

^{182}Ta $Z = 73$ $N = 109$ adopted link ENSDF link

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

BE = 1458.299 (0.002) MeV

Qbeta- = 1.816 (0.002) MeV

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

S-alpha=	-1.482 (0.003)-----							
182TA 1				0.000	3-			1 114.74 D 12
182TA 2		0.016	5+					2 283 MS 3
182TA 3					0.098	4-		3
182TA 4					0.114	4-		4
182TA 5		0.150	4+					5
182TA 6		0.163	6+					6 30 PS LT
182TA 7					0.173	5-		7
182TA 8					0.237	5-		8
182TA 9						0.245		9
182TA 10						0.250	(3)+	10

182TA 11						0.269	(5)+	11
182TA 12					0.270	2-		12 1.2 NS 2
182TA 13					0.293	5-		13
182TA 14					0.316	6-		14
182TA 15						0.331	2+,5+	15
182TA 16		0.335	7+					16 30 PS LT
182TA 17					0.361	3-		17
182TA 18		0.364	4+					18
182TA 19						0.390	(6)+	19
182TA 20						0.396	(6-)	20

182TA 21		0.403	2+					21 1.00 NS 5
182TA 22						0.411	(6+)	22
182TA 23					0.444	1-		23 2.2 NS 2
182TA 24						0.458		24
182TA 25						0.476	(3)+	25
182TA 26					0.480	4-		26
182TA 27					0.488	6-		27
182TA 28					0.491	2-		28
182TA 29		0.506	5+					29
182TA 30					0.520	10-		30 15.84 M 10

182TA 31						0.547	(3)-	31
182TA 32						0.558	(1)-	32
182TA 33						0.566	(3)-	33
182TA 34		0.572	4+					34
182TA 35						0.579	(7+)	35
182TA 36						0.581	(7-)	36

182TA 37						0.583	(0-)	37
182TA 38						0.593	(1)+	38
182TA 39				0.628	5-			39
182TA 40						0.647	(2+)	40

182TA 41						0.648	(2)-	41
182TA 42						0.651	(4)-	42
182TA 43						0.652	(9-)	43
182TA 44						0.660	(4)-	44
182TA 45						0.663		45
182TA 46				0.666	2-			46
182TA 47						0.673	(6+)	47
182TA 48						0.696		48
182TA 49				0.702	3-			49
182TA 50						0.720	(3)-	50

182TA 51		0.724	3+					51
182TA 52						0.740	(2)-	52
182TA 53						0.749	(3)+	53
182TA 54						0.776	(7-)	54
182TA 55				0.781	5-			55
182TA 56						0.783	(5-)	56
182TA 57						0.791		57
182TA 58						0.805	(6-)	58
182TA 59						0.817	(4)-	59
182TA 60						0.831		60

182TA 61				0.835	3-			61
182TA 62						0.843	3-,4-,5-	62
182TA 63						0.856	(4)-	63
182TA 64						0.866	2-,5-	64
182TA 65						0.881	3+,4+,5+	65
182TA 66						0.898	3-,4-	66
182TA 67				0.910	5-			67
182TA 68						0.915	3-,4-	68
182TA 69						0.936	(2:5)+	69
182TA 70				0.940	5-			70

182TA 71						0.960	(4-)	71
182TA 72						0.961	(5-)	72
182TA 73						0.987	3-,4-	73
182TA 74						1.000	3-,4-	74
182TA 75						1.003	2-,5-	75
182TA 76						1.022	3+,4+	76
182TA 77						1.028	3-,4-	77
182TA 78						1.050	3-,4-	78
182TA 79						1.057	3-,4-	79
182TA 80						1.082	3-,4-	80

182TA 81				1.101	5-			81

182TA 82		1.114	5-				82
182TA 83					1.116	(7-)	83
182TA 84					1.125	(2-,5-)	84
182TA 85					1.137	3-,4-	85
182TA 86					1.150	3-,4-	86
182TA 87					1.170	3-,4-	87
182TA 88					1.196	2-,3-,4-	88
182TA 89					1.203	3+,4+,5+	89
182TA 90		1.216	2-				90

182TA 91					1.230	3-,4-	91
182TA 92					1.240	3-,4-	92
182TA 93					1.260	3-,4-	93
182TA 94					1.270	3-,4-	94
182TA 95					1.280	3-,4-	95
182TA 96					1.284	3-,4-	96
182TA 97					1.289		97
182TA 98					1.299	2,3,4,5	98
182TA 99					1.303	3-,4-	99
182TA 100					1.321	3-,4-	100

182TA 101		1.326	5-				101
182TA 102					1.332		102
182TA 103					1.337	(8-)	103
182TA 104					1.350	3-,4-	104
182TA 105		1.360	5-				105
182TA 106					1.371	3-,4-	106
182TA 107					1.377	3-,4-	107
182TA 108					1.389	3-,4-	108
182TA 109					1.393	3-,4-	109
182TA 110					1.396		110

182TA 111					1.417	3-,4-	111
182TA 112					1.433		112
182TA 113					1.445	3-,4-	113
182TA 114					1.452	3-,4-	114
182TA 115					1.472	3-,4-	115
182TA 116					1.480	3-,4-	116
182TA 117					1.483		117
182TA 118					1.490	3-,4-	118
182TA 119					1.496	3-,4-	119
182TA 120					1.527	3-,4-	120

182TA 121					1.538	3,4,5	121
182TA 122					1.542	3-,4-	122
182TA 123		1.546	2-				123
182TA 124		1.552	5-				124
182TA 125		1.556	5-				125
182TA 126		1.571	2-				126
182TA 127					1.577	3-,4-	127

182TA 128				1.580		128
182TA 129				1.582	3-,4-	129
182TA 130				1.605	3-,4-	130

182TA 131				1.612	3-,4-	131
182TA 132				1.617	3-,4-	132
182TA 133				1.628	3-,4-	133
182TA 134				1.636	3-,4-	134
182TA 135				1.642	3-,4-	135
182TA 136				1.646	(2:5)	136
182TA 137		1.651	5-			137
182TA 138				1.658	2-,3-,4-	138
182TA 139		1.662	5-			139
182TA 140				1.667	(2:5)	140

182TA 141				1.674	3-,4-	141
182TA 142				1.680	3-,4-	142
182TA 143				1.695	3-,4-	143
182TA 144				1.701	3-,4-	144
182TA 145				1.712	3-,4-	145
182TA 146				1.714		146
182TA 147				1.725	3-,4-	147
182TA 148				1.734	3,4	148
182TA 149				1.747	3-,4-	149
182TA 150		1.756	5-			150

182TA 151		1.763	5-			151
182TA 152				1.766	(2:5)	152
182TA 153				1.770	3,4	153
182TA 154				1.778	3-,4-	154
182TA 155				1.803		155
182TA 156				1.827		156
182TA 157				1.843		157
182TA 158				1.890		158
182TA 159				1.905		159
182TA 160				1.924		160

182TA 161				1.945		161
182TA 162				1.960		162
182TA 163				1.984		163
182TA 164				2.009		164
182TA 165				2.017		165
182TA 166				2.030		166
182TA 167				2.043		167
182TA 168				2.055		168
182TA 169				2.081		169
182TA 170				2.146		170

182TA 171				2.161		171
182TA 172				2.180		172

182TA 173			2.274		173
182TA 174			2.369		174
182TA 175			2.394		175
182TA 176			2.420		176
182TA 177			2.478		177
182TA 178			2.659		178
182TA 179			2.674		179
182TA 180			6.063	3+,4+	180

S-n	=	6.063 (0.002)	-----		
182TA 181			6.065	3+,4+	181

S-p	=	6.317 (0.002)	-----		
S-n	=	6.063 (0.002)	-----		
S-2p	=	14.332 (0.071)	-----		
S-2n	=	13.640 (0.003)	-----		
S-alpha	=	-1.482 (0.003)	-----		
S+p	=	-7.224 (0.002)			
S+n	=	-6.934 (0.002)			
S+2p	=	-12.367 (0.005)			
S+2n	=	-12.551 (0.026)			
S+alpha	=	2.078 (0.002)			
gap p	=	-0.907 (0.003)			
gap n	=	-0.871 (0.003)			
gap 2p	=	1.965 (0.071)			
gap 2n	=	1.088 (0.026)			
gap alpha	=	0.596 (0.003)			