

^{50}Ca $Z = 20$ $N = 30$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 427.508 (0.002) MeV

Qbeta- = 4.948 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2

50CA 1	0.000	0+			1 13.45 S 5
50CA 2	1.027	2+			2 66.5 PS 21
50CA 3	3.002	(2+)			3 0.69 PS LT
50CA 4				3.532 (1,2+)	4
50CA 5			3.997 (3-)		5 0.69 PS LT
50CA 6				4.036 (1,2+)	6
50CA 7	4.476	(0+)			7
50CA 8	4.515	(4+)			8 1.04 PS LT
50CA 9				4.831 (4)	9 0.69 PS LT
50CA 10	4.870	(2+)			10

50CA 11			4.886 (1-)		11
50CA 12				4.970 (4+&5-)	12
50CA 13			5.043 (1-)		13
50CA 14			5.085 (4-)		14
50CA 15			5.110 (5-)		15 0.69 PS LT
50CA 16	5.147	(5+)			16
50CA 17				5.168	17
50CA 18				5.281	18
50CA 19				5.362	19
50CA 20				5.434	20

50CA 21			5.517 (5-)		21
50CA 22				5.576	22
S-n =	6.361 (0.002)				

50CA 23				6.519	23
50CA 24			6.869 (7-)		24
50CA 25				7.039	25
50CA 26				7.269	26
50CA 27				7.309	27
50CA 28				7.619	28
50CA 29				7.999	29
50CA 30				8.249	30

50CA 31			8.380 (7-)		31
50CA 32				8.810 (0-,1-)	32
50CA 33			8.980 (7-)		33
50CA 34				9.239 (0-,1-)	34
50CA 35				9.779 (0-,1-)	35

50CA	36		9.800	(6+)				36
50CA	37		10.330	(8+)				37
50CA	38						10.430 (0-,1-)	38
50CA	39						10.550 (0-,1-)	39
50CA	40						11.059 (0-,1-)	40

50CA	41						11.479 (0-,1-)	41

S-p = 17.267 (0.002) -----
S-n = 6.361 (0.002) -----
S-2p = 31.812 (0.017) -----
S-2n = 11.507 (0.002) -----
S-alpha= 12.243 (0.003) -----

S+p = -10.950 (0.003)
S+n = -4.814 (0.002)
S+2p = -24.466 (0.003)
S+2n = -10.820 (0.002)
S+alpha = -8.579 (0.016)

gap p = 6.317 (0.003)
gap n = 1.546 (0.002)
gap 2p = 7.346 (0.017)
gap 2n = 0.687 (0.002)
gap alpha = 3.663 (0.016)