

^{137}Xe $Z = 54$ $N = 83$ adopted link ENSDF link

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

BE = 1145.907 (0.000) MeV

Qbeta- = 4.162 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
137XE 1			0.000	7/2-	1 3.818 M 13
137XE 2			0.601	3/2-	2 0.25 NS LT
137XE 3				0.986 (1/2)-	3
137XE 4			1.218	9/2-	4
137XE 5			1.220	11/2-	5
137XE 6			1.303	5/2-	6
137XE 7				1.461 (1/2,3/2)	7
137XE 8				1.512	8
137XE 9				1.534 (5/2)-	9
137XE 10			1.621	15/2-	10
137XE 11				1.668 (1/2,3/2)	11
137XE 12				1.716 3/2-,5/2,7/2-	12
137XE 13				1.753	13
137XE 14				1.766 3/2-,5/2,7/2-	14
137XE 15				1.796	15
137XE 16				1.809	16
137XE 17				1.821	17
137XE 18				1.841 (3/2-)	18
137XE 19				1.850 3/2-,5/2,7/2-	19
S-alpha=	1.871 (0.002)				
137XE 20				1.873	20
137XE 21				1.879	21
137XE 22				1.898	22
137XE 23				1.926	23
137XE 24			1.935	19/2-	24 10.1 NS 9
137XE 25				1.936 (3/2-)	25
137XE 26				1.991	26
137XE 27				1.997	27
137XE 28				2.011	28
137XE 29				2.013	29
137XE 30				2.030	30
137XE 31				2.088	31
137XE 32				2.090	32
137XE 33				2.100	33
137XE 34				2.114	34
137XE 35				2.144	35
137XE 36				2.147	36

137XE 37				2.155		37
137XE 38				2.191		38
137XE 39				2.196	(1/2-,3/2)	39
137XE 40				2.204	(19/2-)	40

137XE 41				2.230		41
137XE 42				2.238		42
137XE 43				2.244		43
137XE 44				2.282		44
137XE 45				2.346		45
137XE 46				2.356		46
137XE 47				2.368		47
137XE 48				2.380		48
137XE 49				2.423		49
137XE 50				2.444		50

137XE 51				2.452	1/2,3/2	51
137XE 52				2.475		52
137XE 53				2.490	(3/2-)	53
137XE 54				2.567		54
137XE 55				2.571		55
137XE 56				2.609		56
137XE 57				2.630		57
137XE 58				2.672		58
137XE 59				2.676		59
137XE 60				2.726		60

137XE 61				2.830		61
137XE 62				2.845		62
137XE 63				2.910		63
137XE 64				2.923		64
137XE 65				2.960		65
137XE 66				2.980	(23/2-)	66
137XE 67				2.984		67
137XE 68				2.994		68
137XE 69				3.023		69
137XE 70				3.062	(23/2-)	70

137XE 71				3.112		71
137XE 72				3.118		72
137XE 73				3.252		73
137XE 74				3.254		74
137XE 75				3.263		75
137XE 76				3.277		76
137XE 77				3.288		77
137XE 78				3.292	(27/2-)	78
137XE 79				3.347		79
137XE 80				3.353		80

137XE 81				3.417		81

137XE 82			3.459	82
137XE 83			3.501	83
137XE 84			3.541	84
137XE 85			3.544	85
137XE 86			3.570	86
137XE 87			3.572	87
137XE 88			3.671	88
137XE 89			3.730	89
137XE 90			3.795	90

137XE 91			3.801	91
137XE 92			3.862	92
137XE 93			3.866	93
137XE 94			3.911	94
137XE 95			3.987	95
137XE 96			3.996	96
137XE 97			4.016	97
S-n =	4.026	(0.000)	-----	
137XE 98			4.026	98
137XE 99			4.029	99
137XE 100			4.039	100

137XE 101			4.065	101
137XE 102			4.084	102
137XE 103			4.103	103
137XE 104			4.105	104
137XE 105			4.130	105
137XE 106			4.141	106
137XE 107			4.153	107
137XE 108			4.161	108
137XE 109			4.173	109
137XE 110			4.181	110

137XE 111			4.189	111
137XE 112			4.199	112
137XE 113			4.212	113
137XE 114			4.260	114
137XE 115			4.270	115
137XE 116			4.277	116
137XE 117			4.283	117
137XE 118			4.288	118
137XE 119			4.298	119
137XE 120			4.318	120

137XE 121			4.333	121
137XE 122			4.346	122
137XE 123			4.351	123
137XE 124			4.380	124
137XE 125			4.380	125
137XE 126			4.383	126

(29/2+)

137XE 127			4.400	(+)	127
137XE 128			4.403		128
137XE 129			4.421		129
137XE 130			4.425		130

137XE 131			4.443		131
137XE 132			4.478		132
137XE 133			4.489		133
137XE 134			4.502		134
137XE 135			4.505		135
137XE 136			4.527		136
137XE 137			4.543		137
137XE 138			4.544		138
137XE 139			4.560		139
137XE 140			4.585		140

137XE 141			4.609		141
137XE 142			4.631		142
137XE 143			4.681		143
137XE 144			4.686		144
137XE 145			4.688	(33/2+)	145
137XE 146			4.713		146
137XE 147			4.750		147
137XE 148			4.758		148
137XE 149			4.773		149
137XE 150			4.785		150

137XE 151			4.798	(+)	151
137XE 152			4.802		152
137XE 153			4.869		153
137XE 154			4.880	(+)	154
137XE 155			4.881		155
137XE 156			4.899		156
137XE 157			4.906		157
137XE 158			4.956		158
137XE 159			4.978	(+)	159
137XE 160			4.999		160

137XE 161			5.025		161
137XE 162			5.080	(+)	162
137XE 163			5.125		163
137XE 164			5.132		164
137XE 165			5.149		165
137XE 166			5.158	(+)	166
137XE 167			5.170		167
137XE 168			5.180	(+)	168
137XE 169			5.209	(+)	169
137XE 170			5.230	(+)	170

137XE 171			5.355	(+)	171

137XE 172				5.379	(+)	172
137XE 173				5.408	(+)	173

S-p = 10.127 (0.014)-----
 S-n = 4.026 (0.000)-----
 S-2p = 19.233 (0.002)-----
 S-2n = 12.113 (0.004)-----
 S-alpha= 1.871 (0.002)-----

S+p = -7.792 (0.009)
 S+n = -5.660 (0.003)
 S+2p = -17.109 (0.000)
 S+2n = -9.404 (0.002)
 S+alpha = 0.226 (0.005)

gap p = 2.335 (0.017)
 gap n = -1.635 (0.003)
 gap 2p = 2.124 (0.002)
 gap 2n = 2.709 (0.004)
 gap alpha = 2.097 (0.006)