

$^{70}\text{Zn}$        $Z = 30$        $N = 40$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 611.087 ( 0.002) MeV

	Energy T	J+	J-	J-other	T1/2
70ZN 1	0.000	0+			1 3.8E18 Y GE
70ZN 2	0.885	2+			2 3.65 PS 21
70ZN 3	1.071	0+			3 3.90 NS 20
70ZN 4				1.554	4
70ZN 5	1.759	2+			5 1.32 PS 21
70ZN 6	1.787	4+			6 2.9 PS 8
70ZN 7	1.957	2+			7
70ZN 8	2.141	0+			8
70ZN 9				2.375 (2,1,3)+	9
70ZN 10	2.538	2+			10 0.21 PS +28-8
70ZN 11	2.665	2+			11
70ZN 12	2.693	4+			12 0.28 PS +35-14
70ZN 13				2.805	13
70ZN 14			2.859 3-		14 0.201 PS 14
70ZN 15				2.895 (6+)	15
70ZN 16				2.950 1+,2+,3+	16 0.042 PS +21-14
70ZN 17				2.954	17
70ZN 18	2.978	4+			18
70ZN 19				3.022	19
70ZN 20			3.038 5-		20 1.04 PS 7
70ZN 21				3.222 1	21
70ZN 22				3.235 3+,4+,5+	22
70ZN 23				3.247 (3-,4+)	23
70ZN 24				3.328 (0+)	24
70ZN 25			3.342 3-		25
70ZN 26				3.419 (3)-	26
70ZN 27	3.464	4+			27
70ZN 28				3.477	28
70ZN 29			3.506 5-		29
70ZN 30				3.599	30
70ZN 31	3.635	2+			31
70ZN 32	3.680	0+			32
70ZN 33	3.711	2+			33
70ZN 34				3.750 (0-,1-,2-)	34
70ZN 35				3.755 (8+)	35
70ZN 36				3.788	36
70ZN 37				3.813	37
70ZN 38			3.844 1-		38

70ZN 39						3.848	(5,6+)	39
70ZN 40						3.888	(4)+	40
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70ZN 41						3.904	(5,6+)	41
70ZN 42						3.914		42
70ZN 43				3.948	1-			43
70ZN 44		3.999	2+					44
70ZN 45						4.001	(5,6,7-)	45
70ZN 46						4.016	3+,4+,5+	46
70ZN 47						4.061	(5,6,7-)	47
70ZN 48		4.066	4+					48
70ZN 49						4.136	2+,1+,3+	49
70ZN 50						4.146		50
-----								
70ZN 51				4.172	5-			51
70ZN 52						4.265	(5,6,7-)	52
70ZN 53		4.291	2+					53
70ZN 54						4.309	(5,6,7-)	54
70ZN 55						4.367	3+,4+,5+	55
70ZN 56						4.444	3+,4+,5+	56
70ZN 57						4.465	(5,6,7-)	57
70ZN 58						4.514	(5,6,7-)	58
70ZN 59						4.558	(5,6+)	59
70ZN 60						4.589	(5,6,7-)	60
-----								
70ZN 61						4.710	(5,6,7)	61
70ZN 62						4.792	(5,6,7)	62
70ZN 63						4.849	(5,6+)	63
70ZN 64						4.936	(10+)	64
70ZN 65						5.061	(5,6,7)	65
S-alpha=	5.983	( 0.002)	-----					
70ZN 66						6.116	(12+)	66

S-p = 11.117 ( 0.002)-----  
S-n = 9.218 ( 0.002)-----  
S-2p = 20.679 ( 0.004)-----  
S-2n = 15.700 ( 0.002)-----  
S-alpha= 5.983 ( 0.002)-----

S+p = -7.863 ( 0.002)  
S+n = -5.835 ( 0.003)  
S+2p = -17.599 ( 0.002)  
S+2n = -14.723 ( 0.003)  
S+alpha = -6.283 ( 0.002)

gap p = 3.254 ( 0.003)  
gap n = 3.383 ( 0.004)  
gap 2p = 3.080 ( 0.004)  
gap 2n = 0.977 ( 0.004)

gap alpha = -0.299 ( 0.003)