

$^{140}\text{Xe}$        $Z = 54$        $N = 86$       adopted link      ENSDF link

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

BE = 1160.724 ( 0.002) MeV

Qbeta- = 4.063 ( 0.009) MeV

	Energy T	J+	J-	J-other	T1/2
140XE 1	0.000	0+			1 13.60 S 10
140XE 2	0.377	2+			2 70.5 PS 20
140XE 3	0.834	4+			3 14.2 PS 23
S-alpha=	0.986 ( 0.003)				
140XE 4	1.304	3+			4
140XE 5	1.417	6+			5 8.6 PS LT
140XE 6				1.443	6
140XE 7			1.513 3-		7 7.7 PS LT
140XE 8	1.573	5+			8
140XE 9	1.726	6+			9
140XE 10			1.771 5-		10 11 PS 3
140XE 11	1.954	7+			11
140XE 12	1.983	8+			12
140XE 13			2.185 7-		13
140XE 14	2.257	8+			14
140XE 15				2.282 (4)	15
140XE 16				2.489 (6)	16
140XE 17	2.589	9+			17
140XE 18	2.591	10+			18
140XE 19			2.736 9-		19
140XE 20				2.775 (8)	20
140XE 21				2.933	21
140XE 22	2.966	10+			22
140XE 23				3.160 (10)	23
140XE 24			3.246 11-		24
140XE 25	3.270	12+			25
140XE 26				3.283 (11+)	26
140XE 27				3.704	27
140XE 28				3.730 (12)	28
140XE 29				3.813 (13-)	29
140XE 30	3.998	14+			30
140XE 31				4.126 (13+)	31
140XE 32				4.434 (15-)	32
140XE 33				4.745 (16+)	33
140XE 34				5.167 (17-)	34
S-n =	5.413 ( 0.003)				
140XE 35				5.505 (18+)	35

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S-p    = 11.804 ( 0.005)-----  
S-n    =  5.413 ( 0.003)-----  
S-2p   = 21.869 ( 0.004)-----  
S-2n   =  9.157 ( 0.004)-----  
S-alpha=  0.986 ( 0.003)-----  
  
S+p    = -8.780 ( 0.009)  
S+n    = -3.282 ( 0.004)  
S+2p   = -19.434 ( 0.006)  
S+2n   = -8.386 ( 0.004)  
S+alpha = -1.206 ( 0.008)  
  
gap p   =  3.024 ( 0.011)  
gap n   =  2.131 ( 0.005)  
gap 2p  =  2.435 ( 0.008)  
gap 2n  =  0.771 ( 0.005)  
gap alpha = -0.219 ( 0.008)
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