

$^{41}\text{Ca}$        $Z = 20$        $N = 21$       adopted link      ENSDF link

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

BE = 350.415 ( 0.000) MeV

Qbeta+ = 0.422 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
41CA 1			0.000	7/2-	1 9.94E+4 Y 15
41CA 2			1.943	3/2-	2 0.42 PS 5
41CA 3	2.010	3/2+			3 0.505 NS 12
41CA 4			2.462	3/2-	4 3.4 PS 10
41CA 5			2.576	5/2-	5 0.16 PS 4
41CA 6	2.605	5/2+			6 0.35 PS 6
41CA 7	2.670	1/2+			7 2.2 PS 5
41CA 8	2.885	7/2+			8 21 FS 17
41CA 9			2.959	7/2-	9 28 FS 7
41CA 10	3.050	3/2+			10 0.7 PS 3
41CA 11				3.131	11
41CA 12	3.201	9/2+			12 31 FS 10
41CA 13	3.370	11/2+			13 20.6 PS 8
41CA 14	3.400	1/2+			14 82 FS 21
41CA 15	3.495	5/2+			15 0.28 PS 6
41CA 16	3.527	3/2+			16 38 FS 17
41CA 17			3.614	1/2-	17 0.11 PS 5
41CA 18	3.614	7/2+			18 15 FS 9
41CA 19			3.677	9/2-	19 45 FS 12
41CA 20			3.731	3/2-	20 45 FS 14
41CA 21				3.737	21
41CA 22				3.740	(3/2,5/2)+ 22 35 FS LT
41CA 23	3.830	15/2+			23 3.02 NS 13
41CA 24	3.846	1/2+			24 111 FS 31
41CA 25	3.915	13/2+			25 1.5 PS 3
41CA 26	3.920	1/2+			26
41CA 27			3.944	1/2-	27 20 FS LT
41CA 28	3.974	7/2+			28 24 FS 10
41CA 29	3.976	11/2+			29 23 FS 7
41CA 30			4.015	11/2-	30 10 FS 4
41CA 31	4.097	5/2+			31 21 FS LT
41CA 32				4.184	(3/2,5/2) 32 39 FS 12
41CA 33				4.277	(5/2,7/2,9/2)- 33 26 FS LT
41CA 34				4.328	34 110 FS LT
41CA 35			4.343	9/2-	35 0.13 PS 3
41CA 36	4.417	3/2+			36 40 FS 10
41CA 37	4.451	9/2+			37 83 FS 31

41CA 38		4.520	13/2+					38	49 FS	LT
41CA 39						4.550		39	93 FS	21
41CA 40						4.569		40		
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41CA 41					4.603	3/2-		41	37 FS	LT
41CA 42						4.648		42		
41CA 43						4.728	(3/2)+	43	30 FS	LT
41CA 44						4.731	(5/2)+	44	21 FS	10
41CA 45					4.753	1/2-		45	30 FS	10
41CA 46						4.779	(3/2)+	46	15 FS	LT
41CA 47						4.797		47		
41CA 48		4.815	5/2+					48	37 FS	LT
41CA 49						4.831	(3/2)+	49		
41CA 50					4.883	5/2-		50	87 FS	LT
-----										
41CA 51						4.928		51		
41CA 52						4.966		52		
41CA 53		4.973	9/2+					53	49 FS	45
41CA 54						4.995		54		
41CA 55		5.010	1/2+					55		
41CA 56						5.047	(9/2)+	56		
41CA 57						5.057	(5/2,7/2,9/2)+	57	0.14 PS	7
41CA 58					5.072	1/2-		58		
41CA 59					5.078	1/2-		59		
41CA 60		5.095	3/2+					60		
-----										
41CA 61					5.120	3/2-		61	0.8 PS	7
41CA 62					5.148	7/2-		62		
41CA 63						5.154		63	125 FS	LT
41CA 64		5.195	9/2+					64		
41CA 65						5.219	(13/2,17/2)+	65	28 FS	LT
41CA 66		5.283	5/2+					66	37 FS	LT
41CA 67						5.290		67	104 FS	LT
41CA 68						5.305		68		
41CA 69						5.340	(7/2,9/2,11/2)+	69		
41CA 70					5.350	7/2-		70		
-----										
41CA 71					5.369	3/2-		71		
41CA 72		5.411	5/2+					72	30 FS	LT
41CA 73					5.452	1/2-		73		
41CA 74					5.468	3/2-		74		
41CA 75						5.482	(3/2)+	75		
41CA 76						5.506		76	62 FS	21
41CA 77						5.520	(5/2)-	77		
41CA 78						5.539	(5/2:11/2)+	78		
41CA 79						5.588	(9/2)+	79		
41CA 80						5.616	(5/2)-	80		
-----										
41CA 81						5.635	+	81		
41CA 82						5.649	(5/2)-	82		

41CA 83				5.669	3/2-				83
41CA 84							5.685	(5/2,7/2)-	84
41CA 85				5.704	1/2-				85
41CA 86							5.719	(5/2)-	86
41CA 87		5.728	5/2+						87
41CA 88		5.751	9/2+						88
41CA 89							5.760	(5/2)+	89
41CA 90							5.801	(5/2)-	90
-----									
41CA 91		5.817	3/2 3/2+						91 28 FS LT
41CA 92							5.849		92
41CA 93							5.866		93
41CA 94				5.892	1/2-				94
41CA 95							5.910		95
41CA 96							5.933	(5/2)-	96
41CA 97							5.976	(3/2,5/2)+	97
41CA 98		5.984	1/2+						98
41CA 99				6.005	1/2-				99
41CA 100							6.013		100
-----									
41CA 101							6.036	(9/2)+	101
41CA 102							6.066	(5/2:11/2)+	102
41CA 103							6.083	(3/2)+	103
41CA 104		6.099	5/2+						104
41CA 105							6.141	(5/2,7/2)-	105
41CA 106							6.148		106
41CA 107							6.164		107
41CA 108				6.180	1/2-				108
41CA 109							6.193		109
41CA 110				6.208	3/2-				110
-----									
41CA 111				6.239	5/2-				111
41CA 112							6.245		112
41CA 113				6.273	5/2-				113
41CA 114							6.284	(5/2)+	114
41CA 115				6.296	7/2-				115
41CA 116							6.325	(5/2)+	116
41CA 117		6.354	5/2+						117
41CA 118				6.377	1/2-				118
41CA 119							6.401	(9/2)+	119
41CA 120							6.411	(1/2,3/2,5/2+)	120
-----									
41CA 121				6.438	5/2-				121
41CA 122				6.451	5/2-				122
41CA 123							6.462	(5/2:11/2)+	123
41CA 124							6.483	+	124
41CA 125				6.521	5/2-				125
41CA 126							6.527	(5/2:11/2)+	126
41CA 127							6.553		127
41CA 128				6.567	7/2-				128

41CA 129				6.603	(GE 5/2)	129		
41CA 130				6.614	(GE 5/2)	130		
-----								
S-alpha=		6.615	( 0.000)	-----				
41CA 131				6.629		131		
41CA 132				6.647	5/2-	132		
41CA 133		6.674	5/2+			133		
41CA 134				6.686	7/2-	134		
41CA 135				6.729	7/2-	135		
41CA 136				6.738	(5/2:11/2)+	136		
41CA 137				6.748	7/2-	137		
41CA 138				6.793	(5/2)+	138		
41CA 139				6.807	(3/2)+	139		
41CA 140		6.822	3/2 1/2+			140	28 FS	LT
-----								
41CA 141				6.826	(15/2,19/2)	141	1.7 PS	LT
41CA 142		6.852	5/2+			142		
41CA 143				6.870	(5/2)-	143		
41CA 144		6.901	5/2+			144		
41CA 145				6.917	(9/2)+	145		
41CA 146				6.932		146		
41CA 147				6.966	3/2+,5/2+	147		
41CA 148				6.991	5/2-	148		
41CA 149				7.015	(9/2)+	149		
41CA 150				7.027		150		
-----								
41CA 151				7.041	3/2-	151		
41CA 152				7.073	1/2-	152		
41CA 153				7.093	(9/2)+	153		
41CA 154				7.108	(5/2:11/2)-	154		
41CA 155				7.116		155		
41CA 156		7.137	5/2+			156		
41CA 157				7.146	3/2 7/2-	157		
41CA 158				7.164	(9/2)+	158		
41CA 159				7.176	(5/2,7/2)-	159		
41CA 160				7.191	1/2-	160		
-----								
41CA 161				7.225		161		
41CA 162				7.238	5/2-	162		
41CA 163				7.268	(5/2)+	163		
41CA 164				7.296	5/2-	164		
41CA 165				7.308	7/2-	165		
41CA 166				7.332		166		
41CA 167		7.341	3/2+			167		
41CA 168				7.365	(5/2)-	168		
41CA 169		7.367	1/2+			169		
41CA 170				7.377	(5/2)-	170		
-----								
41CA 171				7.393	(5/2:11/2)+	171		
41CA 172				7.417	(7/2,9/2)-	172		

41CA 173			7.437	5/2-			173
41CA 174					7.440	1/2+&(3/2,5/2)+	174
41CA 175			7.459	5/2-			175
41CA 176					7.488	+	176
41CA 177			7.509	7/2-			177
41CA 178			7.525	7/2-			178
41CA 179					7.533	(5/2:11/2)+	179
41CA 180					7.538	(5/2)-	180
-----							
41CA 181					7.553		181
41CA 182					7.576	+	182
41CA 183					7.587	(5/2,7/2)-	183
41CA 184					7.608	(9/2)+	184
41CA 185					7.614		185
41CA 186					7.631	(9/2)+	186
41CA 187					7.639		187
41CA 188					7.657	(1/2,3/2,5/2+)	188
41CA 189					7.679		189
41CA 190					7.707	(GE 5/2)	190
-----							
41CA 191					7.720		191
41CA 192					7.732	(GE 5/2)	192
41CA 193	7.751	1/2+					193
41CA 194	7.770	1/2+					194
41CA 195					7.792		195
41CA 196			7.817	5/2-			196
41CA 197					7.854		197
41CA 198			7.888	5/2-			198
41CA 199					7.901		199
41CA 200					7.919	(5/2)-	200
-----							
41CA 201			7.957	5/2-			201
41CA 202			7.974	7/2-			202
41CA 203					7.990	1/2+&3/2+,5/2+	203
41CA 204					7.995	(9/2)+	204
41CA 205					8.040	(5/2:11/2)+	205
41CA 206					8.047	(5/2)-	206
41CA 207			8.063	7/2-			207
41CA 208			8.102	7/2-			208
41CA 209	8.120	5/2+					209
41CA 210					8.136	(5/2)-	210
-----							
41CA 211					8.151	(5/2)-	211
41CA 212	8.179	5/2+					212
41CA 213			8.200	7/2-			213
41CA 214	8.229	5/2+					214
41CA 215					8.242	(1/2,3/2,5/2+)	215
41CA 216					8.259		216
41CA 217					8.272		217
41CA 218					8.311	(3/2,5/2)+	218

41CA 219				8.313	(9/2)+	219
41CA 220				8.336	(5/2)-	220
-----						
41CA 221				8.347		221
S-n	=	8.363	( 0.000)	-----		
41CA 222		8.373	5/2+			222
41CA 223				8.402	(5/2:11/2)+	223
41CA 224				8.447	(9/2)+	224
41CA 225			8.467	7/2-		225
41CA 226				8.504	(5/2:11/2)+	226
41CA 227			8.522	7/2-		227
41CA 228			8.549	5/2-		228
41CA 229		8.551	1/2+			229
41CA 230			8.585	7/2-		230
-----						
41CA 231			8.620	5/2-		231
41CA 232				8.630	(5/2:11/2)+	232
41CA 233			8.638	5/2-		233
41CA 234				8.656	(5/2:11/2)+	234
41CA 235				8.674		235
41CA 236		8.700	5/2+			236
41CA 237				8.741		237
41CA 238			8.783	5/2-		238
41CA 239				8.855	(9/2+)	239
S-p	=	8.891	( 0.000)	-----		
41CA 240				8.916	(3/2-,9/2+)	240
-----						
41CA 241				8.980	(5/2)+	241
41CA 242				8.997	(9/2+)	242
41CA 243				9.047	(3/2,5/2)+	243
41CA 244			9.084	5/2-		244
41CA 245				9.140		245
41CA 246				9.177	(5/2:11/2)+	246
41CA 247				9.216		247
41CA 248				9.273	(5/2:11/2)+	248
41CA 249				9.315		249
41CA 250		9.375	5/2+			250
-----						
41CA 251				9.420	(5/2:11/2)+	251
41CA 252				9.475		252
41CA 253				9.555	(5/2:11/2)+	253
41CA 254				9.590		254
41CA 255				9.616		255
41CA 256				9.650	(5/2:11/2)+	256
41CA 257				9.720	(5/2:11/2)+	257
41CA 258				9.880	(5/2:11/2)+	258
41CA 259				9.910	(5/2:11/2)+	259
41CA 260				9.920	(5/2:11/2)+	260
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S-p    =  8.891 ( 0.000)-----  
S-n    =  8.363 ( 0.000)-----  
S-2p   = 16.474 ( 0.005)-----  
S-2n   = 23.998 ( 0.001)-----  
S-alpha=  6.615 ( 0.000)-----  
  
S+p     = -4.272 ( 0.000)  
S+n     = -11.481 ( 0.000)  
S+2p    = -8.756 ( 0.006)  
S+2n    = -19.414 ( 0.000)  
S+alpha = -6.297 ( 0.001)  
  
gap p   =  4.619 ( 0.000)  
gap n   = -3.118 ( 0.000)  
gap 2p  =  7.718 ( 0.008)  
gap 2n  =  4.584 ( 0.001)  
gap alpha =  0.318 ( 0.001)
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