

^{125}Xe $Z = 54$ $N = 71$ adopted link ENSDF link

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

BE = 1053.867 (0.001) MeV

Qbeta+ = 1.637 (0.002) MeV

	Energy T	J+	J-	J-other	T1/2	
125XE	1			0.000	1/2(+)	1 16.9 H 2
125XE	2			0.112	3/2(+)	2 350 PS 20
125XE	3			0.253	9/2(-)	3 57 S 1
125XE	4			0.266	7/2	4
125XE	5			0.296	7/2(+)	5 0.14 US 3
125XE	6			0.311	11/2(-)	6
125XE	7			0.335	5/2(+)	7
125XE	8			0.471	3/2(+)	8
125XE	9			0.484	7/2(+)	9
125XE	10			0.497	5/2(+)	10

125XE	11			0.526	1/2(+), 3/2(+)	11
125XE	12			0.540	3/2(+)	12
125XE	13			0.594	5/2, 7/2(+)	13
125XE	14			0.597	9/2(+)	14 80 PS 17
125XE	15			0.608	7/2(-)	15
125XE	16			0.708	3/2(+), 5/2(+)	16
125XE	17			0.711	3/2(+)	17
125XE	18			0.737	13/2(-)	18
125XE	19			0.741	7/2(+)	19
125XE	20			0.762	(5/2-)	20

125XE	21			0.766	3/2, 5/2(+)	21
125XE	22			0.797	15/2(-)	22 8.7 PS 9
125XE	23			0.837	9/2(+)	23
125XE	24			0.871	11/2(+)	24 7.8 PS 8
125XE	25			0.887	9/2, 11/2(-)	25
125XE	26			0.889	7/2(+)	26
125XE	27			0.894	13/2(-)	27
125XE	28			0.896	5/2(-)	28
125XE	29			0.920	11/2	29
125XE	30			0.933	3/2(+), 5/2, 7/2(+)	30

125XE	31			0.946	5/2(+), 7/2(+)	31
125XE	32			0.969	7/2(+)	32
125XE	33			0.988		33
125XE	34			1.019	9/2(+)	34
125XE	35			1.024	(11/2-)	35
125XE	36			1.030	11/2(+)	36
125XE	37			1.064		37

125XE	38				1.077		38		
S-alpha=		1.081	(0.026)	-----				
125XE	39				1.104	(9/2,11/2+)	39		
125XE	40				1.121		40		

125XE	41				1.126		41		
125XE	42				1.138		42		
125XE	43				1.141	3/2(+),5/2,7/2(+)	43		
125XE	44				1.162	5/2(+)	44		
125XE	45				1.172		45		
125XE	46				1.193	7/2(+),9/2(+)	46		
125XE	47				1.210	13/2(+)	47	2.9 PS	10
125XE	48				1.217	5/2(+)	48		
125XE	49				1.245	(9/2-,11/2,13/2-)	49		
125XE	50				1.247		50		

125XE	51				1.248	11/2	51		
125XE	52				1.264		52		
125XE	53				1.282		53		
125XE	54				1.288		54		
125XE	55				1.307		55		
125XE	56				1.310	15/2(-)	56		
125XE	57				1.310	(15/2-)	57		
125XE	58				1.311	1/2,3/2	58		
125XE	59				1.312	3/2,5/2,7/2	59		
125XE	60				1.316	(11/2+)	60		

125XE	61				1.321		61		
125XE	62				1.325	1/2,3/2	62		
125XE	63				1.327		63		
125XE	64				1.331	3/2(+),5/2,7/2(+)	64		
125XE	65				1.341	(9/2-,11/2,13/2-)	65		
125XE	66				1.360	3/2,5/2,7/2	66		
125XE	67				1.370	5/2(+),7/2(+)	67		
125XE	68				1.380	7/2,9/2(+)	68		
125XE	69				1.388	17/2	69		
125XE	70				1.396	11/2(-),13/2,15/	70		

125XE	71				1.399		71		
125XE	72				1.404	5/2(+),7/2,9/2(+)	72		
125XE	73				1.416	5/2(+)	73		
125XE	74				1.425		74		
125XE	75				1.439	11/2(+)	75		
125XE	76				1.441	19/2(-)	76	3 PS	LT
125XE	77				1.474		77		
125XE	78				1.477		78		
125XE	79				1.481	13/2(+)	79		
125XE	80				1.490	3/2(+),5/2,7/2	80		

125XE	81				1.493		81		

125XE 82			1.495		82
125XE 83			1.510		83
125XE 84			1.536	15/2(+)	84 2.6 PS 9
125XE 85			1.538	7/2(+)	85
125XE 86			1.573	(13/2)	86
125XE 87			1.579	5/2(+), 7/2(+)	87
125XE 88			1.579	1/2, 3/2	88
125XE 89			1.580	17/2(-)	89
125XE 90			1.580		90

125XE 91			1.586	(15/2)	91
125XE 92			1.600	(11/2)	92
125XE 93			1.602		93
125XE 94			1.604		94
125XE 95			1.606	5/2(+), 7/2, 9/2(+)	95
125XE 96			1.617		96
125XE 97			1.625		97
125XE 98			1.628	7/2(+)	98
125XE 99			1.640	11/2(-), 13/2(+)	99
125XE 100			1.648		100

125XE 101			1.649		101
125XE 102			1.660	15/2	102
125XE 103			1.669	3/2(+), 5/2, 7/2(+103)	
125XE 104			1.679	7/2(+), 9/2, 11/2(104+)	
125XE 105			1.684		105
125XE 106			1.688		106
125XE 107			1.688		107
125XE 108			1.690	5/2(+), 7/2(+)	108
125XE 109			1.698	1/2, 3/2	109
125XE 110			1.714		110

125XE 111			1.717		111
125XE 112			1.719	15/2	112
125XE 113			1.724		113
125XE 114			1.740		114
125XE 115			1.753	7/2, 9/2, 11/2(+)	115
125XE 116			1.760		116
125XE 117			1.805		117
125XE 118			1.809		118
125XE 119			1.826		119
125XE 120			1.826	(15/2)	120

125XE 121			1.833	(9/2-, 11/2, 13/2+121)	
125XE 122			1.859	17/2(-)	122
125XE 123			1.865		123
125XE 124			1.883	(15/2)	124
125XE 125			1.906		125
125XE 126			1.925	17/2(+)	126 3 PS LT
125XE 127			1.934		127

125XE 128			1.976	(15/2)	128		
125XE 129			2.005	(15/2,17/2)	129		
125XE 130			2.006	19/2(-)	130		

125XE 131			2.031	(9/2+,11/2,13/2+131)			
125XE 132			2.036		132		
125XE 133			2.046	9/2(+)	133		
125XE 134			2.063		134		
125XE 135			2.082		135		
125XE 136			2.095	(9/2+,11/2,13/2+136)			
125XE 137			2.097		137		
125XE 138			2.145		138		
125XE 139			2.151	15/2(-)	139		
125XE 140			2.155	1/2,3/2	140		

125XE 141			2.167		141		
125XE 142			2.167	21/2	142		
125XE 143			2.175		143		
125XE 144			2.175		144		
125XE 145			2.194		145		
125XE 146			2.216	23/2(-)	146		
125XE 147			2.227	13/2	147		
125XE 148			2.227		148		
125XE 149			2.238	17/2	149		
125XE 150			2.255		150		

125XE 151			2.272	19/2(+)	151	3 PS	LT
125XE 152			2.302		152		
125XE 153			2.315		153		
125XE 154			2.318		154		
125XE 155			2.349		155		
125XE 156			2.384		156		
125XE 157			2.385	21/2(-)	157		
125XE 158			2.415		158		
125XE 159			2.424	19/2(+)	159		
125XE 160			2.447		160		

125XE 161			2.465		161		
125XE 162			2.485	(15/2-,17/2,19/2162-)			
125XE 163			2.508	19/2	163		
125XE 164			2.509		164		
125XE 165			2.524	1/2,3/2	165		
125XE 166			2.544	1/2,3/2	166		
125XE 167			2.551	19/2	167		
125XE 168			2.572		168		
125XE 169			2.604		169		
125XE 170			2.617	(15/2,17/2)	170		

125XE 171			2.653	19/2	171		
125XE 172			2.664		172		

125XE 173			2.671		173
125XE 174			2.704	21/2(+)	174
125XE 175			2.811	(23/2)	175
125XE 176			2.819	(17/2)	176
125XE 177			2.853		177
125XE 178			2.891	(21/2)	178
125XE 179			2.927		179
125XE 180			2.953	(19/2)	180

125XE 181			2.970	(21/2)	181
125XE 182			3.000		182
125XE 183			3.055	25/2	183
125XE 184			3.075	(21/2)	184
125XE 185			3.100	27/2(-)	185
125XE 186			3.131	(23/2)	186
125XE 187			3.151	(21/2)	187
125XE 188			3.211	(21/2)	188
125XE 189			3.272	(25/2)	189
125XE 190			3.278	(23/2)	190

125XE 191			3.323	(23/2)	191
125XE 192			3.379		192
125XE 193			3.486	(25/2)	193
125XE 194			3.487	(25/2)	194
125XE 195			3.519	(25/2)	195
125XE 196			3.524		196
125XE 197			3.563		197
125XE 198			3.619	(27/2)	198
125XE 199			3.650		199
125XE 200			3.753	(27/2)	200

125XE 201			3.899		201
125XE 202			3.960	(27/2)	202
125XE 203			4.053	29/2	203
125XE 204			4.065	(27/2)	204
125XE 205			4.071	(31/2-)	205
125XE 206			4.135		206
125XE 207			4.148	(27/2)	207
125XE 208			4.211	(29/2)	208
125XE 209			4.268	(29/2)	209
125XE 210			4.293	(29/2)	210

125XE 211			4.383	(31/2)	211
125XE 212			4.574	(31/2)	212
125XE 213			4.763	(31/2)	213
125XE 214			4.912	(31/2)	214
125XE 215			5.067	(35/2)	215
125XE 216			5.122	(33/2)	216
125XE 217			5.138	(33/2)	217
125XE 218			5.162	(33/2)	218

125XE 219			5.200		219
125XE 220			5.201	(33/2)	220

125XE 221			5.320	(35/2)	221
125XE 222			5.320	(35/2)	222
125XE 223			5.827	(35/2)	223
125XE 224			5.976	(37/2)	224
125XE 225			5.996	(35/2)	225
125XE 226			6.097	(39/2)	226
125XE 227			6.114	(37/2)	227
125XE 228			6.252	(37/2)	228
125XE 229			6.344	(39/2)	229
125XE 230			6.345	(39/2)	230

125XE 231			6.753	(39/2)	231
125XE 232			6.815	(39/2)	232
125XE 233			7.098	(41/2)	233
S-p	=	7.124 (0.003)	-----		
125XE 234			7.175	(43/2)	234
125XE 235			7.177	(41/2)	235
125XE 236			7.216	(43/2)	236
125XE 237			7.287	(41/2)	237
125XE 238			7.334	(43/2)	238
S-n	=	7.603 (0.002)	-----		
125XE 239			7.769	(43/2)	239
125XE 240			7.893	(43/2)	240

125XE 241			8.243	(47/2)	241
125XE 242			8.265	(45/2)	242
125XE 243			8.315	(45/2)	243
125XE 244			8.332	(45/2)	244
125XE 245			8.352	(47/2)	245
125XE 246			8.398	(47/2)	246
125XE 247			8.407	(47/2)	247
125XE 248			8.453		248
125XE 249			8.497		249
125XE 250			8.705	(47/2)	250

125XE 251			9.289	(49/2)	251
125XE 252			9.327	(49/2)	252
125XE 253			9.401	(51/2)	253
125XE 254			9.518	(51/2)	254
125XE 255			9.568	(49/2)	255
125XE 256			9.709	(51/2)	256

S-p	=	7.124 (0.003)	-----		
S-n	=	7.603 (0.002)	-----		
S-2p	=	12.606 (0.002)	-----		
S-2n	=	18.094 (0.010)	-----		

S-alpha= 1.081 (0.026)-----

S+p = -4.440 (0.010)

S+n = -10.018 (0.001)

S+2p = -10.196 (0.011)

S+2n = -17.264 (0.004)

S+alpha = -0.286 (0.011)

gap p = 2.684 (0.011)

gap n = -2.415 (0.002)

gap 2p = 2.410 (0.012)

gap 2n = 0.830 (0.011)

gap alpha = 0.795 (0.028)