

^{38}Cl $Z = 17$ $N = 21$ [link to full NNDC output](#)

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

BE = 323.208 (0.000) MeV

Qbeta- = 4.917 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
38CL 1			0.000 2-		1 37.230 M 14
38CL 2			0.671 5-		2 715 MS 3
38CL 3			0.755 3-		3 0.220 PS 37
38CL 4			1.309 4-		4 0.37 PS 6
38CL 5			1.617 3-		5 1.52 PS 14
38CL 6				1.692 (1,2)-	6 0.91 PS +22-19
38CL 7				1.746 0-,1-	7 0.51 PS +14-10
38CL 8				1.785 2-,3-,4-	8 66 FS 15
38CL 9				1.820 (1+)	9
38CL 10	1.942	1+			10
38CL 11				1.981 2-,3-	11 0.26 PS 4
38CL 12				2.453 (0:4)+	12
38CL 13			2.743 3-		13 28 FS 15
38CL 14	2.751	1+			14
38CL 15				2.895 0-,1-,2-,3-	15
38CL 16				2.953 (1+,2+)	16
38CL 17				3.254 0-,1-,2-,3-	17
38CL 18				3.293 0-,1-,2-,3-	18
38CL 19				3.349 (7+)	19
38CL 20				3.404 0-,1-,2-,3-	20
38CL 21				3.538 0-,1-,2-,3-	21
38CL 22				3.566 0-,1-,2-,3-	22
38CL 23				3.640 (5,6)	23
38CL 24				3.685 0-,1-,2-,3-	24
38CL 25				3.757 0-,1-,2-,3-	25
38CL 26				3.809 (4,5,6)	26
38CL 27				3.823 (1,2,3)-	27
38CL 28				3.863 (1,2,3)-	28
38CL 29				3.894 (1,2,3)-	29
38CL 30				3.936 0-,1-,2-,3-	30
38CL 31				3.975 0-,1-,2-,3-	31
38CL 32				4.011 0-,1-,2-,3-	32
38CL 33				4.063 0-,1-,2-,3-	33
38CL 34				4.074 (0:4)	34
38CL 35				4.289 0-,1-,2-,3-	35
38CL 36				4.349 0-,1-,2-,3-	36
38CL 37				4.405 (0:4)	37

38CL 38						4.412	0-,1-,2-,3-	38
38CL 39						4.506	0-,1-,2-,3-	39
38CL 40						4.813	0-,1-,2-,3-	40

38CL 41						4.836	0-,1-,2-,3-	41
38CL 42						4.973	(1:5)(-)	42
38CL 43						5.068	(1:5)(-)	43
38CL 44						5.098	(0:4)(+)	44
38CL 45						5.498	(0:4)(+)	45

S-n	=	6.108	(0.000)	-----			
38CL 46		6.116	2+					46
38CL 47		6.133	1+					47
38CL 48						6.135		48
38CL 49						6.139		49
38CL 50						6.149		50

38CL 51		6.153	2+					51
38CL 52						6.158		52
38CL 53						6.162		53
38CL 54						6.162		54
38CL 55						6.173		55
38CL 56						6.173		56
38CL 57						6.192		57
38CL 58						6.199	(2+)	58
38CL 59						6.203		59
38CL 60						6.220		60

38CL 61						6.230		61
38CL 62						6.230		62
38CL 63						6.232		63
38CL 64						6.233		64
38CL 65						6.240		65
38CL 66						6.241		66
38CL 67						6.248		67
38CL 68						6.248		68
38CL 69						6.254		69
38CL 70						6.255		70

38CL 71						6.261		71
38CL 72						6.268		72
38CL 73						6.270		73
38CL 74						6.271		74
38CL 75						6.272		75
38CL 76						6.280		76
38CL 77						6.281		77
38CL 78						6.283		78
38CL 79						6.283		79
38CL 80						6.290		80

38CL 81						6.294		81

38CL 82				6.294	82
38CL 83				6.311	83
38CL 84				6.315	84
38CL 85				6.316	85
38CL 86				6.320	86
38CL 87				6.321	87
38CL 88				6.322	88
38CL 89				6.323	89

S-alpha=	7.674	(0.001)			
38CL 90		8.216 3 0+			90

S-p = 10.191 (0.000)-----
S-n = 6.108 (0.000)-----
S-2p = 24.125 (0.013)-----
S-2n = 16.419 (0.000)-----
S-alpha= 7.674 (0.001)-----

S+p = -10.733 (0.005)
S+n = -8.073 (0.002)
S+2p = -18.315 (0.000)
S+2n = -13.902 (0.032)
S+alpha = -7.649 (0.000)

gap p = -0.542 (0.005)
gap n = -1.966 (0.002)
gap 2p = 5.810 (0.013)
gap 2n = 2.516 (0.032)
gap alpha = 0.026 (0.001)