

$^{133}\text{Sm}$        $Z = 62$        $N = 71$       adopted link      ENSDF link

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

BE = 1082.221 (-0.266) MeV

Qbeta+ = 8.167 ( 0.271) MeV

	Energy T	J+	J-	J-other	T1/2
-----					
S-alpha=	-2.714	(-0.371)	-----		
133SM 1				0.000 (5/2+)	1 2.89 S 16
133SM 2				0.140 (7/2+)	2
133SM 3				0.315 (9/2+)	3
133SM 4				0.524 (11/2+)	4
133SM 5				0.763 (13/2+)	5
133SM 6				1.032 (15/2+)	6
133SM 7				1.326 (17/2+)	7
133SM 8				1.640 (19/2+)	8
133SM 9				1.976 (21/2+)	9
133SM 10				2.326 (23/2+)	10
-----					
133SM 11				2.692 (25/2+)	11
S-p	=	2.857	(-0.297)	-----	
133SM 12				3.064 (27/2+)	12
133SM 13				3.430 (29/2+)	13

S-p = 2.857 (-0.297)-----

S-n = 10.117 (-0.375)-----

S-2p = 4.051 (-0.267)-----

S-2n = 23.086 (-0.475)-----

S-alpha= -2.714 (-0.371)-----

S+p = 0.171 (-0.378)

S+n = -12.157 (-0.298)

S+2p = -1.559 (-0.485)

S+2n = -21.759 (-0.308)

S+alpha = 3.557 (-0.382)

gap p = 3.028 ( 0.480)

gap n = -2.040 ( 0.479)

gap 2p = 2.492 ( 0.553)

gap 2n = 1.327 ( 0.566)

gap alpha = 0.843 ( 0.532)