

^{43}Ca $Z = 20$ $N = 23$ adopted link ENSDF link

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

BE = 369.829 (0.000) MeV

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

43CA	1				0.000	7/2-	1	STABLE
43CA	2				0.373	5/2-	2	34 PS 3
43CA	3				0.593	3/2-	3	81 PS 4
43CA	4	0.990	3/2+				4	49 PS 4
43CA	5	1.394	5/2+				5	1.84 PS 35
43CA	6				1.678	11/2-	6	0.85 PS 14
43CA	7	1.902	7/2+				7	0.53 PS 10
43CA	8				1.932	5/2-	8	116 FS 30
43CA	9	1.957	1/2+				9	1.1 PS 3
43CA	10				2.046	3/2-	10	0.8 PS 2

43CA	11				2.067	7/2-	11	21 FS 7
43CA	12				2.094	9/2-	12	1.4 PS 4
43CA	13				2.103	3/2-	13	0.33 PS 9
43CA	14					2.224 3/2-,5/2-	14	28 FS 17
43CA	15					2.248	15	
43CA	16				2.249	9/2-	16	37 FS 8
43CA	17					2.273 3/2+,5/2+	17	0.28 PS 8
43CA	18	2.410	9/2+				18	1.2 PS 4
43CA	19					2.523 (1/2-,3/2	19	
43CA	20				2.611	1/2-	20	0.13 PS 5

43CA	21					2.674 5/2-,7/2-	21	36 FS 16
43CA	22					2.697 3/2+,5/2+	22	38 FS LT
43CA	23	2.748	1/2+				23	
43CA	24				2.754	15/2-	24	23.6 PS 10
43CA	25					2.770 (1/2,3/2,	25	0.10 PS 4
43CA	26	2.845	(5/2)+				26	0.55 PS 15
43CA	27				2.879	1/2-	27	107 FS 38
43CA	28				2.944	3/2-	28	60 FS LT
43CA	29	2.951	11/2+				29	4.7 PS 12
43CA	30					3.029 (3/2:7/2)	30	60 FS LT

43CA	31					3.030 (1/2,3/2,	31	
43CA	32					3.050	32	60 FS LT
43CA	33				3.051	11/2-	33	17 FS LT
43CA	34	3.076	(5/2)+				34	17 FS LT
43CA	35					3.096 (1/2-:7/2	35	17 FS LT
43CA	36					3.097 (5/2+:11/	36	0.76 PS 21
43CA	37					3.196 7/2+,9/2+	37	118 FS 42

43CA 38						3.270 (5/2)	38			
43CA 39						3.278 (11/2:17/	39			
43CA 40				3.286		3/2-	40	60 FS		LT

43CA 41						3.315 1/2-,3/2-	41	0.13 PS		6
43CA 42		3.371		13/2+			42	14 PS		LT
43CA 43						3.377	43			
43CA 44						3.415 5/2-,7/2-	44			
43CA 45						3.469	45			
43CA 46		3.505		13/2+			46	73 FS		24
43CA 47						3.572 3/2-	47			
43CA 48		3.604		(1/2)+			48			
43CA 49						3.649 (3/2+,5/2	49			
43CA 50				3.662		13/2-	50	49 FS		21

43CA 51						3.705	51			
43CA 52						3.737	52			
43CA 53						3.772 1/2-,3/2-	53			
43CA 54						3.783	54			
43CA 55				3.816		(7/2-)	55	69 FS		38
43CA 56		3.837		(3/2 TO 13/2)+			56			
43CA 57						3.864 (1/2-,3/2	57			
43CA 58						3.898	58			
43CA 59						3.918 (7/2,9/2)	59			
43CA 60		3.944		15/2+			60	0.76 PS		21

43CA 61						3.958	61			
43CA 62						3.978 3/2+,5/2+	62			
43CA 63						4.017	63			
43CA 64						4.044 3/2+,5/2+	64			
43CA 65						4.078	65			
43CA 66						4.089 (5/2-,7/2	66			
43CA 67						4.136 7/2+,9/2+	67	260 FS		LT
43CA 68		4.148		1/2+			68			
43CA 69						4.175	69			
43CA 70		4.187		15/2+			70	125 FS		50

43CA 71				4.207		1/2-	71			
43CA 72						4.210 3/2+,5/2+	72			
43CA 73						4.239 1/2-,3/2-	73			
43CA 74						4.268 (3/2+,5/2	74			
43CA 75						4.291 (7/2:13/2	75			
43CA 76		4.298		1/2+			76			
43CA 77		4.364		(7/2 TO 13/2)+			77			
43CA 78				4.395		15/2-	78	42 FS		17
43CA 79						4.401	79			
43CA 80						4.461 5/2-,7/2-	80			

43CA 81						4.498	81			
43CA 82		4.533		1/2+			82			

43CA 83				4.569	83		
43CA 84				4.585	84		
43CA 85		4.591	17/2+			85	0.21 PS 5
43CA 86					4.603 (1/2,3/2,	86	
43CA 87		4.621	15/2+			87	76 FS 28
43CA 88					4.642 3/2+,5/2+	88	
43CA 89		4.654	1/2+			89	
43CA 90					4.703	90	

43CA 91					4.736 3/2+,5/2+	91	
43CA 92					4.758	92	
43CA 93					4.783	93	
43CA 94					4.796	94	
43CA 95					4.826 (5/2-,7/2	95	
43CA 96					4.854	96	
43CA 97		4.878	(7/2 TO 17/2)+			97	
43CA 98					4.901 1/2-,3/2-	98	
43CA 99					4.922	99	
43CA 100					4.944	100	

43CA 101					4.982 (3/2+,5/2	101	
43CA 102					5.004 (5/2-,7/2	102	
43CA 103					5.037 1/2-,3/2-	103	
43CA 104					5.047 1/2-,3/2-	104	
43CA 105					5.072 1/2-,3/2-	105	
43CA 106		5.100	1/2+			106	
43CA 107					5.155 (13/2,17/107	107	76 FS 28
43CA 108					5.170 3/2+,5/2+	108	
43CA 109					5.189 (7/2:13/2	109	
43CA 110		5.193	1/2+			110	

43CA 111		5.215	1/2+			111	
43CA 112					5.249 (7/2:13/2	112	
43CA 113					5.351 (7/2:13/2	113	
43CA 114					5.395 (11/2-:19	114	0.104 PS 31
43CA 115					5.430	115	
43CA 116					5.548	116	
43CA 117					5.555 (15/2,19/117	117	1.4 PS 4
43CA 118					5.647	118	
43CA 119		5.696	(7/2 TO 13/2)+			119	
43CA 120					5.728 3/2+,5/2+	120	

43CA 121					5.805	121	
43CA 122					5.889	122	
43CA 123					5.931 (11/2:19/123	123	55 FS 17
43CA 124					5.991 (5/2-,7/2	124	
43CA 125		6.015	1/2+			125	
43CA 126					6.087	126	
43CA 127					6.177 (3/2+,5/2	127	
43CA 128					6.224 (17/2,21/128	128	0.58 PS 15

43CA 129				6.300	129
43CA 130				6.410	130

43CA 131				6.460	131
43CA 132				6.570	132
43CA 133				6.640	133
43CA 134				6.680	134
43CA 135				6.790	135
43CA 136				6.950	136
43CA 137				7.040	137
43CA 138				7.090	138
43CA 139				7.190	139
43CA 140				7.500	140

43CA 141				7.590	141
S-alpha=	7.592	(0.005)	-----		
43CA 142				7.730	142
43CA 143				7.920	143
43CA 144	7.933	1/2+			144
S-n	=	7.933	(0.000)	-----	
43CA 145				7.942	1/2-,3/2-145
43CA 146	7.942	1/2+			146
43CA 147				7.952	1/2-,3/2-147
43CA 148	7.955	1/2+			148
43CA 149				7.956	1/2-,3/2-149
43CA 150	7.959	1/2+			150

43CA 151				7.969	1/2-,3/2-151
43CA 152	7.970	1/2+			152
43CA 153				7.972	1/2-,3/2-153
43CA 154	7.978	1/2+			154
43CA 155	7.980	1/2+			155
43CA 156				7.981	1/2-,3/2-156
43CA 157				7.982	1/2-,3/2-157
43CA 158	7.990	5/2 1/2+			158
43CA 159	7.990	5/2 (3/2)+			159
43CA 160	7.992	1/2+			160

43CA 161	7.997	1/2+			161
43CA 162				8.002	1/2-,3/2-162
43CA 163				8.006	1/2-,3/2-163
43CA 164	8.008	1/2+			164
43CA 165	8.014	1/2+			165
43CA 166				8.014	1/2-,3/2-166
43CA 167				8.020	167
43CA 168				8.021	168
43CA 169				8.023	169
43CA 170				8.024	170

43CA 171				8.026	171

43CA 172	8.029	1/2+			172
43CA 173				8.034 1/2-, 3/2-	173
43CA 174	8.047	1/2+			174
43CA 175				8.049 1/2-, 3/2-	175
43CA 176	8.052	1/2+			176
43CA 177				8.056 1/2-, 3/2-	177
43CA 178	8.057	1/2+			178
43CA 179				8.057 1/2-, 3/2-	179
43CA 180				8.057	180

43CA 181				8.058	181
43CA 182				8.061 1/2-, 3/2-	182
43CA 183	8.062	1/2+			183
43CA 184				8.066 1/2-, 3/2-	184
43CA 185	8.074	1/2+			185
43CA 186				8.075 1/2-, 3/2-	186
43CA 187				8.075	187
43CA 188	8.078	1/2+			188
43CA 189				8.081	189
43CA 190	8.086	1/2+			190

43CA 191				8.089	191
43CA 192				8.090	192
43CA 193				8.099	193
43CA 194	8.103	1/2+			194
43CA 195	8.106	1/2+			195
43CA 196				8.114	196
43CA 197	8.115	1/2+			197
43CA 198				8.128	198
43CA 199				8.133	199
43CA 200				8.134	200

43CA 201				8.138	201
43CA 202	8.140	1/2+			202
43CA 203				8.142 1/2-, 3/2-	203
43CA 204				8.144	204
43CA 205				8.149 1/2-, 3/2-	205
43CA 206				8.152 1/2-, 3/2-	206
43CA 207	8.157	1/2+			207
43CA 208				8.160	208
43CA 209				8.166	209
43CA 210				8.176	210

43CA 211				8.181 1/2-, 3/2-	211
43CA 212	8.186	1/2+			212
43CA 213	8.201	1/2+			213
43CA 214				8.201	214
43CA 215	8.205	1/2+			215
43CA 216				8.207 1/2-, 3/2-	216
43CA 217				8.223	217

43CA 218				8.259	218
43CA 219				8.263	219
43CA 220				8.270	220

43CA 221		8.281	1/2+		221
43CA 222				8.303	222
43CA 223				8.309	223
43CA 224		8.323	1/2+		224
43CA 225		8.341	1/2+		225
43CA 226		8.348	1/2+		226
43CA 227				8.368	227
43CA 228				8.370	228
43CA 229		8.373	1/2+		229
43CA 230		8.400	1/2+		230

43CA 231		8.413	1/2+		231
43CA 232				8.419	232
43CA 233				8.430	233
43CA 234		8.434	1/2+		234
43CA 235		8.453	1/2+		235
43CA 236		8.466	1/2+		236
43CA 237				8.470	237
43CA 238		8.475	1/2+		238
43CA 239		8.480	1/2+		239
43CA 240				8.484	240

43CA 241		8.490	1/2+		241
43CA 242				8.492	242
43CA 243		8.590	5/2 1/2+		243
43CA 244				8.767 5/2-, 7/2-	244
43CA 245				8.930	245
43CA 246				8.993 1/2-, 3/2-	246
43CA 247				9.145 3/2+, 5/2+	247
43CA 248		10.485	5/2 1/2+		248

S-p	=	10.676	(0.000)	-----	
43CA 249				10.720 3/2+, 5/2+	249
43CA 250				11.380	250

43CA 251				12.060	251
43CA 252				12.265 3/2+, 5/2+	252
43CA 253				13.230 (3/2+, 5/2+)	253
43CA 254				13.700	254
43CA 255				13.950	255
43CA 256				14.190	256

S-p	=	10.676	(0.000)	-----	
S-n	=	7.933	(0.000)	-----	
S-2p	=	19.919	(0.000)	-----	
S-2n	=	19.414	(0.000)	-----	

S-alpha= 7.592 (0.005) -----

S+p = -6.696 (0.002)

S+n = -11.131 (0.000)

S+2p = -15.179 (0.001)

S+2n = -18.546 (0.000)

S+alpha = -8.954 (0.000)

gap p = 3.980 (0.002)

gap n = -3.198 (0.000)

gap 2p = 4.740 (0.001)

gap 2n = 0.868 (0.001)

gap alpha = -1.362 (0.005)