

^{136}Xe $Z = 54$ $N = 82$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1141.882 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
136XE 1	0.000	0+			1 2.165E21 Y 61
136XE 2	1.313	2+			2 0.360 PS 14
136XE 3	1.694	4+			3 1.293 NS 17
136XE 4	1.892	6+			4 2.95 US 17
136XE 5				2.126 3+,4+	5
136XE 6	2.262	6+			6 50 PS LE
136XE 7	2.290	2+			7
136XE 8	2.415	2+			8
136XE 9				2.444 5	9 50 PS LE
136XE 10				2.465	10
136XE 11				2.560 (4+)	11
136XE 12	2.582	0+			12
136XE 13				2.608 4+,5+	13 50 PS LE
136XE 14				2.634 1+,2+	14
136XE 15				2.849 (1,2+)	15
136XE 16				2.867 (8+)	16
136XE 17				2.869 (2+)	17
136XE 18				2.979 1+,2+	18
136XE 19				3.160	19
136XE 20				3.212 (1,2+)	20
136XE 21	3.229	8+			21
136XE 22			3.275 3-		22
136XE 23				3.350 (1,2)	23
136XE 24	3.484	10+			24
136XE 25				3.626 1	25
S-alpha=	3.666 (0.003)				
136XE 26				3.675 2	26
136XE 27				3.738 1	27
136XE 28				3.780 (4-)	28
136XE 29				3.830 (9-)	29
136XE 30				3.830 (6+,5)	30
136XE 31				3.873 (6+,5)	31
136XE 32				3.873 (3-)	32
136XE 33				4.058 (6+,5)	33
136XE 34				4.150 (2-)	34
136XE 35				4.269 2(+)	35
136XE 36	4.320	0+			36
136XE 37			4.380 4-		37

136XE 38				4.380	(8+)	38
136XE 39				4.454	1(-),2(+)	39
136XE 40				4.474	1	40

136XE 41				4.545	1,2(+)	41
136XE 42				4.711	1	42
136XE 43		4.820	1-			43
136XE 44				4.857	(11-)	44
136XE 45				4.890	1	45
136XE 46				4.929	1	46
136XE 47				4.947		47
136XE 48				5.017	(1,2+)	48
136XE 49				5.100	(2-)	49
136XE 50				5.128	1	50

136XE 51				5.141	(13-)	51
136XE 52				5.150	(2-)	52
136XE 53				5.187	1	53
136XE 54				5.218		54
136XE 55				5.321	(1+,2+)	55
136XE 56				5.322	1	56
136XE 57				5.352	1	57
136XE 58				5.420		58
136XE 59				5.458	1,2	59
136XE 60				5.482	(10+)	60

136XE 61				5.560	(2-,3-)	61
136XE 62				5.608	1	62
136XE 63				5.639	1	63
136XE 64				5.651	1	64
136XE 65				5.670	(3-)	65
136XE 66				5.728	1	66
136XE 67				5.760		67
136XE 68				5.800	1	68
136XE 69				5.832	(2+,3,4+)	69
136XE 70				5.862	(4+,5,6+)	70

136XE 71				5.871	1	71
136XE 72				5.880	(11+)	72
136XE 73				5.888	1	73
136XE 74				5.914	1	74
136XE 75				5.951	(12+)	75
136XE 76				5.969	(1,2+)	76
136XE 77				6.003	1,2	77
136XE 78				6.013	(1,2+)	78
136XE 79				6.030	1,2	79
136XE 80				6.053	(1,2+)	80

136XE 81				6.091		81
136XE 82		6.104	1-			82

136XE 83			6.115	1	83
136XE 84			6.126	1	84
136XE 85			6.156	(14-)	85
136XE 86			6.170	(1,2+)	86
136XE 87			6.170	(13+)	87
136XE 88			6.186		88
136XE 89			6.200	(1,2+)	89
136XE 90			6.227	1	90

136XE 91			6.253	1	91
136XE 92			6.301	1	92
136XE 93			6.310	1	93
136XE 94			6.324	1	94
136XE 95			6.354	1	95
136XE 96			6.372	1	96
136XE 97			6.409	(1,2+)	97
136XE 98			6.412		98
136XE 99			6.430	1	99
136XE 100			6.455	1	100

136XE 101			6.493	1	101
136XE 102			6.509	1	102
136XE 103			6.527	1	103
136XE 104			6.562	1	104
136XE 105			6.577	1	105
136XE 106			6.612	(14+)	106
136XE 107			6.624		107
136XE 108			6.665	1	108
136XE 109			6.684	1	109
136XE 110			6.691	1	110

136XE 111			6.704	1	111
136XE 112			6.715	1	112
136XE 113			6.734	1	113
136XE 114			6.738	(14+)	114
136XE 115			6.771	1	115
136XE 116			6.797	1	116
136XE 117			6.808	1	117
136XE 118			6.861	1	118
136XE 119			6.869	1	119
136XE 120			6.884	1	120

136XE 121			6.942	1	121
136XE 122			6.968	1	122
136XE 123			7.013	1	123
136XE 124			7.023	1	124
136XE 125			7.053	1	125
136XE 126			7.068	(15+)	126
136XE 127			7.071	1	127
136XE 128			7.082	1	128

136XE 129			7.094	1	129
136XE 130			7.121	1	130

136XE 131			7.134	1	131
136XE 132			7.165	1	132
136XE 133			7.193	1	133
136XE 134			7.200	1	134
136XE 135			7.212	1	135
136XE 136			7.232	1	136
136XE 137			7.245	1	137
136XE 138			7.343	1	138
136XE 139			7.370	1	139
136XE 140			7.512	(16+)	140

136XE 141			7.636		141
136XE 142			7.692	1	142
136XE 143			7.727	1	143
136XE 144			7.848		144
136XE 145			7.883	1	145
136XE 146			7.908	1	146
136XE 147			7.948	(17+)	147
136XE 148			7.990	1	148
136XE 149			8.024	1	149
136XE 150			8.051	1	150

136XE 151			8.066	1	151
S-n	=	8.087 (0.004)	-----		
136XE 152			8.093	1	152

S-p	=	9.939 (0.002)	-----		
S-n	=	8.087 (0.004)	-----		
S-2p	=	18.474 (0.003)	-----		
S-2n	=	14.446 (0.000)	-----		
S-alpha	=	3.666 (0.003)	-----		

S+p	=	-7.405 (0.000)			
S+n	=	-4.026 (0.000)			
S+2p	=	-16.410 (0.000)			
S+2n	=	-9.686 (0.003)			
S+alpha	=	0.735 (0.008)			

gap p	=	2.534 (0.002)			
gap n	=	4.062 (0.004)			
gap 2p	=	2.063 (0.003)			
gap 2n	=	4.760 (0.003)			
gap alpha	=	4.401 (0.009)			