

$^{64}\text{Ni}$        $Z = 28$        $N = 36$       [link to full NNDC output](#)

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

BE = 561.758 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
-----					
64NI 1	0.000	0+			1 STABLE
64NI 2	1.346	2+			2 1.088 PS 35
64NI 3				2.277 (2)+	3
64NI 4				2.485	4
64NI 5	2.610	4+			5 1.73 PS 28
64NI 6				2.867 (0)+	6 0.04 PS 2
64NI 7				2.972 (1,2+)	7 0.13 PS +13-5
64NI 8				3.026 (0+)	8
64NI 9	3.166	4+			9 0.13 PS +17-5
64NI 10	3.276	2+			10 0.21 PS 2
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64NI 11				3.396 (4)+	11
64NI 12				3.464 (0+,1,2,3-)	12
64NI 13				3.482 (2+,3,4+)	13
64NI 14			3.560 3-		14 3.3 PS AP
64NI 15				3.648 1+,2+	15
64NI 16				3.749 (1,2+)	16
64NI 17				3.749 (4+)	17
64NI 18				3.797 (1+ TO 4+)	18
64NI 19				3.808	19
64NI 20			3.849 5-		20
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64NI 21				3.965	21
64NI 22	4.085	4+			22
64NI 23				4.137	23
64NI 24				4.172 (6-)	24
64NI 25				4.174	25
64NI 26	4.216	4+			26
64NI 27				4.244	27
64NI 28				4.263	28
64NI 29				4.285 (1+ TO 5+)	29
64NI 30				4.348	30
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64NI 31				4.369	31
64NI 32				4.398	32
64NI 33				4.412	33
64NI 34				4.455	34
64NI 35				4.475	35
64NI 36	4.493	2+			36
64NI 37				4.521	37
64NI 38				4.532 (7-)	38

64NI	39					4.548		39
64NI	40	4.573	2+					40 0.036 PS 6
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64NI	41					4.584		41
64NI	42					4.616	(1,2+)	42
64NI	43	4.641	2+					43 0.025 PS 4
64NI	44					4.670		44
64NI	45					4.692		45
64NI	46					4.704	(0+,1,2,3-)	46
64NI	47	4.721	4+					47
64NI	48					4.741		48
64NI	49					4.762	(1,2)	49
64NI	50					4.801	(1+ TO 5+)	50
-----								
64NI	51					4.869	(1,2+)	51
64NI	52					4.889	(2)+	52
64NI	53					4.925		53
64NI	54					4.962		54
64NI	55	4.991	2+					55
64NI	56					5.010		56
64NI	57					5.027		57
64NI	58					5.065		58
64NI	59	5.093	4+					59
64NI	60					5.107		60
-----								
64NI	61					5.123		61
64NI	62					5.156	(0+,1,2,3-)	62
64NI	63					5.169		63
64NI	64					5.188		64
64NI	65	5.215	4+					65
64NI	66					5.229		66
64NI	67					5.264		67
64NI	68					5.287	(2+,3,4+)	68
64NI	69					5.332		69
64NI	70					5.354		70
-----								
64NI	71			5.370	3-			71
64NI	72					5.386		72
64NI	73	5.408	2+					73
64NI	74					5.418	(1)-	74
64NI	75					5.441	(5-)	75
64NI	76					5.484	(3-)	76
64NI	77					5.507		77
64NI	78					5.536		78
64NI	79					5.567		79
64NI	80					5.614	(2+)	80
-----								
64NI	81					5.663	(1+ TO 5+)	81
64NI	82	5.734	4+					82
64NI	83					5.769	(1,2,3)-	83

64NI 84				5.812	(8+)	84
64NI 85		5.817	3-			85
64NI 86				5.843		86
64NI 87				5.870		87
64NI 88				5.902	(1-,2-)	88
64NI 89				5.976	(1+ TO 5+)	89
64NI 90		6.018	3-			90
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64NI 91				6.030	(6+)	91
64NI 92				6.060	(1,2)-	92
64NI 93		6.116	3-			93
64NI 94				6.182		94
64NI 95				6.220		95
64NI 96				6.452	(1+,2+)	96
64NI 97				6.512	(1-,2-)	97
64NI 98				6.622		98
64NI 99				6.656		99
64NI 100				6.687	(1,2)-	100
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64NI 101				6.754		101
64NI 102				6.822		102
64NI 103				6.838		103
64NI 104				6.861		104
64NI 105				7.020	(1,2)	105
64NI 106				7.130		106
64NI 107				7.220	(1,2)	107
64NI 108				7.300	(LE 4-)	108
64NI 109				7.730	(1,2)	109
64NI 110				7.950	(LE 4-)	110
-----						
S-alpha=	8.111	( 0.003)	-----			
64NI 111				8.240	(1,2)	111
-----						
S-p	=	12.536	( 0.019)	-----		
S-n	=	9.657	( 0.001)	-----		
S-2p	=	22.799	( 0.003)	-----		
S-2n	=	16.495	( 0.001)	-----		
S-alpha=	8.111	( 0.003)	-----			
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S+p	=	-7.454	( 0.001)			
S+n	=	-6.098	( 0.001)			
S+2p	=	-16.378	( 0.001)			
S+2n	=	-15.050	( 0.001)			
S+alpha	=	-5.333	( 0.001)			
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gap p	=	5.083	( 0.019)			
gap n	=	3.559	( 0.001)			
gap 2p	=	6.421	( 0.003)			
gap 2n	=	1.445	( 0.002)			

gap alpha = 2.778 ( 0.004)