

^{49}Ca $Z = 20$ $N = 29$ [link to full NNDC output](#)

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

BE = 421.147 (0.000) MeV

Qbeta- = 5.262 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
49CA 1			0.000	3/2-	1 8.718 M 6
49CA 2			2.023	1/2-	2 5.5 FS LT
49CA 3				3.355 (9/2+)	3
49CA 4			3.585	5/2-	4 40 FS +23-16
49CA 5				3.861 (1/2-,3/2-)	5
49CA 6			3.991	5/2-	6 9.7 FS +49-35
49CA 7				4.014 7/2+,9/2+	7 0.60 PS +35-18
49CA 8			4.072	3/2-	8 60 FS +21-19
49CA 9			4.261	1/2-	9
49CA 10			4.272	1/2-	10 25 FS +22-17
49CA 11	4.416	5/2+			11 32 FS LT
49CA 12				4.617	12
49CA 13				4.757 (5/2+)	13
49CA 14				4.788	14
49CA 15	4.885	9/2+			15
49CA 16				5.133	16
S-n =	5.146 (0.000)				
49CA 17				5.166	17
49CA 18				5.251	18
49CA 19				5.309 1/2	19 59 EV 34
49CA 20	5.378	9/2+			20
49CA 21			5.444	1/2-	21 2.5 KEV +36-25
49CA 22			5.540	3/2-	22 3.3 KEV 18
49CA 23				5.553 GE 5/2	23
49CA 24			5.568	1/2-	24
49CA 25			5.588	1/2-	25 4.3 KEV 27
49CA 26				5.612	26
49CA 27				5.680	27
49CA 28				5.693	28
49CA 29				5.722	29
49CA 30	6.076	5/2+			30
49CA 31				6.257 1/2	31
49CA 32				6.262	32
49CA 33				6.330 (1/2+,3/2+,5/2+)	33
49CA 34				6.376 (5/2+)	34
49CA 35				6.425 3/2	35 10 KEV
49CA 36				6.443 3/2	36 3 KEV

49CA 37				6.492	3/2-			37	8 KEV
49CA 38		6.513	5/2+					38	
49CA 39		6.529	9/2+					39	
49CA 40							6.595	40	

49CA 41		6.707	5/2+					41	
49CA 42		6.753	9/2+					42	
49CA 43							6.882	43	
49CA 44		6.924	5/2+					44	
49CA 45							6.971	45	
49CA 46		7.070	5/2+					46	
49CA 47							7.070	47	GE 7/2
49CA 48							7.335	48	(1/2+,3/2+,5/2+)
49CA 49							7.428	49	(1/2+,3/2+,5/2+)
49CA 50							7.529	50	(9/2+)

49CA 51							7.612	51	
49CA 52							7.705	52	(9/2+)
49CA 53							7.872	53	
49CA 54							8.140	54	
49CA 55							8.390	55	(1/2+,3/2+,5/2+)
49CA 56							8.670	56	
49CA 57							9.100	57	
49CA 58							9.280	58	
49CA 59							9.580	59	
49CA 60							10.100	60	

S-p = 16.304 (0.001)-----
S-n = 5.146 (0.000)-----
S-2p = 30.511 (0.001)-----
S-2n = 15.098 (0.002)-----
S-alpha= 13.954 (0.001)-----

S+p = -10.537 (0.015)
S+n = -6.361 (0.002)
S+2p = -23.011 (0.001)
S+2n = -11.175 (0.001)
S+alpha = -7.956 (0.100)

gap p = 5.768 (0.015)
gap n = -1.214 (0.002)
gap 2p = 7.500 (0.001)
gap 2n = 3.923 (0.002)
gap alpha = 5.998 (0.100)