

^{44}Ca $Z = 20$ $N = 24$ adopted link ENSDF link

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

BE = 380.960 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
44CA 1	0.000	0+			1 STABLE
44CA 2	1.157	2+			2 2.71 PS 15
44CA 3	1.884	0+			3 14 PS 4
44CA 4	2.283	4+			4 1.9 PS 7
44CA 5	2.657	2+			5 30 FS 3
44CA 6	3.044	4+			6 4.6 PS 11
44CA 7	3.285	6+			7 13.4 PS 10
44CA 8	3.301	2+			8 35 FS 18
44CA 9			3.308 3-		9 0.15 PS 7
44CA 10				3.357 (2+,3,4+)	10 28 FS LT
44CA 11	3.580	0+			11
44CA 12				3.662 1	12 8.3 FS
44CA 13				3.676 (1-,2,3)	13
44CA 14				3.692 1	14 66 FS
44CA 15			3.712 4-		15 0.42 NS LT
44CA 16				3.776 2	16 0.69 NS LT
44CA 17				3.880	17
44CA 18			3.914 5-		18 2 PS GT
44CA 19			3.923 5-		19 0.56 NS LT
44CA 20				4.011	20
44CA 21	4.092	6+			21
44CA 22				4.094 (2+,3,4+)	22
44CA 23				4.169	23
44CA 24	4.196	2+			24 0.69 NS LT
44CA 25				4.260 (2+,3)	25
44CA 26				4.315 (1,2,3)	26
44CA 27			4.358 3-		27
44CA 28			4.399 3-		28
44CA 29				4.409 (1,2,3)-	29
44CA 30				4.437 (1,2+)	30
44CA 31	4.480	2+			31
44CA 32				4.553 (1,2,3)-	32
44CA 33				4.565 (5-)	33
44CA 34				4.573 (1,2,3)	34
44CA 35				4.584 (2+,3,4+)	35 3.5 NS LT
44CA 36				4.616	36
44CA 37				4.649 1	37 11 FS
44CA 38	4.651	2+			38

44CA 39						4.690	(1-,2,3,4+)	39		
44CA 40						4.804	(1-,2+)	40		

44CA 41						4.824	(1,2,3)	41		
44CA 42						4.848	1	42	24 FS	
44CA 43						4.866	1	43	6.2 FS	
44CA 44						4.884	(1,2,3)-	44		
44CA 45				4.905	3-			45		
44CA 46				4.931	6-			46		
44CA 47						4.982	(2 TO 5)+	47		
44CA 48		5.006	4+					48		
44CA 49				5.026	3-			49		
44CA 50		5.088	8+					50	0.53 PS	14

44CA 51						5.097	(3,4)-	51		
44CA 52						5.130	(2,3)+	52		
44CA 53						5.162	1	53	3.7 FS	
44CA 54						5.201	(1,2,3)-	54		
44CA 55		5.210	1+					55	2.0 FS	3
44CA 56						5.222		56		
44CA 57						5.230	(2 TO 5)+	57	4.2 NS	LT
44CA 58				5.245	7-			58		
44CA 59						5.289	(2 TO 5)+	59		
44CA 60						5.301		60		

44CA 61						5.325	(1,2,3)	61		
44CA 62		5.343	2+					62		
44CA 63						5.367	(1,2,3)	63		
44CA 64						5.375	(2 TO 5)+	64		
44CA 65						5.404	(3,4)-	65		
44CA 66						5.459	(2 TO 5)+	66		
44CA 67						5.519		67		
44CA 68						5.549	(2,3,4)+	68		
44CA 69				5.561	3-			69		
44CA 70						5.612	1	70	2.1 FS	

44CA 71						5.647	(8+)	71		
44CA 72						5.655	(1 TO 6)-	72		
44CA 73						5.733	(2 TO 5)+	73	3.5 NS	LT
44CA 74						5.776	(2,3,4)+	74		
44CA 75						5.801	1	75	16 FS	
44CA 76						5.806	1	76	3.3 FS	
44CA 77						5.810		77		
44CA 78						5.832		78		
44CA 79		5.864	0+					79		
44CA 80						5.867	(2+,3,4,5)	80		

44CA 81						5.876	1	81	6 FS	
44CA 82						5.891		82		
44CA 83						5.911	1	83	2.7 FS	

44CA 84			5.971	8-			84
44CA 85						5.975	85
44CA 86						6.014	86
44CA 87						6.040	87
44CA 88		6.083	1+			(2 TO 5)+	88 3 FS
44CA 89			6.137	1-			89 1.8 FS
44CA 90						6.146	90

44CA 91						6.211	91
44CA 92						6.246	92 12 FS
44CA 93			6.422	1-			93 0.3 FS
44CA 94						6.438	94
44CA 95		6.446	1+				95 8.4 FS
44CA 96						6.507	96 4.8 FS
44CA 97						6.578	97
44CA 98			6.658	9-			98
44CA 99						6.673	99
44CA 100						6.675	100 6.5 FS

44CA 101						6.744	101
44CA 102						6.778	102
44CA 103						6.913	103
44CA 104						6.961	104 8 FS
44CA 105						6.972	105 0.7 FS
44CA 106						6.996	106
44CA 107						7.044	107
44CA 108						7.066	108 3.9 FS
44CA 109			7.093	9-			109
44CA 110						7.226	110 4.1 FS

44CA 111						7.275	111 2.7 FS
44CA 112						7.403	112 5.4 FS
44CA 113						7.471	113
44CA 114						7.556	114
44CA 115		7.572	1+				115 3.8 FS
44CA 116			7.579	1-			116 0.7 FS
44CA 117			7.662	1-			117 6.7 FS
44CA 118			7.783	1-			118 6.1 FS
44CA 119			7.809	1-			119 11.6 FS
44CA 120						7.829	120 8.9 FS

44CA 121			7.835	1-			121 4.4 FS
44CA 122						7.844	122
44CA 123			7.880	10-			123
44CA 124						7.953	124 2.4 FS
44CA 125						8.050	125
44CA 126						8.070	126 3.1 FS
44CA 127						8.086	127 3.1 FS
44CA 128			8.286	11-			128
44CA 129						8.290	129

44CA 130				8.321	1		130	13.7 FS

44CA 131				8.395	1		131	2.4 FS
44CA 132				8.405	1		132	0.6 FS
44CA 133		8.557	1-				133	3.4 FS
44CA 134		8.615	1-				134	3.3 FS
44CA 135		8.802	1-				135	16 FS
44CA 136				8.828			136	1.1 FS
44CA 137		8.851	1-				137	1.0 FS

S-alpha=		8.854	(0.000)					

44CA 138				8.860			138	
44CA 139		8.909	1-				139	0.5 FS
44CA 140		9.024	1-				140	

44CA 141		9.148	1-				141	
44CA 142		9.274	1-				142	1.5 FS
44CA 143		9.317	1-				143	
44CA 144				9.460			144	
44CA 145		9.665	1-				145	
44CA 146				9.750			146	
44CA 147				9.788			147	
44CA 148		9.814	1-				148	
44CA 149		9.859	12-				149	
44CA 150		9.898	1-				150	

S-p = 12.182 (0.001)-----
S-n = 11.131 (0.000)-----
S-2p = 21.624 (0.006)-----
S-2n = 19.064 (0.000)-----
S-alpha= 8.854 (0.000)-----

S+p = -6.893 (0.001)
S+n = -7.415 (0.000)
S+2p = -17.237 (0.000)
S+2n = -17.814 (0.002)
S+alpha = -9.449 (0.000)

gap p = 5.290 (0.001)
gap n = 3.716 (0.001)
gap 2p = 4.387 (0.006)
gap 2n = 1.251 (0.002)
gap alpha = -0.595 (0.000)