

^{139}Xe $Z = 54$ $N = 85$ adopted link ENSDF link

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

BE = 1155.311 (0.002) MeV

Qbeta- = 5.056 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
139XE 1			0.000	3/2-	1 39.68 S 14
139XE 2				0.023 (7/2-)	2
139XE 3				0.032 (5/2-)	3
S-alpha= 0.341 (0.003)					
139XE 4				0.559 (9/2-)	4
139XE 5				0.594 (11/2-)	5
139XE 6				0.624 (5/2-)	6
139XE 7				0.670 (3/2-,5/2,7/2-)	7
139XE 8				0.679 (9/2-)	8
139XE 9				1.008 (5/2,7/2,9/2)	9
139XE 10				1.059 (3/2-,5/2,7/2)	10
139XE 11				1.086 (13/2-)	11
139XE 12				1.179 (15/2-)	12
139XE 13				1.193 (3/2-,5/2,7/2)	13
139XE 14				1.195 (13/2-)	14
139XE 15				1.313	15
139XE 16				1.399 (3/2-,5/2,7/2)	16
139XE 17				1.418 (11/2+)	17
139XE 18				1.444 (7/2,9/2)	18
139XE 19				1.449 (7/2,9/2)	19
139XE 20				1.493	20
139XE 21				1.512 (13/2+)	21
139XE 22				1.577 (17/2-)	22
139XE 23				1.684 (5/2,7/2,9/2)	23
139XE 24				1.771	24
139XE 25				1.810 (19/2-)	25
139XE 26				1.862 (17/2-)	26
139XE 27				1.894	27
139XE 28				2.014 (17/2+)	28
139XE 29				2.159 (21/2-)	29
139XE 30				2.193 (19/2-)	30
139XE 31				2.308	31
139XE 32				2.500 (23/2-)	32
139XE 33				2.575 (21/2+)	33
139XE 34				2.740	34
139XE 35				2.898	35
139XE 36				2.922 (25/2-)	36

139XE 37				2.925		37
139XE 38				2.994		38
139XE 39				3.161	(27/2-)	39
139XE 40				3.212	(25/2+)	40

139XE 41				3.305		41
139XE 42				3.548	(27/2+)	42
139XE 43				3.586	(29/2-)	43
139XE 44				3.608		44
S-n	=	3.744	(0.004)	-----		
139XE 45				3.793	(29/2+)	45
139XE 46				4.023	(31/2-)	46
139XE 47				4.232	(33/2-)	47
139XE 48				4.299		48
139XE 49				4.412	(33/2+)	49
139XE 50				4.985	(35/2-)	50

139XE 51				5.096	(37/2-)	51
139XE 52				6.091	(41/2-)	52

S-p	=	10.954	(0.006)	-----		
S-n	=	3.744	(0.004)	-----		
S-2p	=	20.919	(0.003)	-----		
S-2n	=	9.404	(0.002)	-----		
S-alpha	=	0.341	(0.003)	-----		
S+p	=	-8.694	(0.008)			
S+n	=	-5.413	(0.003)			
S+2p	=	-18.666	(0.006)			
S+2n	=	-8.695	(0.004)			
S+alpha	=	-0.718	(0.007)			
gap p	=	2.260	(0.011)			
gap n	=	-1.669	(0.005)			
gap 2p	=	2.253	(0.006)			
gap 2n	=	0.709	(0.004)			
gap alpha	=	-0.377	(0.008)			