^{66}Cu $Z = 29$ $N = 37$ link to full NNDC output

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

BE = 576.277 (0.001) MeV
Qbeta- = 2.641 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2
66CU 1	0.000	1+		1	5.120 M 14
66CU 2	0.186	2+		2	
66CU 3			0.238	3	
66CU 4	0.275	3+		4	
66CU 5			0.386 (1+)	5	
66CU 6	0.465	2+		6	
66CU 7	0.591	4+		7	
66CU 8			0.679	8	
66CU 9	0.730	3+		9	
66CU 10	0.823	2+		10	
66CU 11			0.884	11	
66CU 12			0.916	12	
66CU 13			1.008	13	
66CU 14	1.017	3+		14	
66CU 15	1.052	1+		15	
66CU 16			1.154 (6)-	16	600 NS 20
66CU 17			1.158 (2+,3)	17	
66CU 18			1.213 1+,2+	18	
66CU 19			1.247 4-	19	
66CU 20	1.344	1+		20	
66CU 21	1.432	1+		21	
66CU 22			1.439 (1+,2,3+)	22	
66CU 23			1.498	23	
66CU 24			1.547 1+,2+,3+	24	
66CU 25			1.560 +	25	
66CU 26			1.577 1+,2+,3+	26	
66CU 27			1.630 1-,2-	27	
66CU 28			1.678 1+,2+	28	
66CU 29			1.694 (1)+	29	
66CU 30			1.713 (1+)	30	
66CU 31			1.736 (4,5)-	31	
66CU 32			1.746 (1,2)	32	
66CU 33	1.820	1+		33	
66CU 34			1.879	34	
66CU 35			1.894 1-,2-	35	
66CU 36			1.911	36	
66CU 37			1.927 1+,2+	37	

66CU	38			1.971	2-			38
66CU	39					2.018	1+,2+,3+	39
66CU	40					2.023	(1,2)	40
66CU	41			2.124	2-			41
66CU	42					2.163	-	42
66CU	43					2.166	+	43
66CU	44					2.195		44
66CU	45					2.261		45
66CU	46					2.329		46
66CU	47					2.347		47
66CU	48					2.364		48
66CU	49					2.395		49
66CU	50					2.449		50
66CU	51					2.453	(1+,2,3+)	51
66CU	52					2.503	(2+,3+)	52
66CU	53					2.521	2-,3-,4-	53
66CU	54					2.537	0+,1+	54
66CU	55			2.560	2-			55
66CU	56					2.567	(5)+	56
66CU	57					2.586		57
66CU	58					2.597		58
66CU	59					2.609		59
66CU	60					2.629	3+,4+	60
66CU	61					2.644	(1,2)-	61
66CU	62					2.664	1-,2-	62
66CU	63	2.681	1+					63
66CU	64					2.688	(1+)	64
66CU	65					2.707	3+,4+,5+	65
66CU	66					2.739	2-,3-,4-	66
66CU	67					2.768	(1)+	67
66CU	68					2.800	(2)-	68
66CU	69					2.814	1-,2-	69
66CU	70					2.845	1-,2-	70
66CU	71					2.868	0+,1+	71
66CU	72					2.903	(3)+	72
66CU	73					2.943	(1-,2-)	73
66CU	74					2.949	(1-,2-)	74
66CU	75					2.953	(1,2)-	75
66CU	76					2.988		76
66CU	77					3.010	3+,4+,5+	77
66CU	78					3.026	(1-,2-)	78
66CU	79					3.046	(1-,2-)	79
66CU	80					3.049		80
66CU	81					3.077	(1-,2-)	81
66CU	82					3.091	(1-,2-)	82

66CU 83			3.099	(2+,3,4+)	83
66CU 84			3.111		84
66CU 85			3.142		85
66CU 86			3.152		86
66CU 87			3.166	(1,2,3)+	87
66CU 88			3.209		88
66CU 89			3.248		89
66CU 90			3.287	+	90
66CU 91			3.334	+	91
66CU 92			3.342		92
66CU 93			3.371		93
66CU 94			3.398		94
66CU 95			3.432		95
66CU 96			3.479		96
66CU 97			3.487	(2+,3+)	97
66CU 98			3.509	(2+,3,4+)	98
66CU 99			3.535		99
66CU 100			3.559		100
66CU 101			3.584		101
66CU 102			3.601		102
66CU 103			3.637	1-,2-	103
66CU 104			3.672		104
66CU 105			3.705	2-,3-,4-	105
66CU 106			3.710	(9+)	106
66CU 107			3.750		107
66CU 108			3.780		108
66CU 109			3.815	1-,2-	109
66CU 110			3.875		110
66CU 111			3.890	(7+)	111
66CU 112			3.896	(2-)	112
66CU 113			3.935	(1-,2-)	113
66CU 114			4.014	(1+,2,3+)	114
66CU 115			4.057	(1,2)-	115
66CU 116			4.080		116
66CU 117			4.116		117
66CU 118			4.180	(7+)	118
66CU 119			4.250	(1,2)-	119
66CU 120			4.300		120
66CU 121			4.463	(1,2)-	121
66CU 122			4.528	(1,2)-	122
66CU 123			4.851		123
66CU 124			5.077		124

S-p = 8.421 (0.001)

S-n = 7.066 (0.001)

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S-2p   =  21.044 ( 0.020)----------------------------------------------------------------
S-2n   =  16.976 ( 0.001)----------------------------------------------------------------
S-alpha=   7.259 ( 0.019)----------------------------------------------------------------

S+p       =  -8.911 ( 0.001)
S+n       =  -9.133 ( 0.001)
S+2p      = -15.406 ( 0.002)
S+2n      = -15.451 ( 0.002)
S+alpha   =  -5.077 ( 0.001)

gap p     =  -0.490 ( 0.001)
gap n     =  -2.067 ( 0.001)
gap 2p    =   5.638 ( 0.020)
gap 2n    =   1.525 ( 0.002)
gap alpha =   2.182 ( 0.019)
```