

^{136}Sm $Z = 62$ $N = 74$ adopted link ENSDF link

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

BE = 1116.005 (0.012) MeV

Qbeta+ = 4.359 (0.070) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-2.190	(0.027)	-----		
136SM 1	0.000	0+			1 47 S 2
136SM 2	0.255	2+			2 88 PS 9
136SM 3	0.686	4+			3 5.0 PS 5
136SM 4				0.713 (2+)	4
136SM 5				1.171 (4+)	5
136SM 6	1.221	6+			6 1.5 PS 5
136SM 7				1.491 (2+)	7
136SM 8				1.641 (6+)	8
136SM 9	1.799	8+			9 1.0 PS 3
136SM 10				2.250 (8+)	10

136SM 11				2.265 (8-)	11 15 US 1
136SM 12				2.275 (7-)	12
136SM 13	2.415	10+			13 0.9 PS 3
136SM 14				2.679 (9-)	14
136SM 15				2.738 (9-)	15
136SM 16				2.768 (8-)	16
136SM 17				2.954 (10+)	17
136SM 18				3.092 (12+)	18
136SM 19				3.112 (10-)	19
136SM 20				3.218 (10-)	20

136SM 21				3.291 (11-)	21
136SM 22	3.337	12+			22
136SM 23				3.556 (11-)	23
136SM 24				3.683 (12+)	24
136SM 25				3.828 (14+)	25
136SM 26				3.889 (14+)	26
136SM 27				3.892 (12-)	27
136SM 28				3.921 (13-)	28
136SM 29				3.991 (14+)	29
136SM 30				4.015 (12-)	30

S-p	= 4.038	(0.084)	-----		
136SM 31				4.169	31
136SM 32				4.322	32
136SM 33				4.423	33
136SM 34				4.437 (14+)	34
136SM 35				4.465 (13-)	35

136SM	36				4.588		36
136SM	37				4.598	(14-)	37
136SM	38				4.603	(16+)	38
136SM	39				4.619	(15-)	39
136SM	40				4.735	(16+)	40

136SM	41				4.837	(16+)	41
136SM	42				4.862		42
136SM	43				4.928	(14-)	43
136SM	44				5.205		44
136SM	45				5.379	(17-)	45
136SM	46				5.446	(18+)	46
136SM	47				5.592		47
136SM	48				5.636	(18+)	48
S-2p	=	5.742	(0.017)	-----			
136SM	49				5.796	(18+)	49
136SM	50				6.002		50

136SM	51				6.206	(19-)	51
136SM	52				6.356	(20+)	52
136SM	53				6.595	(20+)	53
136SM	54				7.110	(21-)	54
136SM	55				7.328	(22+)	55
136SM	56				7.567	(22+)	56
136SM	57				8.350	(24+)	57
136SM	58				8.610	(24+)	58
S-p	=	4.038	(0.084)	-----			
S-n	=	12.025	(0.155)	-----			
S-2p	=	5.742	(0.017)	-----			
S-2n	=	21.627	(0.135)	-----			
S-alpha	=	-2.190	(0.027)	-----			
S+p	=	-0.624	(0.013)				
S+n	=	-9.252	(0.031)				
S+2p	=	-3.451	(0.139)				
S+2n	=	-20.829	(0.017)				
S+alpha	=	2.604	(0.031)				
gap p	=	3.414	(0.085)				
gap n	=	2.773	(0.158)				
gap 2p	=	2.291	(0.140)				
gap 2n	=	0.797	(0.136)				
gap alpha	=	0.414	(0.041)				