

$^{119}\text{Te}$        $Z = 52$        $N = 67$       adopted link      ENSDF link

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

BE = 1006.987 ( 0.007) MeV

Qbeta+ = 2.293 ( 0.010) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-0.426	( 0.007)	-----		
119TE 1	0.000	1/2+			1 16.05 H 5
119TE 2	0.257	3/2+			2
119TE 3			0.261	11/2-	3 4.70 D 4
119TE 4	0.321	5/2+			4 2.2 NS 2
119TE 5	0.360	7/2+			5
119TE 6			0.468	9/2-	6
119TE 7			0.501	7/2-	7
119TE 8				0.557 3/2+,5/2+	8
119TE 9				0.598	9
119TE 10	0.636	5/2+			10
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119TE 11			0.661	7/2-	11
119TE 12	0.669	7/2+			12
119TE 13				0.703 (7/2+)	13
119TE 14	0.708	1/2+			14
119TE 15				0.724 3/2+,5/2+	15
119TE 16				0.743 7/2-,9/2-	16
119TE 17				0.747 (3/2+,5/2+)	17
119TE 18				0.767 5/2-,7/2-	18
119TE 19			0.772	5/2-	19
119TE 20				0.813 3/2+,5/2+	20
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119TE 21				0.877 3/2+,5/2+	21
119TE 22				0.889 3/2+,5/2+	22
119TE 23				0.901 (5/2-,7/2-)	23
119TE 24			0.901	15/2-	24
119TE 25				0.906	25
119TE 26				0.946 (9/2+)	26
119TE 27				0.957	27
119TE 28				0.964 3/2+,5/2+	28
119TE 29				0.980 (13/2-)	29
119TE 30				0.985 7/2+,9/2+	30
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119TE 31				0.994 5/2-,7/2-	31
119TE 32	1.004	1/2+			32
119TE 33				1.056 (7/2+,9/2+)	33
119TE 34				1.093	34
119TE 35				1.105 (7/2+,9/2+)	35
119TE 36	1.114	5/2+			36

119TE 37		1.132	1/2+				37	
119TE 38						1.155	1/2-, 3/2-	38
119TE 39						1.162	7/2-, 9/2-	39
119TE 40						1.185	5/2-, 7/2+	40
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119TE 41						1.189	7/2+, 9/2+	41
119TE 42						1.197	(3/2+)	42
119TE 43						1.198	3/2-, 5/2, 7/2	43
119TE 44						1.202	(1/2, 3/2, 5/2+)	44
119TE 45						1.215		45
119TE 46						1.251		46
119TE 47						1.264	(1/2+)	47
119TE 48		1.277	1/2+					48
119TE 49						1.281	(11/2+)	49
119TE 50		1.291	1/2+					50
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119TE 51						1.296		51
119TE 52						1.361	3/2+, 5/2+	52
119TE 53						1.371	3/2-, 5/2+	53
119TE 54						1.373		54
119TE 55						1.401	7/2+, 9/2+	55
119TE 56						1.418	7/2+, 9/2+	56
119TE 57						1.434	7/2+, 9/2+	57
119TE 58						1.443	7/2+, 9/2+	58
119TE 59		1.445	1/2+					59
119TE 60						1.446	3/2+, 5/2+	60
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119TE 61						1.479		61
119TE 62		1.505	1/2+					62
119TE 63		1.513	5/2+					63
119TE 64						1.528	(1/2+, 3/2, 5/2+)	64
119TE 65						1.531	3/2+, 5/2+	65
119TE 66						1.540	7/2+, 9/2+	66
119TE 67						1.586	(13/2+)	67
119TE 68						1.593	3/2+, 5/2+	68
119TE 69						1.599	(17/2-)	69
119TE 70						1.604	7/2+, 9/2+	70
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119TE 71						1.619	(19/2-)	71
119TE 72						1.620	1/2-, 3/2-	72
119TE 73						1.624	3/2, 5/2+	73
119TE 74						1.632	(1/2, 3/2, 5/2+)	74
119TE 75						1.655	3/2+, 5/2+	75
119TE 76		1.674	5/2+					76
119TE 77						1.680	(5/2-, 7/2-)	77
119TE 78						1.704	(7/2+, 9/2+)	78
119TE 79						1.720	1/2-, 3/2-	79
119TE 80						1.729	3/2, 5/2+	80
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119TE 81						1.739	3/2, 5/2+	81

119TE 82				1.741	(5/2-, 7/2-)	82
119TE 83				1.748	(7/2+, 9/2+)	83
119TE 84				1.770	5/2-, 7/2-	84
119TE 85				1.796		85
119TE 86		1.809	1/2+			86
119TE 87				1.819	(7/2+, 9/2+)	87
119TE 88				1.824	5/2-, 7/2-	88
119TE 89				1.834	3/2+, 5/2+	89
119TE 90				1.835	(5/2-, 7/2+)	90
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119TE 91				1.864	1/2-, 3/2-	91
119TE 92		1.877	1/2+			92
119TE 93				1.888	(3/2+, 5/2+)	93
119TE 94				1.889		94
119TE 95				1.892	7/2+, 9/2+	95
119TE 96				1.910	1/2-, 3/2-	96
119TE 97				1.924	(7/2+, 9/2+)	97
119TE 98				1.936	3/2+, 5/2+	98
119TE 99				1.940	(15/2+)	99
119TE 100				1.969	(7/2+, 9/2+)	100
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119TE 101		1.974	1/2+			101
119TE 102				1.999		102
119TE 103				2.005		103
119TE 104				2.010	(7/2+, 9/2+)	104
119TE 105				2.014	(1/2+)	105
119TE 106				2.025	3/2+, 5/2, 7/2+	106
119TE 107		2.048	1/2+			107
119TE 108				2.059	1/2-, 3/2-	108
119TE 109				2.076	7/2+, 9/2+	109
119TE 110				2.078	3/2+, 5/2+	110
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119TE 111				2.081	(7/2+, 9/2+)	111
119TE 112				2.090	(1/2+)	112
119TE 113				2.102	(21/2-)	113
119TE 114				2.106	(3/2+, 5/2, 7/2+)	114
119TE 115				2.113	3/2+, 5/2, 7/2+	115
119TE 116				2.138	(3/2+, 5/2+)	116
119TE 117				2.153	1/2-, 3/2-	117
119TE 118				2.217	(7/2+, 9/2+)	118
119TE 119				2.239	3/2+, 5/2+	119
119TE 120		2.254	1/2+			120
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119TE 121				2.267	3/2+, 5/2+	121
119TE 122				2.272	(23/2-)	122
119TE 123				2.276	(7/2+, 9/2+)	123
119TE 124				2.303	(23/2-, 25/2-)	124
119TE 125				2.326	(3/2+, 5/2+)	125
119TE 126				2.346	3/2+, 5/2+	126
119TE 127				2.347	(7/2+, 9/2+)	127

119TE 128				2.376	3/2+,5/2+	128
119TE 129				2.389	3/2+,5/2+	129
119TE 130				2.405	1/2-,3/2-	130
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119TE 131		2.418	1/2+			131
119TE 132				2.467	3/2+,5/2+	132
119TE 133				2.480	1/2-,3/2-	133
119TE 134				2.506		134
119TE 135				2.519	3/2+,5/2+	135
119TE 136				2.629	(23/2-)	136
119TE 137				3.007	(25/2-)	137
119TE 138				3.010		138
119TE 139				3.181	(25/2-)	139
119TE 140				3.348	(27/2-)	140
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119TE 141				3.382	(27/2)	141
119TE 142				3.624	(27/2-)	142
119TE 143				3.668	(29/2-)	143
119TE 144				3.763	(27/2-)	144
119TE 145				3.805	(29/2)	145
119TE 146				4.378	(31/2-)	146
119TE 147				4.449	(33/2-)	147
119TE 148				4.572	(31/2-)	148
119TE 149				4.669		149
119TE 150				4.730		150
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119TE 151				5.032	(37/2-)	151
119TE 152				5.254	(35/2-)	152
119TE 153				5.447	(39/2-)	153
119TE 154				5.449	(41/2)	154
119TE 155				6.004	(43/2-)	155
119TE 156				6.054		156
119TE 157				6.467	(45/2-)	157
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S-p	=	6.475	( 0.008)	-----		
119TE 158				6.513	(41/2-)	158
119TE 159				6.728	(43/2-)	159
119TE 160				6.828	(43/2-)	160
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119TE 161				6.936	(45/2-)	161
119TE 162				6.953	(47/2-)	162
119TE 163				7.025	(43/2-)	163
119TE 164				7.259		164
119TE 165				7.360	(45/2-)	165
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S-n	=	7.563	( 0.020)	-----		
119TE 166				7.654	(47/2-)	166
119TE 167				7.936		167
119TE 168				7.962	(45/2-)	168
119TE 169				8.062		169
119TE 170				8.355		170
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119TE 171				8.637	(47/2-)	171
119TE 172				9.068		172
119TE 173				9.383	(51/2-)	173
119TE 174				9.556		174
119TE 175				9.699	(55/2-)	175

S-p = 6.475 ( 0.008)-----  
 S-n = 7.563 ( 0.020)-----  
 S-2p = 11.363 ( 0.007)-----  
 S-2n = 18.230 ( 0.015)-----  
 S-alpha= -0.426 ( 0.007)-----

S+p = -3.854 ( 0.017)  
 S+n = -10.251 ( 0.007)  
 S+2p = -9.877 ( 0.013)  
 S+2n = -17.503 ( 0.027)  
 S+alpha = -0.491 ( 0.012)

gap p = 2.622 ( 0.019)  
 gap n = -2.688 ( 0.021)  
 gap 2p = 1.486 ( 0.015)  
 gap 2n = 0.726 ( 0.031)  
 gap alpha = -0.917 ( 0.014)