^{129}Te $Z = 52$ $N = 77$ adopted link ENSDF link

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

BE = 1087.523 (0.001) MeV
Qbeta- = 1.502 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
129TE 1	0.000	3/2+			1 69.6 M 3
129TE 2			0.106	11/2-	2 33.6 D 1
129TE 3	0.180	1/2+			3
129TE 4				0.250	4
129TE 5				0.360 (5/2+,3/2+)	5
129TE 6				0.455 7/2+,9/2+	6
129TE 7				0.465 9/2(-)	7
129TE 8	0.545	5/2+			8
129TE 9	0.634	5/2+			9
129TE 10			0.760	7/2-	10
129TE 11	0.773	1/2+			11
129TE 12	0.813	7/2+			12
129TE 13				0.865 (7/2+)	13
129TE 14				0.866 15/2(-)	14
129TE 15	0.875	3/2+			15
129TE 16				0.878 5/2-,7/2-	16
129TE 17	0.967	5/2+			17
129TE 18	1.155	1/2+			18
129TE 19				1.162 (7/2)-	19
129TE 20	1.212	7/2+			20
129TE 21				1.217 3/2+,5/2+	21
129TE 22				1.221 (5/2-,7/2+)	22
129TE 23				1.228 (7/2-,9/2+)	23
129TE 24				1.234 3/2+,5/2+	24
129TE 25	1.282	5/2+			25
129TE 26	1.303	1/2+			26
129TE 27	1.318	7/2+			27
129TE 28				1.385 (3/2-,5/2,7/2+)	28
129TE 29				1.406 (5/2,7/2,9/2+)	29
129TE 30	1.421	5/2+			30
129TE 31				1.461 (5/2,7/2,9/2+)	31
129TE 32				1.481 (3/2-,5/2,7/2+)	32
129TE 33	1.483	7/2+			33
129TE 34				1.516 (11/2+)	34
129TE 35				1.523 19/2(-)	35
129TE 36				1.545 7/2+,9/2+	36
129TE 37				1.560 (3/2)-	37

129TE	38	1.582	7/2+			1.633	7/2-,9/2+	38
129TE	39	1.600	5/2+					39
129TE	40							40
129TE	41	1.654	1/2+					41
129TE	42					1.654	(17/2-,19/2-)	42
129TE	43	1.656	5/2+					43
129TE	44					1.672	3/2+,5/2+	44
129TE	45	1.724	5/2+					45
129TE	46					1.727	(15/2+)	46
129TE	47					1.728	(9/2)+	47
129TE	48					1.740	3/2+,5/2+	48
129TE	49					1.751	(5/2,7/2,9/2)	49
129TE	50					1.752	(5/2)-	50
129TE	51	1.753	5/2+					51
129TE	52	1.754	7/2+					52
129TE	53					1.762	(5/2+)	53
129TE	54					1.778	(5/2,7/2,9/2+)	54
129TE	55	1.780	5/2+					55
129TE	56	1.813	7/2+					56
129TE	57					1.839	(1/2+)	57
129TE	58					1.844	-	58
129TE	59					1.844	(9/2)+	59
129TE	60					1.852	5/2-,7/2-	60
129TE	61					1.868	(5/2,7/2+)	61
129TE	62	1.869	5/2+					62
129TE	63					1.870	5/2-,7/2-	63
129TE	64	1.871	5/2+					64
129TE	65					1.887	(21/2-)	65
129TE	66					1.888	(3/2+,5/2+)	66
129TE	67					1.921	(5/2)+	67
129TE	68					1.940	(5/2,7/2,9/2)	68
129TE	69					1.957	(21/2-)	69
129TE	70					1.992	(5/2-,7/2-)	70
129TE	71			2.040	3/2-			71
129TE	72	2.059	1/2+					72
129TE	73	2.071	5/2+					73
129TE	74	2.072	3/2+					74
129TE	75			2.072	7/2-			75
129TE	76					2.086	(7/2+)	76
129TE	77			2.107	7/2-			77
129TE	78	2.114	1/2+					78
129TE	79	2.115	5/2+					79
129TE	80					2.131	(1/2+)	80
129TE	81			2.131	7/2-			81
129TE	82					2.133	9/2-,11/2-	82

129TE	83					2.135	(5/2-,7/2+)	83	
129TE	84					2.138	(23/2+)	84	33 NS 3
129TE	85	2.142	7/2+					85	
129TE	86	2.183	3/2+					86	
129TE	87					2.198	(5/2-,7/2-)	87	
129TE	88					2.221	(3/2,5/2+)	88	
129TE	89			2.221	7/2-			89	
129TE	90					2.232	5/2-,7/2-	90	
129TE	91	2.255	1/2+					91	
129TE	92					2.265	(5/2+,7/2+)	92	
129TE	93			2.267	3/2-			93	
129TE	94					2.279	(7/2)+	94	
129TE	95					2.304	9/2-,11/2-	95	
129TE	96	2.310	1/2+					96	
129TE	97			2.312	7/2-			97	
129TE	98					2.317	(11/2)-	98	
129TE	99	2.354	1/2+					99	
129TE	100			2.360	3/2-			100	
129TE	101					2.363	(1/2-)	101	
129TE	102					2.371	(3/2)+	102	
129TE	103					2.377	(1/2-)	103	
129TE	104			2.380	3/2-			104	
129TE	105	2.416	5/2+					105	
129TE	106			2.427	7/2-			106	
129TE	107	2.432	1/2+					107	
129TE	108					2.454	7/2+,9/2+	108	
129TE	109			2.463	7/2-			109	
129TE	110					2.465	(3/2+,5/2+)	110	
129TE	111					2.477	(3/2+,5/2+)	111	
129TE	112					2.482	7/2+,9/2+	112	
129TE	113	2.491	1/2+					113	
129TE	114			2.493	3/2-			114	
129TE	115					2.507	(3/2)+	115	
129TE	116					2.507	(5/2-,7/2-)	116	
129TE	117					2.511	23/2(-)	117	
129TE	118					2.511	(5/2-,7/2-)	118	
129TE	119					2.515	9/2-,11/2-	119	
129TE	120	2.519	3/2+					120	
129TE	121			2.525	1/2-			121	
129TE	122	2.556	5/2+					122	
129TE	123			2.582	3/2-			123	
129TE	124					2.584	(3/2)+	124	
129TE	125					2.612	(5/2-,7/2-)	125	
129TE	126					2.616	(3/2+,5/2+)	126	
129TE	127	2.632	5/2+					127	
129TE	128					2.641	(5/2-,7/2-)	128	

129TE 129				2.671	(3/2+,5/2+)	129
129TE 130	2.681	9/2+				130
129TE 131			2.705	1/2-		131
129TE 132	2.711	5/2+				132
129TE 133				2.728	1/2-,3/2-	133
129TE 134				2.737	(3/2-)	134
129TE 135				2.747	3/2+,5/2+	135
129TE 136				2.757	(3/2)+	136
129TE 137				2.765	(5/2-,7/2-)	137
129TE 138				2.767	(5/2+)	138
129TE 139				2.812	(9/2-,11/2-)	139
129TE 140				2.819	(5/2-,7/2-)	140
129TE 141				2.824	7/2+,9/2+	141
129TE 142				2.831	(3/2+)	142
129TE 143				2.835	(5/2-,7/2-)	143
129TE 144				2.840	27/2(-)	144
129TE 145				2.844	3/2+,5/2+	145
129TE 146				2.854	(5/2-,7/2-)	146
129TE 147	2.856	5/2+				147
129TE 148				2.859	(5/2-,7/2-)	148
129TE 149				2.871	(5/2-)	149
129TE 150				2.886		150
129TE 151				2.890	(5/2-,7/2-)	151
129TE 152				2.891	(3/2:9/2)(+)	152
129TE 153				2.900	9/2-,11/2-	153
129TE 154				2.920	(5/2)-	154
129TE 155			2.971	7/2-		155
129TE 156			2.979	5/2-		156
129TE 157				2.980	7/2+,9/2+	157
129TE 158				3.000		158
129TE 159				3.009		159
129TE 160				3.024		160
129TE 161				3.029		161
129TE 162				3.046		162
129TE 163				3.052	(27/2+)	163
129TE 164				3.056		164
129TE 165				3.070		165
129TE 166				3.077	(3/2+,5/2+)	166
129TE 167				3.089		167
129TE 168				3.103		168
129TE 169				3.128		169
129TE 170				3.134		170
129TE 171				3.151		171
129TE 172				3.163		172
129TE 173				3.182		173

129TE 174			3.202		174
129TE 175			3.212		175
129TE 176			3.230		176
129TE 177			3.240	(3/2:9/2)(+)	177
129TE 178			3.246		178
129TE 179			3.253		179
129TE 180			3.261		180
129TE 181			3.277		181
129TE 182			3.282		182
129TE 183			3.296		183
129TE 184			3.306		184
129TE 185			3.321		185
129TE 186			3.327		186
129TE 187			3.350		187
129TE 188		3.355 3/2-			188
129TE 189			3.362		189
129TE 190			3.365		190
129TE 191			3.372		191
129TE 192			3.379		192
129TE 193			3.385		193
129TE 194			3.390		194
129TE 195			3.406		195
129TE 196			3.414		196
129TE 197			3.420		197
129TE 198			3.430	(3/2)-	198
129TE 199			3.441		199
129TE 200			3.453		200
129TE 201			3.461		201
129TE 202			3.475		202
129TE 203			3.479		203
129TE 204		3.490 1/2-			204
129TE 205			3.500	7/2+,9/2+	205
129TE 206			3.503	(3/2-)	206
129TE 207			3.512		207
129TE 208			3.513	(29/2-)	208
129TE 209			3.524		209
129TE 210			3.528	(1/2-)	210
S-alpha= 3.536 (0.002)					
129TE 211			3.547	(3/2-)	211
129TE 212			3.559		212
129TE 213		3.565 1/2-			213
129TE 214			3.569		214
129TE 215			3.580		215
129TE 216			3.587		216
129TE 217			3.594		217
129TE 218			3.601	(3/2)-	218

129TE 219			3.615		219
129TE 220			3.617	(31/2-)	220
129TE 221			3.623		221
129TE 222			3.629		222
129TE 223			3.634		223
129TE 224			3.637	(29/2+)	224
129TE 225	3.638	1/2-			225
129TE 226			3.643		226
129TE 227	3.649	1/2-			227
129TE 228			3.655		228
129TE 229			3.666		229
129TE 230	3.671	3/2-			230
129TE 231			3.678		231
129TE 232			3.696		232
129TE 233	3.708	1/2-			233
129TE 234			3.714		234
129TE 235			3.729		235
129TE 236			3.737		236
129TE 237	3.745	3/2-			237
129TE 238			3.752		238
129TE 239			3.765	(3/2)-	239
129TE 240			3.770		240
129TE 241			3.777		241
129TE 242			3.785		242
129TE 243	3.792	3/2-			243
129TE 244			3.801		244
129TE 245			3.812		245
129TE 246			3.819		246
129TE 247			3.827		247
129TE 248			3.838		248
129TE 249	3.853	3/2-			249
129TE 250			3.860		250
129TE 251	3.865	3/2-			251
129TE 252			3.873		252
129TE 253			3.885		253
129TE 254			3.890		254
129TE 255	3.899	3/2-			255
129TE 256			3.907		256
129TE 257			3.917		257
129TE 258			3.922		258
129TE 259			3.929		259
129TE 260			3.938		260
129TE 261			3.944		261
129TE 262			3.948	(3/2-)	262
129TE 263			3.953		263

129TE 264			3.962		264
129TE 265			3.969	(3/2-)	265
129TE 266	3.974	3/2-			266
129TE 267			3.987		267
129TE 268			3.994		268
129TE 269			3.998		269
129TE 270			4.002		270
129TE 271			4.006		271
129TE 272			4.017		272
129TE 273			4.025		273
129TE 274	4.033	3/2-			274
129TE 275			4.033	(31/2+)	275
129TE 276			4.043		276
129TE 277			4.046		277
129TE 278			4.054		278
129TE 279			4.059	(1/2)-	279
129TE 280	4.068	3/2-			280
129TE 281			4.072		281
129TE 282	4.082	3/2-			282
129TE 283	4.088	3/2-			283
129TE 284			4.093		284
129TE 285			4.102		285
129TE 286			4.106		286
129TE 287			4.110		287
129TE 288	4.121	1/2-			288
129TE 289			4.129		289
129TE 290	4.134	3/2-			290
129TE 291			4.150		291
129TE 292			4.156	(31/2+)	292
129TE 293			4.161		293
129TE 294			4.166		294
129TE 295			4.175	(1/2)-	295
129TE 296			4.181	(3/2)-	296
129TE 297			4.201		297
129TE 298	4.204	1/2-			298
129TE 299			4.212		299
129TE 300	4.220	3/2-			300
129TE 301			4.229		301
129TE 302	4.240	3/2-			302
129TE 303			4.251		303
129TE 304			4.259		304
129TE 305			4.267	(1/2)-	305
129TE 306	4.277	3/2-			306
129TE 307			4.291		307
129TE 308	4.298	1/2-			308
129TE 309			4.307		309

129TE 310			4.312	(1/2)-	310
129TE 311			4.317		311
129TE 312			4.326		312
129TE 313			4.336	(1/2)-	313
129TE 314			4.350		314
129TE 315	4.356	1/2-			315
129TE 316	4.365	1/2-			316
129TE 317			4.374	(1/2,3/2,5/2+)	317
129TE 318			4.381		318
129TE 319	4.389	1/2-			319
129TE 320			4.402		320
129TE 321			4.411		321
129TE 322			4.425	(3/2-)	322
129TE 323	4.433	3/2-			323
129TE 324			4.435	(33/2-)	324
129TE 325			4.444		325
129TE 326			4.456		326
129TE 327			4.467	(1/2-)	327
129TE 328			4.475		328
129TE 329			4.484		329
129TE 330			4.497		330
129TE 331			4.504		331
129TE 332			4.512		332
129TE 333			4.523		333
129TE 334			4.543		334
129TE 335			4.558		335
129TE 336			4.573		336
129TE 337			4.580		337
129TE 338			4.588	(1/2,3/2,5/2+)	338
129TE 339			4.595		339
129TE 340			4.608		340
129TE 341			4.622		341
129TE 342			4.635		342
129TE 343			4.643	(1/2-,3/2-)	343
129TE 344			4.653	(1/2-,3/2-)	344
129TE 345			4.666	1/2-,3/2-	345
129TE 346			4.682	1/2-,3/2-	346
129TE 347			4.695		347
129TE 348			4.697	(33/2+)	348
129TE 349			4.712	1/2-,3/2-	349
129TE 350			4.724		350
129TE 351			4.744		351
129TE 352			4.766		352
129TE 353			4.778	(1/2-,3/2-)	353
129TE 354			4.794		354

129TE 355			4.808		355
129TE 356			4.825	(35/2-)	356
129TE 357			4.840		357
129TE 358			4.850		358
129TE 359			4.868		359
129TE 360			4.880		360
129TE 361			4.907		361
129TE 362			4.917	(1/2-,3/2-)	362
129TE 363			4.929		363
129TE 364			4.947		364
129TE 365			4.958		365
129TE 366			4.975		366
129TE 367			5.002		367
129TE 368			5.013		368
S-n = 6.082 (0.001)					
129TE 369	6.082 1/2+				369
129TE 370			6.083		370
129TE 371			6.083	1/2	371 0.15 EV 10
129TE 372		6.083 1/2-			372 0.0697 EV 10
129TE 373		6.083 1/2-			373 0.170 EV 20
129TE 374			6.084		374
129TE 375			6.084		375
129TE 376			6.084		376
129TE 377			6.084		377
129TE 378			6.085		378
129TE 379			6.086		379
129TE 380			6.086		380
129TE 381			6.086		381
129TE 382			6.088		382
129TE 383			6.088		383
129TE 384			6.089		384
129TE 385			6.090		385
129TE 386			6.092		386
129TE 387			6.093		387
129TE 388			6.093		388
129TE 389			6.093		389
129TE 390			6.094		390
129TE 391			6.094		391
129TE 392			6.095		392
129TE 393			6.095		393
129TE 394			6.095		394
129TE 395			6.095		395
129TE 396			6.097		396
129TE 397			6.098		397
129TE 398			6.099		398
129TE 399			6.099		399

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129TE 400 |                |                |   6.100                   400
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129TE 401 |                |                |   6.100                   401
129TE 402 |                |                |   6.101                   402
129TE 403 |                |                |   6.102                   403
129TE 404 |                |                |   6.102                   404
129TE 405 |                |                |   6.102                   405
129TE 406 |                |                |   6.103                   406
129TE 407 |                |                |   6.104                   407


S-p    =   9.664 ( 0.019)-------------------------------------------------------------------
S-n    =   6.082 ( 0.001)-------------------------------------------------------------------
S-2p   =  18.113 ( 0.009)-------------------------------------------------------------------
S-2n   =  14.867 ( 0.002)-------------------------------------------------------------------
S-alpha=   3.536 ( 0.002)-------------------------------------------------------------------

S+p       =  -7.220 ( 0.003)
S+n       =  -8.419 ( 0.001)
S+2p      = -15.987 ( 0.001)
S+2n      = -14.349 ( 0.001)
S+alpha   =  -3.064 ( 0.002)

gap p     =   2.443 ( 0.019)
gap n     =  -2.337 ( 0.001)
gap 2p    =   2.126 ( 0.009)
gap 2n    =   0.518 ( 0.002)
gap alpha =   0.473 ( 0.003)
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