

^{170}Tm $Z = 69$ $N = 101$ adopted link ENSDF link

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

BE = 1377.937 (0.001) MeV
 Qbeta- = 0.969 (0.001) MeV
 Qbeta+ = 0.312 (0.002) MeV

	Energy T	J+		J-		J-other		T1/2

S-alpha=	-0.850	(0.001)	-----					
170TM 1				0.000	1-			1 128.6 D 3
170TM 2				0.039	2-			2 1.71 NS 17
170TM 3				0.115	3-			3 0.60 NS 3
170TM 4				0.150	0-			4
170TM 5				0.183	4-			5
170TM 6							0.183 (3)+	6 4.12 US 13
170TM 7				0.204	2-			7 1 NS LT
170TM 8				0.220	2-			8 0.25 NS 3
170TM 9				0.237	1-			9
170TM 10							0.247 (4)+	10

170TM 11							0.271 (3)-	11
170TM 12				0.319	5-			12
170TM 13							0.327 (5+)	13
170TM 14				0.350	3-			14
170TM 15							0.355 (4)+	15
170TM 16							0.358 (4)-	16
170TM 17				0.381	4-			17
170TM 18							0.403 (3,4)-	18
170TM 19				0.409	6-			19
170TM 20							0.419	20

170TM 21							0.426 (6+)	21
170TM 22							0.440 (5+)	22
170TM 23							0.447 (3)-	23
170TM 24							0.457	24
170TM 25							0.468 (5)-	25
170TM 26							0.477	26
170TM 27							0.540 (4)-	27
170TM 28							0.544 (3+)	28
170TM 29				0.551	5-			29
170TM 30				0.590	1-			30

170TM 31							0.594	31
170TM 32							0.599 (6-)	32
170TM 33		0.604		1+				33
170TM 34		0.608		3+				34
170TM 35				0.617	7-			35

170TM	36					0.627		36
170TM	37			0.638	2-			37
170TM	38					0.644	(4-)	38
170TM	39			0.649	1-			39
170TM	40	0.650	2+					40

170TM	41					0.656	(5-)	41
170TM	42	0.662	1+					42
170TM	43					0.678		43
170TM	44					0.684	(0)-	44
170TM	45					0.687		45
170TM	46			0.693	2-			46
170TM	47	0.704	2+					47
170TM	48			0.708	3-			48
170TM	49					0.709	(1,2,3)-	49
170TM	50					0.716	(3)-	50

170TM	51	0.719	1+					51
170TM	52					0.734	(2)-	52
170TM	53					0.742	(LE2+)	53
170TM	54					0.744	1-,2-,3-	54
170TM	55			0.750	3-			55
170TM	56					0.756	(4)-	56
170TM	57					0.758	(2)+	57
170TM	58					0.760		58
170TM	59					0.774	(3)-	59
170TM	60					0.775	(0)+	60

170TM	61					0.782	(1)-	61
170TM	62					0.790	(6)-	62
170TM	63					0.801	(4)-	63
170TM	64					0.806	(4)-	64
170TM	65					0.819	(2)+	65
170TM	66	0.822	2+					66
170TM	67					0.829	(5+)	67
170TM	68					0.833		68
170TM	69					0.835	(4)-	69
170TM	70					0.839	(3)-	70

170TM	71					0.841	(LE2+)	71
170TM	72					0.850		72
170TM	73			0.854	2-			73
170TM	74	0.860	1+					74
170TM	75					0.863	(3)-	75
170TM	76					0.863	(1)-	76
170TM	77					0.867	(3)-	77
170TM	78					0.868		78
170TM	79					0.891	(5)+	79
170TM	80					0.908	(2)-	80

170TM 81				0.921	(5-)	81
170TM 82				0.925	(3)-	82
170TM 83				0.948	(6)+	83
170TM 84				0.956	(7-)	84
170TM 85				0.959	(3)-	85
170TM 86				0.964	(3,4)-	86
170TM 87				0.965		87
170TM 88				0.980	(3)-	88
170TM 89				0.985	(3,4,5)-	89
170TM 90				1.011	(6)+	90

170TM 91				1.014	(4-)	91
170TM 92				1.018	(LE2+)	92
170TM 93				1.025		93
170TM 94				1.046		94
170TM 95				1.057		95
170TM 96				1.061	(6-)	96
170TM 97				1.064	(1)+	97
170TM 98				1.071	(2)-	98
170TM 99				1.073		99
170TM 100				1.079	(1)+	100

170TM 101				1.088		101
170TM 102				1.092	(1,2)	102
170TM 103				1.102	(2+)	103
170TM 104				1.111		104
170TM 105				1.131	(5-)	105
170TM 106				1.140	(2)-	106
170TM 107				1.142	(1,2,3)	107
170TM 108				1.148	(1,2)-	108
170TM 109				1.161	(1)-	109
170TM 110				1.169	(2)-	110

170TM 111				1.179	(2)-	111
170TM 112				1.182	(LE3)	112
170TM 113		1.193	2-			113
170TM 114				1.201	(LE2)	114
170TM 115				1.211	(2+)	115
170TM 116				1.213	(3)-	116
170TM 117				1.220		117
170TM 118				1.224	(LE2-)	118
170TM 119				1.230	(7-)	119
170TM 120				1.232	(LE3)	120

170TM 121				1.238	(0,1,2)-	121
170TM 122				1.245		122
170TM 123				1.258		123
170TM 124				1.265	(0,1,2)-	124
170TM 125				1.269		125
170TM 126				1.280	(1-,2-)	126

170TM 127			1.291	(4-)	127
170TM 128			1.295		128
170TM 129			1.299	(2)-	129
170TM 130			1.309	(LE2)	130

170TM 131			1.316	(1)-	131
170TM 132			1.324	(LE2-)	132
170TM 133			1.335	(1-,2,3-)	133
170TM 134			1.355	(1,2)-	134
170TM 135			1.363	(1+,2-)	135
170TM 136			1.375	(1-)	136
170TM 137			1.382	(2)-	137
170TM 138			1.395	(2-)	138
170TM 139			1.413	(1-,2,3-)	139
170TM 140			1.433	(1-)	140

170TM 141			1.437	(LE2)	141
170TM 142			1.442	(LE4)	142
170TM 143			1.443	(1-)	143
170TM 144			1.448	(3)-	144
170TM 145			1.453	(LE2)	145
170TM 146			1.461		146
170TM 147			1.466	(1-,2-)	147
170TM 148			1.472	(1-)	148
170TM 149			1.478	(1,2-)	149
170TM 150			1.481	(LE2)	150

170TM 151			1.491		151
170TM 152			1.501	(LE2-)	152
170TM 153			1.515	(0-,2-)	153
170TM 154			1.518	(1-,2,3-)	154
170TM 155			1.526	(LE2-)	155
170TM 156			1.532	(LE2-)	156
170TM 157			1.537	(1-)	157
170TM 158			1.539	(4-)	158
170TM 159			1.549	(LE3)	159
170TM 160			1.566		160

170TM 161			1.587	(1-,2,3-)	161
170TM 162			1.590	(LE3)	162
170TM 163			1.604	(LE3)	163
170TM 164			1.609	(0-,1-,2-)	164
170TM 165			1.639	(1 TO 4)	165
170TM 166			1.646	(2-,3+)	166
170TM 167			1.659	(LE3)	167
170TM 168			1.669	(LE2)	168
170TM 169			1.676	(1-)	169
170TM 170			1.690		170

170TM 171			1.705	(LE3)	171

170TM 172			1.727	(1 TO 4)	172
170TM 173			1.734	(LE3)	173
170TM 174			1.748	(LE3)	174
170TM 175			1.758	(LE3)	175
170TM 176			1.769	(1 TO 3)	176
170TM 177			1.793	(1-)	177
170TM 178			1.818	(LE3)	178
170TM 179			1.823	(1-,2-)	179
170TM 180			1.846	(1-)	180

170TM 181			1.855	(1 TO 3)	181
170TM 182			1.859	(1-)	182
170TM 183			1.871	(LE2)	183
170TM 184			1.910	(LE3)	184
170TM 185			1.921	(1-,2)	185
170TM 186			1.933	(1-,2,3-)	186
170TM 187			1.944	(0-,2-)	187
170TM 188			1.951	(2,3-)	188
170TM 189			1.979	(1-,2,3-)	189
170TM 190			2.013	(2,3-)	190

170TM 191			2.039	(LE3)	191
170TM 192			2.073	(1-,2,3-)	192
170TM 193			2.084	(LE3)	193
170TM 194			2.098	(1,2)	194
170TM 195			2.101	(1-,2,3-)	195
170TM 196			2.116	(LE2)	196
170TM 197			2.135	(2,3-)	197
170TM 198			2.145	(LE3)	198
170TM 199			2.161	(1-,2,3-)	199
170TM 200			2.168	(1-,2,3-)	200

170TM 201			2.192	(1+,2,3-)	201
170TM 202			2.258	(0-,1,2-)	202
170TM 203			2.265	(2-,3+)	203
170TM 204			2.272	(LE3)	204
170TM 205			2.282	(LE3)	205
170TM 206			2.283	(1-,2)	206
170TM 207			2.290	(LE3)	207
170TM 208			2.307	(1-,2,3-)	208
170TM 209			2.341	(1-,2,3-)	209
170TM 210			2.347	(LE3)	210

170TM 211			2.365	(2-,3,4-)	211
170TM 212			2.388	(LE3)	212
170TM 213			2.439	(1-,2-)	213
170TM 214			2.458	(LE2)	214
170TM 215			2.478	(LE2)	215
170TM 216			2.482	(LE3)	216
170TM 217			2.529	(1 TO 4)	217

170TM 218				2.536	(1-,2,3-)	218
170TM 219				2.540	(1-,2,3-)	219
170TM 220				2.554	(LE3)	220

170TM 221				2.573	(LE3)	221
170TM 222				2.588	(LE3)	222
170TM 223				2.592	(1-,2-)	223
170TM 224				2.599	(2-)	224
170TM 225				2.607	(1-,2-)	225
170TM 226				2.618	(2-,3-)	226
170TM 227				2.626	(LE3)	227
170TM 228				2.635	(1-,2)	228
170TM 229				2.672	(1-,2,3-)	229
170TM 230				2.702	(LE3)	230

170TM 231				2.721	(LE3)	231
170TM 232				2.727		232
170TM 233				2.768	(1+,2,3-)	233
170TM 234				2.779	(1-,2,3-)	234
170TM 235				2.802	(LE3)	235
170TM 236				2.808	(2-,3-)	236
170TM 237				2.814	(1-,2-)	237
170TM 238				2.846	(LE3)	238
170TM 239				2.867	(1-,2,3-)	239
170TM 240				2.875	(1-,2,3-)	240

170TM 241				2.881	(LE3)	241
170TM 242				2.912	(LE3)	242
170TM 243				2.925	(1-,2,3-)	243
170TM 244				2.953	(1-,2,3-)	244
170TM 245				2.996	(1-,2,3-)	245
170TM 246				3.031	(LE2)	246
170TM 247				3.099	(LE2)	247
170TM 248				3.207	(1 TO 4)	248
170TM 249				3.216	(LE3)	249
170TM 250				3.273	(LE3)	250

170TM 251				3.471	(LE4)	251
170TM 252				3.491	(LE3)	252
170TM 253				3.557	(LE4)	253
170TM 254				3.624		254
170TM 255				3.630	(LE3)	255
170TM 256				3.760	(LE3)	256
170TM 257				3.806	(LE3)	257
170TM 258				3.864	(LE3)	258
S-p	=	6.163	(0.001)	-----		
S-n	=	6.592	(0.001)	-----		
170TM 259				6.592	0+,1+	259

S-p = 6.163 (0.001)-----
S-n = 6.592 (0.001)-----
S-2p = 14.314 (0.030)-----
S-2n = 14.625 (0.002)-----
S-alpha= -0.850 (0.001)-----

S+p = -6.801 (0.001)
S+n = -7.486 (0.001)
S+2p = -11.519 (0.002)
S+2n = -13.721 (0.006)
S+alpha = 1.800 (0.002)

gap p = -0.638 (0.001)
gap n = -0.894 (0.002)
gap 2p = 2.795 (0.030)
gap 2n = 0.905 (0.006)
gap alpha = 0.950 (0.002)