

^{128}Nd $Z = 60$ $N = 68$ adopted link ENSDF link

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

BE = 1046.656 (-0.256) MeV

Qbeta+ = 5.863 (0.258) MeV

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

S-alpha=	-2.036	(-0.356)	-----		
128ND 1	0.000	0+			1 5 S
128ND 2	0.134	2+			2
128ND 3	0.424	4+			3 16 PS 4
128ND 4	0.848	6+			4 15 PS LT
128ND 5	1.377	8+			5
128ND 6				1.732 (4-)	6
128ND 7				1.877 (5-)	7
128ND 8				1.927 (5-)	8
128ND 9	1.987	10+			9
128ND 10				2.053 (6-)	10

128ND 11				2.223 (7-)	11
128ND 12				2.268 7(-)	12
128ND 13				2.483 (8-)	13
128ND 14				2.653 (9-)	14
128ND 15	2.656	12+			15
128ND 16				2.750 9(-)	16
128ND 17				3.009 (10-)	17
128ND 18				3.182 (11-)	18

S-p	= 3.224	(-0.361)	-----		
128ND 19				3.322 (11-)	19
128ND 20	3.372	14+			20

128ND 21				3.589 (12-)	21
128ND 22				3.795 (13-)	22
128ND 23				3.955 (13-)	23
128ND 24	4.136	16+			24
128ND 25				4.201 (14-)	25

S-2p	= 4.225	(-0.258)	-----		
128ND 26				4.481 (15-)	26
128ND 27				4.641 (15-)	27
128ND 28				4.886 (16-)	28
128ND 29	4.964	18+			29
128ND 30				5.232 (17-)	30

128ND 31				5.369 (17-)	31
128ND 32				5.646 (18-)	32
128ND 33	5.874	20+			33
128ND 34				6.052 (19-)	34

128ND	35						6.165	(19-)	35
128ND	36						6.490	(20-)	36
128ND	37		6.869	22+					37
128ND	38						6.942	(21-)	38
128ND	39						7.010	(21-)	39
128ND	40						7.382	(22-)	40

128ND	41						7.886	(23-)	41
128ND	42		7.938	24+					42
128ND	43						8.307	(24-)	43
128ND	44		9.062	26+					44
128ND	45						9.302	(26-)	45

S-p = 3.224 (-0.361)-----
S-n = 12.622 (-0.361)-----
S-2p = 4.225 (-0.258)-----
S-2n = 23.284 (-0.359)-----
S-alpha= -2.036 (-0.356)-----

S+p = -0.050 (-0.363)
S+n = -9.983 (-0.363)
S+2p = -1.794 (-0.467)
S+2n = -22.271 (-0.258)
S+alpha = 2.848 (-0.368)

gap p = 3.174 (0.512)
gap n = 2.639 (0.512)
gap 2p = 2.432 (0.533)
gap 2n = 1.013 (0.442)
gap alpha = 0.812 (0.512)