

^{127}Te $Z = 52$ $N = 75$ adopted link ENSDF link

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

BE = 1072.656 (0.001) MeV

Qbeta- = 0.703 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
127TE 1	0.000	3/2+			1 9.35 H 7
127TE 2	0.061	1/2+			2
127TE 3			0.088 11/2-		3 106.1 D 7
127TE 4				0.341 (9/2-)	4 0.41 NS 2
127TE 5	0.473	5/2+			5
127TE 6	0.502	3/2+			6
127TE 7	0.623	1/2+			7
127TE 8			0.631 7/2-		8
127TE 9	0.685	7/2+			9
127TE 10	0.763	3/2+			10
127TE 11	0.783	5/2+			11
127TE 12			0.786 15/2-		12
127TE 13			0.786 7/2-		13
127TE 14	0.924	7/2+			14
127TE 15	1.075	3/2+			15
127TE 16				1.077 5/2,7/2,9/2	16
127TE 17	1.140	5/2+			17
127TE 18	1.155	5/2+			18
127TE 19				1.157 (9/2-,11/2-)	19
127TE 20				1.176	20
127TE 21				1.183 (5/2-,7/2,9/2)	21
127TE 22				1.206 3/2+,5/2+	22
127TE 23	1.290	5/2+			23
127TE 24				1.293 (3/2+,5/2,7/2+)	24
127TE 25				1.309 3/2+,5/2+	25
127TE 26				1.323	26
127TE 27				1.353 (11/2+)	27
127TE 28			1.354 3/2-		28
127TE 29	1.379	5/2+			29
127TE 30	1.406	1/2+			30
127TE 31	1.429	7/2+			31
127TE 32				1.447 (7/2+,9/2+)	32
127TE 33				1.462	33
127TE 34			1.464 19/2-		34
127TE 35				1.492 (7/2+,9/2+)	35
127TE 36				1.545	36
127TE 37				1.549	37

127TE 38						1.551	(5/2-, 7/2, 9/2)	38
127TE 39		1.556	5/2+					39
127TE 40		1.568	5/2+					40

127TE 41						1.602	(3/2+, 5/2+)	41
127TE 42						1.608	(5/2-, 7/2, 9/2)	42
127TE 43						1.612	7/2+, 9/2+	43
127TE 44						1.616	(15/2+)	44
127TE 45						1.676		45
127TE 46						1.684	3/2+, 5/2+	46
127TE 47				1.688	3/2-			47
127TE 48						1.704	3/2+, 5/2+	48
127TE 49						1.732	(7/2+, 9/2+)	49
127TE 50						1.758	(3/2+, 5/2, 7/2-)	50

127TE 51						1.773	3/2+, 5/2+	51
127TE 52						1.779	(5/2-, 7/2+)	52
127TE 53						1.803	7/2+, 9/2+	53
127TE 54						1.806		54
127TE 55						1.815	(3/2+, 5/2, 7/2-)	55
127TE 56				1.845	5/2-			56
127TE 57						1.847	(5/2+)	57
127TE 58						1.856		58
127TE 59						1.869	1/2, 3/2, 5/2+	59
127TE 60						1.878	3/2+, 5/2+	60

127TE 61						1.884		61
127TE 62		1.889	1/2+					62
127TE 63						1.906	3/2+, 5/2+	63
127TE 64						1.916	3/2+, 5/2+	64
127TE 65				1.920	7/2-			65
127TE 66						1.938	7/2+, 9/2+	66
127TE 67		1.954	1/2+					67
127TE 68						1.956		68
127TE 69						1.956	(3/2+, 5/2+)	69
127TE 70						1.959	(3/2-, 5/2, 7/2+)	70

127TE 71						1.975	(3/2+, 5/2, 7/2-)	71
127TE 72						1.985	(7/2+, 9/2+)	72
127TE 73						1.993	1/2, 3/2, 5/2+	73
127TE 74						2.002	1/2-, 3/2-	74
127TE 75						2.008	(1/2+)	75
127TE 76				2.010	3/2-			76
127TE 77				2.026	7/2-			77
127TE 78						2.026	3/2+, 5/2+	78
127TE 79						2.030	(3/2-, 5/2, 7/2+)	79
127TE 80						2.049	(3/2+, 5/2+)	80

127TE 81						2.056	(3/2+, 5/2, 7/2+)	81
127TE 82				2.100	7/2-			82

127TE 83				2.102		83
127TE 84				2.109	1/2,3/2,5/2+	84
127TE 85		2.120	1/2+			85
127TE 86				2.138	7/2-	86
127TE 87				2.138	1/2,3/2,5/2+	87
127TE 88				2.144	3/2-	88
127TE 89				2.157	1/2,3/2,5/2+	89
127TE 90				2.167	7/2-	90

127TE 91				2.176	3/2+,5/2+	91
127TE 92				2.190		92
127TE 93				2.196	7/2+,9/2+	93
127TE 94			2.207	3/2-		94
127TE 95				2.217	3/2+,5/2+	95
127TE 96		2.225	1/2+			96
127TE 97				2.244	(7/2+,9/2+)	97
127TE 98			2.246	3/2-		98
127TE 99				2.254	3/2+,5/2+	99
127TE 100			2.278	5/2-		100

127TE 101				2.299	(3/2+,5/2,7/2-)	101
127TE 102				2.305		102
127TE 103				2.314		103
127TE 104			2.318	3/2-		104
127TE 105				2.327		105
127TE 106			2.328	7/2-		106
127TE 107				2.328	1/2+,3/2,5/2+	107
127TE 108				2.338	(3/2-)	108
127TE 109				2.340	(1/2,3/2,5/2+)	109
127TE 110				2.358		110

127TE 111			2.360	3/2-		111
127TE 112		2.368	7/2+			112
127TE 113				2.391		113
127TE 114			2.401	7/2-		114
127TE 115				2.417		115
127TE 116				2.427		116
127TE 117				2.429	(3/2+,5/2+)	117
127TE 118				2.438	(3/2-)	118
127TE 119				2.458	(1/2+)	119
127TE 120			2.469	1/2-		120

127TE 121				2.473	(3/2+,5/2+)	121
127TE 122				2.493	(1/2,3/2,5/2+)	122
127TE 123				2.497	3/2+,5/2+	123
127TE 124				2.520	(5/2,7/2-)	124
127TE 125				2.554		125
127TE 126				2.561	(1/2-,3/2,5/2+)	126
127TE 127				2.593	(3/2-)	127
127TE 128			2.619	1/2-		128

127TE 129				2.667	1/2-				129	
127TE 130							2.690	1/2,3/2,5/2+	130	

127TE 131							2.701	1/2,3/2,5/2+	131	
127TE 132							2.713		132	
127TE 133		2.730		3/2+					133	
127TE 134		2.759		3/2+					134	
127TE 135							2.763		135	
127TE 136							2.767	(3/2+,5/2,7/2-)	136	
127TE 137							2.773	(3/2-,5/2+)	137	
127TE 138							2.783	(5/2-,7/2-)	138	
127TE 139				2.790	5/2-				139	
127TE 140							2.799		140	

127TE 141				2.819	5/2-				141	
127TE 142							2.844	(1/2-,3/2-)	142	
127TE 143				2.856	1/2-				143	
127TE 144							2.870	(5/2-,7/2-)	144	
127TE 145							2.878	1/2,3/2,5/2+	145	
S-alpha=		2.891 (0.003)	-----							
127TE 146							2.896	3/2+,5/2,7/2-	146	
127TE 147							2.905		147	
127TE 148							2.913	(1/2-,3/2-)	148	
127TE 149							2.916	1/2,3/2,5/2+	149	
127TE 150							2.925	(1/2-,3/2-)	150	

127TE 151							2.932	1/2+,3/2,5/2+	151	
127TE 152							2.955	(3/2-)	152	
127TE 153							2.966	(3/2+,5/2,7/2-)	153	
127TE 154							2.979		154	
127TE 155							2.994	(3/2-,5/2,7/2+)	155	
127TE 156							3.005		156	
127TE 157							3.017	3/2+,5/2,7/2-	157	
127TE 158							3.035	3/2+,5/2,7/2-	158	
127TE 159							3.064	(1/2-,3/2-)	159	
127TE 160							3.096	3/2+,5/2,7/2-	160	

127TE 161				3.128	7/2-				161	
127TE 162							3.131		162	
127TE 163							3.132		163	
127TE 164							3.138		164	
127TE 165							3.154	(3/2)-	165	
127TE 166							3.176		166	
127TE 167							3.187	(5/2-,7/2-)	167	
127TE 168							3.218		168	
127TE 169							3.238	(3/2+,5/2,7/2-)	169	
127TE 170							3.252		170	

127TE 171							3.255		171	
127TE 172							3.265	(3/2+,5/2,7/2-)	172	

127TE 173			3.287	(1/2,3/2,5/2+)	173
127TE 174			3.304		174
127TE 175			3.314		175
127TE 176			3.342	(3/2+,5/2,7/2-)	176
127TE 177			3.375	(1/2-,3/2-,5/2-	177)
127TE 178		3.392	3/2-		178
127TE 179		3.416	3/2-		179
127TE 180		3.450	3/2-		180

127TE 181			3.480		181
127TE 182			3.503		182
127TE 183			3.545	(1/2-,3/2-)	183
127TE 184			3.554		184
127TE 185			3.567	1/2,3/2,5/2+	185
127TE 186			3.572	(3/2-)	186
127TE 187			3.583		187
127TE 188			3.596		188
127TE 189			3.609		189
127TE 190			3.615		190

127TE 191			3.653		191
127TE 192			3.661		192
127TE 193			3.679	1/2,3/2,5/2+	193
127TE 194			3.711	(1/2-,3/2-)	194
127TE 195			3.720	(1/2,3/2,5/2+)	195
127TE 196			3.739		196
127TE 197			3.749		197
127TE 198			3.765	1/2,3/2,5/2+	198
127TE 199			3.780	(5/2-,7/2-)	199
127TE 200			3.814	(1/2-,3/2-)	200

127TE 201			3.836	1/2,3/2,5/2+	201
127TE 202			3.853	1/2,3/2,5/2+	202
127TE 203			3.866	(3/2-,5/2+)	203
127TE 204			3.884	1/2+,3/2,5/2+	204
127TE 205			3.891		205
127TE 206			3.908		206
127TE 207			3.922	1/2,3/2,5/2+	207
127TE 208			3.954		208
127TE 209			3.974	1/2,3/2,5/2+	209
127TE 210			3.983		210

127TE 211			4.000		211
127TE 212			4.022		212
127TE 213			4.037	1/2,3/2,5/2+	213
127TE 214			4.057	1/2,3/2,5/2+	214
127TE 215			4.072		215
127TE 216			4.100		216
127TE 217			4.114		217
127TE 218			4.133		218

127TE 219			4.161		219
127TE 220			4.175		220

127TE 221			4.196	1/2-,3/2-	221
127TE 222			4.215		222
127TE 223			4.239	(1/2-,3/2,5/2+)	223
127TE 224			4.258	(1/2-,3/2-)	224
127TE 225			4.284	1/2-,3/2-	225
127TE 226			4.313		226
127TE 227			4.332	(1/2-,3/2-)	227
127TE 228			4.353		228
127TE 229			4.386	1/2-,3/2-	229
127TE 230			4.424		230

127TE 231			4.470		231
127TE 232			4.489	1/2-,3/2-	232
127TE 233			4.523		233
127TE 234			4.544		234
127TE 235			4.573		235
127TE 236			4.590		236
127TE 237			4.624		237
127TE 238			4.660		238
127TE 239			4.675		239
127TE 240			4.688		240

127TE 241			4.717		241
127TE 242			4.741		242
127TE 243			4.765	(1/2-,3/2-)	243
127TE 244			4.796		244
127TE 245			4.812		245
127TE 246			4.841	(1/2-,3/2-)	246
127TE 247			4.867		247
127TE 248			4.883		248
127TE 249			4.905	(1/2-,3/2-)	249
127TE 250			4.934		250

127TE 251			4.958	(1/2-,3/2-)	251
127TE 252			4.995		252
127TE 253			5.017		253
127TE 254			5.050		254
127TE 255			5.070		255
127TE 256			5.102		256
127TE 257			5.130	(1/2,3/2-)	257
127TE 258			5.167		258
127TE 259			5.198	(1/2-,3/2-)	259
127TE 260			5.223		260

127TE 261			5.254		261
127TE 262			5.286		262
127TE 263			5.297		263

127TE 264			5.317	264
127TE 265			5.338	265
127TE 266			5.365	266
127TE 267			5.380	267
127TE 268			5.407	268
127TE 269			5.417	269
127TE 270			5.441	270

127TE 271			5.475	271
127TE 272			5.498	272
127TE 273			5.531	273
127TE 274			5.545	274
127TE 275			5.570	275
127TE 276			5.584	276
127TE 277			5.603	277
127TE 278			5.623	278
127TE 279			5.634	279
127TE 280			5.655	280

127TE 281			5.675	281
127TE 282			5.700	282
127TE 283	6.288	1/2+		283

S-p = 9.176 (0.032)-----
S-n = 6.288 (0.002)-----
S-2p = 16.965 (0.002)-----
S-2n = 15.401 (0.002)-----
S-alpha= 2.891 (0.003)-----

S+p = -6.746 (0.004)
S+n = -8.785 (0.002)
S+2p = -14.994 (0.001)
S+2n = -14.867 (0.002)
S+alpha = -2.558 (0.001)

gap p = 2.430 (0.032)
gap n = -2.497 (0.002)
gap 2p = 1.971 (0.002)
gap 2n = 0.534 (0.002)
gap alpha = 0.333 (0.003)