

^{136}Xe $Z = 54$ $N = 82$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

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 =	18.473 (0.003)	-----		
S-2n =	14.446 (0.000)	-----		
S-alpha=	3.666 (0.003)	-----		

S+p =	-7.406 (0.000)			
S+n =	-4.026 (0.000)			
S+2p =	-16.411 (0.000)			
S+2n =	-9.686 (0.003)			
S+alpha =	0.736 (0.008)			

gap p =	2.533 (0.002)			
gap n =	4.061 (0.004)			
gap 2p =	2.063 (0.003)			
gap 2n =	4.760 (0.003)			
gap alpha =	4.402 (0.009)			