

$^{123}\text{Te}$        $Z = 52$        $N = 71$       adopted link      ENSDF link

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

BE = 1041.261 ( 0.001) MeV

Qbeta+ = 0.052 ( 0.002) MeV

	Energy T	J+	J-	J-other	T1/2
123TE 1	0.000	1/2+			1 9.2E+16 Y GT
123TE 2	0.159	3/2+			2 196 PS 10
123TE 3			0.247 11/2-		3 119.2 D 3
123TE 4				0.384 (7/2-,9/2+)	4
123TE 5	0.440	3/2+			5 22 PS 4
123TE 6	0.490	7/2+			6 30.7 NS 4
123TE 7	0.505	5/2+			7 13 PS 3
123TE 8				0.533 (7/2-)	8
123TE 9	0.599	1/2+			9
123TE 10	0.688	3/2+			10
123TE 11				0.697 (7/2)+	11
123TE 12				0.769	12
123TE 13	0.784	3/2+			13 52 FS +33-21
123TE 14				0.862 (5/2)	14
123TE 15				0.871 (3/2+,5/2,7/2+)	15
123TE 16				0.880 (7/2-)	16
123TE 17				0.887 (15/2-)	17
123TE 18				0.895 3/2+,5/2+	18 45 FS +24-14
123TE 19				0.920 (13/2-)	19
123TE 20				0.920	20
123TE 21				0.996 (5/2)-	21
123TE 22	1.037	3/2+			22 43 FS +16-12
123TE 23				1.068 3/2+,5/2+	23
123TE 24				1.082 7/2+,9/2+	24
123TE 25				1.098 (3/2-,5/2,7/2+)	25
123TE 26				1.138	26
123TE 27				1.153	27
123TE 28				1.210 (5/2-,7/2-)	28
123TE 29				1.213 (3/2-,5/2+)	29
123TE 30				1.244 7/2+,9/2+	30
123TE 31				1.254 (3/2-:9/2-)	31
123TE 32				1.268 (+)	32
123TE 33				1.318 (1/2+,3/2+)	33
123TE 34				1.328	34
123TE 35				1.330 7/2+,9/2+	35
123TE 36				1.345 (3/2)-	36
123TE 37				1.354 (5/2)+	37

123TE 38				1.414	(5/2+)	38
123TE 39				1.418	(5/2-, 7/2-)	39
123TE 40				1.423	(3/2+, 5/2+)	40
-----						
123TE 41				1.427	7/2+, 9/2+	41
123TE 42				1.446	(3/2)+	42
123TE 43				1.474		43
123TE 44				1.483	1/2-, 3/2-	44
123TE 45				1.484	(5/2-)	45
123TE 46				1.496		46
123TE 47				1.515	3/2+, 5/2+	47
S-alpha=	1.531	(	0.002)	-----		
123TE 48				1.552	(17/2-)	48
123TE 49				1.558	(3/2)+	49
123TE 50				1.585	(3/2-, 5/2, 7/2+)	50
-----						
123TE 51				1.606	(+)	51
123TE 52				1.610	(19/2-)	52
123TE 53				1.623		53
123TE 54				1.655	7/2+, 9/2+	54
123TE 55				1.672		55
123TE 56				1.684	5/2-, 7/2-	56
123TE 57				1.694		57
123TE 58				1.708	3/2+, 5/2+	58
123TE 59				1.732	(5/2+)	59
123TE 60				1.760	(3/2)-	60
-----						
123TE 61				1.788		61
123TE 62				1.796	3/2-, 5/2+	62
123TE 63				1.808	(3/2-)	63
123TE 64				1.839	(1/2, 3/2)	64
123TE 65				1.854	(5/2+)	65
123TE 66				1.864	(3/2+, 5/2+)	66
123TE 67				1.887	(3/2)-	67
123TE 68				1.903	(+)	68
123TE 69				1.930	(21/2-)	69
123TE 70	1.946	1/2+				70
-----						
123TE 71				1.958	(3/2+, 5/2+)	71
123TE 72				1.978	(3/2)-	72
123TE 73				2.011		73
123TE 74				2.021	1/2-, 3/2-	74
123TE 75				2.051	5/2-, 7/2-	75
123TE 76				2.054	7/2+, 9/2+	76
123TE 77				2.066		77
123TE 78				2.076	3/2+, 5/2+	78
123TE 79				2.083		79
123TE 80				2.093	(1/2, 3/2)	80
-----						
123TE 81				2.118	(+)	81

123TE 82			2.130	(3/2)-	82
123TE 83			2.144		83
123TE 84			2.151		84
123TE 85			2.158	1/2-, 3/2-	85
123TE 86			2.163	3/2+, 5/2+	86
123TE 87			2.197	(1/2+, 3/2)	87
123TE 88			2.201	(3/2+, 5/2+)	88
123TE 89			2.264	5/2-, 7/2-	89
123TE 90			2.285	(+)	90
-----					
123TE 91			2.297	7/2+, 9/2+	91
123TE 92			2.332	7/2+, 9/2+	92
123TE 93			2.348		93
123TE 94			2.358		94
123TE 95			2.358	(23/2-)	95
123TE 96			2.369	(5/2-, 7/2-)	96
123TE 97			2.377	(5/2-, 7/2-)	97
123TE 98			2.399		98
123TE 99			2.414	5/2-, 7/2-	99
123TE 100			2.443		100
-----					
123TE 101			2.457		101
123TE 102			2.465	(+)	102
123TE 103			2.479		103
123TE 104			2.498		104
123TE 105			2.515		105
123TE 106			2.526		106
123TE 107			2.533		107
123TE 108			2.541		108
123TE 109			2.552	1/2-, 3/2-	109
123TE 110			2.556		110
-----					
123TE 111			2.565		111
123TE 112			2.572	(+)	112
123TE 113			2.604		113
123TE 114			2.614		114
123TE 115			2.622	(1/2+, 3/2)	115
123TE 116			2.630		116
123TE 117			2.638		117
123TE 118			2.645	(1/2, 3/2)	118
123TE 119			2.657		119
123TE 120			2.670	(7/2+, 9/2+)	120
-----					
123TE 121			2.676	(7/2+, 9/2+)	121
123TE 122			2.684	(21/2-, 23/2-)	122
123TE 123			2.687	1/2-, 3/2-	123
123TE 124			2.695	(+)	124
123TE 125			2.713		125
123TE 126			2.726	(1/2, 3/2)	126
123TE 127			2.735		127

123TE 128			2.742		128
123TE 129			2.751	(5/2-, 7/2-)	129
123TE 130			2.773	1/2-, 3/2-	130
-----					
123TE 131			2.782		131
123TE 132			2.794		132
123TE 133			2.807		133
123TE 134			2.812	1/2-, 3/2-	134
123TE 135			2.813	(23/2)	135
123TE 136			2.834		136
123TE 137			2.849		137
123TE 138			2.857		138
123TE 139			2.864		139
123TE 140			2.869		140
-----					
123TE 141			2.875		141
123TE 142			2.881		142
123TE 143			2.887		143
123TE 144			2.895		144
123TE 145			2.906		145
123TE 146			2.916		146
123TE 147			2.922		147
123TE 148			2.937	1/2-, 3/2-	148
123TE 149			2.947	(1/2, 3/2)	149
123TE 150			2.950	5/2-, 7/2-	150
-----					
123TE 151			2.957	(1/2, 3/2)	151
123TE 152			2.968		152
123TE 153			2.984		153
123TE 154			3.003		154
123TE 155			3.008	1/2-, 3/2-	155
123TE 156			3.033		156
123TE 157			3.039	(25/2-)	157
123TE 158			3.055		158
123TE 159			3.079		159
123TE 160			3.106		160
-----					
123TE 161			3.151		161
123TE 162			3.181		162
123TE 163			3.197	1/2-, 3/2-	163
123TE 164			3.321		164
123TE 165			3.337		165
123TE 166			3.375		166
123TE 167			3.377	(27/2-)	167
123TE 168			3.401	1/2-, 3/2-	168
123TE 169			3.439		169
123TE 170			3.469		170
-----					
123TE 171			3.492		171
123TE 172			3.513		172

123TE 173			3.551	1/2-, 3/2-	173
123TE 174			3.552	(27/2)	174
123TE 175			3.625		175
123TE 176			3.744		176
123TE 177			3.766		177
123TE 178			3.787		178
123TE 179			3.813		179
123TE 180			3.822		180
-----					
123TE 181			3.849		181
123TE 182			3.866		182
123TE 183			3.912		183
123TE 184			3.935		184
123TE 185			3.975		185
123TE 186			4.014		186
123TE 187			4.040		187
123TE 188			4.055		188
123TE 189			4.075		189
123TE 190			4.113	(29/2-)	190
-----					
123TE 191			4.134		191
123TE 192			4.173		192
123TE 193			4.200		193
123TE 194			4.202	(31/2)	194
123TE 195			4.254	(31/2-)	195
123TE 196			4.271		196
123TE 197			4.302		197
123TE 198			4.317		198
123TE 199			4.347		199
123TE 200			4.358		200
-----					
123TE 201			4.380		201
123TE 202			4.411		202
123TE 203			4.441		203
123TE 204			4.476		204
123TE 205			4.500		205
123TE 206			4.538		206
123TE 207			4.570		207
123TE 208			4.606		208
123TE 209			4.628	(33/2-)	209
123TE 210			4.655		210
-----					
123TE 211			4.669		211
123TE 212			4.685		212
123TE 213			4.715		213
123TE 214			4.748		214
123TE 215			4.749	(33/2)	215
123TE 216			4.776		216
123TE 217			4.789		217
123TE 218			4.854		218

123TE 219				4.876		219
123TE 220				4.966		220
-----						
123TE 221				5.010	(35/2-)	221
123TE 222				5.015		222
123TE 223				5.035		223
123TE 224				5.088		224
123TE 225				5.140		225
123TE 226				5.169		226
123TE 227				5.190		227
123TE 228				5.232		228
123TE 229				5.329		229
123TE 230				5.450		230
-----						
123TE 231				5.566	(37-/2)	231
123TE 232				5.589		232
123TE 233				5.645		233
123TE 234				5.953		234
123TE 235				6.275		235
123TE 236				6.559		236
123TE 237				6.913		237
-----						
S-n	=	6.929	( 0.002)	-----		
123TE 238		6.929	1/2+			238
123TE 239					7.063	239
123TE 240					7.090	240
-----						
123TE 241				7.296		241
123TE 242				7.481		242
123TE 243				8.030		243
-----						
S-p	=	8.126	( 0.003)	-----		
S-n	=	6.929	( 0.002)	-----		
S-2p	=	14.552	( 0.002)	-----		
S-2n	=	16.771	( 0.026)	-----		
S-alpha	=	1.531	( 0.002)	-----		
-----						
S+p	=	-5.482	( 0.003)			
S+n	=	-9.424	( 0.002)			
S+2p	=	-12.606	( 0.002)			
S+2n	=	-15.993	( 0.002)			
S+alpha	=	-1.575	( 0.004)			
-----						
gap p	=	2.643	( 0.004)			
gap n	=	-2.495	( 0.003)			
gap 2p	=	1.946	( 0.003)			
gap 2n	=	0.777	( 0.026)			
gap alpha	=	-0.044	( 0.005)			