

$^{128}\text{Sn}$        $Z = 50$        $N = 78$       adopted link      ENSDF link

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

BE = 1077.373 ( 0.018) MeV

Qbeta- = 1.268 ( 0.026) MeV

	Energy T	J+	J-	J-other	T1/2
128SN 1	0.000	0+			1 59.07 M 14
128SN 2				1.169 (2)+	2 1.63 PS 10
128SN 3				2.000 (4+)	3
128SN 4				2.092 (7-)	4 6.5 S 5
128SN 5				2.104 (2)+	5
128SN 6				2.121 (5-)	6 8.6 NS 8
128SN 7				2.258 (2)+	7
128SN 8				2.274 (2-,3,4+)	8
128SN 9				2.378 (7-)	9
128SN 10				2.413 (8+)	10 40 NS LT
128SN 11				2.492 (10+)	11 2.91 US 14
128SN 12				2.547 (7-)	12
128SN 13				2.579 (2)+	13
128SN 14				2.633 (2,3,4+)	14
128SN 15				2.642 (2,3,4+)	15
128SN 16				2.757 (2,3,4+)	16
128SN 17				2.952 (2,3,4+)	17
128SN 18				2.959 (7,8,9)	18
128SN 19				3.092 (2,3,4+)	19
128SN 20				3.147 (9-)	20
128SN 21				3.176 (7-)	21
128SN 22				3.226 (2)+	22
128SN 23				3.383 (7-)	23
128SN 24				3.520 (2)+	24
128SN 25				3.554 (12+)	25
128SN 26				3.609 (7,8,9-)	26
128SN 27				3.633	27
128SN 28				3.769 (7,8,9)	28
128SN 29				3.772 (11-)	29
128SN 30				3.871 (7-,8-,9-)	30
128SN 31				3.886 (2)+	31
128SN 32				3.955 (2)+	32
128SN 33				3.959 (7-,8-,9-)	33
128SN 34				3.980 (13-)	34
128SN 35				3.988 (7,8,9-)	35
128SN 36				3.998 (2,3,4)+	36
128SN 37				4.038 (2)+	37

128SN	38				4.065	(9-)	38		
128SN	39				4.075	(2,3,4)+	39		
128SN	40				4.100	(15-)	40	220 NS	30
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128SN	41				4.214	(7-,8-,9-)	41		
128SN	42				4.220	(2,3,4)+	42		
128SN	43				4.227	(2)+	43		
128SN	44				4.243	(7-,8-,9-)	44		
128SN	45				4.298	(2)+	45		
128SN	46				4.510	(2)+	46		
128SN	47				4.898	(7-,8-,9-)	47		

S-p = 13.771 ( 0.020)-----  
 S-n = 7.963 ( 0.020)-----  
 S-2p = 25.684 ( 0.018)-----  
 S-2n = 13.489 ( 0.021)-----  
 S-alpha= 9.087 ( 0.018)-----

S+p = -8.557 ( 0.028)  
 S+n = -5.301 ( 0.025)  
 S+2p = -18.569 ( 0.018)  
 S+2n = -12.913 ( 0.018)  
 S+alpha = -4.252 ( 0.018)

gap p = 5.214 ( 0.034)  
 gap n = 2.663 ( 0.032)  
 gap 2p = 7.114 ( 0.025)  
 gap 2n = 0.575 ( 0.027)  
 gap alpha = 4.835 ( 0.025)