	7/2+			3 69 PS 19
97TC 4	0.324	5/2+			4 0.45 NS 8
97TC 5			0.580 3/2-		5
97TC 6			0.657 5/2-		6 0.76 PS GE
97TC 7				0.766	7
97TC 8	0.773	13/2+			8 0.35 PS GE
97TC 9				0.778 (7/2+,9/2+)	9
97TC 10	0.785	5/2+			10 0.33 PS +17-10
97TC 11				0.833 11/2(+)	11 0.35 PS GE
97TC 12				0.834	12
97TC 13				0.852 (3/2+,5/2+)	13
97TC 14	0.855	7/2+			14 0.37 PS GE
97TC 15				0.862 (9/2+)	15 0.38 PS GE
97TC 16				0.940	16
97TC 17				0.942	17
97TC 18			0.947 3/2-		18 0.22 PS +9-6
97TC 19	0.970	7/2+			19
97TC 20				0.995 (3/2+)	20 0.17 PS +7-4
97TC 21				1.004	21
97TC 22			1.049 3/2-		22 0.21 PS GE
97TC 23				1.060 (5/2,7/2+)	23
97TC 24				1.127 11/2(+)	24
97TC 25				1.138 (5/2)	25
97TC 26				1.141 (7/2+)	26 0.28 PS +25-10
97TC 27				1.165 (9/2,7/2)	27
97TC 28				1.167	28
97TC 29				1.200 (9/2+)	29 0.24 PS +37-10
97TC 30				1.220 (7/2+)	30
97TC 31				1.240 (7/2-)	31 0.26 PS GE
97TC 32				1.271	32
97TC 33				1.275 (3/2-,5/2-,7/2-)	33
97TC 34				1.278 (9/2-)	34
97TC 35	1.310	9/2+			35
97TC 36				1.312	36
97TC 37				1.348	37

97TC 38						1.366	(3/2+)	38	
97TC 39						1.373	(3/2,5/2-)	39	
97TC 40						1.379	3/2+,5/2+	40	

97TC 41						1.380	(9/2+)	41	0.09 PS +5-3
97TC 42						1.382		42	
97TC 43						1.387	(3/2+,5/2)	43	
97TC 44						1.393	(13/2+)	44	
97TC 45						1.397		45	
97TC 46						1.401	(3/2-,5/2-)	46	
97TC 47						1.410	(7/2-)	47	
97TC 48						1.441		48	0.21 PS GE
97TC 49						1.471	(7/2+,9/2+)	49	
97TC 50						1.480		50	

97TC 51						1.512	(3/2,5/2,7/2)	51	0.25 PS +18-9
97TC 52						1.518	(3/2-)	52	0.21 PS +22-8
97TC 53						1.523	(5/2+,7/2,9/2+)	53	0.044 PS +14-10
97TC 54						1.527		54	
97TC 55		1.537		1/2+				55	
97TC 56						1.538	(11/2+,13/2+)	56	
97TC 57						1.573	(3/2+,5/2)	57	
97TC 58						1.580	(5/2,7/2-)	58	
97TC 59						1.581	(11/2+,13/2+)	59	
97TC 60						1.582	(3/2+,5/2,7/2)	60	

97TC 61						1.586	(3/2+,5/2+,7/2+)	61	
97TC 62						1.599	3/2+,5/2+	62	
97TC 63						1.625		63	
97TC 64						1.650	3/2+,5/2+	64	0.4 PS 3
97TC 65		1.654		17/2+				65	
97TC 66						1.676	3/2+,5/2+	66	
97TC 67						1.678	(5/2-)	67	
97TC 68						1.685	15/2(+)	68	
97TC 69						1.690	(5/2+,7/2+)	69	
97TC 70						1.693	(3/2+,5/2,7/2)	70	

97TC 71						1.698		71	
97TC 72						1.707		72	
97TC 73						1.708	(7/2)	73	0.025 PS +9-6
97TC 74		1.712		1/2+				74	
97TC 75						1.721	(1/2+,3/2+,5/2+	75)	
97TC 76						1.723	(5/2+)	76	
97TC 77						1.733	(3/2+,5/2,7/2-	77)	0.54 PS GE
97TC 78						1.779	(5/2,7/2)	78	
97TC 79						1.797	(3/2,5/2,7/2)	79	
97TC 80						1.801		80	

97TC 81						1.816	(9/2+)	81	
97TC 82						1.835	(11/2+)	82	

97TC 83				1.835	(13/2-)	83
97TC 84				1.842		84
97TC 85		1.847	1/2+			85
97TC 86				1.850	(15/2+)	86
97TC 87				1.851	(3/2)	87 0.21 PS +22-8
97TC 88				1.856	(3/2+,5/2-)	88
97TC 89				1.859		89
97TC 90				1.862		90

97TC 91				1.865	(9/2+)	91
97TC 92				1.879	(9/2+,17/2+)	92
97TC 93				1.893	(13/2+,15/2+)	93
97TC 94				1.896		94
97TC 95				1.897	(5/2+,7/2+,9/2+)	95
97TC 96				1.907		96
97TC 97				1.914		97
97TC 98				1.914	(3/2,5/2)	98
97TC 99				1.919		99
97TC 100				1.923		100

97TC 101				1.925	(3/2,5/2)	101
97TC 102				1.940	1/2-,3/2-	102
97TC 103				1.941	(7/2)	103
97TC 104				1.948		104
97TC 105				1.949	(9/2+)	105
97TC 106				1.951	3/2+,5/2+	106
97TC 107				1.964		107
97TC 108				1.977		108
97TC 109				1.979		109
97TC 110				1.987	(3/2)	110

97TC 111				1.993		111
97TC 112				1.995		112
97TC 113				2.001		113
97TC 114				2.004		114
97TC 115				2.013	3/2+,5/2+	115
97TC 116				2.024		116
97TC 117				2.033		117
97TC 118				2.036	(1/2-,3/2,5/2-	118)
97TC 119				2.048		119
97TC 120				2.055		120

97TC 121				2.056		121
97TC 122				2.060	(9/2,11/2)	122
97TC 123				2.069		123
97TC 124				2.096		124
97TC 125				2.098		125
97TC 126				2.111	3/2+,5/2+	126
97TC 127				2.118		127
97TC 128				2.120		128

97TC 129				2.122	(13/2+,15/2,17/2129+)	
97TC 130				2.131		130

97TC 131				2.135		131
97TC 132				2.150	(3/2+,5/2,7/2)	132
97TC 133		2.151	1/2+			133
97TC 134				2.169		134
97TC 135				2.208		135
97TC 136				2.217		136
97TC 137				2.255	(5/2+,7/2-)	137
97TC 138				2.257		138
97TC 139				2.258		139
97TC 140				2.260	3/2+,5/2+	140

97TC 141		2.264	1/2+			141
97TC 142				2.265		142
97TC 143				2.307	3/2+,5/2+	143
97TC 144				2.331	(19/2+)	144
97TC 145				2.338	(17/2-)	145
97TC 146				2.418		146

S-alpha=		2.437	(0.004)	-----		
97TC 147				2.447		147
97TC 148				2.449		148
97TC 149				2.480		149
97TC 150				2.492		150

97TC 151				2.534	(21/2+)	151
97TC 152				2.565	(19/2)	152
97TC 153		2.653	1/2+			153
97TC 154				2.662		154
97TC 155				2.672		155
97TC 156				2.713	3/2+,5/2+	156
97TC 157				2.730		157
97TC 158				2.734	(21/2+)	158
97TC 159				2.783	3/2+,5/2+	159
97TC 160				2.878	3/2+,5/2+	160

97TC 161				2.908	3/2+,5/2+	161
97TC 162				2.917	(17/2+,19/2,21/2162+)	
97TC 163				3.018	3/2+,5/2+	163
97TC 164				3.060	3/2+,5/2+	164
97TC 165				3.143	(21/2-)	165
97TC 166		3.145	1/2+			166
97TC 167		3.214	1/2+			167
97TC 168				3.254		168
97TC 169				3.297		169
97TC 170				3.372	(3/2+,5/2+)	170

97TC 171				3.486	(3/2+,5/2+)	171
97TC 172				3.530	(25/2+)	172

97TC 173				3.576	(23/2+)	173
97TC 174				3.586		174
97TC 175				3.600	3/2+,5/2+	175
97TC 176				3.644	(25/2+)	176
97TC 177				3.720	3/2+,5/2+	177
97TC 178				3.731	(25/2+)	178
97TC 179				4.060		179
97TC 180				4.330		180

97TC 181				4.334	(27/2+)	181
97TC 182				4.376	(27/2+)	182
97TC 183				4.430	(29/2+)	183
97TC 184				4.580		184
97TC 185				4.681	(29/2+)	185
97TC 186				4.780		186
97TC 187				4.990		187
97TC 188				5.051	(29/2+)	188
97TC 189				5.323	(31/2+)	189
97TC 190				5.461	(31/2+)	190

97TC 191				5.536	(33/2+)	191
97TC 192				5.587	(33/2+)	192
S-p	=	5.719	(0.004)	-----		
97TC 193				7.017	(37/2+)	193
97TC 194				7.714	(39/2+)	194
97TC 195				8.345	(43/2+)	195

S-p = 5.719 (0.004)-----
S-n = 9.474 (0.007)-----
S-2p = 15.016 (0.004)-----
S-2n = 17.346 (0.007)-----
S-alpha= 2.437 (0.004)-----

S+p = -8.289 (0.008)
S+n = -7.279 (0.005)
S+2p = -12.938 (0.020)
S+2n = -16.246 (0.004)
S+alpha = -2.613 (0.007)

gap p = -2.571 (0.009)
gap n = 2.195 (0.008)
gap 2p = 2.078 (0.020)
gap 2n = 1.100 (0.008)
gap alpha = -0.176 (0.008)