

^{64}Ni $Z = 28$ $N = 36$ adopted link ENSDF link

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

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 1.086 PS 35
64NI 3	2.277	2+			3
64NI 4	2.477	6+			4
64NI 5	2.610	4+			5 1.73 PS 28
64NI 6	2.867	0+			6 1.45 PS 10
64NI 7				2.972 (1,2+)	7 0.13 PS +13-5
64NI 8				2.983 (3+)	8
64NI 9	3.026	0+			9 3.6 PS 12
64NI 10	3.154	2+			10
64NI 11	3.166	4+			11 0.13 PS +17-5
64NI 12	3.276	2+			12 0.24 PS 3
64NI 13	3.396	4+			13
64NI 14	3.464	0+			14
64NI 15				3.482 (2+,3,4+)	15
64NI 16			3.560 3-		16
64NI 17				3.579 (1+)	17
64NI 18	3.648	2+			18
64NI 19	3.749	2+			19 0.5 PS GT
64NI 20				3.749 4(-)	20
64NI 21	3.799	2+			21
64NI 22				3.808	22
64NI 23			3.849 5-		23
64NI 24	3.857	0+			24
64NI 25				3.963 (0+:4+)	25
64NI 26	4.076	4+			26
64NI 27				4.085 5(-)	27
64NI 28				4.137	28
64NI 29				4.173 6(-)	29
64NI 30				4.174 (1,2)	30
64NI 31	4.216	4+			31
64NI 32				4.244	32
64NI 33	4.268	0+			33
64NI 34				4.285	34
64NI 35				4.346	35
64NI 36				4.369	36
64NI 37				4.397	37
64NI 38				4.418 (0+:4+)	38

64NI 39						4.453			39
64NI 40						4.477	(6+)		40

64NI 41		4.493	2+						41
64NI 42						4.521			42
64NI 43					4.532	7-			43
64NI 44						4.556	(0+,1+,2+)		44
64NI 45		4.573	2+						45
64NI 46						4.584			46
64NI 47						4.616	(1,2)		47
64NI 48		4.641	2+						48 25.9 FS +7-5
64NI 49						4.670			49
64NI 50						4.692			50

64NI 51		4.704	0+						51
64NI 52						4.712	(6-)		52
64NI 53		4.719	4+						53
64NI 54						4.741			54
64NI 55						4.759	(1,2)		55
64NI 56						4.800	(1+:5+)		56
64NI 57						4.869	(1,2)		57
64NI 58		4.889	2+						58
64NI 59						4.928			59
64NI 60						4.962	(6-,7-,8-)		60

64NI 61						4.963	(0+:4+)		61
64NI 62		4.991	2+						62
64NI 63						5.009			63
64NI 64						5.027			64
64NI 65						5.065			65
64NI 66		5.093	4+						66
64NI 67						5.107			67
64NI 68						5.123			68
64NI 69						5.156	(0+,1,2,3-)		69
64NI 70						5.169			70

64NI 71						5.188			71
64NI 72		5.215	4+						72
64NI 73						5.229			73
64NI 74						5.264			74
64NI 75						5.285	(2+,3,4+)		75
64NI 76						5.332			76
64NI 77						5.355			77
64NI 78					5.369	3-			78
64NI 79						5.383	(0+:4+)		79
64NI 80		5.408	2+						80

64NI 81						5.418	(1)-		81
64NI 82						5.439	(5-)		82
64NI 83						5.484	(3-)		83

64NI 84				5.507		84	
64NI 85				5.536		85	
64NI 86				5.567		86	
64NI 87				5.614	(2+)	87	
64NI 88				5.663	(1+:5+)	88	
64NI 89		5.734	4+			89	
64NI 90				5.736	(7-)	90	

64NI 91				5.759	0-:4-	91	
64NI 92		5.769	0+			92	
64NI 93		5.812	8+			93	
64NI 94				5.817	3-	94	
64NI 95					5.843	95	
64NI 96					5.870	96	
64NI 97					5.902	(1-,2-)	97
64NI 98					5.976	(1+:5+)	98
64NI 99			6.018	3-		99	
64NI 100				6.040	(6+)	100	

64NI 101				6.060	1-,2-	101	
64NI 102			6.116	3-		102	
64NI 103				6.182		103	
64NI 104				6.189	9(-)	104	
64NI 105				6.220		105	
64NI 106				6.444	(1,2)+	106	
64NI 107				6.512	1-,2-	107	
64NI 108				6.622		108	
64NI 109				6.656		109	
64NI 110				6.687	1-,2-	110	

64NI 111				6.754		111	
64NI 112				6.796	(10+)	112	
64NI 113				6.822		113	
64NI 114				6.838		114	
64NI 115				6.861		115	
64NI 116				7.020	(1,2)	116	
64NI 117				7.130		117	
64NI 118				7.220	(1,2)	118	
64NI 119				7.300	0-,1-,2-,3-,4-	119	
64NI 120				7.730	(1,2)	120	

64NI 121				7.950	0-,1-,2-,3-,4-	121	
S-alpha=	8.111	(0.003)	-----				
64NI 122				8.240	(1,2)	122	
S-n =	9.658	(0.001)	-----				
64NI 123				9.658		123	
64NI 124				9.658	0-,1-	124	
64NI 125				9.659	0-,1-	125	
64NI 126				9.664		126	
64NI 127				9.666		127	

64NI 128			9.666	128
64NI 129			9.666	129
64NI 130			9.666	130

64NI 131			9.667	131
64NI 132			9.669	132
64NI 133			9.670	133
64NI 134			9.671	134
64NI 135			9.671	135
64NI 136			9.673	136
64NI 137			9.674	137
64NI 138			9.675	138
64NI 139			9.677	139
64NI 140			9.677	140

64NI 141			9.680	141
64NI 142			9.687	142
64NI 143			9.689	143
64NI 144			9.711	144

S-p = 12.536 (0.019)-----
S-n = 9.658 (0.001)-----
S-2p = 22.799 (0.003)-----
S-2n = 16.495 (0.001)-----
S-alpha= 8.111 (0.003)-----

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)

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)